

## IMPORTANT NOTICE

THIS OFFERING IS AVAILABLE ONLY TO INVESTORS WHO ARE (1) LOCATED OUTSIDE THE UNITED STATES AND EITHER (A) "QUALIFIED INVESTORS" AS DEFINED IN THE PROSPECTUS DIRECTIVE 2003/71/EC, AS AMENDED, (THE "**PROSPECTUS DIRECTIVE**") IN THE EUROPEAN ECONOMIC AREA ("**EEA**") OR (B) OUTSIDE THE EEA PROVIDED SUCH AVAILABILITY IS PERMITTED UNDER APPLICABLE SECURITIES LAWS OR (2) LOCATED IN THE UNITED STATES AND "QUALIFIED INSTITUTIONAL BUYERS" (EACH A "**QIB**") AS DEFINED IN RULE 144A ("**RULE 144A**") UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**").

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You have been sent the attached Prospectus on the basis that you have confirmed to NIBC Bank N.V., Stifel Nicolaus Europe Limited and Erste Group Bank AG (the "**Underwriters**"), or one of their qualified affiliates, being the sender of the attached, that (i) either (a) you are located outside the United States and you are either (1) a "qualified investor" (as defined in the Prospectus Directive) in the EEA or (2) a person outside the EEA into whose possession this Prospectus may be lawfully delivered in accordance with the laws of the jurisdiction in which you are located or (b) you are a QIB and (ii) you consent to delivery by electronic transmission.

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This document does not constitute or contain any offer to sell or invitation to subscribe or make commitments for or in respect of any security in any jurisdiction where such an offer or invitation would be unlawful. If a jurisdiction requires that the offering be made by a licensed broker or dealer and the Underwriters or any affiliate of the Underwriters is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by the Underwriters or such affiliate on behalf of Themis Bioscience B.V., to be converted into a public company with limited liability (*naamloze vennootschap*) (the "**Company**"), in such jurisdiction.

The attached Prospectus has been sent to you in an electronic form. You are reminded that documents transmitted via this medium may be altered or changed during the process of electronic transmission and, consequently, neither the Company nor the Underwriters, nor any person who controls any of them nor any director, officer, employee nor agent of any of them, nor any affiliate of any such person accepts any liability or responsibility whatsoever in respect of any difference between the Prospectus distributed to you in electronic format and the hard copy version.



**Themis Bioscience N.V.**

*(a public limited liability company (naamloze vennootschap) incorporated under the laws of the Netherlands with its statutory seat (statutaire zetel) in Amsterdam, the Netherlands)*

**Offering of up to 3,608,247 ordinary shares with a nominal value of EUR 0.02 each**

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Themis Bioscience B.V., to be converted into a public company with limited liability (*naamloze vennootschap*) (the **Company**), and together with Themis Bioscience GmbH, (**Themis**), is offering up to 3,608,247 newly issued ordinary shares with a nominal value of EUR 0.02 each in its capital (the **Offer Shares**) (excluding the Increase Option and the Over-Allotment Option, both as defined below). Assuming no exercise of the Increase Option and the Over-Allotment Option, the Offer Shares will constitute not more than approximately 41% of the Company's issued ordinary shares, with a nominal value of EUR 0.02 each, in the capital of the Company (the **Shares**). Assuming the Increase Option and the Over-Allotment Option are fully exercised, the Offer Shares will constitute not more than approximately 54% of the issued Shares.

Capitalized terms used but not otherwise defined in this prospectus (the **Prospectus**) are defined in Section 21 (Definitions and Glossary).

The offering of the Offer Shares (the **Offering**) consists of (i) a public offering to retail and institutional investors in the Netherlands and (ii) a private placement to certain institutional investors in various other jurisdictions. The Offer Shares are being offered (i) within the United States to qualified institutional buyers (**QIBs**) as defined in Rule 144A (**Rule 144A**) under the US Securities Act of 1933, as amended (the **US Securities Act**) in reliance on Rule 144A or pursuant to another exemption from, or in a transaction not subject to, the registration requirements of the US Securities Act, and (ii) outside the United States in offshore transactions in reliance on Regulation S under the US Securities Act (**Regulation S**).

**Investing in the Offer Shares involves substantial risks and uncertainties. An investor is exposed to the risk to lose all or part of his or her investment. Before any investment in the Offer Shares, an investor must read this entire document and in particular Section 1 (Risk Factors). Themis' main assets are intellectual property rights concerning technologies that have not led to the commercialization of any product. Themis has never been profitable and it has never commercialized any products.**

**The price of the Offer Shares (the *Offer Price*) is expected to be between EUR 9.70 and EUR 11.60 per Offer Share (the *Offer Price Range*).**

The Offering will begin on 29 October 2018 at 9:00 a.m. Central European Time (**CET**) and is expected to end at 16:00 CET on 8 November 2018 (the **Offering Period**), subject to acceleration or extension of the timetable for the Offering and subject as set out below for retail investors. On the final day of the Offering Period, subject to acceleration and extension of the timetable for the Offering and barring unforeseen circumstances, prospective retail investors may submit offers to subscribe for shares until 8 November 2018, 12:00 (noon) CET, and institutional investors may subscribe for Offer Shares until 8 November 2018, 16:00 CET. The Company together with the Joint Global Coordinators (as defined below) may adjust the dates, times and periods given in the timetable and throughout this Prospectus. If so decided, the Company will make this public through a press release, which will also be posted on the Company's website. Any other material alterations will be published through a press release that will also be posted on the Company's website and (if required) in a supplement to this Prospectus that is subject to the approval of the Netherlands Authority for the Financial Markets (*Stichting Autoriteit Financiële Markten*, the **AFM**). Any extension of the timetable for the Offering will be published in a press release at least three hours before the end of the original Offering Period, provided that any extension will be for a minimum of one full day on which banks are generally open for business in the Netherlands (a **Business Day**). Any acceleration of the timetable for the Offering will be published in a press release at least three hours before the proposed end of the accelerated Offering Period. In any event, the Offering Period will be at least six Business Days.

The Offer Price Range is an indicative price range. The Company reserves the right to, after consultation with the Joint Global Coordinators, change the Offer Price Range, decrease the total number of Offer Shares, or to increase the total number of Offer Shares by up to 15%, up to a maximum of 541,237 Offer Shares (the **Increase Option**). Any increase in the top end of the Offer Price Range on the last day of the Offering Period or the determination of an Offer Price above the Offer Price Range will result in the Offering Period being extended by at least two Business Days. Any increase in the top end of the Offer Price Range on the day prior to the last day of the Offering Period will result in the Offering Period being extended by at least one Business Day. In these cases, if the Offering Period for Dutch Retail Investors would already have closed, this Offering Period for Dutch Retail Investors would be reopened. Accordingly, all investors,

including Dutch Retail Investors, will have at least two business days to reconsider their subscriptions. Any such change of the number of Offer Shares and/or the Offer Price Range will be announced through a press release, which will also be posted on the Company's website. The Offer Price and the exact number of Offer Shares offered will be determined by the Company in consultation with the Joint Global Coordinators prior to the allocation of the Offer Shares (**Allocation**), including any acceleration or extension, on the basis of the book-building process and taking into account the considerations set out in Section 15 (The Offering). The Offer Price, the exact number of Offer Shares to be sold (including any exercise of the Increase Option) and the maximum number of Additional Shares (as defined below) will be stated in a pricing statement (the **Pricing Statement**) which will be published in a press release that will also be posted on the Company's website and filed with the AFM.

Prior to the date of the Prospectus, the Company entered into commitment letters (the **Commitment Letters**) with Global Health Investment Fund I, LLC, WELLINGTON Partners Nominee Ltd., aws Gründerfonds Beteiligungs GmbH & Co KG, FPCI Ventech Capital III and Werner Lanthaler (the **Committing Shareholders**). Pursuant to the Commitment Letters, each of the Committing Shareholders, severally and not jointly, has irrevocably committed to subscribe for, and the Company has agreed to issue and allot to the Committing Shareholders, Offer Shares at the Offer Price in the Offering. The aggregate commitments of all Committing Shareholders pursuant to the Commitment Letters amount to EUR 8,600,000. The Commitment Letters will terminate automatically upon the earlier of (i) the termination of the Underwriting Agreement (as defined herein), (ii) the Settlement Date (as defined below) not having occurred before 31 December 2018, and (iii) the Joint Global Coordinators on the one hand, or the Company on the other hand, informing the other, prior to the execution of the Underwriting Agreement, that it has determined not to proceed with the Offering. See "*Plan of Distribution – Committing Shareholders*".

Furthermore, Themis Bioscience GmbH and Themis Bioscience B.V. will enter into arrangements (the **Arrangements**) with FCPI Capital Invest PME 2016, FCPI Capital Invest PME 2017 and FCPI Innovation Pluriel n°4 (the **Omnes Funds**) to facilitate an investment of the Omnes Funds in Themis. Under the Arrangements, Themis Bioscience GmbH will issue convertible loan notes (the **Loan Notes**) in the principal amount of EUR 1,400,000 to the Omnes Funds prior to the determination of the Offer Price. Under the Arrangements, the Company will exercise its right to purchase the Loan Notes from the Omnes Funds and the Omnes Funds will receive a number of Shares (such Shares, the **Omnes Funds Shares**) equal to the principal amount of the Loan Notes divided by the Offer Price at Settlement or, if Settlement does not take place, the Arrangements will be cancelled against repayment of the principal amount of the Loan Notes by Themis Bioscience GmbH. As a result, upon Settlement occurring, the holdings of the Omnes Funds will increase correspondingly and the Company receive a EUR 1,400,000 investment from the Omnes Funds. The Omnes Funds Shares are not Offer Shares.

Prior to the Offering there has not been a public market for the Shares. Application has been made for the admission to listing and trading of all Shares under the symbol "THISR" on Euronext Amsterdam (**Euronext**), a regulated market operated by Euronext Amsterdam N.V. Subject to acceleration or extension of the timetable for the Offering, trading of the Shares on Euronext is expected to commence on or about 9 November 2018 (the **First Trading Date**) on an 'as-if-and-when-issued' basis. Payment (in euro) for, and delivery of, the Offer Shares (**Settlement**) is expected to take place on 12 November 2018 (the **Settlement Date**) through the book entry facilities of *Nederlands Centraal Instituut voor Giraal Effectenverkeer B.V.* (**Euroclear Nederland**) in accordance with Euroclear Nederland's normal procedures applicable to equity securities and against payment in full for the Offer Shares in immediately available funds.

The Company (which at the date of the Prospectus is still a private limited liability company (*besloten vennootschap met beperkte aansprakelijkheid*) named Themis Bioscience B.V.) will be converted into a public company with limited liability (*naamloze vennootschap*) shortly after the determination of the Offer Price.

NIBC Bank N.V. (**NIBC**) and Stifel Nicolaus Europe Limited (**Stifel**) are acting as joint global coordinators and joint bookrunners for the Offering (in such and any other capacity, the **Joint Global Coordinators**). Erste Group Bank AG is acting as co-bookrunner for the Offering (and together with the Joint Global Coordinators, the **Underwriters**).

The Company has granted an option (the **Over-Allotment Option**) to the Joint Global Coordinators (on behalf of the Underwriters), exercisable within 30 calendar days after the First Trading Date, pursuant to which the Joint Global Coordinators, on behalf of the Underwriters, may require the Company to issue up to 541,237 additional Shares (or up to 622,422 additional Shares in the event that the Increase Option is exercised in full), comprising up to 15% of the total number of Offer Shares sold in the Offering (the **Additional Shares**), to cover over-allotments or short positions (if any) in connection with the Offering. In this Prospectus, unless the context indicates otherwise, the definition of Offer Shares includes the Additional Shares but excludes the Increase Option.

The Offering is and will only be made in those jurisdictions in which, and only to those persons to whom, the Offering may be lawfully made. The Company is not taking any action to permit a public offering of the Offer Shares in any jurisdiction outside the Netherlands.

The Offer Shares have not been approved or disapproved by the United States Securities and Exchange Commission or any securities commission or other regulatory authority of any state or other jurisdiction of the United States, nor have any of the foregoing passed upon or endorsed the merits of the Offering or the accuracy or adequacy of this Prospectus. Any representation to the contrary is a criminal offence in the United States. The Offer Shares have not and will not be

registered under the US Securities Act or under any securities laws of any state or other jurisdiction of the United States and may not be taken up, offered, sold, resold, delivered or distributed, directly or indirectly, in, into or from the United States except pursuant to an applicable exemption from, or in a transaction not subject to, the registration requirements of the US Securities Act and in compliance with the securities laws of any state or other jurisdiction of the United States. There will be no public offer of any Shares in the United States or in any other jurisdictions except the Netherlands. Each subscriber for Offer Shares is deemed to have made certain representations and statements as described in Section 17 (Selling and Transfer Restrictions) and each potential investor should carefully read and comply with the contents of Sections 2 (Important Information) and 17 (Selling and Transfer Restrictions).

Settlement is subject to the satisfaction of a number of conditions (see Section 16.2 (*Plan of Distribution – Underwriting Agreement*)).

If Settlement does not take place on the Settlement Date or at all, the Offering may be withdrawn. In such case, all subscriptions for Offer Shares will be disregarded and any allocations of Offer Shares will be deemed not to have been made and any payments made will be returned without interest or other compensation. Prior to Settlement all dealings in the Offer Shares are at the sole risk of the parties concerned. None of the Company, the Underwriters or Euronext Amsterdam N.V. accepts any responsibility or liability for any loss or damage incurred by any party as a result of the withdrawal of the Offering or the (related) annulment of any transactions in Offer Shares on Euronext.

This Prospectus constitutes a prospectus for the purposes of Article 3 of Directive 2003/71/EC, as amended (the ***Prospectus Directive***) and has been prepared in accordance with Chapter 5.1 of the Dutch Financial Supervision Act (*Wet op het financieel toezicht*, the ***DFSA***) and the rules promulgated thereunder. This Prospectus has been approved by and filed with the AFM.

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Prospectus dated 29 October 2018

**Joint Global Coordinators and Joint Bookrunners**

**NIBC**

**STIFEL**

**Co-Bookrunner**

**ERSTE GROUP**

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## Summary of the Prospectus

Summaries are made up of disclosure requirements known as elements (**Elements**). These Elements are numbered in Sections A – E (A.1 – E.7). This summary contains all the Elements required to be included in a summary for this type of security and issuer. Because some Elements are not required to be addressed, there may be gaps in the numbering sequence of the Elements.

Even though an Element may be required to be inserted in the summary because of the type of security and issuer, it is possible that no relevant information can be given regarding the Element. In such cases, the summary includes a short description of the Element with the words “not applicable”.

### A – Introduction and Warnings

- A.1 Warnings.** This summary should be read as an introduction to the prospectus (the **Prospectus**) relating to (i) the offering (the **Offering**) by Themis Bioscience N.V. (the **Company**, and together with Themis Bioscience GmbH (**Themis**)) of up to 3,608,247 newly issued Shares (as defined below) (the **Offer Shares**) (excluding the Increase Option and the Over-Allotment Option, both as defined in E.3 below) and (ii) the admission to listing and trading of the ordinary shares, with a nominal value of EUR 0.02 each, in the capital of the Company (the **Shares**) on Euronext Amsterdam (**Euronext**), a regulated market of Euronext Amsterdam N.V. including the Omnes Funds Shares (as defined in B.7 below). Assuming no exercise of the Increase Option and the Over-Allotment Option, the Offer Shares will constitute not more than approximately 41% of the issued Shares. Assuming the Increase Option and the Over-Allotment Option are fully exercised, the Offer Shares will constitute not more than approximately 54% of the issued Shares.

Any decision to invest in the Shares should be based on consideration of the Prospectus as a whole by the investor.

With regard to historical financial information as of and for the financial years ended 31 December 2017 and 2016 as well as prior periods and as of 30 June 2018 and for the six month periods ended 30 June 2018 and 2017 presented in the Prospectus, references to **Themis** refer to Themis Bioscience GmbH, unless otherwise indicated.

Where a claim relating to the information contained in the Prospectus is brought before a court, the plaintiff investor might, under the national legislation of the relevant member state of the European Economic Area, have to bear the costs of translating the Prospectus before the legal proceedings are initiated. Civil liability attaches only to those persons who have prepared the summary including any translation thereof, but only if the summary is misleading, inaccurate or inconsistent when read together with the other parts of the Prospectus or it does not provide, when read together with the other parts of the Prospectus, key information in order to aid investors when considering whether to invest in the Shares.

- A.2 Information regarding the subsequent use of the Prospectus.** Not applicable. The Company does not consent to the use of the Prospectus for the subsequent resale or final placement of Offer Shares by financial intermediaries.

### B – Issuer

- B.1 Legal and commercial name.** At the date of the Prospectus, the Company is still a private company limited liability (*besloten vennootschap met beperkte aansprakelijkheid*) named Themis Bioscience B.V. The Company will be converted into a public company with limited liability (*naamloze vennootschap*) shortly after the determination of the Offer Price (as defined below). The commercial name is “Themis Bioscience”.
- B.2 Domicile, legal form, legislation under which the issuer operates country of incorporation.** The Company has been incorporated and exists as a private company with limited liability (*besloten vennootschap met beperkte aansprakelijkheid*) under the laws of and is domiciled in the Netherlands. The Company will be converted into a public company with limited liability (*naamloze vennootschap*) shortly after the determination of the Offer Price. The statutory seat (*statutaire zetel*) of the Company is in Amsterdam, the Netherlands, and its office address is at Muthgasse 11, 1190 Vienna, Austria. The Company is registered with the trade register of the Dutch Chamber of Commerce under number 72587121.

<b>B.3</b>	<b>Current operations and principal business activities and principal markets in which the issuer competes.</b>	<p>Themis is an immunomodulation clinical-stage biopharmaceutical group that focuses on the development of products to protect against infectious diseases and for the treatment of cancer. Through modulating an effective immune response, Themis aims to develop vaccines for vaccinations against infectious diseases and virotherapy based treatment for cancer. In developing its vaccines, Themis uses a measles vaccine-based platform technology (<i><b>MV Platform</b></i>) which is built upon one of the safest and most efficacious vaccines available, the measles vaccine. This measles vaccination has been used for more than 50 years in over one billion children and consists of the live attenuated measles virus. Themis has further developed the measles vaccine into an active delivery vehicle enabling the addition of antigens that are designed to protect against or treat other diseases. This uniquely integrated immunomodulation technology provides Themis with the ability to target specific diseases and allows for platform versatility and the ability to address a wide range of indications. Themis technology platform is supported by a state-of-the-art, fully aseptic, commercial manufacturing infrastructure to enable plug-and-play vaccine development and cost-efficient production.</p> <p>The current principal market in which Themis operates is Europe.</p>
<b>B.4a</b>	<b>Most significant recent trends affecting the issuer and the industry in which it operates.</b>	<p>Themis is preparing to publish positive final results of its phase 2 clinical trial for its lead product candidate, the Chikungunya virus vaccine (<i><b>MV-CHIK</b></i>) in a leading peer-reviewed scientific journal (the manuscript has been approved for publication by the journal and is awaiting publication). The results demonstrate the safety, tolerability and immunogenicity of MV-CHIK. The positive results provide an important clinical proof of concept for MV-CHIK and constitute an important prerequisite for the initiation of phase 3 clinical trials relating to MV-CHIK.</p>
<b>B.5</b>	<b>Description of Themis and the Company's position within Themis.</b>	<p>The Company is a holding company without material direct business operations. The Company was founded by Themis Bioscience GmbH as sole founder and sole shareholder and incorporated on 14 September 2018 as a private company with limited liability (<i>besloten vennootschap met beperkte aansprakelijkheid</i>) under Dutch law. Themis Bioscience GmbH currently is the holder of 1 class B share in the capital of the Company (the <i><b>Class B Share</b></i>). Themis Bioscience GmbH, in turn, was founded by Mr. Erich Tauber, Mr. Mansour Yaich, Mr. Katharina Wieser and Mr. Andre Habel.</p> <p>Immediately after the determination of the offer price of the Offer Shares (the <i><b>Offer Price</b></i>), a corporate reorganization (the <i><b>Corporate Reorganization</b></i>) will be effected whereby the current shareholders of Themis Bioscience GmbH will contribute all shares they hold in the share capital of Themis Bioscience GmbH into the Company by way of a contribution in kind against newly issued Shares. For each Themis Bioscience GmbH share of EUR 1 contributed, the Company will issue 50 new Shares to the existing shareholders of Themis Bioscience GmbH. After the contribution, the Company will therefore be the parent company with Themis Bioscience GmbH as its wholly-owned subsidiary. Immediately after the contribution, the Company will cancel the Class B Share outstanding and held by Themis Bioscience GmbH against repayment of the nominal value of EUR 0.02 equaling the market value of such Class B Share. As a result, no shares other than the Shares will be outstanding prior to the issuance of the Offer Shares. Immediately after the cancellation, the Company will be converted into a public company with limited liability (<i>naamloze vennootschap</i>) by way of notarial deed of conversion and amendment of the Articles of Association (the <i><b>Deed of Conversion and Amendment</b></i>).</p> <p>Themis Bioscience GmbH conducted and conducts all business operations presented in the Prospectus.</p>
<b>B.6</b>	<b>Major Shareholder</b>	<p>On the date of the Prospectus, only the one Class B Share, issued upon incorporation of the Company, is outstanding, which is held by Themis Bioscience GmbH. The following table sets forth the shareholders of the Company (<i><b>Shareholders</b></i>) which, to the Company's knowledge, will directly or indirectly have a notifiable interest in the Company's capital and voting rights within the meaning of the Dutch Financial Supervision Act (<i>Wet op het financieel toezicht</i>) following the Corporate Reorganization and: (i) prior to the issuance of the Offer Shares and (ii) immediately following the issuance of the Offer Shares assuming the maximum number of Offer Shares are subscribed for, (a) without the Increase Option or the Over-Allotment Option being exercised, (b) with full exercise of the Increase Option only, (c) with full exercise of the Over-Allotment Option only and (d) with full exercise of both the Increase Option and the Over-Allotment Option.</p>

Shares owned prior to the issuance of the Offer Shares			Shares owned immediately following the issuance of the Offer Shares assuming the maximum number of Offer Shares are subscribed for*							
			Without exercise of the Increase Option or the Over-Allotment Option**		With full exercise of the Increase Option only		With full exercise of the Over-Allotment Option only		With full exercise of the Increase Option and the Over-Allotment Option	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Erich Tauber .....	679,050	7.7%	679,050	5.5%	679,050	5.2%	679,050	5.2%	679,050	5.0%
Mansour Yaïch .....	583,700	6.6%	583,700	4.7%	583,700	4.5%	583,700	4.5%	583,700	4.3%
Katharina Wieser...	498,600	5.7%	498,600	4.0%	498,600	3.8%	498,600	3.8%	498,600	3.7%
FPCI Ventech Capital III .....	1,784,850	20.3%	1,953,864	15.7%	1,953,864	15.1%	1,953,864	15.1%	1,953,864	14.4%
Omnes Capital <sup>1</sup> .....	1,726,050	19.6%	1,726,050	13.9%	1,726,050	13.3%	1,726,050	13.3%	1,726,050	12.7%
WELLINGTON Partners Nominee Ltd.....	1,738,750	19.7%	1,973,492	15.9%	1,973,492	15.2%	1,973,492	15.2%	1,973,492	14.5%
aws Gründerfonds Beteiligungs GmbH & Co KG....	430,100	4.9%	500,523	4.0%	500,523	3.9%	500,523	3.9%	500,523	3.7%
aws Gründerfonds Equity Invest GmbH & Co KG....	58,550	0.7%	58,550	0.5%	58,550	0.5%	58,550	0.5%	58,550	0.4%
Global Health Investment Fund I, LLC .....	1,195,700	13.6%	1,524,338	12.3%	1,524,338	11.8%	1,524,338	11.8%	1,524,338	11.2%

\*Shares owned immediately following the issuance of the Offer Shares include the pre-commitments by Committing Shareholders calculated in share amount based on the mid-point Offer Price.

\*\* The shareholdings disclosed in this column do not include any rights under the previous equity incentive plan (see Section 12.9 (*Summary of Equity Incentive Plan*) for an overview of these rights).

<sup>1</sup> Omnes Capital controls various funds that own Shares. The amounts held by Omnes Capital shown in this table do not reflect the Omnes Funds Shares (as defined in B.7 below).

## B.7 Selected key historical financial information.

The financial information set forth below is extracted or derived from, and should be read in conjunction with, the audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016 as well as the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018, included in the Prospectus. The audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016 have been prepared in accordance with International Financial Reporting Standards, as adopted by the European Union (*IFRS*), and the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018 have been prepared in accordance with IFRS on interim financial reporting (IAS 34).

Where financial information in the following tables is labelled “audited”, this means that it has been extracted from the audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016. The label “unaudited” is used in the following tables to indicate financial information that was not taken from the above-mentioned audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016 but has been extracted or derived from the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018 and/or the internal accounting records of Themis Bioscience GmbH or is calculated from the above-mentioned sources.

# Statement of Comprehensive Income

	For the six months ended 30 June		For the financial year ended 31 December	
	2018	2017	2017	2016
	(in EUR thousands) (unaudited)		(in EUR thousands) (audited)	
Other operating income .....	2,717	1,049	2,567	1,775
Research and development expenses ...	(3,541)	(2,708)	(5,907)	(5,202)
Administrative expenses .....	(702)	(446)	(992)	(581)
Other operating expenses .....	(22)	(25)	(81)	(56)
<b>Operating loss .....</b>	<b>(1,549)</b>	<b>(2,130)</b>	<b>(4,413)</b>	<b>(4,063)</b>
Financial income .....	0	1	1	4
Financial expense .....	(10)	(9)	(451)	(19)
<b>Financial result .....</b>	<b>(10)</b>	<b>(8)</b>	<b>(450)</b>	<b>(15)</b>
<b>Loss before income tax.....</b>	<b>(1,559)</b>	<b>(2,139)</b>	<b>(4,863)</b>	<b>(4,078)</b>
Income tax .....	(1)	(1)	(2)	(2)
<b>Loss and total comprehensive loss for period/year .....</b>	<b>(1,560)</b>	<b>(2,139)</b>	<b>(4,865)</b>	<b>(4,080)</b>

## Statement of Financial Position

	As of 30 June	As of 31 December	
	2018	2017	2016
	(in EUR thousands)	(in EUR thousands)	
	(unaudited)	(audited)	
<b>ASSETS</b>			
Intangible assets .....	24	12	15
Property, plant and equipment .....	195	40	42
<b>Non-current assets .....</b>	<b>219</b>	<b>51</b>	<b>57</b>
Other receivables .....	1,497	1,427	741
Income tax receivables .....	1	1	0
Other assets .....	354	308	73
Other financial assets .....	43	43	171
Cash and cash equivalents .....	5,178	3,672	3,127
<b>Current assets .....</b>	<b>7,073</b>	<b>5,451</b>	<b>4,112</b>
<b>Total assets .....</b>	<b>7,292</b>	<b>5,502</b>	<b>4,169</b>
<b>EQUITY AND LIABILITIES</b>			
<b>Equity<sup>(1)</sup></b>			
Nominal capital .....	152	130	130
Capital reserves .....	20,060	15,196	15,196
Contributions made for a resolved capital increase .....	0	4,455	0
Retained earnings .....	(21,689)	(20,128)	(15,264)
<b>Total equity .....</b>	<b>(1,477)</b>	<b>(347)</b>	<b>63</b>
<b>Liabilities</b>			
Financial liabilities .....	1,149	1,604	1,651
Other non-current liabilities .....	57	71	61
<b>Non-current liabilities .....</b>	<b>1,207</b>	<b>1,675</b>	<b>1,712</b>
Financial liabilities .....	795	327	0
Trade payables and other current liabilities .....	6,768	3,847	2,394
<b>Current liabilities .....</b>	<b>7,562</b>	<b>4,173</b>	<b>2,394</b>
<b>Total liabilities .....</b>	<b>8,769</b>	<b>5,849</b>	<b>4,106</b>
<b>Total equity and liabilities .....</b>	<b>7,292</b>	<b>5,502</b>	<b>4,169</b>

<sup>(1)</sup> Shown as negative equity in the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018 and as negative equity/equity in the audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016.

## Selected Cash Flow Statement Information

	For the six months ended		For the financial year ended	
	30 June		31 December	
	2018	2017	2017	2016
	(in EUR thousands)		(in EUR thousands)	
	(unaudited)		(audited)	
Cash flow from operating activities .....	1,349	(2,012)	(3,868)	(4,218)
Cash flow utilized by investing activities .....	(189)	(5)	(16)	(44)
Cash flow from financing activities .....	346	(0)	4,428	6,964
<b>Net cash flow</b> .....	<b>1,506</b>	<b>(2,017)</b>	<b>545</b>	<b>2,702</b>
<b>Cash and cash equivalents at beginning of period</b> .....	<b>3,672</b>	<b>3,127</b>	<b>3,127</b>	<b>425</b>
<b>Cash and cash equivalents at end of period</b> .....	<b>5,178</b>	<b>1,111</b>	<b>3,672</b>	<b>3,127</b>

### Significant changes to the Company's financial condition and operating results.

As at the date of the Prospectus, there have been no significant changes in Themis' financial or trading position since 30 June 2018, other than those described below.

On 21 July 2018, Themis Bioscience GmbH signed the contracts for the second and third tranche of the Series C financing round after fulfilment of defined milestones. This capital increase was registered in the Austrian commercial register on 11 August 2018 and amounted to EUR 5,500 thousand before deduction of equity transaction costs and provides part of the necessary cash funds to initiate preparation of phase 3 clinical studies for Chikungunya.

In the context of the continued preparation of the clinical phase 3, on 18 September 2018 Themis has accepted a firm offer for the start of the manufacturing process with a German contract manufacturers for an amount of EUR 2.3 million. To account for the increased research and development activities and number of employees, Themis has enlarged its laboratory and office space by approximately 400 square meter at the current site and has signed an additional lease contract in September 2018 with its lessor. As a result of the further expansion Themis has hired five additional employees since 30 June 2018 and employs at the date of the Prospectus 23 people compared to 18 people (12 employees based on full-time equivalent) as of 30 June 2018. Regarding higher research and development activities related to the CEPI project and phase 3 preparation for MV-CHIK as well as the IPO preparation operating expenses have increased.

Furthermore, Themis Bioscience GmbH and Themis Bioscience B.V. will enter into arrangements (the **Arrangements**) with FCPI Capital Invest PME 2016, FCPI Capital Invest PME 2017 and FCPI Innovation Pluriel n°4 (the **Omnes Funds**) to facilitate an investment of the Omnes Funds in Themis. Under the Arrangements, Themis Bioscience GmbH will issue convertible loan notes (the **Loan Notes**) in the principal amount of EUR 1,400,000 to the Omnes Funds prior to the determination of the Offer Price. Under the Arrangements, the Company will exercise its right to purchase the Loan Notes from the Omnes Funds and the Omnes Funds will receive a number of Shares (such Shares, the **Omnes Funds Shares**) equal to the principal amount of the Loan Notes divided by the Offer Price at Settlement or, if Settlement does not take place, the Arrangements will be cancelled against repayment of the principal amount of the Loan Notes by Themis Bioscience GmbH. As a result, upon Settlement occurring, the holdings of the Omnes Funds will increase correspondingly and the Company receive a EUR 1,400,000 investment from the Omnes Funds. The Omnes Funds Shares are not Offer Shares.

<b>B.8</b>	<b>Selected key pro forma financial information.</b>	Not applicable. No pro forma financial information has been included in the Prospectus.
<b>B.9</b>	<b>Profit forecast.</b>	Not applicable. The Company has not issued a profit forecast.
<b>B.10</b>	<b>Qualifications in the audit reports.</b>	<p>Not applicable. There are no qualifications in the auditor's report on the historical financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016. However, the unqualified auditor's report on the audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016 contains the following emphasis of matter paragraph with respect to material uncertainty regarding going concern:</p> <p>“We draw attention to Note 2.1 Basis of preparation – Going Concern in the financial statements, which indicates that Themis Bioscience GmbH's management has prepared the financial statements as of December 31, 2017 and December 31, 2016 and for the years then ended according to the principle of going concern, although ongoing losses have occurred. In this context we refer to the management's explanations in the notes to the financial statements (Note 2.1 Basis of preparation – Going Concern, Note 23.4 Liquidity risk, Note 24 Post balance sheet events), whereas according to the current forecast, financing of Themis Bioscience GmbH until the end of the third quarter 2019 is based on the assumption of additional capital by both, investors and subsidies. In addition, management is in ongoing negotiations with existing and potential new investors as well as pharmaceutical companies with the objective to secure funding for the long term development of Themis Bioscience GmbH. With regards to the positive research results for the clinical phase 2 for the Chikungunya vaccine and the status of the current financing negotiations, the management follows the going concern principle of Themis Bioscience GmbH. In case Themis Bioscience GmbH will not succeed in timely providing an adequate funding of future cash needs, considerable doubt on Themis Bioscience GmbH's ability to act as a going concern would be raised and the entity would possibly not be in the position to realize its assets and pay its liabilities, as disclosed in the financial statements as of December 31, 2017 and December 31, 2016 in its normal course of business. Our opinion is not modified in respect of this matter.”</p>
<b>B.11</b>	<b>Insufficiency of the issuer's working capital for its present requirements.</b>	<p>Themis currently does not have sufficient working capital for its present requirements for the twelve months following the date of this Prospectus. However, Themis believes that it has, based on the current available cash resources, sufficient working capital to continue its current operations until the second quarter of 2019. Based on its present requirements resulting from its current business plan, Themis expects, without limitation, to require funds for the following:</p> <ul style="list-style-type: none"> <li>• conducting the phase 3 clinical trials for Chikungunya, in particular for manufacturing the vaccine and testing it on approximately 3,000 subjects including 500 batch control subjects in three different regions around the world, and bring it through to phase 3 results;</li> <li>• increasing research and development in the immuno-oncology field; and</li> <li>• further develop the other product candidates, such as vaccines against respiratory syncytial virus (<i>RSV</i>), the cytomegalovirus (<i>CMV</i>) and Noro;</li> </ul> <p>Themis believes its operations will require cash resources in the range of EUR 20 million to EUR 24 million to provide it with sufficient working capital for the next twelve months following the date of the Prospectus, which cash resources will, <i>inter alia</i>, be obtained from the Offering, it being understood that if the Offering is completed and the Offer Price is set at the low-end of the Offer Price Range, net proceeds of approximately EUR 32 million will be generated assuming no exercise of the Increase Option or the Over-Allotment Option. As such, these proceeds, together with Themis' current cash resources, will provide it with sufficient working capital for the next twelve months following the date of the Prospectus.</p> <p>If the Offering should be withdrawn or otherwise not be completed, Themis believes it would require additional funds to cover the deficit in its working capital for the next twelve months</p>



following the date of the Prospectus. In that event, Themis may seek to enter into debt or equity financing arrangements by means of private or public offerings. It may then delay, reduce the scope of, eliminate or divest clinical programs and consider other cost reduction initiatives. Themis believes that the actions mentioned above are likely to be successful and that the implementation of these cost reduction and/or financing measures would provide it with sufficient cash to maintain its operations for at least twelve months from the date of the Prospectus.

Based on the assumption that the Offering will be subscribed for in full with an Offer Price at the low-end of the Offer Price Range, Themis expects that the net proceeds will approximately be (i) EUR 32 million without exercise of the Increase Option or the Over-Allotment Option, (ii) EUR 37 million with full exercise of the Increase Option only, (iii) EUR 37 million with full exercise of the Over-Allotment Option only and (iv) EUR 43 million with full exercise of the Increase Option and the Over-Allotment Option, which in each case considerably exceeds the working capital shortfall of approximately EUR 20 million referred to above. Consequently, if the Offering is completed and the expected net proceeds of the Offering are generated, these proceeds together with Themis' current cash resources will provide it with sufficient working capital for the next twelve months following the date of this Prospectus.

If the Offering should be withdrawn or otherwise not be completed, Themis would pursue various additional alternatives, including seeking additional investors, obtaining further funding from existing investors through additional funding rounds and/or delaying, reducing the scope of, eliminating or divesting clinical programs and considering other cost reduction initiatives, such as reducing the amount of space being rented by Themis, postponing hiring new personnel and/or reducing the size of the current workforce. There is material uncertainty that Themis will be able to continue as a going concern as it may fail to complete other financing alternatives and further, that it may not raise additional funding. Although Themis would be using its best efforts to undertake such alternative measures, it can provide no assurance that such actions, in the absence of the completion of the Offering, will be sufficient to provide it with the working capital needed for the twelve months following the date of the Prospectus. If it is unable to generate such working capital in a sufficient amount, there is material uncertainty as to whether Themis will be able to continue as a going concern and its business, financial condition and/or results of operations would be materially and adversely affected and Themis may ultimately be required to file for insolvency.

## C – Securities

<b>C.1</b>	<b>Type and class of the securities being admitted to trading.</b>	The Shares are ordinary shares with a nominal value of EUR 0.02 each in the share capital of the Company.
	<b>Security identification number.</b>	Application has been made to list all Shares under the symbol “THISR” on Euronext under ISIN Code NL0013089170. The Company's legal entity identifier is 724500HI5W5FYK0R3975.
<b>C.2</b>	<b>Currency of the Offer Shares.</b>	The Offer Shares are denominated in and will trade in euro.
<b>C.3</b>	<b>The number of Shares issued and fully paid nominal value.</b>	After the execution of the Deed of Conversion and Amendment, which deed will be executed shortly after the determination of the Offer Price and prior to Settlement, the authorized share capital of the Company will amount to EUR 850,000, divided into 42,500,000 Shares with a nominal value of EUR 0.02 each. The issued share capital of the Company will upon Settlement consist of 12,412,747 Shares if the Increase Option and the Over-Allotment Option are not exercised and of 13,576,406 Shares if those options are both exercised in full.
		At the Settlement Date, no Shares will be held by the Company. All issued Shares will be fully paid-up and subject to, and will have been created under, the laws of the Netherlands.
<b>C.4</b>	<b>A description of the rights attached to the</b>	Reference to the <i>Articles of Association</i> hereafter will be to the Company's articles of association as they will read after the execution of the Deed of Conversion and Amendment.

**securities.** Each Share confers its holder the right to cast one vote at the Company's general meeting, being the corporate body or, where the context so requires, the physical meeting (the **General Meeting**). There are no restrictions on voting rights. The Shares carry dividend rights.

The General Meeting, or the Company's management board (the **Management Board** and each member thereof, a **Managing Director**), subject to approval by the Company's supervisory board (the **Supervisory Board** and each member thereof, a **Supervisory Director**), to the extent so authorized by the General Meeting for a specific period, may resolve to issue Shares. The General Meeting is only authorized to resolve to issue Shares upon the proposal of the Management Board and subject to the approval of the Supervisory Board. This also applies to the granting of rights to subscribe for Shares, such as options, but is not required for an issue of Shares pursuant to the exercise of a previously granted right to subscribe for Shares. An authorization as referred to above will be irrevocable unless otherwise stipulated and will each time only be valid for a fixed term of no more than five years and may each time only be renewed for a maximum period of five years. The Company may not subscribe for its own Shares on issue.

Pursuant to a resolution of the General Meeting to be adopted prior to Settlement, the Management Board will be irrevocably authorized to, subject to approval by the Supervisory Board, resolve to issue Shares and to grant rights to subscribe for Shares. This authorization of the Management Board will be limited to 50% of the issued Shares immediately following Settlement, to be valid for eighteen months following the Settlement Date.

Upon issue of Shares or grant of rights to subscribe for Shares, each Shareholder shall have a pre-emptive right in proportion to the aggregate nominal amount of his or her Shares. Shareholders do not have pre-emptive rights in respect of Shares issued against contribution in kind, Shares issued to the Company's employees or Shares issued to persons exercising a previously granted right to subscribe for Shares.

Pre-emptive rights may be limited or excluded by a resolution of the General Meeting upon the proposal of the Management Board, which proposal is subject to the approval of the Supervisory Board. The Management Board, subject to approval by the Supervisory Board, is authorized to resolve on the limitation or exclusion of the pre-emptive right if and to the extent the Management Board has been designated by the General Meeting to do so. The designation will only be valid for a specific period, in each case not exceeding five years. Unless provided otherwise in the designation, the designation cannot be cancelled. A resolution of the General Meeting to limit or exclude pre-emptive rights or a resolution to designate the Management Board as described above requires a two-thirds majority of the votes cast if less than half of the issued share capital is represented at a General Meeting.

Pursuant to a resolution of the General Meeting to be adopted prior to Settlement, the Management Board will, subject to the approval of the Supervisory Board, be irrevocably authorized by the General Meeting to resolve to restrict and/or exclude statutory pre-emptive rights in relation to issuances of Shares or granting of rights to subscribe for Shares. The aforementioned authorization of the Management Board is limited to 50% of the issued Shares immediately following Settlement and will be valid for eighteen months following the Settlement Date.

- |            |   |   |
|------------|---|---|
| <b>C.5</b> | <b>Restrictions on the transferability of the Offer Shares.</b> | There are no restrictions on the transferability of the Offer Shares in the Articles of Association.<br><br>However, the Offering to persons located or resident in, or who are citizens of, or who have a registered address in countries other than the Netherlands, and the transfer of Offer Shares into jurisdictions other than the Netherlands, may be subject to specific regulations or restrictions.                  |
| <b>C.6</b> | <b>Listing and admission to trading of the Shares.</b>          | Prior to the Offering, there has been no public market for the Shares. Application has been made for the admission to listing and trading of all Shares under the symbol "THISR" on Euronext. Subject to acceleration or extension of the timetable for the Offering, trading in the Shares on Euronext is expected to commence, on an 'as-if-when-issued' basis, on or about 9 November 2018 (the <b>First Trading Date</b> ). |
| <b>C.7</b> | <b>Dividend policy.</b>   | Themis has not generated any revenues to date and, consequently, has never declared or paid any cash dividends historically. Furthermore, the Company does not expect to generate revenues in the near future and in any event expects to retain all earnings, if any, generated by   |

Themis' operations for the development and growth of its business and therefore does not anticipate paying any dividends to the Shareholders in the foreseeable future.

## **D – Risks**

### **D.1 Key risks relating to the issuer and its industry.**

The following is a summary of selected key risks that, alone or in combination with other events or circumstances, could have a material adverse effect on Themis' business, results of operations, financial position, cash flows and prospects. In making the selection, Themis has considered circumstances such as the probability of the risk materializing on the basis of the current state of affairs, the potential impact which the materialization of the risk could have on its business, results of operations, financial position, cash flows and prospects, and the attention that management would on the basis of current expectations have to devote to these risks if they were to materialize. Investors should read, understand and consider all risk factors, which risk factors are material and should be carefully read in their entirety (see Section 1 (Risk Factors)) before making an investment decision with respect to any Offer Shares.

**Themis has incurred significant losses since its inception. Themis expects to incur further losses for at least the next several years and may never achieve profitability, while Themis' net losses are expected to fluctuate significantly.**

Themis is an immune-modulating clinical-stage biopharmaceutical group that focuses on the development of products to protect against infectious diseases and for the treatment of cancer. Since inception in 2009, Themis has incurred significant operating losses. Themis' loss and total comprehensive loss for the period or year was EUR 1,560 thousand for the six months ended 30 June 2018 and EUR 4,865 thousand for the financial year ended 31 December 2017. Themis has accumulated losses of EUR 21,689 thousand as of 30 June 2018. To date, Themis has financed its operations primarily through private placements of shares, and research and development support from governmental grants and loans. Themis has devoted substantially all of its efforts to research and development, including clinical trials, but has not yet completed development of any drugs or begun to generate revenues from the commercialization of any of its product candidates. Themis expects to continue to incur significant expenses and increasing operating losses for at least the next several years. The amount of future losses is uncertain as well as when, if ever, Themis will achieve profitability.

**If Themis is not able to obtain, or if there are delays in obtaining, required regulatory approvals, in particular in the European Union and the United States, Themis will not be able to commercialize its product candidates, and its ability to generate revenues will be materially impaired.**

Themis' product candidates, including MV-CHIK, and the activities associated with their development and commercialization are subject to comprehensive regulation by the European Medicines Agency and the US Food and Drug Administration and by comparable authorities in other countries. Failure to obtain marketing approval for a product candidate will prevent Themis from commercializing the product candidate. Themis has not received approval to market MV-CHIK or any of its other product candidates from regulatory authorities in any jurisdiction. Regulatory authorities may determine that MV-CHIK or any of the other product candidates are not effective or only moderately effective, or have undesirable or unintended side effects, toxicities, safety profiles or other characteristics that preclude Themis from obtaining marketing approval or that prevent or limit commercial use. If Themis does not obtain regulatory approval to commercialize a product candidate, or if such approval is delayed, Themis' business, results of operations and/or financial condition could be materially adversely affected.

**Themis depends heavily on the success of MV-CHIK, its lead product candidate, which it is developing for the treatment of the Chikungunya virus and, in the longer term, the success of its other product candidates.**

If Themis is unable to commence or complete the phase 3 clinical program for its lead product candidate, MV-CHIK, and thereby fails to obtain marketing and regulatory approvals for MV-CHIK, or if it thereafter fails to commercialize MV-CHIK or experiences significant delays in doing so, its business will be harmed. There remains a significant risk that Themis will fail to successfully develop MV-CHIK. Even if Themis ultimately obtains favorable results from the

phase 3 clinical program for MV-CHIK, Themis does not expect to submit applications for marketing approval for MV-CHIK until at least 2021. Themis' ability to generate product revenues will depend heavily on Themis obtaining marketing approval for and commercializing MV-CHIK, which will require Themis to be successful in a range of challenging activities. If Themis does not achieve one or more of such activities in a timely manner or at all, Themis could experience significant delays or an inability to successfully commercialize MV-CHIK. Moreover, the successful development and commercial success of Themis' other product candidates, which are at early product development stages, will depend on similar factors.

**Themis may not be successful in its efforts to build a pipeline of product candidates and develop marketable products.**

Themis relies on its technology platform (the measles virus or MV Platform), that consists of three key elements, the viral vector technology, advanced antigen design capabilities and proprietary, commercial manufacturing infrastructure. While the Company believes its platform technology can be applied to various product candidates in research and pre-clinical development for the treatment of infectious diseases and cancer, these potential products are at a relatively early stage of development and Themis may not be successful in its efforts to use and expand the MV Platform to build a pipeline of product candidates and develop approved or marketable products. Furthermore, Themis' reliance on a single platform for the development of all its products results in number of additional risks. In particular, difficulties regarding the safety and efficacy rates for MV-CHIK would automatically translate to all other product candidates, any changes in the regulatory environment which may have an adverse impact on the development on MV-CHIK would also affect all other product candidates of Themis and any unexpected findings, such as safety findings, would be applicable to all products candidates as well.

**Manufacturing Themis' products is complex, time-consuming and expensive and may not be sufficiently scalable.**

Manufacturing Themis' products and product candidates will necessitate authorization and compliance with regulatory requirements and will be complex, time-consuming and expensive. There can be no assurance that products identified and developed by Themis and/or Themis' licensees or contractual partners will be capable of being produced in the quality and quantities necessary for clinical development, launch and commercialization at an acceptable cost. Supply sources and transportation could be delayed or interrupted from time to time and, if interrupted, it is not certain that supplies could be resumed (whether in part or in whole) within a reasonable timeframe and at an acceptable cost, if at all. Furthermore, there can be no assurance that Themis' current industrialized manufacturing process can be expanded to scales allowing full commercial manufacturing. Failure to sufficiently ramp-up manufacturing could also adversely influence the business, financial condition and results of operations of Themis.

**Themis may need substantial additional funding. If Themis is unable to raise capital when needed or on acceptable terms, or if it loses its access to existing sources of funding, Themis could be forced to delay, reduce or terminate its product development programs or commercialization efforts.**

Themis expects its research and development and other expenses to increase substantially in connection with its ongoing activities, particularly as Themis continues the research and development of, and potentially seeks marketing approval for, MV-CHIK and other product candidates. Themis' expenses will increase if Themis suffers any delays in the phase 3 clinical program for MV-CHIK, including delays further in receipt of regulatory clearance to begin phase 3 clinical trials or delays in enrollment of patients. If Themis obtains marketing approval, in particular for MV-CHIK but also for any other product candidate that it develops, Themis expects to incur significant commercialization expenses related to product sales, marketing, distribution and manufacturing. Furthermore, upon the closing of this offering, Themis expects to incur additional costs associated with it operating as a public company. Accordingly, Themis will need to obtain substantial funding in connection with its continuing operations. If the Offering does not proceed or does not raise a certain minimum amount, or if Themis' cash needs are higher than anticipated and Themis is not able to generate sufficient funds from other sources, Themis' cash and cash equivalents will not be sufficient for the next 12 months and it will presumably run out of cash, which may lead to Themis not being able to

continue as a going concern or filing for insolvency.

- D.2 Other material risks relating to the issuer and its industry.** The following is a summary of all other material risks that, alone or in combination with other events or circumstances could have a material adverse effect on Themis' business, results of operations, financial position, cash flows and prospects. Investors should read, understand and consider all risk factors, which risk factors are material and should be carefully read in their entirety (see Section 1 (Risk Factors)) before making an investment decision with respect to any Offer Shares.
- Themis has incurred significant losses since its inception. Themis expects to incur further losses for at least the next several years and may never achieve profitability, while Themis' net losses are expected to fluctuate significantly.
  - Themis' limited operating history may make it difficult for a prospective investor to evaluate the success of its business to date and to assess its future viability.
  - Themis' business plan is based on market models that may prove to be wrong.
  - Themis' product portfolio relating to infectious diseases relates to outbreak-diseases for which demand depends on outbreaks.
  - Themis faces competition from other biotechnology and pharmaceutical companies, which may discover, develop or commercialize products before or more successfully than Themis.
- D.3 Key risks relating to the securities and the Offering.** The following is a summary of selected key risks relating to the Offer Shares and the Offering. In making the selection, Themis has considered circumstances such as the probability of the risk materializing on the basis of the current state of affairs and the potential impact which the materialization of the risk could have on the Offer Shares, and the attention that management would on the basis of current expectations have to devote to these risks if they were to materialize. Investors should read, understand and consider all risk factors, which risk factors are material and should be carefully read in their entirety (see Section 1 (Risk Factors)) before making an investment decision with respect to any Offer Shares.
- Upon Settlement, certain existing Shareholders will retain substantial influence over the Company. These existing Shareholders may have different interests from the Company or the other Shareholders.
  - Future offerings of debt or equity securities by the Company, or the perception thereof, may adversely affect the market price of the Shares and any future issuances of Shares may dilute investors' shareholdings.
  - Future sales or the possibility of future sales of a substantial number of Shares by the existing Shareholders and the Company's management may adversely affect the market price of the Shares.
- Other material risks relating to the securities and to the Offering.** The following is a summary of all other material risks relating to the Offer Shares and the Offering. Investors should read, understand and consider all risk factors, which risk factors are material and should be carefully read in their entirety (see Section 1 (Risk Factors)) before making an investment decision with respect to any Offer Shares.
- The Company has broad discretion in the use of the net proceeds from the Offering and may not use them effectively.
  - Shareholders outside the Netherlands may not be able to exercise pre-emptive rights in future offerings.
  - If securities or industry analysts cease to publish research reports on Themis' business, or adversely change or make negative recommendations regarding the Shares, the market price and trading volume of the Shares could decline.
  - There is a risk that an active and liquid market for the Shares will not develop and the

price of the Shares may be volatile.

- The market price of the Shares may fluctuate significantly and be lower than the Offer Price, and investors could lose all or part of their investment.
- The Company does not intend to pay dividends for the foreseeable future.
- If Settlement does not take place, subscriptions for the Offer Shares will be disregarded and transactions effected in the Offer Shares will be annulled.
- Investors with a reference currency other than euro will become subject to certain foreign exchange risks when investing in the Shares.
- The requirements of being a public company may strain the Company's resources and distract its management, which could make it difficult to manage its business.
- The ability of Shareholders to bring action or enforce judgments against the Company, the Managing Directors and the Supervisory Directors may be limited.
- The Company is a Dutch public limited liability company. The rights of the Shareholders may be different from the rights of shareholders in companies governed by the laws of US jurisdictions.
- The Company operates so as to be treated as exclusively as a resident of Austria for tax purposes, but the relevant tax authorities may treat us as also being tax resident elsewhere.

## E – Offer

### E.1 The total net proceeds and estimated expenses.

Assuming that the Offering is fully subscribed and the Offer Price is at the low-end or at the high-end of the Offer Price Range, the table below sets out (i) the expected gross proceeds, (ii) the expected net proceeds and (iii) the expected aggregate administrative, legal and audit expenses as well as the other costs and expenses in connection with the Offering, including those with respect to the Netherlands Authority for the Financial Markets (*Stichting Autoriteit Financiële Markten*, the **AFM**) and Euronext Amsterdam N.V. and the fees and commissions payable to the Underwriters (as defined in E.3 below) (which for these purposes are assumed to have been equal to 5.5% of the gross proceeds of the Offering other than in respect of the Committing Shareholders which are paying a 4.4% commission), with respect to (a) the Offering without exercise of the Increase Option and the Over-Allotment Option, (b) the Offering including exercise of the Increase Option only, (c) the Offering including exercise of the Over-Allotment Option only and (d) the Offering including exercise of the Increase Option and Over-Allotment Option in full.

Offering	Gross proceeds		Net proceeds		Aggregate expenses, costs and fees	
			(in EUR millions)			
	Low-end of the Offer Price Range	High-end of the Offer Price Range	Low-end of the Offer Price Range	High-end of the Offer Price Range	Low-end of the Offer Price Range	High-end of the Offer Price Range
Offering, without the Increase Option and the Over-Allotment Option ....	35	42	32	39	3	3
Offering, including the Increase Option only .....	40	48	37	45	3	4
Offering, including the Over-Allotment Option only .....	40	48	37	45	3	4
Offering, including the Increase Option and the Over-Allotment Option in full .....	46	56	43	51	3	4

### E.2a Reasons for the offering and

Assuming that the Offering is fully subscribed for and the Offer Price is at the low-end of the Offer Price Range, and excluding the exercise of the Increase Option and the Over-Allotment

**use of  
proceeds.**

Option, Themis currently anticipates that over the coming several years it will use the net proceeds of the Offering, in order of importance, as follows:

- approximately EUR 30 million (approximately 95% of the net proceeds of the Offering) to conduct the phase 3 clinical trials for Chikungunya, in particular for manufacturing the vaccine and testing it on approximately 3,000 subjects including 500 batch control subjects in three different regions around the world, and bring it through to phase 3 results (excluding regulatory approvals);
- up to approximately EUR 2 million (up to approximately 5% of the net proceeds of the Offering) to increase research and development in the immuno-oncology field; and
- the remainder will be used:
  - to increase the commercialization capabilities; and
  - for general corporate purposes.

Assuming the Offering is fully subscribed and the Offer Price is at the low-end of the Offer Price Range, including the exercise of the Increase Option and the Over-Allotment Option, Themis currently anticipates that over the coming several years it will use the net proceeds of the Offering, in order of importance, as follows:

- approximately EUR 30 million (approximately 70% of the net proceeds of the Offering) to conduct the phase 3 clinical trials for Chikungunya, in particular for manufacturing the vaccine and testing it on approximately 3,000 subjects including 500 batch control subjects in three different regions around the world, and bring it through to phase 3 results (excluding regulatory approvals);
- approximately EUR 4 million to EUR 9 million (approximately 10% to 20% of the net proceeds of the Offering) to increase research and development in the immuno-oncology field;
- up to approximately EUR 4 million (up to approximately 10% of the net proceeds of the Offering) to further develop the other product candidates, such as vaccines against RSV, CMV and Noro; and
- the remainder will be used:
  - to increase the commercialization capabilities; and
  - for general corporate purposes.

As of the date of the Prospectus, Themis cannot predict with certainty all of the specific uses for the net proceeds from the Offering, or the amounts to be actually spent on the uses set forth above. The amounts and timing of its actual use of the net proceeds may vary depending on numerous factors, among others the progress of Themis' development, progress of its research, the cost of, status of and results from preclinical development programs and clinical trials, any collaboration that Themis may enter into for product candidates and any unforeseen cash needs. At the date of the Prospectus, Themis cannot estimate the amount of time or use of proceeds needed to conduct the above-mentioned trial. As a result, Themis retains broad discretion in the use of the net proceeds from the Offering.

**E.3 Terms and  
conditions of  
the Offering.**

**Offer Shares**

The Company is offering up to 3,608,247 Offer Shares (excluding the Increase Option and the Over-Allotment Option). Assuming no exercise of the Increase Option and the Over-Allotment Option, the Offer Shares will constitute not more than approximately 41% of the issued Shares. Assuming the Increase Option and the Over-Allotment Option are fully exercised, the Offer Shares will constitute not more than approximately 54% of the issued Shares.

The Offering consists of: (i) a public offering to retail and institutional investors in the Netherlands and (ii) a private placement to certain institutional investors in various other jurisdictions. The Offer Shares are being offered: (i) within the United States of America (the **United States**) to qualified institutional buyers as defined in Rule 144A (**Rule 144A**) under the US Securities Act of 1933, as amended (the **US Securities Act**) pursuant to Rule 144A or another exemption from, or in a transaction not subject to, the registration requirements of the US Securities Act and applicable state securities laws, and (ii) outside the United States, in offshore transactions as defined in, and in accordance with, Regulation S under the US Securities Act. The Offer Shares are being offered only in those jurisdictions in which, and only to those persons to whom, offers of Shares may be lawfully made.

### **Increase Option and Over-Allotment Option**

The Company reserves the right to, after consultation with the Joint Global Coordinators (as defined below), increase the total number of Offer Shares by up to 15%, up to a maximum of 541,237 Offer Shares (the **Increase Option**). In the event that the Increase Option is exercised in full, the maximum number of Offer Shares amounts to 4,149,484, representing approximately 47% of the issued Shares. Any decision to exercise the Increase Option will be announced at the latest on the date the Offer Price is announced, which is currently expected to be on or about 8 November 2018. The Company has further granted the Joint Global Coordinators, on behalf of the Underwriters (as defined below), an option (the **Over-Allotment Option**), exercisable within 30 calendar days after the First Trading Date, pursuant to which the Joint Global Coordinators, on behalf of the Underwriters, may require the Company to issue at the Offer Price up to 541,237 additional Shares (or up to 622,422 additional Shares in the event that the Increase Option is exercised in full), comprising up to 15% of the total number of Offer Shares sold in the Offering (the **Additional Shares**), to cover over-allotments or short positions (if any) in connection with the Offering.

### **Offering Period**

The Offering will begin on 29 October 2018 at 9:00 a.m. Central European Time (**CET**) and is expected to end at 16:00 CET on 8 November (the **Offering Period**), subject to acceleration or extension of the timetable for the Offering and subject as set out below for retail investors. On the final day of the Offering Period, subject to acceleration and extension of the timetable for the Offering and barring unforeseen circumstances, prospective retail investors may submit offers to subscribe for shares until 8 November, 12:00 (noon) CET, and institutional investors may subscribe for Offer Shares until 8 November, 16:00 CET. The Company together with the Joint Global Coordinators may adjust the dates, times and periods given in the timetable and throughout the Prospectus.

### **Offer Price and Number of Offer Shares**

The Offer Price Range is expected to be in the range of EUR 9.70 to EUR 11.60 (inclusive) per Offer Share. The Offer Price and the exact number of Offer Shares will be determined on the basis of a book building process. The Offer Price may be set within, above or below the Offer Price Range. The Offer Price Range is an indicative price range. The Offer Price and the exact number of Offer Shares offered will be determined by the Company, after consultation with the Joint Global Coordinators prior to the allocation of the Offer Shares (**Allocation**), subject to any acceleration or extension, on the basis of the book building process and taking into account economic and market conditions, a qualitative and quantitative assessment of demand for the Offer Shares, and other factors deemed appropriate.

The Offer Price, the exact number of Offer Shares to be sold (including any exercise of the Increase Option) and the maximum number of Additional Shares will be stated in a pricing statement (the **Pricing Statement**) that will be published through a press release that will also be posted on the Company's website and filed with the AFM.

The Offer Price Range is an indicative price range. The Company, after consultation with the Joint Global Coordinators, reserves the right to change the Offer Price Range, to decrease the total number of Offer Shares, or to increase the total number of Offer Shares pursuant to the Increase Option prior to Allocation. Any increase of the top end of the Offer Price Range on the last day of the Offering Period or the determination of an Offer Price above the Offer Price Range will result in the Offering Period being extended by at least two business days. Any



increase of the top end of the Offer Price Range on the day prior to the last day of the Offering Period will result in the Offering Period being extended by at least one business day. In these cases, if the Offering Period for Dutch Retail Investors would already have closed, this Offering Period for Dutch Retail Investors would be reopened. Accordingly, all investors, including Dutch Retail Investors, will have at least two business days to reconsider their subscriptions. Any such change will be announced in a press release (that will also be posted on the Company's website). Upon a change of the number of Offer Shares, references to Offer Shares in the Prospectus should be read as referring to the amended number of Offer Shares and references to Additional Shares should be read as referring to the amended number of Additional Shares.

### **Subscription and Allocation**

Subscriptions by eligible Dutch retail investors (***Dutch Retail Investors***) can only be made on a market order (*bestens*). As a consequence, Dutch Retail Investors that subscribed for the Offer Shares in the Offering, shall be obliged to purchase and pay for the number of Offer Shares in their share application, to the extent allocated to them, at the Offer Price, even if the Offer Price is above the upper end of the Offer Price Range (if applicable, as amended). Dutch Retail Investors can submit their subscriptions through their own financial intermediary. The financial intermediary will be responsible for collecting subscriptions from Dutch Retail Investors and for submitting their subscriptions to NIBC Bank N.V. (***NIBC***) as the retail coordinator (the ***Retail Coordinator***). The Retail Coordinator will consolidate all subscriptions submitted by Dutch Retail Investors to financial intermediaries and inform the Joint Global Coordinators and the Company. Dutch Retail Investors are entitled to cancel or amend their application, at the financial intermediary where their original application was submitted, at any time prior to the end of the Offering Period (if applicable, as accelerated or extended), in the event that the Offer Price Range is increased above the upper end of the original Offer Price Range or a supplement to the Prospectus is published.

Allocation is expected to take place after the closing of the Offering Period on or about 8 November 2018, subject to acceleration or extension of the timetable for the Offering. Allocation to investors who subscribed for Offer Shares will be made by the Underwriters, after consultation with the Company, and full discretion will be exercised as to whether or not and how to allocate the Offer Shares subscribed for. There is no maximum or minimum number of Offer Shares for which prospective investors may subscribe and multiple (applications for) subscriptions are permitted. In the event that the Offering is oversubscribed, investors may receive fewer Offer Shares than they applied to subscribe for.

### **Payment**

Payment (in euro) for, and delivery of, the Offer Shares will take place on the date of Settlement, which is expected to be 12 November 2018 (the ***Settlement Date***). Taxes and expenses, if any, must be borne by the investor. Dutch Retail Investors may be charged expenses by their financial intermediary. Investors must pay the Offer Price in immediately available funds in full in euro on or before the Settlement Date (or earlier in the case of an early closing of the Offering Period and consequent acceleration of pricing, Allocation, commencement of trading and Settlement).

### **Delivery of Shares**

The Offer Shares will be delivered in book-entry form through the facilities of *Nederlands Centraal Instituut voor Giraal Effectenverkeer B.V. (Euroclear Nederland)*. If Settlement does not take place on the Settlement Date as planned or at all, the Offering may be withdrawn, in which case all subscriptions for Offer Shares will be disregarded, any allotments made will be deemed not to have been made and any subscription payments made will be returned without interest or other compensation. Any transactions in Shares prior to Settlement are at the sole risk of the parties concerned.

### **Commitment of Committing Shareholders**

Prior to the date of the Prospectus, the Company entered into commitment letters (the ***Commitment Letters***) with certain of Themis Bioscience GmbH's current shareholders, Global Health Investment Fund I, LLC, WELLINGTON Partners Nominee Ltd., aws Gründerfonds

Beteiligungs GmbH & Co KG, FPCI Ventech Capital III and Werner Lanthaler (the **Committing Shareholders**). Pursuant to the Commitment Letters, each of the Committing Shareholders, severally and not jointly, has irrevocably committed to subscribe for, and the Company has agreed to issue and allot to the Committing Shareholders, Offer Shares at the Offer Price in the Offering.

The aggregate commitments of all Committing Shareholders pursuant to the Commitment Letters amount to EUR 8,600,000. The Commitment Letters will terminate automatically upon the earlier of (i) the termination of the Underwriting Agreement (as defined below), (ii) the Settlement Date not having occurred before 31 December 2018, or (iii) the Joint Global Coordinators, on the one hand, or the Company, on the other hand, informing the other, prior to the execution of the Underwriting Agreement (as defined below), that it has elected or determined not to proceed with the Offering.

### **Underwriting Agreement**

The Company and the Underwriters named below (the **Underwriters**) entered into an underwriting agreement on 29 October 2018 with respect to the offer and sale of the Offer Shares in connection with the Offering (the **Underwriting Agreement**).

After entering into of the pricing agreement between the Company and the Underwriters (the **Pricing Agreement**), which is a condition for the obligations of the Underwriters under the Underwriting Agreement, and on the terms of and subject to the conditions set forth in the Underwriting Agreement, the Company will agree to issue and sell the Offer Shares at the Offer Price to subscribers procured by the Underwriters or, failing subscription by the procured subscribers, to the Underwriters themselves, and each of the Underwriters will, severally but not jointly, agree to procure subscribers for the Offer Shares or, failing subscription by the procured subscribers, to subscribe for the Offer Shares themselves at the Offer Price.

In the Underwriting Agreement, the Company has made certain representations and warranties and given certain undertakings. In addition, the Company has agreed to indemnify the Underwriters against certain liabilities in connection with the Offering.

The Underwriting Agreement provides that the obligations of the Underwriters to procure subscribers and purchasers for the Offer Shares or, failing subscription by the procured subscribers, to subscribe for and/or purchase the Offer Shares themselves are subject to, among other things, the following conditions precedent: (i) the approval of this Prospectus by the AFM being in full force and effect, (ii) receipt at closing of the Offer of opinions on certain legal matters from counsel, (iii) the absence of a material adverse change in respect of the business, financial position, results of operations or prospects of Themis or in financial markets since the date of the Underwriting Agreement, (v) the admission of the Shares to listing on Euronext Amsterdam occurring no later than 09:00 a.m. CET on the First Trading Date and (vi) certain other customary conditions, most notably in respect of the accuracy of certain representations and warranties by the Company, required disclosure by the Company having been made and the Company having complied with the terms of the Underwriting Agreement.

Upon the occurrence of certain specified events, such as the occurrence of (i) a material adverse change in the business, financial position, results of operations or prospects of Themis taken as a whole since the date of the Underwriting Agreement, (ii) a breach of any representation, warranty or undertaking or otherwise of the Underwriting Agreement or (iii) a statement in the Prospectus, the Pricing Statement or any amendment or supplement to the Prospectus being untrue, inaccurate or misleading or a new matter having arisen that constitutes a material omission from the Prospectus, the Underwriters may elect to terminate the Underwriting Agreement at any time prior to the Settlement Date (or thereafter, in respect of the Over-Allotment Option only).

### **Joint Global Coordinators and Joint Bookrunners**

NIBC and Stifel are acting as joint global coordinators and joint bookrunners for the Offering (in such and any other capacity, the **Joint Global Coordinators**).

## **Underwriters**

The Joint Global Coordinators and Erste Group Bank AG (acting as co-bookrunner for the Offering) are acting as the Underwriters.

## **Listing and Paying Agent**

NIBC is the listing and paying agent with respect to the admission to listing and trading of the Shares on Euronext.

## **Retail Coordinator**

NIBC is the retail coordinator with respect to the with respect to the Shares on Euronext.

## **Stabilization Manager**

NIBC is the stabilization manager (the *Stabilization Manager*) with respect to the Shares on Euronext.

- E.4 Interests material to the Offering including conflicting interests.** The Underwriters and/or their respective affiliates have in the past been engaged, and may in the future, from time to time, engage in commercial banking, investment banking and financial advisory and ancillary activities in the ordinary course of their business with Themis or any parties related to it, in respect of which they have received, and may in the future receive, customary fees and commissions.
- Additionally, the Underwriters may, in the ordinary course of their business, in the future hold the Company's securities for investment. In respect of the aforementioned, the sharing of information is generally restricted for reasons of confidentiality by internal procedures or by rules and regulations. As a result of these transactions, the Underwriters may have interests that may not be aligned, or could potentially conflict, with the interests of purchasers or with the interests of the Company.
- E.5 Name of the person or entity offering to sell the security.** The Company is offering to sell the Offer Shares, including any Shares issued upon any exercise of the Increase Option and/or the Over-Allotment Option.
- Lock-up agreement: the parties involved; and indication of the period of the lock-up.** The restrictions of the lock-up arrangements described below, including those on sales, issues or transfers of Shares, may be waived by the Joint Global Coordinators (acting on behalf of the Underwriters), in their sole discretion and at any time. If the consent of the Joint Global Coordinators (acting on behalf of the Underwriters) in respect of a waiver of the lock-up arrangements is requested as described below, full discretion can be exercised by the Joint Global Coordinators as to whether or not such consent will be granted.

## **Company lock-up**

Pursuant to the Underwriting Agreement, the Company has agreed with the Underwriters that, for a period from the date of the Underwriting Agreement until 365 days from the Settlement Date, it will not, except as set forth below, without the prior written consent of the Joint Global Coordinators (acting on behalf of the Underwriters), (i) directly or indirectly, issue, offer, pledge, sell, contract to sell, sell or grant any option, right, warrant or contract to purchase, exercise any option to sell, purchase any option or contract to sell, or lend or otherwise transfer or dispose of, directly or indirectly, any Ordinary Shares or other shares of the Company or any securities convertible into or exercisable or exchangeable for, or substantially similar to, Ordinary Shares or other shares of the Company or file any registration statement under the US Securities Act or any similar document with any other securities regulator, stock exchange or listing authority with respect to any of the foregoing; (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of any Ordinary Shares or other shares of the Company or otherwise has the same economic effect as (i), whether in the case of (i) and (ii) any such transaction is to be settled by delivery of Ordinary Shares or such

other securities, in cash or otherwise; (iii) publicly announce such an intention to effect any such transaction; or (iv) submit to its Shareholders or any other body of the Company a proposal to effect any of the foregoing.

The foregoing restrictions shall not apply to (i) the issue and offer by the Company of the Offer Shares, (ii) the granting of awards in options or Ordinary Shares by the Company or the issuance of Ordinary Shares upon exercise of options granted by the Company, in each case pursuant to employee incentive schemes as disclosed or described as being proposed or contemplated in this Prospectus or (iii) the issue of Ordinary Shares to Shareholders in connection with the Corporate Reorganization.

### **Shareholders lock-up**

Each of the existing Shareholders (other than the Managing Directors) has entered into a lock-up agreement with the Joint Global Coordinators (acting on behalf of the Underwriters) on 29 October 2018. Pursuant to this lock-up agreement, each of the existing Shareholders (other than Managing Directors) has agreed with the Joint Global Coordinators (on behalf of the Underwriters) that, for a period from the date of the Underwriting Agreement until 365 calendar days from the Settlement Date, it will not, except as set forth below, without the prior written consent of the Joint Global Coordinators (acting on behalf of the Underwriters): (i) directly or indirectly, offer, pledge, sell, contract to sell, sell or grant any option, right, warrant or contract to purchase, exercise any option to sell, purchase any option or contract to sell, or lend or otherwise transfer or dispose of, directly or indirectly, any Shares or other shares of the Company or any securities convertible into or exercisable or exchangeable for, or substantially similar to, Shares or other shares of the Company or request or demand that the Company file any registration statement under the US Securities Act of 1933, as amended, or submits any prospectus for approval under the Dutch Financial Supervision Act (*Wet op het financieel toezicht*) (the **DFSA**) or any similar document with any other securities regulator, stock exchange or listing authority with respect to any of the foregoing; (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of any Shares or other shares of the Company or otherwise has the same economic effect as (i), whether any such transaction in the case of (i) and (ii) is to be settled by delivery of Shares or such other securities, in cash or otherwise; (iii) cause or approve, directly or indirectly, any announcement, execution or implementation of a direct or indirect placement of Shares or any other securities of the Company or any public announcement of such an intention to effect any such transaction; or (iv) the submission to the General Meeting or any other body of the Company, or vote in favour of, a proposal to effect any of the foregoing.

The foregoing restrictions shall not apply to: (i) any Shares acquired by such Shareholder in the Offering or on Euronext Amsterdam on or after the First Trading Date; (ii) any transfer, subscription or exchange in connection with the Corporate Reorganization; (iii) an acceptance of a general offer for the ordinary share capital of the Company made in accordance with the DFSA or the provision of an irrevocable undertaking to accept such an offer, provided that the Joint Global Coordinators are notified in writing two Business Days in advance; (iv) any transfer as a result of the legal merger or demerger of the Company; (v) the lending of Shares to the Stabilization Manager (acting on behalf of the Underwriters) pursuant to the stock lending agreement dated 29 October 2018; and (vi) any transfer of Shares by any existing Shareholder to any of (A) its subsidiaries or subsidiary undertakings, or to any subsidiary or subsidiary undertaking of its ultimate holding company, or (B) to any investment fund or other entity controlled or managed by the relevant Shareholder or any of the entities referred to in (A), provided that prior to the transfer it shall have entered into a lock-up agreement or assumed all rights and obligations of the relevant transferring Shareholder under the lock-up agreement for the remainder of the lock-up period.

### **Management and employee lock-up**

Each Managing Director and certain employees of the Company have entered into a lock-up agreement with the Joint Global Coordinators (acting on behalf of the Underwriters) on 29 October 2018. Pursuant to this lock-up agreement, each such person has agreed with the Joint Global Coordinators (on behalf of the Underwriters) that, for a period from the date of the Underwriting Agreement until 365 calendar days from the Settlement Date, it will not, except as set forth below, without the prior written consent of the Joint Global Coordinators (acting

on behalf of the Underwriters): (i) directly or indirectly, offer, pledge, sell, contract to sell, sell or grant any option, right, warrant or contract to purchase, exercise any option to sell, purchase any option or contract to sell, or lend or otherwise transfer or dispose of, directly or indirectly, any Shares or other shares of the Company or any securities convertible into or exercisable or exchangeable for, or substantially similar to, Shares or other shares of the Company or request or demand that the Company file any registration statement under the US Securities Act of 1933, as amended, or submits any prospectus for approval under the DFSA or any similar document with any other securities regulator, stock exchange or listing authority with respect to any of the foregoing; (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of any Shares or other shares of the Company or otherwise has the same economic effect as (i), whether any such transaction in the case of (i) and (ii) is to be settled by delivery of Shares or such other securities, in cash or otherwise; (iii) cause, directly or indirectly, any announcement, execution or implementation of a direct or indirect placement of Shares or any other securities of the Company or any public announcement of such an intention to effect any such transaction; or (iv) the submission to the General Meeting or any other body of the Company, or vote in favour of, a proposal to effect any of the foregoing.

The foregoing restrictions shall not apply to: (i) any transfer, subscription or exchange in connection with the Corporate Reorganization; (ii) an acceptance of a general offer for the ordinary share capital of the Company made in accordance with the DFSA or the provision of an irrevocable undertaking to accept such an offer, provided that the Joint Global Coordinators are notified in writing two Business Days in advance; (iii) any transfer as a result of the legal merger or demerger of the Company; (iv) the exercise of options for Shares under awards granted under the Company's existing stock option plan as described in the Prospectus but not any sale of Shares obtained as a result; and (v) any transfer or disposal of Shares to family members of the relevant person, provided that prior to the transfer he or she shall have assumed all rights and obligations of the relevant transferring or disposing person under the lock-up agreement for the remainder of the lock-up period.

**E.6 Dilution.**

The voting interest of the existing Shareholders will be diluted as a result of the issuance of the Offer Shares. The maximum dilution for the existing Shareholders not participating in the Offering pursuant to the issuance of the Offer Shares would be (i) 29%, assuming the issuance of the maximum number of Offer Shares and no exercise of the Increase Option and the Over-Allotment Option, (ii) 32%, assuming the issuance of the maximum number of Offer Shares and the full exercise of the Increase Option only, (iii) 32%, assuming the issuance of the maximum number of Offer Shares and the full exercise of the Over-Allotment Option only and (iv) 35%, assuming the issuance of the maximum number of Offer Shares and the full exercise of the Increase Option and the Over-Allotment Option.

**E.7 Estimated expenses charged to the investor by the issuer.**

Not applicable. No expenses have been or will be charged to investors by the Company in relation to the Offering.

## 1. Risk Factors

*An investment in the Offer Shares is subject to substantial risks and uncertainties. In addition to the other information contained or incorporated by reference in this Prospectus, investors should carefully consider the following risks when deciding whether to invest in the Offer Shares. Any of the following risks, alone or together with additional risks and uncertainties not currently known to the Company, or that the Company might currently deem immaterial, could have a material adverse effect on the business, prospects, net assets, financial condition, cash flows and operating results of Themis. With regard to historical financial information as of and for the financial years ended 31 December 2017 and 2016 as well as prior periods and as of 30 June 2018 and for the six month periods ended 30 June 2018 and 2017 presented in the Prospectus, references to **Themis** refer to Themis Bioscience GmbH, unless otherwise indicated.*

*All of the risk factors described below are contingencies that may or may not occur. Themis may face a number of these risks described below simultaneously and one or more of the risks described below may be interdependent. The order in which the risks are presented is not necessarily an indication of the likelihood of the risks actually materializing, or the significance or degree of the risks or the scope of any potential harm to the Company's and/or Themis' business, prospects, net assets, financial condition, cash flows or operating results.*

*The risk factors are based on assumptions that could turn out to be incorrect. Furthermore, although the Company believes that the risks and uncertainties described below are the material risks and uncertainties concerning Themis' business and the Shares, they are not the only risks and uncertainties relating to Themis and the Shares. Other risks, events, facts or circumstances not presently known to the Company, or that the Company currently deems to be immaterial, individually or cumulatively, may prove to be important and could have a material adverse effect on Themis' business, prospects, net assets, financial condition, cash flows or operating results.*

*Prospective investors should read and carefully review this entire Prospectus and should reach their own views before making an investment decision with respect to any Offer Shares. Furthermore, before making an investment decision with respect to any Offer Shares, prospective investors should consult their own stockbrokers, bank managers, lawyers, auditors or other financial, legal and tax advisors and carefully review the risks associated with an investment in the Offer Shares and consider such an investment decision in light of their personal circumstances.*

### 1.1 Risks Related to Themis' Business Activities and Industry

#### 1.1.1 ***Themis has incurred significant losses since its inception. Themis expects to incur further losses for at least the next several years and may never achieve profitability, while Themis' net losses are expected to fluctuate significantly.***

Themis is an immune-modulating clinical-stage biopharmaceutical group that focuses on the development of products to protect against infectious diseases and for the treatment of cancer. Since inception in 2009, Themis has incurred significant operating losses. Themis' loss and total comprehensive loss for the period or year was EUR 1,560 thousand for the six months ended 30 June 2018 and EUR 4,865 thousand for the financial year ended 31 December 2017. Themis has accumulated losses of EUR 21,689 thousand as of 30 June 2018. To date, Themis has financed its operations primarily through private placements of shares, and research and development support from governmental grants and loans. Themis has devoted substantially all of its efforts to research and development, including clinical trials, but has not yet completed development of any drugs or begun to generate revenues from the commercialization of any of its product candidates. Themis expects to continue to incur significant expenses and increasing operating losses for at least the next several years. The amount of future losses is uncertain as well as when, if ever, Themis will achieve profitability.

The losses incurred by Themis may, in addition, fluctuate significantly from half year to half year and year to year. In particular, Themis anticipates that its expenses will substantially increase in connection with initiating and completing the planned international phase 3 clinical trials of its lead product candidate, a measles-vectored Chikungunya virus vaccine (**MV-CHIK**) for the treatment of the Chikungunya virus. Themis expects costs for the phase 3 clinical trials for MV-CHIK to amount to approximately EUR 20,000 thousand.

In addition, Themis is conducting a phase 1 clinical trial of a Zika virus vaccine. Themis expects to complete this trial in 2020. Themis plans to further conduct pre-clinical development of virus vaccines against the norovirus, the respiratory syncytial virus (**RSV**) and the cytomegalovirus (**CMV**), depending on the ability to raise non-dilutive funds (grants). Furthermore, Themis is in the process of conducting preclinical studies in relation to its immuno-oncology product candidates, which will result in it incurring significant expenses for the foreseeable future.

If Themis obtains marketing approval of MV-CHIK or another product candidate, Themis also expects to incur significant sales, marketing, distribution and manufacturing expenses.

**1.1.2 *Themis may need substantial additional funding. If Themis is unable to raise capital when needed or on acceptable terms, or if it loses its access to existing sources of funding, Themis could be forced to delay, reduce or terminate its product development programs or commercialization efforts.***

Themis expects its research and development and other expenses to increase substantially in connection with its ongoing activities, particularly as Themis continues the research and development of, and potentially seeks marketing approval for, MV-CHIK and other product candidates. Themis' expenses will increase if Themis suffers any delays in the phase 3 clinical program for MV-CHIK, including delays in receipt of regulatory clearance to begin phase 3 clinical trials or delays in enrolment of patients. If Themis obtains marketing approval, in particular for MV-CHIK but also for any other product candidate that it develops, Themis expects to incur significant commercialization expenses related to product sales, marketing, distribution and manufacturing. Furthermore, upon the closing of the Offering, Themis expects to incur additional costs associated with the Company operating as a public company. Accordingly, Themis will need to obtain substantial additional funding in connection with its continuing operations.

Themis believes that its operations (as described in Section 6.4 (*Capitalization, Indebtedness and Working Capital—Statement on Working Capital*)) will require cash resources in the range of EUR 20 million to EUR 24 million to provide it with sufficient working capital to meet its anticipated cash requirements for at least the next twelve months, which will be satisfied from its existing cash resources including research funding arrangements, together with the net proceeds of the Offering (assuming that the Offering is fully subscribed for and the Offer Price is at the low-end of the Offer Price Range). However, if the Offering does not proceed or if net proceeds of the Offering are lower than EUR 20 million, or if Themis' cash needs are higher than anticipated and Themis is not able to generate sufficient funds from other sources, Themis' cash and cash equivalents will not be sufficient for the next twelve months, which may lead to Themis not being able to continue as a going concern or filing for insolvency. In any such event, the Company would implement a detailed action plan to address the imminent working capital shortfall by reducing cash outflows prior to exhausting its cash and cash equivalents. This would include significant cost reductions and reduced, or at least delayed, operating and capital expenditures. See Section 6.4 (*Capitalization, Indebtedness and Working Capital—Statement on Working Capital*). Such an action plan, although necessary, would ultimately have a material adverse effect on Themis' business, results of operations, financial position, cash flows and prospects. In addition, even if Themis raises at least EUR 20 million in the Offering and as a result thereof its cash and cash equivalents are sufficient for the next twelve months, in the future Themis may need to raise substantial additional capital to achieve its business objectives.

Themis' ability to raise additional funds will depend on financial, economic and other factors, many of which are beyond the Company's control. Adequate additional financing may not be available to Themis on acceptable terms, or at all. If necessary funds are not available, Themis may have to delay, limit, reduce or terminate its product development efforts or the establishment of late-stage development and commercialization capabilities, production or marketing, which could have a material adverse effect on its business, financial condition, results of operations and prospects.

Furthermore, in relation to the development of vaccines against Zika virus, Lassa fever and MERS, Themis has entered into partnered programs with the European Commission, the UK Government and the Coalition of Emergence Preparedness Innovation (*CEPI*) for the development of these vaccines. In connection with these partnered programs, Themis receives funding upon reaching certain pre-defined milestones. Should Themis be unable to reach certain of the pre-defined milestones or meet certain other specified conditions to continued funding, resulting in it losing its right to funding under the terms of the partnered programs, it may have to cease the related development activities.

**1.1.3 *Themis depends heavily on the success of MV-CHIK, its lead product candidate, which it is developing for the treatment of the Chikungunya virus and, in the longer term, the success of its other product candidates.***

If Themis is unable to commence or complete the phase 3 clinical program for its lead product candidate, MV-CHIK, and thereby fails to obtain marketing and regulatory approvals for MV-CHIK, or if it thereafter fails to commercialize MV-CHIK or experiences significant delays in doing so, its business will be harmed.

Themis has invested a significant portion of its efforts and financial resources into the development of MV-CHIK. There remains, however, a significant risk that Themis will fail to successfully develop MV-CHIK.

Themis' ability to generate product revenues, which may not occur for many years, if ever, will depend heavily on Themis obtaining marketing approval for and commercializing MV-CHIK. Based on its current plans, Themis does not expect to generate significant revenues unless and until Themis obtains marketing approval for, and commercializes, the MV-CHIK. This will require Themis to be successful in a range of challenging activities, including:

- securing regulatory approval to begin phase 3 clinical trials;

- initiating and obtaining favourable results from its phase 3 clinical trials of MV-CHIK;
- receiving regulatory approval of Themis' manufacturing processes and its facilities from applicable regulatory authorities;
- applying for and obtaining marketing approval for MV-CHIK;
- establishing sales, marketing and distribution capabilities to effectively market and sell MV-CHIK in the European Union and the United States and establishing collaboration, distribution or other marketing arrangements with third parties to commercialize MV-CHIK in markets outside the European Union and the United States;
- launching commercial sales of MV-CHIK, if and when approved, whether alone or in collaboration with third parties;
- acceptance of MV-CHIK, if and when approved, by patients, the medical community and third-party payers and effectively competing with other therapies;
- maintaining a continued acceptable safety profile of MV-CHIK following approval;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity;
- protecting its rights to its intellectual property portfolio related to MV-CHIK;
- successfully manufacturing commercial quantities of MV-CHIK; and
- negotiating and securing adequate reimbursement from third-party payers for MV-CHIK.

If Themis does not achieve one or more of the above listed activities in a timely manner or at all, Themis could experience significant delays or an inability to successfully commercialize MV-CHIK, which could materially harm its business. Themis may never succeed in these activities and, even if it does, it may never generate revenues that are significant enough to generate profits from operations. Even if Themis does generate profits from operations, Themis may not be able to sustain or increase profitability on a quarterly or annual basis. Themis' failure to generate profits from operations and/or to thereafter remain profitable would decrease the value of its business and could impair its ability to raise capital, expand its business, maintain its research and development efforts, diversify its product offerings or continue its operations. A decline in the value of Themis could also cause prospective investors to lose all or part of their investment.

The successful development and commercial success of Themis' other product candidates, which are at early product development stages, will depend on similar factors listed above. Themis' ability to generate profits from operations and become profitable depends on its ability to successfully develop and commercialize drugs that generate significant revenues. Even if Themis is able to successfully develop and commercialize MV-CHIK, there can be no assurance that Themis will also be able to successfully develop any of its other product candidates. A failure to do so would impair the Company's ability to grow its operations and revenues, and would have a material adverse effect on its business, prospects, financial condition and results of operation.

#### **1.1.4 *Themis' limited operating history may make it difficult for a prospective investor to evaluate the success of its business to date and to assess its future viability.***

Themis' operations to date have been limited to organizing and staffing its company, developing and securing its technology, raising capital and undertaking preclinical studies and clinical trials of its product candidates. Themis has not yet demonstrated its ability to successfully complete development of any product candidates, obtain marketing approvals, manufacture a commercial scale product or arrange for a third party to do so on its behalf, or conduct sales and marketing activities necessary for successful product commercialization. Consequently, any predictions Themis makes about its future success or viability may not be as accurate as they could be if Themis had a longer operating history.

In addition, as a new business, Themis may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. Themis will need to transition from a company with a research and development focus to a company capable of supporting commercial activities. Themis may not be successful in such a transition, and if so this would negatively impact its ability to generate revenues, achieve cash flows and become a viable business, which would in turn negatively impact the price of the Shares and could result in the loss or all or part of a prospective investor's investment in Shares.



**1.1.5 *Themis' business plan is based on market models that may prove to be wrong.***

Themis' business plan is, among others, based on market models from third parties, such as VacZine Analytics, the purpose of which is to estimate the demand, and hence, market potential, for certain vaccinations. For instance, the demand for a Chikungunya virus specified in such market models is estimated at approximately USD 500,000 thousand annually by 2035 (*Source: VacZine Analytics*).

These models may be based on inaccurate information, the assumptions underlying such market models may be wrong or may not materialize, or the applied methodology may be flawed or not fully applicable. Themis has not independently verified the accuracy or completeness of such market models and it therefore cannot be excluded that such market models are, in fact, erroneous. As a result, Themis could invest significant time and financial resources to pursue opportunities that may ultimately be worth a great deal less than what Themis expects. This could materially adversely affect Themis' business, prospects, financial condition and results of operation and the price of the Shares.

**1.1.6 *Themis' product portfolio relating to infectious diseases relates to outbreak-diseases for which demand depends on outbreaks.***

Chikungunya is a mosquito-borne viral disease with continued transmission and outbreaks in over 100 countries including in the Caribbean, South America, India, Southeast Asia and Africa. In 2017, outbreaks were also recorded in France and Italy. The virus can be imported to new countries by infected travellers. The infection rate during an outbreak can reach or exceed 90%, with a recent outbreak in French overseas territory La Réunion infecting over 30% of its total population during the outbreak. Chikungunya outbreaks usually last three to six months and may have a significant economic impact.

However, without any outbreaks, the demand for MV-CHIK in endemic countries will be reduced and it will be less likely that governmental contracts for the distribution of MV-CHIK in endemic countries will be concluded. Further, fewer outbreaks of the disease may reduce the awareness of it in countries where the disease is not endemic. This may reduce demand for MV-CHIK. The same applies to Themis' other product candidates that relate to outbreak-diseases, which may be affected by lapses of time between outbreaks in a similar way. A lower demand could materially adversely affect Themis' business, prospects, financial condition and results of operation.

Please also see the risk factor in Section 1.3.3 (Risk Factors – Risks Related to Product Development, Commercialization and Future Operations – Even if MV-CHIK or any other product candidate receives marketing approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payers and others in the medical community necessary for commercial success and the market opportunity for MV-CHIK may be smaller than Themis estimates.)

**1.1.7 *Themis faces competition from other biotechnology and pharmaceutical companies, which may discover, develop or commercialize products before or more successfully than Themis.***

Themis is engaged in the pharmaceutical development of new drug products, which is a rapidly changing field.

The development and commercialization of new drug products is highly competitive. Themis faces competition in relation to any products Themis may seek to develop or commercialize in the future, including in relation to the technology Themis applies in developing its products candidates, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

PaxVax, Inc. (***PaxVax***) is a US-based specialty vaccines company that develops and commercializes vaccines against infectious diseases and is therefore a main competitor of Themis. Its adjuvant Chikungunya vaccine candidate uses a virus-like particles technology which was in-licensed from the US National Institutes of Health. A phase 2 clinical trial was initiated by PaxVax in 2018 to assess various doses, formulations, and schedules of administration. The PaxVax vaccine candidate could have a better immunogenicity and safety profile or could be commercialized earlier than MV-CHIK. Other competitors include Moderna Therapeutics, Inc., Bharat Biotech Ltd. and Valneva SE., all of which are engaged in the research and development of a Chikungunya vaccine and are currently engaged in phase 1 clinical trials.

Themis' commercial opportunity could be reduced or eliminated if its competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are approved for broader indications or patient populations, are more convenient or are less expensive than any products that Themis may develop. Themis' competitors may also obtain marketing approvals for their products before Themis does, which could result in its competitors establishing a strong market position before Themis is able to enter the market. In addition, Themis would

then be required to demonstrate comparability and superiority of its product candidate in order for the product candidate to be approved, which may result in a delay of the approval process or inability to obtain such approval. Further, the availability of other parties' products could limit the demand, and the price which Themis is able to charge, for any products that it may develop and commercialize. The key competitive factors affecting the success of Themis' product candidates are likely to be its efficacy, safety, convenience, price and the availability of coverage and reimbursement from government and other third-party payers.

Many of Themis' competitors will have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining approvals from regulatory authorities and marketing approved products than Themis does. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of Themis' competitors. Smaller and other early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with Themis in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to or necessary for Themis' development activities relating to its product candidates.

To the extent that Themis' product candidates are aimed at treating rare diseases, strong competition from a small number of competitors could effectively shut Themis out of the relevant market, given the market's limited size. The occurrence of any of these events could impair the ability to successfully commercialize product candidates and could materially adversely affect Themis' business, prospects, financial condition and results of operation.

## **1.2 Risks Related to Regulatory Approval and Marketing of Its Product Candidates and Legal Compliance**

### **1.2.1 *If Themis is not able to obtain, or if there are delays in obtaining, required regulatory approvals, in particular in the European Union and the United States, Themis will not be able to commercialize its product candidates, and its ability to generate revenues will be materially impaired.***

Themis' product candidates, including MV-CHIK, and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labelling, storage, approval, advertising, promotion, sale and distribution, are subject to comprehensive regulation by the European Medicines Agency (the *EMA*) and the US Food and Drug Administration (the *FDA*) and by comparable authorities in other countries. Failure to obtain marketing approval for a product candidate will prevent Themis from commercializing the product candidate. Themis has not received approval to market MV-CHIK or any of its other product candidates from regulatory authorities in any jurisdiction.

Securing marketing approval requires the submission of extensive preclinical and clinical data and supporting information to regulatory authorities for each therapeutic indication to establish the product candidate's safety and efficacy. Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more clinical trials can occur at any stage of testing. The outcome of preclinical testing and early clinical trials may not be predictive of the success of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. The design of a clinical trial can determine whether its results will support approval of a product, and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced or completed.

If Themis is required to conduct clinical trials or other testing of MV-CHIK or any other product candidate that it develops beyond those trials and tests that it contemplates, if Themis is unable to successfully complete its clinical trials or other testing, if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns, Themis may:

- be delayed in obtaining marketing approval for its product candidates;
- not obtain marketing approval at all;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labelling that includes significant use or distribution restrictions or safety warnings, including boxed warnings;
- be subject to additional post-marketing testing requirements or restrictions; or
- have the product removed from the market after obtaining marketing approval.

Securing marketing approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the regulatory authorities. Regulatory authorities may determine that MV-CHIK or any of the other product candidates are not effective or only moderately effective, or have undesirable or unintended side effects, toxicities, safety profiles or other characteristics that preclude Themis from obtaining marketing approval or that prevent or limit commercial use. The process of obtaining marketing approvals is expensive, may take many years, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that Themis' data are insufficient for approval and require costly and time consuming additional preclinical, clinical or other studies. Moreover, regulatory authorities in certain jurisdictions, such as the United States and the European Union, have differing approval requirements and timeframes for completion of their reviews. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent marketing approval of a product candidate. Any marketing approval Themis ultimately obtains may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable. If Themis does not obtain regulatory approval to commercialize a product candidate, or if such approval is delayed, Themis' business, results of operations and/or financial condition could be materially adversely affected.

**1.2.2 *PRIME designation by the EMA may not lead to a faster regulatory review or approval process and, in any event, does not assure EMA approval.***

Following the outcome of phase 2 clinical trials, the EMA has granted Themis primary medicine (**PRIME**) designation for its development of MV-CHIK. PRIME designation provides a close interaction with the EMA with a designated rapporteur and an accelerated review timetable. PRIME status by EMA is the European equivalent of FDA's Breakthrough Therapy Designation, for which Themis has also applied with a decision by the FDA expected by the end of 2018.

However, PRIME designation does not ensure that MV-CHIK will receive marketing approval or that approval will be granted within any particular timeframe. Themis may also seek PRIME designation for its other product candidates. Themis may not experience a faster development process, review or approval compared to conventional EMA procedures. In addition, the EMA may withdraw PRIME designation if it believes that the designation is no longer supported by data from Themis' clinical development program. PRIME designation alone does not guarantee qualification for the EMA's priority review procedures. Accordingly, Themis expects to seek similar pathways for US licensure and FDA approval, and similar risks apply in that regard.

**1.2.3 *Themis' failure to obtain marketing approval in jurisdictions other than the European Union and the United States would prevent its product candidates from being marketed in these other jurisdictions, and any approval Themis is granted for its product candidates in the European Union and the United States would not assure approval of product candidates in other jurisdictions.***

Chikungunya fever is an outbreak disease that is endemic over 100 countries including in the Caribbean, South America, India, Southeast Asia and Africa. In order to market and sell MV-CHIK, but also Themis' other product candidates, in such jurisdictions outside the United States and the European Union, Themis must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time and resources required to obtain approval may differ from that required to obtain FDA or EMA approval. The regulatory approval process outside the United States and the European Union generally includes all of the risks associated with obtaining FDA or EMA approval. In addition, some countries outside the United States and the European Union require approval of the sales price of a drug before it can be marketed. In many countries, separate procedures must be followed to obtain reimbursement. Themis may not obtain marketing, pricing or reimbursement approvals outside the United States and the European Union on a timely basis, if at all. Approval by the FDA or EMA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside the United States and the European Union does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA or EMA. Themis may not be able to file for marketing approvals and may not receive necessary approvals to commercialize its products in any market. Marketing approvals in countries outside the United States and the European Union do not ensure pricing approvals in those countries or in any other countries, and marketing approvals and pricing approvals do not ensure that reimbursement will be obtained once the relevant products are on the market.

**1.2.4 *The product candidates of Themis will remain subject to ongoing regulatory obligations following their regulatory approval.***

If Themis obtains regulatory approval in a jurisdiction, regulatory authorities may still impose significant restrictions on the indicated uses or marketing of the product, or impose ongoing requirements for potentially costly post-approval studies or post-market surveillance, such as safety and effectiveness reporting obligations. Advertising and promotional materials must comply with the FDA's or the EMA's rules and are subject to FDA or EMA review, in addition to other potentially applicable laws and legislation globally.

In addition, product manufacturers and their facilities are subject to payment of user fees and continual review and periodic inspections by the FDA, the EMA and other regulatory authorities for compliance with good manufacturing practices. If Themis or a regulatory agency discovers previously unknown problems with a product such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions relative to that product or manufacturing facility, including requiring Themis to recall or withdraw the product from the market or suspend manufacturing.

If Themis fails to comply with applicable regulatory requirements following approval of any of the products, including in connection with the manufacturing, labelling and distribution of such products, a regulatory agency may:

- issue a warning letter asserting that Themis is in violation of the law;
- seek an injunction or impose civil or criminal penalties or monetary fines;
- impose restrictions, or suspend or withdraw regulatory approval;
- suspend any ongoing clinical studies;
- seize the product; or
- refuse to allow Themis to enter into supply contracts, including government contracts.

Any government investigation of alleged violations of law could further require Themis to spend significant time and resources in response and could generate negative publicity and damage Themis' reputation. In addition, failure to comply with the regulatory requirements could also result in litigation involving individuals using Themis' products. The occurrence of any event or penalty described above may delay commercialization of Themis' products, increase costs and materially adversely affect Themis' business, results of operations, prospects and financial condition.

**1.2.5 *Themis is and will be required to comply with numerous legal and regulatory requirements in different jurisdictions, which makes compliance more costly and challenging.***

Themis is in the process of developing its product candidates, which it seeks to commercialize internationally. As a result, Themis is and will be subject to various laws and regulations in different jurisdictions, many of which are challenging in their complexity or opacity. Laws applicable to Themis' business include employment, privacy, data security, telecommunications, online content, intellectual property protection, corporate, tax, finance, money laundering, online payment, anti-corruption and international sanctions laws, including Regulation (EU) No 2580/2001 on specific restrictive measures directed against certain persons and entities with a view to combating terrorism.

These various laws and regulations are often evolving and sometimes conflict with each other. Furthermore, operating in foreign jurisdictions entails an inherent risk of misinterpreting and wrongly implementing foreign and international laws and regulations. Violations of applicable laws and regulations may harm Themis' reputation and result in legal action, criminal and civil sanctions, or administrative fines and penalties against Themis, or members of Themis' governing bodies and Themis' employees. They may also result in damage claims by third parties or other adverse legal consequences, including class action lawsuits and enforcement actions by national and international regulators resulting in the limitation or prohibition of Themis' conduct of business. There is no guarantee that Themis can successfully manage or avoid any of the legal risks to which Themis is exposed, and noncompliance with the legal and regulatory frameworks that govern its operations, whether intentional or not, may have substantial consequences for Themis' businesses, including causing it to cease its operations entirely. The materialization of any of the risks described above could have a material adverse effect on its business, financial condition and operating results.

In addition, healthcare providers, physicians and third-party payers play a primary role in the recommendation and prescription of any product candidates, including MV-CHIK. Themis' future arrangements with customers, healthcare providers and professionals and third-party payers in the jurisdictions in which it may have commercial

operations in the future may expose Themis to broadly applicable fraud and abuse, “anti-kickback” and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which Themis markets, sells and distributes its products for which Themis obtains marketing approval.

Efforts to ensure that Themis’ business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities in the jurisdictions in which it may have commercial operations in the future will conclude that Themis’ business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If its operations are found to be in violation of any of these laws or any other governmental regulations that may apply to Themis, Themis may be subject to significant civil, criminal and administrative penalties, damages, fines, exclusion from government funded healthcare programs, such as Horizon 2020, and the curtailment or restructuring of its operations. Exclusion, suspension and debarment from government funded healthcare programs would significantly impact Themis ability to commercialize, sell or distribute any drug. If any of the physicians or other providers or entities with whom Themis expects to do business are found to be not in compliance with applicable laws, Themis may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

**1.2.6 *Even if Themis is able to commercialize MV-CHIK or any other product candidate that Themis develops, the product may become subject to unfavorable pricing regulations, reimbursement regulations and practices or healthcare reform initiatives, which would harm its business.***

The regulations that govern marketing approvals, pricing, coverage and reimbursement for new drug products vary widely from country to country. Current and future legislation may significantly change the approval requirements in ways that could involve additional costs and cause delays in obtaining approvals. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, Themis might obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay its commercial launch of the product, possibly for lengthy time periods, and negatively impact the revenues Themis is able to generate from the sale of the product in that country. Adverse pricing limitations may hinder Themis’ ability to recoup its investment in one or more product candidates, even if its product candidates obtain marketing approval.

Themis’ ability to commercialize MV-CHIK or any other product candidate successfully also will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers and other organizations. Government authorities and other third-party payers, such as private health insurers and health maintenance organizations, decide which medications Themis will pay for and establish reimbursement levels. A major trend in the European Union and United States healthcare industries and elsewhere is cost containment. Government authorities and other third-party payers have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third-party payers are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. Themis cannot be sure that coverage and reimbursement will be available for MV-CHIK or any other product that Themis commercializes and, if coverage and reimbursement are available, the level of reimbursement. Reimbursement may impact the demand for, or the price of, any product candidate for which Themis obtains marketing approval.

Obtaining and maintaining adequate reimbursement for MV-CHIK may be particularly difficult because the market does not exist so far and, hence, is difficult to estimate. If reimbursement is not available or is available only to limited levels, Themis may not be able to successfully commercialize MV-CHIK or other product candidates for which Themis obtains marketing approval.

Obtaining coverage and reimbursement approval for a product from a government or other third-party payer is a time-consuming and costly process that could require Themis to provide to the payer supporting scientific, clinical and cost-effectiveness data for the use of its products. Themis may not be able to provide data sufficient to gain acceptance with respect to coverage and reimbursement. If reimbursement of Themis future products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, Themis’ may be unable to achieve or sustain profitability.

Themis intends to seek approval to market its products in the European Union and the United States and in selected foreign jurisdictions. In the European Union, the pricing of prescription pharmaceuticals is subject to governmental control and pricing negotiations with governmental authorities can, in some circumstances, take several years after obtaining marketing approval for a product. Recently, many European countries have come under significant political pressure to reduce its overall spending (including spending on healthcare), which in turn is generating pressure on pharmaceutical companies to reduce the prices Themis charges national healthcare systems. In addition, market acceptance and sales of Themis’ products will depend significantly on the availability of adequate coverage and reimbursement from third-party payers and may be affected by existing and future health care reform measures.

There have been, and likely will continue to be, legislative and regulatory proposals directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. For example, in 2010 in the United States, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act (collectively, the ***Healthcare Reform Act***) was enacted. The Healthcare Reform Act, among other things, increases the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extends the rebate program to individuals enrolled in Medicaid managed care organizations, establishes annual fees that manufacturers of certain branded prescription drugs can charge and requires manufacturers to participate in a discount program for certain outpatient drugs under Medicare Part D. An expansion in the US government's role in the US healthcare industry may further lower rates of reimbursement for pharmaceutical products in the United States.

Themis cannot predict the initiatives in the European Union and the United States or elsewhere that may be adopted in the future. The continuing efforts of the government, insurance companies, managed care organizations and other payers of healthcare services to contain or reduce costs of healthcare and/or impose price controls may adversely affect Themis' ability to set prices for its products, generate revenues and achieve or maintain profitability.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the applicable regulatory authority. Moreover, eligibility for coverage and reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers its costs, including research, development, manufacture, sale and distribution.

Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover Themis' costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs, and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payers and by any future relaxation of laws that presently restrict imports of drugs from countries where it may be sold at lower prices than in the European Union or the United States. In the United States, third-party payers often rely upon Medicare coverage policy and payment limitations in setting its own reimbursement policies. In the European Union, reference pricing systems and other measures may lead to cost containment and reduced prices. Themis' inability to promptly obtain coverage and adequate reimbursement rates from both government-funded and private payers for any approved products that Themis develops could have a material adverse effect on its operating results, its ability to raise capital needed to commercialize products and its overall financial condition.

**1.2.7 *If Themis fails to comply with environmental, health and safety laws and regulations, it could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of its business.***

Themis is subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Its operations currently, and may in the future, involve the use of hazardous and flammable materials, including chemicals and medical and biological materials, and produce hazardous waste products. The costs of compliance with such applicable regulations and requirements could be substantial, and failure to comply could result in sanctions, including fines, injunctions, civil penalties, denial of applications for marketing authorization of its products, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of products, operating restrictions and criminal prosecutions, any of which could significantly increase Themis' costs or delay the development and commercialization of its product candidates and could materially adversely affect Themis' business, prospects, financial condition and results of operation.

Even if Themis contracts with third parties for the disposal of these materials and wastes, Themis cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from its use of hazardous materials or disposal of hazardous wastes, Themis could be held liable for any resulting damages, and any liability could exceed its resources.

Although Themis maintains workers' compensation insurance to cover it for costs and expenses Themis may incur due to injuries to its employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities.

In addition, Themis may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair its research, development or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

**1.2.8 *Themis uses personal data in various ways in the course of its business and may fail to comply with laws and regulations with respect to private data protection.***

Themis uses personal data relating to employees, test subjects, third party suppliers and regulatory authorities in conducting its business to develop its product candidates and is therefore subject to national and international laws and regulations governing the collection, use, retention, sharing and security of personal data. A failure to comply with applicable laws or regulations could have an adverse impact on Themis' reputation and subject Themis to penalties or claims, which could have a material adverse effect on Themis' business, financial condition, results of operations and prospects. The need to comply with data protection legislation results in significant controlling, operational and reputational risks which can affect Themis in a number of ways including, for example, test subjects refusing to work with Themis. Regulation regarding data collection and data protection may also become more stringent in the future. Thus, new laws, regulations or developments in this field could have a material adverse effect on Themis' business, financial condition, results of operations and prospects.

As a result of significant amendments to laws or regulations in countries in which Themis operates, Themis may have to incur higher costs or change its business practices. Themis also expects compliance to become more complex and to involve higher costs and the increasing risk of non-compliance may give rise to civil liability, administrative orders (including injunctive relief), fines or even criminal charges. For example, the new regulation (EU) 2016/679 on data privacy (the **General Data Protection Regulation**) has introduced substantial changes to the data protection regime of the EU, including regarding intragroup as well as external data transfers and will to a large extent replace current national data protection laws by a directly applicable EU legislation. The General Data Protection Regulation is applicable as of 25 May 2018 and imposes a substantially higher compliance burden on Themis' business. In addition, the regulation increases the maximum level of fines for undertakings to the higher of up to EUR 20,000 thousand or 4% of a company's total worldwide annual revenue.

Themis is also exposed to the risk that its data could be wrongfully appropriated, lost or disclosed, or processed in breach of data protection regulation, by it or on its behalf. If Themis or any third party service provider on which it may rely fails to transmit information in a secure manner, or if any such loss of personal customer data were otherwise to occur, Themis could face liability under data protection laws. There is also a risk of data abuse by any of its service providers for which Themis may have to assume the liability, which may result in Themis being unable to progress with its clinical studies. The realization of any of these risks could have a material adverse effect on Themis' business, financial condition, results of operations and prospects.

**1.3 Risks Related to Product Development, Commercialization and Future Operations**

**1.3.1 *If adverse side effects are identified for MV-CHIK or any other product candidate, Themis may need to abandon or limit its development of that product candidate, which may delay or prevent marketing approval, or, if approval has already been obtained for the product candidate, Themis may need to take it off the market, include safety warnings or otherwise limit such product candidate's sales***

All of Themis product candidates are in clinical or preclinical development and there is a risk of failure. It is impossible to predict when or if any of Themis' product candidates will prove effective or safe in humans or will receive marketing approval. If its product candidates are associated with undesirable side effects or have characteristics that are unexpected, Themis may need to abandon its development or limit development to certain uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk benefit perspective. For example, the phase 2 clinical trial for MV-CHIK showed side effects comparable to those of a licensed measles vaccine, including headache and injection site tenderness. It is also very common that compounds that initially showed promise in clinical or earlier stage testing have later been found to cause side effects or other safety issues that prevented further development of the compound.

If Themis elects or is forced to suspend or terminate any clinical trial of MV-CHIK or any other product candidates as a result of side effects, the commercial prospects of MV-CHIK or such other product candidates will be harmed and its ability to generate product revenues, if at all, from MV-CHIK or any of these other product candidates will be delayed or eliminated. Moreover, even if marketing approval has already been obtained, identification of serious adverse side effects could result in Themis being required to take the applicable product off the market, include safety warnings with such product or take other steps that have a negative impact on the sales of such product. Serious side effects could also result in litigation for harm caused to patients and Themis' reputation may suffer. Any of these occurrences could materially harm Themis' business, financial condition, results of operations and prospects.

**1.3.2 *If Themis experiences delays or difficulties in the enrolment of patients in its clinical trials, its receipt of necessary marketing approvals could be delayed or prevented.***

Themis may not be able to initiate or continue clinical trials of MV-CHIK or any other product candidate that Themis develops if Themis is unable to locate and enrol a sufficient number of eligible subjects to participate in these clinical trials, which enrolment process is subject to factors that may be beyond Themis' control.

In general patient enrolment is affected by factors such as:

- severity of the disease under investigation;
- eligibility criteria for the clinical trial in question;
- perceived risks and benefits of the product candidate under study;
- approval of other therapies to treat the disease under investigation;
- efforts to facilitate timely enrolment in clinical trials;
- patient referral practices of physicians;
- the time of year in which the trial is initiated or conducted, geographic distribution of trial sites given the timing of the respective disease season, if any, globally and seasonal variability in the number of patients affected by the disease under investigation;
- the ability to monitor patients adequately during and after treatment; and
- proximity and availability of clinical trial sites for prospective patients.

Enrolment delays in Themis' clinical trials may result in increased development costs for its product candidates, which would cause the value of the Company to decline and limit Themis' ability to obtain additional financing. Themis' inability to enrol a sufficient number of patients in its phase 3 clinical trials of MV-CHIK or any of its other clinical trials would result in significant delays or may require them to abandon one or more clinical trials altogether.

**1.3.3 *Even if MV-CHIK or any other product candidate receives marketing approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payers and others in the medical community necessary for commercial success and the market opportunity for MV-CHIK may be smaller than Themis estimates.***

If MV-CHIK or any of its other product candidates receives marketing approval, Themis may nonetheless fail to gain sufficient market acceptance by physicians, patients, third-party payers and others in the medical community. For example, current awareness for the Chikungunya virus is not well established in the medical community, other than in the counties where the Chikungunya virus is endemic. In addition, Themis' efforts to effectively communicate MV-CHIK's differentiating characteristics and key attributes to clinicians and hospital pharmacies with the goal of establishing a status for MV-CHIK may fail or may be less successful than Themis expects.

If MV-CHIK does not achieve an adequate level of acceptance, Themis may not generate significant product revenues or any profits from operations. The degree of market acceptance of its product candidates, if approved for commercial sale, will depend on a number of factors, some of which may be beyond Themis' control, including:

- the efficacy and potential advantages compared to alternative treatments;
- the prevalence and severity of any side effects;
- convenience and ease of administration compared to alternative treatments, if any;
- the willingness of the target patient population to try new therapies, physicians to prescribe these therapies and hospitals to approve the cost and use by its physicians of these therapies;
- the strength of marketing and distribution support;



- the availability of third-party coverage and adequate reimbursement;
- the cost of MV-CHIK; and
- the timing of any marketing approval in relation to other product approvals.

Further, the potential market opportunities for Themis' product candidates are difficult to estimate. Its estimates of the potential market opportunities are based, among other things, on industry knowledge and publications, third-party research reports (such as VacZine Analytics) and other surveys. They are also predicated on assumptions that are inherently uncertain including, in the case of MV-CHIK, with respect to global travel volume, pricing potential, outbreak frequency, and public awareness of chikungunya. If any of these assumptions prove to be inaccurate, the actual markets for Themis' product candidates' could be significantly smaller than estimated. See also Section 1.1.5 (Risk Factors—Risks Related to Themis' Business Activities and Industry—Themis' business plan is based on market models that may prove to be wrong.)

The materialization of any of these risks could materially harm Themis' business, financial condition, results of operations and prospects.

#### 1.3.4 ***Themis may not be successful in its efforts to build a pipeline of product candidates and develop marketable products.***

Themis relies on its technology platform (the measles virus or ***MV Platform***), that consists of three key elements:

- the viral vector technology, which uses the Schwarz Measles Virus as a safe and efficacious delivery vehicle;
- the advanced antigen design capabilities for targeting specific infectious diseases and tumour types (***Vector Technology***); and
- its proprietary manufacturing infrastructure (***Manufacturing Technology***).

The Vector Technology is exclusively licensed by Themis from the Institute Pasteur for infectious diseases and from Max-Planck-Innovations for immuno-oncology applications. Both technologies are used to program the immune system to generate a targeted immune response against diseases. The Manufacturing Technology can be used for every potential product based on Themis' Vector Technology.

Themis expects to develop MV-CHIK initially. However, one of Themis' strategies is to pursue clinical development of additional product candidates. These potential products are at a relatively early stage of development and Themis may not be successful in its efforts to use and expand the MV Platform to build a pipeline of product candidates and develop approved or marketable products. In particular, there is no assurance that Themis will be able to successfully utilize its Vector Technology to develop products for additional vaccines against diseases such as MERS, Lassa, RSV, Noro, Zika, CMV or in the immuno-oncology field.

Furthermore, Themis' reliance on a single platform for the development of all its products results in a number of additional risks. In particular, difficulties regarding the safety and efficacy rates for MV-CHIK could apply equally to all its other product candidates and hence, delay the development process for its entire product pipeline. Further, any changes in the regulatory environment which may have an adverse impact on the development on MV-CHIK could also affect all other product candidates of Themis, since the development of all of its product candidates is based on a single technology. Moreover, any unexpected research findings, such as findings raising safety concerns, would be applicable to all product candidates.

The materialization of any of these risks could materially harm Themis' business, financial condition, results of operations and prospects.

#### 1.3.5 ***Product liability lawsuits against Themis could divert its resources, cause them to incur substantial liabilities and to limit commercialization of any products that Themis may develop or in-license.***

Themis faces an inherent risk of product liability exposure related to the testing of MV-CHIK and any other product candidate that Themis develops in human clinical trials and will face an even greater risk if Themis commercially sells any of its products. If Themis cannot successfully defend itself against claims that its product candidates or products

caused injuries, Themis will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- reduced resources of its management to pursue its business strategy;
- decreased demand for any product candidates or products that Themis may develop;
- injury to its reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- significant costs to defend the related litigation;
- substantial monetary awards to trial participants or patients;
- loss of revenue;
- increased regulatory scrutiny; and
- the inability to commercialize any products that Themis may develop.

Prior to the commencement of the planned phase 3 clinical trials, Themis plans to obtain product liability insurance that covers its clinical trials in the amount required by the applicable law. This amount of insurance may not be adequate to cover all liabilities that it may incur.

Themis will need to increase its insurance coverage if and when Themis begins commercializing MV-CHIK or any other product candidate that receives marketing approval. Insurance coverage is increasingly expensive. Themis may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

**1.3.6 *Manufacturing Themis' products is complex, time-consuming and expensive and may not be sufficiently scalable.***

Manufacturing Themis' products and product candidates will necessitate authorization and compliance with regulatory requirements and will be complex, time-consuming and expensive. There can be no assurance that products identified and developed by Themis and/or Themis' licensees or contractual partners will be capable of being produced in the quality and quantities necessary for clinical development, launch and commercialization at an acceptable cost.

Supply sources and transportation could be delayed or interrupted from time to time and, if interrupted, it is not certain that supplies could be resumed (whether in part or in whole) within a reasonable timeframe and at an acceptable cost, if at all. In particular, since the materials used by Themis are non-commoditized, the lead times for any purchase orders of such materials are lengthy, in some case as much as six months. Such long lead-times also apply to the manufacturing equipment required by Themis. An increase in the costs and expenses of components or raw materials may also adversely influence the business, financial condition and results of operations of Themis.

Other events such as acts of God, strikes or other production disruptions or wilful misconduct during production, storage and shipment of products can result in the loss of batches and therefore lead to financial losses and substantial delays in development programs and launch of products.

Furthermore, Themis' current industrialized manufacturing process allows production in the range of a 3 to 20 liters scale. However, there can be no assurance that the manufacturing process can be expanded to scales allowing full commercial manufacturing. Failure to sufficiently ramp-up manufacturing could also adversely influence the business, financial condition and results of operations of Themis.

**1.3.7 *If Themis is not able to establish collaborations, Themis may have to alter its development and commercialization plans.***

The potential commercialization of MV-CHIK and the development and potential commercialization of other product candidates will require substantial additional cash to fund expenses. For some of Themis' product candidates, Themis may decide to collaborate with pharmaceutical and biotechnology companies for the development and potential commercialization, as well as, potentially, sales and marketing, of those product candidates. For example, Themis intends to seek to commercialize MV-CHIK through a variety of types of collaboration arrangements outside the European

Union. Themis faces significant competition in seeking appropriate collaborators. Whether Themis reaches a definitive agreement for collaboration will depend, among other things, upon its assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. Those factors may include the design or results of clinical trials, the likelihood of approval by the EMA or similar regulatory authorities outside the European Union, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing products, the existence of uncertainty with respect to its ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge, and industry and market conditions generally. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such collaboration could be more attractive than the one with them for its product candidate. Themis may also be restricted under future license agreements from entering into agreements on certain terms with potential collaborators.

Collaborations are complex and time-consuming to negotiate and document. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators.

If Themis is unable to reach agreement with suitable collaborators on a timely basis, on acceptable terms or at all, Themis may have to curtail the development of a product candidate, reduce or delay its development program or one or more of its other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase its expenditures and undertake development or commercialization activities at its own expense. However, even if Themis is able to enter into a collaboration agreement, there can be no assurance that disputes among the collaborating parties will not arise, which could have an adverse impact on Themis' ability to benefit from such collaboration.

If Themis elects to fund and undertake development or commercialization activities on its own, Themis may need to obtain additional expertise and additional capital, which may not be available to them on acceptable terms or at all. If Themis fails to enter into collaborations and does not have sufficient funds or expertise to undertake the necessary development and commercialization activities, Themis may not be able to further develop its product candidates or bring them to market and generate product revenues (See also Section 1.5.2 (Risk Factors—Risks Related to Dependence on Third Parties—Themis may enter into collaborations with third parties for the development or commercialization of MV-CHIK and its other product candidates. If those collaborations are not successful, Themis may not be able to capitalize on the market potential of these product candidates.)).

**1.3.8 *Themis currently has no marketing and sales organization and has no experience in the marketing of products. If Themis is unable to establish marketing and sales capabilities or enter into agreements with third parties to market and sell its product candidates, Themis may not be able to generate product revenues.***

Themis does not have any sales, marketing or distribution infrastructure and has no experience in the sale, marketing or distribution of pharmaceutical products. To achieve commercial success for any approved product, Themis must either develop sales, marketing and distribution functions or outsource these functions to third parties. Themis will consider all options in relation to its commercialization efforts, including a full commercialization through an internal sales force, licensing of the products to third parties or a hybrid model. Themis will have to compete with other pharmaceutical and biotechnology companies to recruit, hire, train and retain marketing and sales personnel.

There are risks involved with establishing Themis' own sales, marketing and distribution capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force is expensive and time consuming and could delay any product launch. If the commercial launch of a product candidate for which Themis recruits a sales force and establishes marketing and distribution capabilities is delayed or does not occur for any reason, it would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and Themis' investment would be lost if Themis cannot retain or reposition its sales and marketing personnel.

Factors that may inhibit Themis' efforts to commercialize certain of its products on its own include:

- its inability to recruit, train and retain adequate numbers of effective sales, marketing and distribution personnel;
- the inability of sales personnel to obtain access to or persuade adequate numbers of physicians to prescribe any future products;

- the lack of complementary products to be offered by sales personnel, which may put its sales representatives at a competitive disadvantage relative to sales representatives from companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating independent sales, marketing and distribution organization.

If Themis is unable to, or decides not to, establish internal sales, marketing and distribution capabilities, it will pursue collaborative arrangements regarding the sales and marketing of its products. (See also Section 1.3.7 (Risk Factors—Risks Related to Product Development, Commercialization and Future Operations—If Themis is not able to establish collaborations, Themis may have to alter its development and commercialization plans.). If Themis does not establish sales, marketing and distribution capabilities successfully, either on its own or in collaboration with third parties, Themis will not be successful in commercializing its product candidates. Themis cannot assure prospective investors that it will be able to develop in-house sales and distribution capabilities or establish or maintain relationships with third-party collaborators to commercialize any product in the European Union, the United States or elsewhere.

## 1.4 Risks Related to Intellectual Property and Information Technology

### 1.4.1 *If Themis is unable to obtain, protect or enforce intellectual property rights related to its product candidates, or if the scope of intellectual property rights is not sufficiently broad, Themis' competitors could develop and commercialize similar or identical products, and Themis' ability to commercialize its product candidates successfully may be adversely affected.*

Themis' success depends, in large part, upon its ability to obtain and maintain patent protection, in particular for its MV Platform comprising product candidates (i.e. the Vector Technology), but also for associated production and purification methods (i.e. the Manufacturing Technology). If Themis does not adequately protect its intellectual property (**IP**), competitors may be able to negate any competitive advantage that Themis may have, which could harm Themis' business. To protect Themis' proprietary position, it files patent applications in Europe, the United States and various other jurisdictions related to its MV Platform candidates that are important to the business. In addition Themis has licensed in patents and patent applications from third parties. Where a broad territorial scope of protection is desirable due to the nature of an individual vaccine product and the prevalence of the corresponding infectious disease to be prevented, Themis or its licensor also seeks patent protection in relevant jurisdictions going beyond the usual panel of jurisdictions in which patents are generally jurisdictions nationalized or validated.

If the patent applications owned or licensed-in by Themis with respect to its MV Platform, including the Vector Technology and the Manufacturing Technology, fail to issue, or if the coverage claimed in such patent applications is narrowed before the relevant patents are issued, or if the breadth or strength of Themis' patent protection is challenged or threatened, or if Themis' patent portfolio fails to provide meaningful exclusivity for e.g. Themis' technology platform or product candidates, Themis would be vulnerable to competition by third parties with identical or similar technologies which could dissuade companies from collaborating with it to develop its current and future product candidates and threaten Themis' ability to commercialize future products.

Themis has filed patent applications or has already obtained patent protection, including in Europe and the United States, that cover relevant product candidates of the Vector Technology, however, Themis cannot offer any assurances regarding which applications, if any, will issue as patents, the breadth of any such issued patent claims or whether any issued claims will be found invalid and unenforceable, or will be challenged or threatened by third parties. There is no assurance that all of the potentially relevant prior art relating to Themis' patents and patent applications, which could invalidate a patent or prevent a patent from issuing from a pending patent application, has been identified. Moreover, because the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, Themis' patents or pending patent applications may be challenged in the courts or patent offices in Europe, the United States and other jurisdictions. An adverse determination in any such challenge may result in Themis' patent claims being narrowed, invalidated or held unenforceable, which could result in loss of exclusivity and limit Themis' ability to stop others from using or commercializing identical or similar technology and products.

Furthermore, even if Themis' patent applications issue as patents, they may not issue in a form that will provide Themis with meaningful patent protection for its product candidates. Themis' competitors may be able to circumvent Themis' patents by developing similar or alternative products in a non-infringing manner. Themis' competitors may also seek approval to market their own products similar or otherwise competitive with Themis' product candidates. Alternatively, Themis' competitors may seek to market generic or biosimilar versions of an approved product by submitting applications to authorities in relevant jurisdictions in which they claim that the patents owned or licensed by Themis are invalid, unenforceable or not infringed. In these circumstances, Themis may need to defend or assert its patents, including by filing lawsuits alleging infringement of its patent rights. In such proceedings, a court or other

agency may find Themis' patents invalid, unenforceable, or not infringed. Even if Themis has valid and enforceable patents, the patents may not provide adequate protection against competing products.

Moreover, the enforcement of patents, know-how (in the sense of, e.g. Directive (EU) 2016/943) and other intellectual property is costly, time-consuming and highly uncertain. Themis cannot guarantee that it will be successful in preventing the infringement or misappropriation of its patented inventions, know-how and other intellectual property rights and those of its licensors, and failure to do so could significantly impair the ability of Themis to effectively compete and have a material adverse effect on its business, prospects, financial condition and results of operations.

**1.4.2 *Themis may not be able to protect and/or enforce its intellectual property rights throughout the world.***

Filing, prosecuting and defending patents covering all of Themis' product candidates throughout the world would be prohibitively expensive to Themis and to its licensors. Themis has therefore not filed for patent protection or licensed- in patents in all national and regional jurisdictions where such protection may be available. In addition, Themis may decide to abandon national and regional patent applications before grant. Finally, the grant proceedings of each national/regional patent is an independent proceeding that may lead to situations in which applications might be refused by the relevant registration authorities in some jurisdictions, while granted by others. Competitors may use Themis' technologies in jurisdictions where Themis or its licensors have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where Themis has patent protection but where enforcement is not as well developed as in the European Union or the United States. These products may compete with Themis' products in jurisdictions where Themis or its licensors do not have any issued patents or Themis' patent claims or other intellectual property rights may not be effective or sufficient to prevent them from such competition.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries do not favour the enforcement of patents and other intellectual property rights, particularly those relating to biopharmaceuticals, which could make it difficult for Themis to stop the infringement of its patents or marketing of competing products in violation of its intellectual property rights. Proceedings to enforce Themis' patent rights in foreign jurisdictions could result in substantial cost and divert Themis' efforts and attention from other aspects of its business. The inability of Themis to protect and/or enforce its intellectual property rights throughout the world could have a material adverse effect on its business, prospects, financial condition and results of operations.

Many countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patents. If Themis or its licensors are forced to grant a license to third parties with respect to any patents relevant to Themis' business, Themis' competitive position may be impaired, and its business and results of operation may be adversely affected.

**1.4.3 *The patent term may be inadequate to protect Themis' competitive position on its products for an adequate amount of time.***

Given the amount of time required for the development, testing and regulatory review of new product candidates in the relevant technical field, patents protecting such candidates might expire before or shortly after such candidates are commercialized. Certain of Themis' own and in-licensed patents, mainly patents related to the MV Platform, are expected to expire shortly after product candidates are approved for sale. For example, relevant patents from the TH1 and TH2 patent families (both as described in Section 10.10 (Business Description—Intellectual Property)) are likely to expire before a successful market entry. For example, the European patents of the TH1 patent family, which is the oldest family in Themis' portfolio, will expire in 2022 or 2023. However, certain US patents from the TH1 patent family have a maximum term until 2025.

The TH1 and TH2 patent families protect the measles virus backbone as such, without protecting the relevant immunological relevant inserts that are individually designed for each specific product. Therefore, it is of utmost importance to assure that patent protection for each new "backbone + new insert" product is obtained. For example, the TH7 patent family (as described in Section 10.10 (Business Description—Intellectual Property)) that protects the MV-CHIK, has a term that expires in 2033.

The expiry of any such own or in-licensed patent may encourage potential competitors as they would be free to use the measles virus backbone technology as such to which the relevant patent relates (unless where such use necessarily implies the use of other technology) which at the relevant time is prohibited by a patent still in force. Even though this might not impact Themis in activities with an individually protected "backbone + new insert" product according to the

Vaccine Technology, the underlying central technology could be exploited by third parties as soon as the backbone technology is no longer under patent protection.

Themis may be open to competition from generic medications and other competitors may try to copy and/or reverse engineer the Company's MV Platform. This risk is material in light of the length of the development process of Themis' products and lifespan of its current patent portfolio.

Themis expects to seek extensions of patent terms in the European Union, the United States and, if available, in other countries where it is prosecuting patents. In the European Union, an extension of protection (in the form of supplementary protection certificates) may be applied assuming a valid market authorization has been obtained and if the relevant pharmaceutical product specifically relates to a basic patent in force. The length of the extension of the term of protection varies, with the maximum extension period being five years, optionally including a further six-month extension in case an approved pediatric investigation plan was conducted and submitted in accordance with Regulation (EC) 1901/2006 (*Pediatric Regulation*). In the United States, the Drug Price Competition and Patent Term Restoration Act of 1984 permits a patent term extension of up to five years beyond the normal expiration of the patent, which is limited to the approved indication. Furthermore, the patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date and only one patent applicable to an approved product is eligible for the extension. However, such an extension may not be available for several of the patents owned or in-licensed by Themis. Moreover, the competent authorities deciding on such extension may not agree with Themis' assessment of whether such extensions are available, and may refuse to grant extensions to its patents, or may grant a shorter extension than requested. If this occurs, Themis' competitors may be able to take advantage of Themis' investment in the development and clinical trials by referencing its clinical and preclinical data and launch their products earlier than might otherwise be the case. If any of the patents used by Themis expire and Themis is unable to extend the patent term, any such event could materially adversely affect Themis' business, prospects, financial condition and results of operation.

**1.4.4 *Themis may become involved in legal proceedings in relation to its intellectual property rights, which may result in costly litigation and could result in Themis having to pay substantial damages and limit Themis' ability to commercialize its product candidates.***

Themis' commercial success depends upon its ability, and the ability of any third party with which it may partner, to develop, manufacture, market and/or sell its product candidates and use its patent-protected technologies without infringing the patents or other intellectual property rights of third parties. There is a considerable amount of litigation involving patents and other intellectual property rights in the biotechnology and pharmaceutical industries. As the biopharmaceutical industry expands and more patents are issued, Themis faces greater risk that there may be patents issued to third parties that relate to its product candidates and technology of which Themis is not aware or that it must challenge to continue its operations as currently contemplated. This risk can be controlled to a certain extent by performing freedom-to-operate analyses for relevant products and methods. Nevertheless, such types of analyses inherently can never provide an absolute degree of certainty. Themis or its licensors may become involved in legal proceedings, including oppositions, interferences, derivation proceedings, inter parties' reviews, patent nullification proceedings, revocation actions, re-examinations or similar proceedings, challenging Themis' patent rights or the patent rights of others, and the outcome of any such proceedings are uncertain. An adverse determination in any such proceeding could reduce the scope of, or invalidate, important patent rights, allow third parties to commercialize Themis' technology or products and compete directly with Themis, without payment to Themis, or result in Themis' inability to manufacture or commercialize products without infringing third-party patent rights. Litigation or other proceedings may fail and, even if successful, may result in substantial costs and distract Themis' management and other employees.

Themis' product candidates may also infringe or may be alleged to infringe existing patents or patents that may be granted in the future. Because patent applications in Europe, the United States and many foreign jurisdictions are typically not published until 18 months after the earliest filing date, Themis cannot be certain that others have not filed patent applications that may cover its technologies, its product candidates or the use of its product candidates at the actual time-point of developing and subsequently filing own intellectual property rights. Additionally, pending patent applications which have been published can, subject to certain limitations, be later amended in a manner that could cover Themis' technologies, its product candidates or the use of its product candidates. As a result, Themis may become party to, or be threatened with, future adversarial proceedings or litigation regarding patents with respect to its product candidates and technology.

If Themis is sued for patent infringement, Themis would need to demonstrate that its product candidates or methods either do not infringe the patent claims of the relevant patent or that the patent claims are invalid, and Themis may not be able to do this. If Themis is found to infringe a third party's patent, the holder of any such patent would be able to block Themis' ability to develop and commercialize its product candidates and technology until such patents expire or unless Themis obtains a license from such third party. Themis could also elect to enter into such a license in order to settle litigation or in order to resolve disputes prior to litigation.

However, Themis may not be able to obtain such required license on commercially reasonable terms, or at all. Even if Themis or its licensor were able to obtain a license, licensed rights could be non-exclusive, thereby giving its competitors access to the same technologies licensed to Themis, and could require Themis to make substantial royalty payments. Themis could also be forced, including by court order, to cease commercializing the infringing technology or product candidate. A finding of infringement could prevent Themis from commercializing its product candidates or force Themis to cease some of its business operations, which could materially harm its business. Themis may also be required to pay damages, costs and other financial remedies to the patent owner. Claims that Themis has misappropriated the confidential information or trade secrets of third parties could have a similarly negative impact on its business. Any such claims are likely to be expensive to defend regardless of the outcome, and competitors of Themis may be able to sustain the costs of complex patent litigation more effectively than Themis because of substantially greater resources. In addition, Themis could be found liable for monetary damages, including treble damages in the United States (if Themis is found to have wilfully infringed a patent) and attorney's fees. Moreover, even if Themis is successful in defending any infringement proceedings, it may incur substantial costs and divert management's time and attention in doing so, which could materially adversely affect Themis' business, prospects, financial condition and results of operation. During the course of any patent or other intellectual property litigation, there could be public announcements of the results of hearings, rulings on motions, and other interim proceedings in the litigation. If securities analysts or investors regard these announcements as negative, the perceived value of Themis' product candidates and technology could be diminished.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation in some jurisdictions, there is a risk that some of Themis' confidential information could be compromised by disclosure during this type of litigation.

**1.4.5 *If Themis fails to comply with its obligations in the agreements under which it licenses intellectual property rights from third parties, or if the license agreements are terminated for other reasons, Themis could lose license rights that are important to its business and have to delay or cease further development of the relevant program or product or be required to spend significant time and resources to modify the program or product or develop or license replacement technology so as not to use the rights under the terminated agreement.***

Themis is party to a number of license agreements and commercial agreements under which it has obtained intellectual property licenses that are important to its business, and Themis expects to enter into additional licenses in the future. If Themis fails to comply with its obligations under these agreements, then the licensor may have the right to terminate the license or commercial agreement. In the event that any of Themis' material technology licenses were to be terminated by the licensor, Themis may have to delay or cease further development of the relevant program or manufacture or sale of the relevant product or be required to spend significant time and resources to modify the program or product so as not to use the rights under the terminated license or commercial agreement.

Licensing of intellectual property has been of critical importance to Themis' business, however, disputes may arise regarding an intellectual property license, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which Themis' technology, products and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patents and other rights under any collaboration relationships Themis might enter into in the future;
- the payments due by Themis under the license agreement, which may be higher than anticipated by Themis;
- Themis' diligence obligations under the license agreement and what activities satisfy those diligence obligations; and
- the ownership of inventions, improvements and know-how resulting from the joint creation or use of intellectual property by Themis and its licensors and partners.

If disputes over in-licensed intellectual property prevent or impair its ability to maintain Themis' current licensing arrangements on acceptable terms, Themis may be unable to successfully develop and commercialize the affected product candidates. Furthermore, Themis may need to obtain licenses from third parties to advance its research or allow commercialization of its product candidates, as Themis has done so from time to time. However, Themis may be unable to obtain any such licenses at a reasonable cost or on reasonable terms, if at all. In that event, Themis may be

required to expend significant time and resources to develop or license replacement technology. If Themis is unable to do so, it may be unable to develop or commercialize the affected product candidates. Any such event could have a material adverse effect on Themis' business, prospects, financial condition and results of operation.

**1.4.6 *If Themis is not able to prevent disclosure of its trade secrets, know-how or other proprietary information, the value of its technology and product candidates could be significantly diminished. Themis' reliance on third parties requires it to share trade secrets, which increases the possibility that a competitor will discover them or that its trade secrets will be misappropriated or disclosed.***

Themis relies on trade secret protection and confidentiality agreements to protect its interests in its trade secrets, know-how or other proprietary information and processes for which patents are difficult to obtain or enforce or that Themis elects not to patent, all of which constitute confidential information. Themis may not be able to protect its confidential information adequately. Since Themis relies on third parties to manufacture its product candidates, and because Themis collaborates with various organizations and academic institutions to advance of its technology, Themis must, at times, share trade secrets with relevant third parties. Themis seeks to protect its proprietary and in-licensed technology, in part, by including confidentiality provisions in its agreements with employees, consultants, contract personnel, advisers and third-party partners. However, Themis may not have entered into appropriate agreements with all of its employees, consultants, contract personnel, advisers, third-party partners or other parties that have had access to its confidential information. Also, no assurance can be given that such agreements will provide for a meaningful protection of confidential information in the event of any unauthorized use or disclosure of information. Although Themis expects its employees, consultants, advisers and any third parties who have access to its confidential information to enter into confidentiality agreements, Themis cannot give any assurances that, either accidentally or through wilful misconduct, the agreements will not be breached, that its confidential information will not be disclosed or that competitors will not otherwise gain access to its confidential information or independently develop substantially equivalent information and techniques.

Further, Themis seeks to maintain the physical security of its premises and physical and electronic security of its information technology systems.

However, it is possible that confidential information may be obtained by third parties as a result of breaches of physical or electronic security systems of Themis, its consultants, advisers, third-party partners or other parties that have had access to its confidential information. Any disclosure of confidential data into the public domain or to third parties could allow competitors of Themis to obtain and use confidential information of Themis. In addition, others may independently discover Themis' confidential information.

Any action to enforce Themis' rights against any misappropriation or unauthorized use and/or disclosure of its confidential information is likely to be time-consuming and expensive, and may ultimately be unsuccessful, or may result in a remedy that is not commercially valuable. Any misappropriation or unauthorized disclosure of Themis' confidential information could impair its competitive position and may have a material adverse effect on its business, prospects, financial condition and results of operation.

**1.4.7 *Themis may be subject to claims that its employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties or that its employees have wrongfully used or disclosed alleged trade secrets of their former employers or that its patents and other intellectual property are owned by its employees, consultants or other third parties.***

Certain of Themis' employees, including members of senior management, were previously employed at universities, medical institutions or other biotechnology or pharmaceutical companies, including competitors or potential competitors of Themis. Although Themis seeks to ensure that its employees, consultants and independent contractors do not use the proprietary information or know-how of others in their work for Themis, it may be subject to claims that Themis or its employees, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of any of its employees' former employers or other third parties. Themis may also be subject to claims that former employees, collaborators or other third parties have an ownership interest in its patents or other intellectual property. Themis may be subject to ownership disputes in the future arising from, for example, conflicting obligations of consultants or others who are involved in developing Themis' technology, products or processes. Litigation may be necessary to defend against these claims. If Themis fails in defending any such claims, in addition to paying monetary damages or other financial remedies, it may lose valuable intellectual property rights or personnel. Even if Themis is successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees and could materially adversely affect Themis' business, prospects, financial condition and results of operation.

**1.4.8 *Obtaining and maintaining patent protection is dependent on compliance with various procedural provisions, document submission, fee payment and other requirements imposed by governmental***



***patent agencies, and Themis' or its licensors' patent protection could be restricted or eliminated for non-compliance with these requirements.***

The relevant patent agencies require compliance with a number of procedural, documentary, fee payment and other similar requirements during the patent application and later during the patent maintenance process. In particular, periodic maintenance fees, renewal fees, annuity fees and other governmental fees need to be paid by Themis and/or its licensors to the relevant patent agencies at relevant stages over the lifetime of Themis' patents and patent applications. In many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. Furthermore, regulatory and statutory issues may arise due to the nature of the products for which protection is sought, for example in the context of "genetic resources" and "traditional knowledge", said topics being steadily incorporated into national intellectual property laws regimes in several jurisdictions.

However, there are situations in which non-compliance may result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Themis has contracted various service providers, including law firms, to assist with monitoring compliance with these obligations and Themis relies on its advisors' proper and timely advice in order to maintain and protect its patent portfolio. Nevertheless, in the event of a partial or complete loss of patent rights in a jurisdiction, Themis' competitors might be able to use its technologies and product candidates as well as those technologies licensed to Themis and this circumstance could materially adversely affect Themis' business, prospects, financial condition and results of operation.

**1.4.9 *Themis relies significantly on information technology and any failure, inadequacy, interruption or security lapse of that technology, including any cyber security incidents, could harm its ability to operate its business effectively.***

Despite the implementation of security measures, Themis' internal computer systems and those of third parties with which Themis contract are vulnerable to damage from cyber-attacks, computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. System failures, accidents or security breaches could cause interruptions in Themis' operations, and could result in a material disruption of its clinical and commercialization activities and business operations, in addition to possibly requiring substantial expenditures of resources to remedy. The loss of clinical trial data could result in delays in its regulatory approval efforts and significantly increase its costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of, or damage to, its data or applications, or inappropriate disclosure of confidential or proprietary information, Themis could incur liability and its product research, development and commercialization efforts could be delayed.

**1.4.10 *Themis may be vulnerable to disruption, damage and financial obligation as a result of computer system failures.***

Despite the implementation of security measures, any of the internal computer systems belonging to the Company or its third-party service providers are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failure. Any system failure, accident or security breach that causes interruptions in its own or in third-party service vendors' operations could result in a material disruption of its product development programs. For example, the loss of clinical study data from completed or future clinical studies could result in delays in its or its partners' regulatory approval efforts and significantly increase its costs in order to recover or reproduce the lost data. To the extent that any disruption or security breach results in a loss or damage to its data or applications, or inappropriate disclosure of confidential or proprietary information, Themis may incur liability as a result, its product development programs and competitive position may be adversely affected and the further development of its product candidates may be delayed. Furthermore, Themis may incur additional costs to remedy the damage caused by these disruptions or security breaches.

## **1.5 Risks Related to Dependence on Third Parties**

**1.5.1 *Risks associated with license agreements with Institut Pasteur and Max Planck***

Themis has entered into license agreements with Institut Pasteur and Max Planck pursuant to which it holds exclusive licenses for the development of new vaccines based on technology patented by such institutions. These licenses are therefore critically important for Themis' commercial goals. Should it lose the exclusivity of such licenses, or lose the licenses altogether, Themis may no longer be able to pursue all of its current commercial goals. Under the license agreements with Institut Pasteur, however, Themis is obliged to continuously adhere to certain specified requirements, such as continuing to actively pursue the commercialization of vaccines based on the licensed technology. Should Themis fail to adhere to such requirements, Institut Pasteur would have a right under the license agreements with Themis to withdraw the exclusivity of the license and even, in the case of further non-adherence to the requirements, withdraw the license completely. Therefore, should Themis refuse or be unable to adhere to the requirements specified in the

license agreements, it could lose the exclusivity of its licenses or potentially lose the licenses entirely, which would materially adversely affect Themis' business, prospects, financial condition and results of operation.

**1.5.2 *Themis may enter into collaborations with third parties for the development or commercialization of MV-CHIK and its other product candidates. If those collaborations are not successful, Themis may not be able to capitalize on the market potential of these product candidates.***

If MV-CHIK receives marketing approval, Themis plans to commercialize it in the United States and the European Union and is considering all options ranging from full commercialization through an internal sales force, licensing of the products to third parties or a hybrid model. Outside the United States and the European Union, Themis expects to utilize a variety of types of collaboration, distribution and other marketing arrangements with one or more third parties to commercialize MV-CHIK. Themis also may seek third-party collaborators for development and commercialization of other product candidates. Its likely collaborators for any sales, marketing, distribution, development, licensing or broader collaboration arrangements include large and mid-size pharmaceutical companies, regional and national pharmaceutical companies and biotechnology companies. Themis is not currently party to any such arrangement. However, if Themis does enter into any such arrangements with any third parties in the future, Themis will likely have limited control over the amount and timing of resources that its collaborators dedicate to the development or commercialization of Themis' product candidates. Themis' ability to generate revenues from these arrangements will depend on its collaborators' abilities and efforts to successfully perform the functions assigned to them in these arrangements.

Collaborations involving Themis' product candidates would pose numerous risks to Themis, including the following:

- collaborators have significant discretion in determining the efforts and resources that Themis will apply to these collaborations and may not perform its obligations as expected;
- collaborators may de-emphasize or not pursue development and commercialization of Themis' product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborators' strategic focus, product and product candidate priorities, available funding, or external factors such as an acquisition that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with Themis' products or product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than Themis';
- a collaborator with marketing and distribution rights to one or more products may not commit sufficient resources to the marketing and distribution of such product or products;
- collaborators may not properly maintain or defend Themis' intellectual property rights or may use Themis' proprietary information in such a way as to invite litigation that could jeopardize or invalidate its intellectual property or proprietary information or expose us to potential litigation;
- collaborators may infringe the intellectual property rights of third parties, which may expose them to litigation and potential liability;
- disputes may arise between the collaborator and Themis as to the ownership of intellectual property arising during the collaboration;
- Themis may grant exclusive rights to its collaborators, which would prevent them from collaborating with others;
- disputes may arise between the collaborators and Themis that result in the delay or termination of the research, development or commercialization of its products or product candidates or that result in costly litigation or arbitration that diverts management attention and resources; and

- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates.

Collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner or at all. If a collaborator of Themis were to be involved in a business combination, the continued pursuit and emphasis on its product development or commercialization program could be delayed, diminished or terminated.

**1.5.3 *Themis depends on third-party suppliers and other third parties for the production of its product candidates and its dependence on these third parties has the potential to adversely affect the clinical advancement of its product candidates, as well as any future commercialization efforts, should a contractor fail to deliver.***

Themis currently relies, and expects to continue to rely, on third-party contract manufacturers (**CMOs**) for the manufacture and supply of its product candidates. Themis currently relies on a single CMO for certain clinical supplies, as is currently the case for certain ingredients included in MV-CHIK. A transfer of the process for Themis' product candidates would be time consuming, and could take up to one year to complete, and Themis may not be able to successfully achieve such a transfer. Moreover, Themis might be unable to source ingredients for its products or product candidates from other suppliers upon short notice and/or at the required volume or at all and, might be required to pay higher prices for these ingredients. If Themis were unable to find an adequate replacement or another acceptable solution in time, clinical trials for Themis' product candidates could be delayed and Themis' commercial activities could be harmed.

Themis currently does not have in-house facilities to manufacture products for clinical trials or in commercial quantities and has no experience in commercial-scale manufacturing and therefore uses certain third-parties for the manufacturing of its product candidates. Themis expects to continue to rely on such third parties for the manufacture and supply of all of its product candidates for larger scale preclinical studies, clinical trials and any future commercialization.

Reliance on third-party providers may expose Themis to different risks than if it were to manufacture its products or product candidates itself. The facilities used by Themis' CMOs or other third-party manufacturers to manufacture Themis' products or product candidates must be approved by the relevant regulatory authorities and Themis does not have control over a supplier's or manufacturer's compliance with the applicable regulations, current good manufacturing practice (**cGMP**) standards and other laws and regulations. If the FDA, the EMA or a comparable other regulatory authority does not approve these facilities for the manufacture of Themis' products or product candidates or if it withdraws any such approval in the future, Themis or its partners may need to find alternative manufacturing facilities, which would significantly impact Themis' or their ability to develop, obtain regulatory approval for or market Themis' product candidates, if approved. Any failure to achieve and maintain compliance with these laws, regulations and standards could subject Themis to the risk that Themis or its partners may have to suspend the manufacturing of Themis' product candidates or that obtained approvals could be revoked, which would adversely affect the business and reputation of Themis.

Furthermore, third-party providers may breach, terminate or refuse to renew their agreements with Themis, potentially at a time that is costly or otherwise inconvenient for Themis. In such cases, Themis would face the challenge of transferring complicated manufacturing techniques to other CMOs. This is in particular relevant in relation to phase 3 clinical trial material and commercial supply of MV-CHIK, which is currently supplied by a single CMO. Themis may incur significant costs and be required to devote significant time to verify that the new manufacturer maintains facilities and procedures that comply with quality standards and with all applicable regulations and guidelines.

Themis' current and anticipated future dependence upon others for the manufacturing of its product candidates may also adversely affect Themis' future profit margins and its ability to commercialize any products that receive marketing approval on a timely and competitive basis.

**1.5.4 *Themis relies or may in the future rely on third parties to conduct preclinical studies or clinical trials for its product candidates, and if they do not properly and successfully perform their obligations to Themis, Themis may not be able to complete preclinical studies or clinical trials and to obtain regulatory approvals for its product candidates.***

Themis relies, and expects that it will continue to rely, on clinical research organizations (**CROs**) and other third parties to assist in managing, monitoring and otherwise carrying out preclinical studies and clinical trials for its product candidates. In particular with regard to the planned phase 3 clinical trials for MV-CHIK, Themis expects to use a single CRO for each of these clinical trials. Therefore, Themis will depend heavily on the performance by these CROs of its services. Themis competes with many other companies for the resources of these third parties. If engagements with third

parties on whom Themis relies are terminated, Themis would have to enter into alternative arrangements which would delay development and commercialization of Themis' product candidates.

Additionally, Themis relies on third parties to enrol qualified subjects and conduct, supervise and monitor its clinical studies. Its reliance on these third parties for clinical development activities reduces Themis' control over these activities. Themis' current plans for the commercialization of MV-CHIK, and its other product candidates, depend on it meeting current estimates for the timing of such commercialization. Failure or delay in clinical studies or otherwise could have a material adverse effect on Themis' business, results of operations or financial conditions.

The FDA, the EMA and other comparable regulatory authorities require compliance with regulations and standards, including good clinical practice (*GCP*), for designing, conducting, monitoring, recording, analysing, and reporting the results of preclinical studies and clinical trials to assure that the data and results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. Although Themis relies on third parties to conduct many of its preclinical studies and clinical trials, Themis is responsible for ensuring that each of these preclinical studies and clinical trials is conducted in accordance with its general investigational plan, protocol and other requirements.

If these third parties do not successfully carry out their duties under their agreements, if the quality or accuracy of the data they obtain is compromised due to their failure to adhere to preclinical studies and clinical trial protocols or to regulatory requirements, or if they otherwise fail to comply with preclinical studies and clinical trial protocols or meet expected deadlines, the clinical trials of Themis' product candidates may not meet regulatory requirements. If preclinical studies and clinical trials do not meet regulatory requirements or if these third parties need to be replaced, preclinical development activities or clinical trials may be extended, delayed, suspended or terminated. If any of these events occur, Themis may not be able to obtain regulatory approval of Themis' product candidates on a timely basis or at all.

**1.5.5 *Themis may form or seek strategic alliances or enter into additional licensing arrangements in the future, and Themis may not realize the benefits of such alliances or licensing arrangements.***

Themis may form or seek strategic alliances, create joint ventures or collaborations or enter into additional licensing arrangements with third parties that Themis believes will complement or augment its development and commercialization efforts with respect to its product candidates and any future product candidates that Themis may develop. Any of these relationships may require Themis to incur non-recurring and other charges, increase its near and long-term expenditures, issue securities that dilute its existing stockholders or disrupt Themis' management and business. In addition, Themis faces significant competition in seeking appropriate strategic partners and the negotiation process is time-consuming and complex. Moreover, Themis may not be successful in its efforts to establish a strategic partnership or other alternative arrangements for its product candidates because Themis may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view its product candidates as having the requisite potential to demonstrate safety and efficacy. If Themis licenses products or businesses, it may not be able to realize the benefit of such transactions if Themis is unable to successfully integrate them with its existing operations and company culture. Themis cannot be certain that, following a strategic transaction or license, it will achieve the revenues or specific net income that justifies such transaction. Any delays in entering into new strategic partnership agreements related to its product candidates could delay the development and commercialization of its product candidates in certain geographies for certain indications, which would harm its business prospects, financial condition and results of operations.

## **1.6 Risks Related to Employee Matters and Managing Growth**

**1.6.1 *Themis' future success depends on its ability to retain its chief executive officer and other key executives and to attract, retain and motivate qualified personnel.***

Themis is highly dependent on Dr. Erich Tauber, its chief executive officer, and the other principal members of its management and scientific teams. Although Themis has formal employment agreements with some of its executive officers, these agreements do not prevent its executives from terminating their employment with Themis at any time. Most of the senior management, however, are working as consultants for Themis and therefore may terminate their involvement on short notice. Themis does not maintain "key person" insurance on any of its executive officers. The unplanned loss of the services of any of these persons might impede the achievement of its research, development and commercialization objectives.

Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel will also be critical to Themis' success. Themis may not be able to attract and retain such personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. Many of the other biotechnology and pharmaceutical companies and academic institutions that Themis competes against for qualified personnel have greater financial and other resources, different risk profiles and a longer history in the industry than Themis does. In addition, Themis relies on consultants and advisors, including scientific and clinical advisors, to assist it

in formulating its research and development and commercialization strategy. Its consultants and advisors may be employed by employers other than Themis and may have commitments under consulting or advisory contracts with other entities that may limit their availability to Themis. The inability of Themis to attract and retain these key persons could prevent it from achieving its objectives overall and thus could have a material adverse effect on its business, earnings, financial situation and prospects.

**1.6.2 *Themis' employees may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements, which could cause significant liability for Themis and harm its reputation.***

Themis is exposed to the risk of employee fraud or other misconduct, including intentional failures to comply with EMA regulations or similar regulations of comparable non-EU regulatory authorities, including US regulations, provision of accurate information to the EMA or comparable non-EU regulatory authorities, compliance with manufacturing standards Themis has established, compliance with healthcare fraud and abuse laws and regulations and similar laws and regulations established and enforced by comparable non-EU regulatory authorities, reporting financial information or data accurately or disclosing unauthorized activities to Themis. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to Themis' reputation. It is not always possible to identify and deter employee misconduct, and the precautions Themis takes to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting them from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws, standards or regulations. If any such actions are instituted against Themis, and Themis is not successful in defending itself or asserting its rights, those actions could have a significant impact Themis' business, financial condition, results of operations, and prospects, including through the imposition of civil, criminal and administrative penalties, damages, monetary fines, possible exclusion from participation healthcare programs, contractual damages, reputational harm, diminished profits and future earnings and curtailment of Themis' operations.

**1.6.3 *Themis expects to expand its development, regulatory and sales and marketing capabilities, and as a result, Themis may encounter difficulties in managing its growth, which could disrupt its operations.***

As of 30 June 2018, Themis had 12 employees (based on full-time equivalent). Themis expects to experience significant growth in the number of its employees and the scope of its operations, particularly in the areas of drug development, regulatory affairs and sales and marketing. In particular, while Themis intends to seek to commercialize through different means, if it decides to establish its own sales and marketing capabilities and promote MV-CHIK and its other product candidates in major European countries with a targeted sales force if and when it is approved. This potential growth will place a significant strain on its management, operations and financial resources, and Themis may have difficulty managing this future potential growth.

To manage its anticipated future growth, Themis must continue to implement and improve its managerial, operational and financial systems, expand its facilities and continue to recruit and train additional qualified personnel. Due to Themis' small size, limited financial resources and the limited experience of its management team in managing a company with such anticipated growth, Themis may not be able to effectively manage the expansion of its operations or recruit and train additional qualified personnel. The physical expansion of its operations may lead to significant costs and may divert its management and business development resources. In particular, Themis' current lease agreement for its office and laboratory facilities, is due to expire in 2020. If Themis fails to prolong its existing lease or to identify new premises, including in relation to expanded operational requirement, at economically attractive terms, this may adversely affect its business, financial condition, results of operations, and prospects. Any inability to manage growth could delay the execution of its business plans or disrupt its operations.

**1.6.4 *Themis may not be able to integrate efficiently or achieve the expected benefits of any opportunistic acquisitions of complementary businesses, product candidates or technologies.***

Even though not currently part of Themis' business strategy, opportunistic acquisitions may prove to be necessary or advantageous for Themis and, therefore, become part of Themis' future business model. Themis' ability to integrate and manage acquired businesses, product candidates or technologies effectively on an opportunistic basis will depend upon a number of factors including the size of the acquired business, the complexity of any product candidate or technology and the resulting difficulty of integrating the acquired business's operations, if any. Themis' relationship with current employees or employees of any acquired business may become impaired. Themis may also be subject to unexpected claims and liabilities arising from such opportunistic acquisitions. These claims and liabilities could be costly to defend, could be material to Themis' financial position and might exceed either the limitations of any applicable indemnification provisions or the financial resources of the indemnifying parties. There can also be no assurance that Themis will be able to assess ongoing profitability and identify all actual or potential liabilities of a business, product candidate or technology prior to its acquisition. If Themis decides to acquire businesses, product candidates or

technologies which result in assuming unforeseen liabilities in respect of which it has not obtained contractual protections or for which protection is not available, this could materially adversely affect Themis' business, results of operations or financial condition.

## **1.7 Risks Related to the Offering and Ownership of the Shares**

### **1.7.1 *Upon Settlement, certain significant existing Shareholders will retain substantial influence over the Company. These existing Shareholders may have different interests from the Company or the other Shareholders.***

Immediately after Settlement, the existing Shareholders of the Company will hold approximately 71% of the Company's issued and outstanding capital (assuming the issue of the maximum number of the Offer Shares and that the Increase Option and the Over-Allotment Option are exercised in full). As a result, these existing Shareholders will continue to be in a position to exert substantial influence on the general meeting of the Company, being the corporate body, or where the context so requires, the physical meeting of shareholders of the Company (the **General Meeting**) and, consequently, on matters decided by the General Meeting, including the appointment of Supervisory Directors, the distribution of dividends, the amendment of the articles of association of the Company (the **Articles of Association**) or any proposed capital increase. This concentration of ownership could adversely affect the trading volume and market price of the Shares.

The interests of these existing Shareholders could deviate from the interests of the Company or the Company's other Shareholders. The existing Shareholders, as the major Shareholders of the Company, may delay, postpone or prevent transactions that might be advantageous for investors or other Shareholders. In addition, these existing Shareholders and/or their respective affiliates may, in the future, own businesses that directly compete with the Company.

### **1.7.2 *Future offerings of debt or equity securities by the Company, or the perception thereof, may adversely affect the market price of the Shares and any future issuances of Shares may dilute investors' shareholdings.***

It is expected that prior to Settlement, the General Meeting will authorize the management board (*bestuur*) of the Company (the **Management Board** and each member thereof, a **Managing Director**), subject to the approval of the supervisory board (*raad van commissarissen*) of the Company (the **Supervisory Board** and each member thereof, a **Supervisory Director**), to issue Shares or grant rights to subscribe for Shares for a period of 18 months following the Settlement Date and to limit or exclude the pre-emptive rights pertaining to such Shares. This authorization of the Management Board is limited to 50% of the issued Shares immediately following Settlement.

The Company may in the future seek to raise capital through public or private debt or equity financings by issuing additional Shares, debt or equity securities convertible into Shares or rights to acquire these securities and exclude the pre-emptive rights pertaining to the then outstanding Shares. In addition, the Company may in the future seek to issue additional Shares as stock dividend or as consideration for or otherwise in connection with the acquisition of new businesses. Furthermore, the Company may issue new Shares in connection with the establishment of employee stock option plans. The issuance of any additional Shares may dilute an investor's shareholding interest in the Company.

Furthermore, any additional debt or equity financing the Company may need may not be available on terms favourable to the Company or at all, which could adversely affect its future plans and the market price of the Shares. Any additional offering or issuance of Shares by the Company, or the perception that an offering or issuance may occur, could also have a negative impact on the market price of the Shares and could increase the volatility in the market price of the Shares.

### **1.7.3 *Future sales or the possibility of future sales of a substantial number of Shares by the existing Shareholders and the Company's management may adversely affect the market price of the Shares.***

The Company has agreed with the Underwriters, pursuant to an underwriting agreement entered into on 29 October 2018 (the **Underwriting Agreement**), to restrictions on its ability to issue, sell or transfer Shares for a period of 365 days after the Settlement Date. Furthermore, each of the existing Shareholders, each Managing Director and certain of the employees of Themis have agreed with the Joint Global Coordinators, pursuant to lock-up agreements entered into on 29 October (the **Lock-up Agreements**), to restrict their respective ability to sell or transfer Shares for a period of 365 days after the Settlement Date. After the expiration of the applicable lock-up period, the existing Shareholders or the Managing Directors may sell their Shares or the Company may sell additional Shares in the public market. In addition, the Joint Global Coordinators have full discretion to waive the lock-up in connection with the existing Shareholders and the Company at any time before its expiry. This could also result in the existing Shareholders and the Company selling Shares in the public market before expiry of the applicable lock-up periods. In addition, there could also be a perception

in the market that such sales could occur due to the expiry of the relevant lock-up period or its waiver. See Section 16.4 (Plan of Distribution—Lock-up Arrangements).

The market price of the Shares could decline if, following the Offering and after the expiration of the lock-up period, a substantial number of Shares are sold by the existing Shareholders in the public market or if there is a perception that such sales could occur. Furthermore, a sale of Shares by any or all of the Managing Directors could be considered as a lack of confidence in the performance and prospects of the Company and could cause the market price of the Shares to decline. In addition, such sales could make it more difficult for the Company to raise capital through the issuance of equity securities in the future.

**1.7.4 *The Company has broad discretion in the use of the net proceeds from the Offering and may not use them effectively.***

The Company's management will have broad discretion in the application of the net proceeds from the Offering and could spend the proceeds in ways that do not improve the Company's results of operations or enhance the value of the Shares. The Company intends to use the net proceeds from the Offering, *inter alia*, for the completion of the clinical studies and the commercialization of MV-CHIK and as further described in Section 4 (Reasons for the Offering and Use of Proceeds). However, the Company's actual use of these proceeds may differ substantially from the Company's current plans and investors will not have the opportunity as part of their investment decision to assess whether the net proceeds are being used appropriately. The failure by the Company's management to apply these funds effectively could result in financial losses that could have a material adverse effect on Themis' business and cause the market price of the Shares to decline. Pending their use, the Company may invest the net proceeds from the Offering in a manner that does not produce income or that loses value.

**1.7.5 *Shareholders outside the Netherlands may not be able to exercise pre-emptive rights in future offerings.***

In the event of an increase in the Company's share capital, holders of Shares are generally entitled under Dutch law to full pre-emptive rights, unless these rights are limited or excluded either by virtue of Dutch law, by a resolution of the General Meeting, or by a resolution of the Management Board, which is subject to the approval of the Supervisory Board (if the Management Board has been designated by the General Meeting or the Articles of Association for this purpose). See Section 14.7 (Description of Share Capital and Corporate Governance—Issue of Shares and Pre-emptive Rights). The Management Board will be designated by the General Meeting prior to Settlement for a period of 18 months following the Settlement Date to limit or exclude pre-emptive rights in relation to the authority which will be granted to the Management Board to issue up to 50% of the issued Shares immediately following Settlement.

However, the securities laws of certain jurisdictions may restrict the Company's ability to allow Shareholders to participate in offerings of the Company's securities and to exercise pre-emptive rights. Accordingly, subject to certain exceptions, Shareholders with registered addresses, or who are resident or located in certain jurisdictions outside the Netherlands, including the United States, will not be eligible to exercise pre-emptive rights. As a result, such Shareholders may experience dilution of their ownership and voting interests in the Company's share capital.

**1.7.6 *If securities or industry analysts cease to publish research reports on Themis' business, or adversely change or make negative recommendations regarding the Shares, the market price and trading volume of the Shares could decline.***

Whether there is an active trading market for the Shares will be influenced by, among other things, the availability and recommendations of research reports covering Themis' business. Directive 2014/65/EU of the European Union on markets in financial instruments (*MiFID II*), which entered into force on 1 January 2018, requires research to be priced and charged separately from execution. As a result of MiFID II, it is possible that research coverage will be reduced in general, and that remaining coverage will be more focused on certain companies, industries or geographic markets. This may negatively affect the coverage by research analysts of Themis' business. If one or more research analysts ceases to cover Themis' business or fails to regularly publish reports on its business, Themis could lose visibility in the financial markets, which could cause the market price or trading volume of the Shares to decline. In addition, if research analysts do not make positive recommendations regarding the Shares, or if negative research is published on the industry or geographic markets serves, the price and trading volume of the Shares could decline.

**1.7.7 *There is a risk that an active and liquid market for the Shares will not develop and the price of the Shares may be volatile.***

Prior to the Offering, there has been no public trading market for the Shares. There can be no assurance that an active trading market for the Shares will develop after the Offering or, if it does develop, that it will be sustained or liquid. If such market fails to develop or be sustained, this could negatively affect the liquidity and price of the Shares, as

well as increase their price volatility. Investors may not be in a position to sell their Shares quickly or at the market price if there is no active trading in Shares. In addition, an illiquid market for the Shares may result in lower market prices and increased volatility, which could adversely affect the value of an investment in the Shares.

The Offer Price may not be indicative of the market price for the Shares after the Offering has completed. The market price of the Shares could also fluctuate substantially due to various factors, some of which could be specific to the Company and its operations and some of which could be related to the industry in which the Company operates or equity markets generally. As a result of these and other factors, the Shares may trade at prices significantly below the Offer Price. The Company cannot assure that the market price of the Shares will not decline, or that the Shares will not trade at prices significantly below the Offer Price, regardless of its actual operating performance.

**1.7.8 *The market price of the Shares may fluctuate significantly and be lower than the Offer Price, and investors could lose all or part of their investment.***

The stock markets in general, and the markets for pharmaceutical and biotechnology shares in particular, have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. Any one of the following factors, among others, may cause a substantial decline in the markets in which Themis operates: general economic conditions; geopolitical conditions, including war, acts of terrorism and other man-made or natural disasters; regulatory developments in the EU, the United States and other jurisdictions; changes in the structure of healthcare payment systems; publication of significant new scientific research; announcements of technological innovations or new products by Themis or its competitors; developments in regulatory clearance processes of Themis or its competitors; publication of research reports about the pharmaceutical or biotechnology industries by securities or industry analysts; changes in estimates by stock market analysts and other events and factors beyond Themis' control. These factors, and the factors described elsewhere in this section, could significantly reduce the trading price of the Offer Shares. Themis cannot assure that the market price of the Shares will not decline, and the Shares may trade at prices significantly below the Offer Price, regardless of Themis' actual operating performance or prospects. As a result, investors may not be able to (re)sell their Shares at or above the Offer Price, or at all.

**1.7.9 *The Company does not intend to pay dividends for the foreseeable future.***

The Company does not intend to pay any dividends for the foreseeable future. Payment of future dividends to the Shareholders will effectively be at the discretion of the Management Board, subject to the approval of the Supervisory Board, after taking into account various factors including the Company's business prospects, cash requirements, financial performance and new product development. In addition, the Company is a holding company with no material, direct business operations. Its principal asset is its direct ownership of Themis Bioscience GmbH. As a result, the Company is dependent on loans, dividends and other payments from Themis Bioscience GmbH to generate the funds necessary to meet its financial obligations, including the payment of dividends. Accordingly, investors cannot rely on dividend income from the Shares and any returns on an investment in the Shares will likely depend entirely upon any future appreciation in the price of the Shares. The Company can provide no assurance that the price of the Shares will appreciate after the Offering or that the market price for the Shares will not fall below the Offer Price.

**1.7.10 *If Settlement does not take place, subscriptions for the Offer Shares will be disregarded and transactions effected in the Offer Shares will be annulled.***

Application has been made to list the Shares on Euronext under the symbol "THISR". The Company expects that the Offer Shares will be admitted to listing and that trading in the Offer Shares will commence prior to the Settlement Date on the First Trading Date on an "as-if-and-when-issued" basis. Settlement may not take place on the Settlement Date or at all, if certain conditions of events referred to in the Underwriting Agreement are not satisfied or waived or occur on or prior to such date (see Section 16 (Plan of Distribution)). Trading in the Offer Shares before Settlement will take place subject to the condition that, if Settlement does not take place, the Offering will be withdrawn, all applications for the Offer Shares will be disregarded, any allotments made will be deemed not to have been made, any subscription payments made will be returned without interest or other compensation and transactions on Euronext will be annulled. All dealings in the Offer Shares prior to Settlement and delivery are at the sole risk of the parties concerned. NIBC acts as listing and paying agent (the ***Listing and Paying Agent***), the Company, the Underwriters and Euronext Amsterdam N.V. do not accept any responsibility or liability for any loss incurred by any person as a result of a withdrawal of the Offering or the related annulment of any transaction on Euronext.

**1.7.11 *Investors with a reference currency other than euro will become subject to certain foreign exchange risks when investing in the Shares.***

The Company's equity capital is denominated in euro, and all dividends on the Shares will be paid by the Company in euro. Investors whose reference currency is a currency other than the euro may be adversely affected by any reduction in the value of euro relative to the respective investor's reference currency. In addition, such investors could



incur additional transaction costs in converting euro into another currency. Investors whose reference currency is a currency other than the euro are therefore urged to consult their financial advisors.

**1.7.12 *The requirements of being a public company may strain the Company's resources and distract its management, which could make it difficult to manage its business.***

As a public company with Shares traded on an exchange located in the Netherlands, the Company will incur a higher level of legal, accounting, financial compliance, reporting and other expenses than the Company did as a privately owned any as compliance with rules and regulations applicable to listed companies will require additional resources and make some activities more time-consuming than they have been in the past. Failure to comply with these requirements could subject the Company to fines under applicable listing rules and liabilities, which could materially adversely affect Themis' business, prospects, financial condition and results of operation.

In addition, these rules and regulations could make it more difficult for the Company to attract and retain qualified persons to serve on the Management Board and Supervisory Board and may divert its management's attention. In addition, effective internal controls over financial reporting are necessary for the Company to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause the Company to fail to meet its reporting obligations.

**1.7.13 *The ability of Shareholders to bring action or enforce judgments against the Company, the Managing Directors and the Supervisory Directors may be limited.***

The ability of Shareholders to bring an action against the Company may be limited under law. The Company is a public company with limited liability (*naamloze vennootschap*) incorporated under the laws of the Netherlands. The rights of Shareholders are governed by Dutch law and the Articles of Association. These rights differ from the rights of Shareholders in typical US corporations and other non-Dutch corporations. It may be difficult for a Shareholder to prevail in a claim against the Company or to enforce liabilities predicated upon non-Dutch laws.

It may not be possible for a Shareholder to effect service of process upon the Managing Directors or the Supervisory Directors within such Shareholder's country of residence, nor to enforce against the Directors or the Supervisory Directors judgments of courts of such Shareholder's country of residence based on civil liabilities under that country's securities laws. There can be no assurance that a Shareholder will be able to enforce any judgment in civil and commercial matters or any judgments against the Managing Directors or the Supervisory Directors who are residents of countries other than those in which the judgment is made. See also Section 2.10 (Important Information—Enforceability of Judgments).

**1.7.14 *The Company will be a Dutch public limited liability company. The rights of the Shareholders may be different from the rights of shareholders in companies governed by the laws of US jurisdictions.***

The Company will be a Dutch public limited liability company. The Company's corporate affairs are, or will be, governed by the Articles of Association and by the laws governing companies incorporated in the Netherlands. The rights of Shareholders and the responsibilities of Managing Directors and Supervisory Directors may be different from the rights and obligations of shareholders in companies governed by the laws of US jurisdictions. Such differences include, among others, voting requirements for important shareholder resolutions regarding capital measures, corporate reorganizations and certain shareholder rights, such as assertion of liability claims. In the performance of its duties, the Management Board and Supervisory Board are required by Dutch law to consider the interests of the Company, the Shareholders, its employees and other stakeholders, in all cases with due observation of the principles of reasonableness and fairness. It is possible that some of these parties will have interests that are different from, or in addition to, the interests of the Shareholders.

**1.7.15 *The Company operates so as to be treated as exclusively as a resident of Austria for tax purposes, but the relevant tax authorities may treat the Company as also being tax resident elsewhere.***

The Company intends to operate in a manner so as to be treated as resident of Austria for tax purposes, although it is a company incorporated under Dutch law.

As such, the Company is in principle (also) a resident of the Netherlands for Netherlands tax purposes, and as such subject to Netherlands taxes. On the basis of the 1970 Convention between the Kingdom of the Netherlands and the Republic of Austria for the avoidance of double taxation with respect to taxes on income and capital (the ***double tax treaty between the Netherlands and Austria***), however, the Netherlands will be restricted in imposing these taxes where the Company is a tax resident of Austria and its "effective management" is located in Austria. The test of "effective management" is largely a question of fact based on all the circumstances, rather than a question of law. Nevertheless, the

relevant case law and OECD guidance suggest that the Company is likely to be regarded as having become Austrian tax resident from incorporation and remaining so if, as the Company intends, (i) meetings of its Management Board are held in Austria (and none will be held in the Netherlands) with a majority of directors present in Austria for those meetings; (ii) at those meetings there are full discussions of, and decisions are made regarding, the key strategic issues affecting the Company and its subsidiaries; (iii) those meetings are properly minuted; (iv) at least some of the directors of the Company, together with supporting staff, are based in Austria; and (v) the Company has permanent staffed office premises in Austria.

The Company anticipates that, so long as the factors listed in the preceding paragraph are present at all material times, it is unlikely that the Austrian and/or Netherlands competent tax authorities will rule that the Company should be treated (solely) as a resident of the Netherlands, in which case the Netherlands will be allowed to levy tax on the Company as a Netherlands resident taxpayer and in such case dividends distributed by the Company are in principle subject to Dutch dividend withholding tax.

## **2. Important Information**

### **2.1 General**

Prospective investors are expressly advised that an investment in the Offer Shares entails certain risks and that they should therefore read and carefully review the content of this Prospectus. A prospective investor should not invest in the Offer Shares unless it has the expertise (either alone or with a financial adviser) to evaluate how the Offer Shares will perform under changing conditions, the resulting effects on the value of the Shares and the impact this investment will have on its overall investment portfolio. Prospective investors should also consult their own tax advisers as to the tax consequences of the purchase, ownership and disposition of the Offer Shares.

The content of this Prospectus is not to be considered or interpreted as legal, financial or tax advice. It is not intended to provide the basis of any credit or other evaluation and should not be considered as a recommendation by the Company, the Underwriters or any of their respective affiliates or representatives that any recipient of this Prospectus should invest in the Offer Shares. Prior to making any decision whether to purchase the Offer Shares, prospective investors should read this Prospectus. Investors should ensure that they read the whole of this Prospectus and not just rely on key information or information summarized within it. Each prospective investor should consult his own stockbroker, bank manager, lawyer, auditor or other financial, legal or tax advisers before making any investment decision with regard to the Offer Shares, to consider such investment decision in light of the prospective investor's personal circumstances, and in order to determine whether or not such prospective investor is eligible to subscribe for the Offer Shares.

In making an investment decision, prospective investors must rely on their own assessment of the Company, the Offer Shares and the terms of the Offering, the information contained in, or incorporated by reference into, terms of this Prospectus, the Pricing Statement and any supplement to this Prospectus, should such supplement be published, within the meaning of Section 5:23 of the DFSA, including the merits and risks involved, and the risk factors described in this Prospectus. Any subscription for the Offer Shares should be based on the assessments that the investor in question may deem necessary, including the legal basis and consequences of the Offering, and including possible tax consequences that may apply, before deciding whether or not to invest in the Offer Shares.

No person has been authorized to give any information or to make any representations in connection with the Offering, other than those contained in this Prospectus and, if given or made, such information or representations must not be relied upon as having been authorized by or on behalf of the Company, any of the Underwriters, the Listing and Paying Agent or any of their respective affiliates or representatives.

Although the Underwriters are party to various agreements pertaining to the Offering and each of the Underwriters has or might enter into a financing arrangement with the Company and/or any of its affiliates, this should not be considered as a recommendation by any of them to invest in the Offer Shares.

The Underwriters and the Listing and Paying Agent are acting exclusively for the Company and no one else in connection with the Offering. They will not regard any other person (whether or not a recipient of this Prospectus) as their respective clients in relation to the Offering and will not be responsible to anyone other than the Company for providing the protections afforded to their respective clients nor for giving advice in relation to the Offering or any transaction or arrangement referred to herein.

### **2.2 Supplements**

The information in this Prospectus is as of the date printed on the front of the cover, unless expressly stated otherwise. Without prejudice to the Company's obligation to publish supplements to this Prospectus when legally required, the delivery of this Prospectus at any time after the date hereof shall not, under any circumstances, create any implication that there has been no change in Themis business or affairs since the date hereof or that the information contained in this Prospectus is correct as of any time since its date. If a significant new factor (including an offer size determined at such level that it would not allow the use of proceeds as described in this Prospectus to be realized therefrom (see Section 4 (Reasons for the Offering and Use of Proceeds)) or a material mistake or inaccuracy relating to the information included in this Prospectus which is capable of affecting the assessment of the Offer Shares arises or is noted between the date of this Prospectus and the end of the Offering Period, a supplement to this Prospectus will be published. This Prospectus and any supplement thereto will be subject to approval by the AFM and will be made public in accordance with the relevant rules under the DFSA. The summary shall also be supplemented, if necessary to take into account the new information included in the supplement.

If a supplement to this Prospectus is published, investors shall have the right to withdraw their application for the Offer Shares made prior to the publication of the supplement. Such withdrawal must be done within the time limits set forth in the supplement (which shall not be shorter than two Business Days after publication of the supplement). Investors are not allowed to withdraw their acceptances in any other circumstances.

Statements contained in any such supplement (or contained in any document incorporated by reference therein) shall, to the extent applicable (whether expressly, by implication or otherwise), be deemed to modify or supersede statements contained in this Prospectus or in a document which is incorporated by reference in this Prospectus. Any shall specify which statement is so modified or superseded and shall specify that such statement shall, except as so modified or superseded, no longer constitute a part of this Prospectus. For the avoidance of doubt, references in this paragraph to any supplement being published by the Company do not include the Pricing Statement.

## 2.3 Responsibility Statement

The Company accepts responsibility for the information contained in this Prospectus. Having taken all reasonable care to ensure that such is the case, the Company attests that the information contained in this Prospectus is, to the best of its knowledge, in accordance with the facts and contains no omission likely to affect its import.

None of the Underwriters, the Listing and Paying Agent nor any of their respective affiliates or respective directors, officers or employees or any other person makes any representation or warranty, express or implied, as to, or assumes any responsibility for, the accuracy or completeness, fairness or verification of the information in this Prospectus or incorporated by reference herein, and nothing in this Prospectus or incorporated herein by reference is, or shall be relied upon as, a promise or representation by the Underwriters, the Listing and Paying Agent or any of their respective affiliates or respective directors, officers or employees or any other person, whether as to the past or the future. None of the Underwriters or the Listing and Paying Agent accepts any responsibility whatsoever for the contents of this Prospectus or for any other statements made or purported to be made by either itself or on its behalf in connection with Themis, the Offering, or the Offer Shares. Accordingly, each of the Underwriters and the Listing and Paying Agent disclaims, to the fullest extent permitted by applicable law, any and all liability, whether arising in tort, contract or otherwise, which they might otherwise be found to have in respect of this Prospectus.

## 2.4 Information to Distributors

Solely for the purposes of the product governance requirements contained within: (a) MiFID II; (b) Articles 9 and 10 of Commission Delegated Directive (EU) 2017/593 supplementing MiFID II; and (c) local implementing measures (together, the **MiFID II Product Governance Requirements**), and disclaiming all and any liability, whether arising in tort, contract or otherwise, which any “manufacturer” (for the purposes of the MiFID II Product Governance Requirements) may otherwise have with respect thereto, the Offer Shares have been subject to a product approval process, which has determined that the Offer Shares are: (i) compatible with an end target market of retail investors and investors who meet the criteria of professional clients and eligible counterparties, each as defined in MiFID II; and (ii) eligible for distribution through all distribution channels as are permitted by MiFID II (the **Target Market Assessment**). Notwithstanding the Target Market Assessment, “distributors” (for the purposes of the MiFID II Product Governance Requirements) should note that: the price of the Offer Shares may decline and investors could lose all or part of their investment; the Offer Shares offer no guaranteed income and no capital protection; and an investment in the Offer Shares is compatible only with investors who do not need a guaranteed income or capital protection, who (either alone or in conjunction with an appropriate financial or other advisor) are capable of evaluating the merits and risks of such an investment and who have sufficient resources to be able to bear any losses that may result therefrom. The Target Market Assessment is without prejudice to the requirements of any contractual, legal or regulatory selling restrictions in relation to the Offering.

For the avoidance of doubt, the Target Market Assessment does not constitute: (a) an assessment of suitability or appropriateness for the purposes of MiFID II; or (b) a recommendation to any investor or group of investors to invest in, or purchase, or take any other action whatsoever with respect to the Offer Shares.

Each distributor is responsible for undertaking its own target market assessment in respect of the Offer Shares and determining appropriate distribution channels.

## 2.5 Notice to Prospective Investors

EXCEPT AS OTHERWISE SET OUT IN THIS PROSPECTUS, THE OFFERING DESCRIBED IN THIS PROSPECTUS IS NOT BEING MADE TO INVESTORS IN THE UNITED STATES, CANADA, AUSTRALIA OR JAPAN, AND THIS PROSPECTUS SHOULD NOT BE FORWARDED OR TRANSMITTED IN OR INTO THE UNITED STATES, AUSTRALIA, CANADA OR JAPAN OR ANY OTHER JURISDICTIONS IN WHICH IT IS UNLAWFUL TO DO SO.

In making an investment decision, prospective investors must rely on their own examination of Themis and the terms of the Offering, including the merits and risks involved. Any decision to subscribe for the Offer Shares should be based solely on this Prospectus and any supplement to this Prospectus, should such supplement be published, within the meaning of Section 5:23 of the DFSA.

The Offer Shares may not be a suitable investment for all investors. Each prospective investor in the Offer Shares must determine the suitability of that investment in light of its own circumstances. In particular, each prospective investor (either alone or with a financial adviser) should:

- (i) have sufficient knowledge and experience to make a meaningful evaluation of the Offer Shares, the merits and risks of investing in the Offer Shares and the information contained or incorporated by reference in this Prospectus, including the financial risks and other risks described in Section 1 (Risk Factors); and
- (ii) have the expertise to evaluate how the Offer Shares will perform under changing conditions, the resulting effects of changing conditions on the value of the Offer Shares and the impact this investment will have on the prospective investor's overall investment portfolio.

Because of the following restrictions, prospective investors are advised to consult legal counsel prior to making any offer for, resale, pledge or other transfer of the Offer Shares.

This Prospectus does not constitute or form part of any offer or invitation to sell, or any solicitation of any offer to acquire Offer Shares in any jurisdiction in which such an offer or solicitation is unlawful or would result in the Company becoming subject to public company reporting obligations outside the Netherlands.

The distribution of this Prospectus and the Offering may, in certain jurisdictions, be restricted by law, and this Prospectus may not be used for the purpose of, or in connection with, any offer or solicitation by anyone in any jurisdiction in which such offer or solicitation is not authorized or to any person to whom it is unlawful to make such offer or solicitation. This Prospectus does not constitute an offer of, or an invitation to, subscription for any Offer Shares in any jurisdiction in which such offer or invitation would be unlawful. The Company and the Underwriters require persons into whose possession this Prospectus comes to inform themselves of and observe all such restrictions. None of the Company or the Underwriters accepts any legal responsibility for any violation by any person, whether or not a prospective subscriber for Offer Shares, of any such restrictions. The Company and the Underwriters reserve the right in their own absolute discretion to reject any offer to subscribe for Offer Shares that the Company, the Underwriters or their respective agents believe may give rise to a breach or violation of any laws, rules or regulations.

No action has been or will be taken to permit a public offer or sale of Offer Shares, or the possession or distribution of this Prospectus or any other material in relation to the Offering in any jurisdiction outside the Netherlands where action may be required for such purpose. Accordingly, neither this Prospectus nor any advertisement or any other related material may be distributed or published in any jurisdiction except under circumstances that will result in compliance with any applicable laws and regulations.

Prospective investors who have a registered address in, or who are resident or located in, jurisdictions other than the Netherlands and any person (including, without limitation, agents, custodians, nominees and trustees) who has a contractual or other legal obligation to forward this Prospectus to a jurisdiction outside the Netherlands should read Section 17 (Selling and Transfer Restrictions). Each subscriber of any Offer Shares will be deemed to have given certain representations and warranties as described in Section 17 (Selling and Transfer Restrictions).

## **2.6 Notice to Prospective Investors in the United States**

The Offer Shares have not been and will not be registered under the US Securities Act or with any securities regulatory authority or any state or other jurisdiction in the United States, and may not be offered, sold, pledged or otherwise transferred within the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the US Securities Act and in compliance with any applicable state securities laws. Accordingly, the Offer Shares will not be offered or sold in the Offering within the United States, except to "qualified institutional buyers" as defined in, and in reliance on, Rule 144A under the US Securities Act or pursuant to another exemption from, or in a transaction not subject to, the registration requirements of the US Securities Act, and are being offered and sold in the Offering outside the United States pursuant to Regulation S under the US Securities Act. The offering of the Offer Shares is being made in the United States through US broker-dealer affiliates of the Underwriters. Transfers of the Offer Shares will be restricted and each subscriber will be deemed to have made acknowledgements, representations and agreements as described in Section 17 (Selling and Transfer Restrictions). The Offer Shares have not been recommended by any United States federal or state securities commission or regulatory authority. Furthermore, the foregoing authorities have not confirmed the accuracy or determined the adequacy of this Prospectus. Any representation to the contrary is a criminal offence in the United States.

The Company is currently not subject to the periodic reporting and other information requirements of the US Securities Exchange Act of 1934, as amended (the **US Exchange Act**), nor will it become subject to such requirements as a result of the Offering. At any time during this Offering and for so long as any Offer Shares are outstanding during any

period in which the Company is not subject to Section 13 or 15(d) of the US Exchange Act, nor exempt from reporting pursuant to Rule 12g3-2(b) thereunder, the Company will, upon request, provide to any prospective purchaser of Offer Shares, any holder or beneficial owner of the Offer Shares or to any prospective purchaser of Offer Shares designated by any such holder or beneficial owner, the information required to be delivered pursuant to Rule 144A(d)(4) under the US Securities Act in order to permit compliance with Rule 144A in connection with resales of the Offered Shares for so long as any of the Offered Shares are “restricted securities” within the meaning of Rule 144(a)(3) under the US Securities Act. Any such request should be addressed to the Company.

## **2.7 Presentation of Financial Information**

### **2.7.1 Financial information**

This Prospectus includes the audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016 as well as the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018.

The Company was incorporated on 14 September 2018 for the purpose of the Offering and, before the Offering, conducted no operations. Accordingly, there is no historical financial information for the Company for the financial years ended 31 December 2017 and 2016 and the six months ended 30 June 2018. Pursuant to the terms of the Corporate Reorganization (as defined in Section 13.1 (*Corporate Reorganization, Existing Shareholders and Related Party Transactions—Corporate Reorganization*)) that will become effective shortly after the determination of the Offer Price, substantially all of the equity interests in Themis Bioscience GmbH were contributed into the Company and exchanged for newly issued Shares in the Company, with Themis Bioscience GmbH becoming a wholly-owned subsidiary of the Company (see Section 13.1 (*Corporate Reorganization, Existing Shareholders and Related Party Transactions—Corporate Reorganization*) for further information). Because the Company is only a holding company and Themis Bioscience GmbH conducted and conducts all business operations presented in this Prospectus, the Company is of the view that, in accordance with article 4a of regulation (EC) No. 809/2004, the audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016 and the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018 provide the information required to be presented with regard to the Company’s financial years ended 31 December 2017 and 2016 and the six month periods ended 30 June 2018 and 2017 so that prospective investors may make an informed investment decision to subscribe for Shares.

With regard to historical financial information as of and for the financial years ended 31 December 2017 and 2016 as well as prior periods and as of 30 June 2018 and for the six month periods ended 30 June 2018 and 2017 presented in the Prospectus, references to **Themis** refer to Themis Bioscience GmbH, unless otherwise indicated.

The audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016 have been audited by Ernst & Young Wirtschaftsprüfungsgesellschaft m.b.H. Vienna, Wagramer Strasse 19, 1220 Vienna, Austria, independent auditor (**EY**), in accordance with Austrian Standards on Auditing, which require to comply with International Standards on Auditing (ISA). EY issued an unqualified auditor’s report on the audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016, which contains the following emphasis of matter paragraph with respect to material uncertainty regarding going concern:

“We draw attention to Note 2.1 Basis of preparation – Going Concern in the financial statements, which indicates that Themis Bioscience GmbH’s management has prepared the financial statements as of December 31, 2017 and December 31, 2016 and for the years then ended according to the principle of going concern, although ongoing losses have occurred. In this context we refer to the management’s explanations in the notes to the financial statements (Note 2.1 Basis of preparation – Going Concern, Note 23.4 Liquidity risk, Note 24 Post balance sheet events), whereas according to the current forecast, financing of Themis Bioscience GmbH until the end of the third quarter 2019 is based on the assumption of additional capital by both, investors and subsidies. In addition, management is in ongoing negotiations with existing and potential new investors as well as pharmaceutical companies with the objective to secure funding for the long term development of Themis Bioscience GmbH. With regards to the positive research results for the clinical phase 2 for the Chikungunya vaccine and the status of the current financing negotiations, the management follows the going concern principle of Themis Bioscience GmbH. In case Themis Bioscience GmbH will not succeed in timely providing an adequate funding of future cash needs, considerable doubt on Themis Bioscience GmbH’s ability to act as a going concern would be raised and the entity would possibly not be in the position to realize its assets and pay its liabilities, as disclosed in the financial statements as of December 31, 2017 and December 31, 2016 in its normal course of business. Our opinion is not modified in respect of this matter.”

The audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016 have been prepared in accordance with the International Financial Reporting Standards, as

adopted by the European Union (**IFRS**). The aforementioned audited financial statements of Themis Bioscience GmbH and the related auditor's report are included in this Prospectus beginning on page F-16.

The unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018 has been prepared in accordance with IFRS on interim financial reporting (IAS 34). The unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018 is included in this Prospectus beginning of page F-2.

IFRS differs in certain material respects from generally accepted accounting principles in the United States (**US GAAP**). As a result, the results of operations and financial condition derived from the audited financial statements and unaudited condensed interim financial statements that are included in this Prospectus may differ substantially from the results of operations and financial condition derived from financial statements prepared in accordance with US GAAP. Themis Bioscience GmbH has not prepared a reconciliation of its financial information to US GAAP or a summary of significant accounting differences in the accounting and valuation methods of IFRS and US GAAP, nor has it otherwise reviewed the impact the application of US GAAP would have on its financial reporting. Accordingly, in making an investment decision, investors must rely on their own examination of Themis Bioscience GmbH's financial information.

Where financial information in the tables in this Prospectus is labelled "audited", this means that it has been extracted from the audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016. The label "unaudited" is used in the tables in this Prospectus to indicate financial information that was not taken from the above-mentioned audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016 but has been extracted or derived from the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018 and/or the internal accounting records of Themis Bioscience GmbH or is calculated from the above-mentioned sources.

Financial information presented in parentheses in the tables in this Prospectus denotes the negative of such number presented. In respect of financial data set out in this Prospectus, a dash ("–") signifies that the relevant figure is not available, while a zero ("0") signifies that the relevant figure is available but has been rounded to zero.

#### 2.7.2 **Currency Presentation**

Unless otherwise indicated, all references in this Prospectus to "€", "euro", "Eur", "EUR" or "cents" are to the currency introduced at the start of the third stage of the European Economic and Monetary Union pursuant to the treaty establishing the European Community, as amended. All references to "\$", "US\$", "USD" or "US dollars" are to the lawful currency of the United States.

#### 2.7.3 **Exchange Rate Information**

Fluctuations in the exchange rate between the euro and the US dollar will affect the US dollar amounts received by owners of the Shares on conversion of dividends, if any, paid in euro on the Shares. The table below shows the noon buying rates for the euro, as announced by the Federal Reserve Bank of New York, expressed in US dollars per EUR 1.00 during the years and as of the dates shown (**noon buying rates**). The average exchange rate for the years shown is the average of the month-end noon buying rates during the relevant year.

<b>Year</b>	<b>Period end</b>	<b>US Dollars per €1.00</b>		
		<b>Average</b>	<b>High</b>	<b>Low</b>
2013 .....	1.3779	1.3303	1.3816	1.2774
2014 .....	1.2101	1.3210	1.3927	1.2101
2015 .....	1.0859	1.1032	1.2015	1.0524
2016 .....	1.0552	1.1029	1.1516	1.0375
2017 .....	1.2022	1.1396	1.2041	1.0416

The table below sets forth period end, average, high and low exchange rates of US dollars per euro for each month indicated and for the period from January 1, 2018 through 23 October 2018.

<b>Year</b>	<b>Period end</b>	<b>US Dollars per €1.00</b>		
		<b>Average</b>	<b>High</b>	<b>Low</b>
May 2018 .....	1.1670	1.1823	1.2000	1.1551
June 2018 .....	1.1677	1.1679	1.1815	1.1577
July 2018 .....	1.1706	1.1685	1.1744	1.1604
August 2018 .....	1.1596	1.1547	1.1720	1.1332
September 2018 .....	1.1576	1.1659	1.1777	1.1562
1 October through 23 October 2018.....	1.1478	1.1524	1.1606	1.1435

The European Central Bank reference rate on 23 October 2018 was US Dollar 1.1478 per EUR 1.00. The above rates may differ from the actual rates used in the preparation of the consolidated financial statements and other financial information appearing in this Prospectus.

#### **2.7.4 Rounding**

Certain data in this Prospectus, including financial, statistical, and operating information has been rounded. As a result of the rounding, the totals of data presented in this Prospectus may vary slightly from the actual arithmetic totals of such data. Percentages have been rounded and accordingly may not add up to 100%.

#### **2.7.5 Market, Economic and Industry Data**

This Prospectus contains statistics, data and other information relating to markets, market sizes, market shares, market positions and other industry data pertaining to the Company's business and markets. Such information has been extracted from reliable third-party sources such as professional organizations, consultants and analysts and information otherwise obtained from third party sources, such as the market model by VacZine Analytics. Such information has been accurately reproduced, and, as far as the Company is aware from such information, no facts have been omitted which would render the information provided inaccurate or misleading.

Certain other statistical or market-related data has been estimated by management based on reliable third-party sources, where possible, including those referred to above or based on data generated in-house by Themis. Although management believes its estimates regarding markets, market sizes, market shares, market positions and other industry data to be reasonable, these estimates have not been verified by any independent sources, and the Company cannot assure prospective investors as to the accuracy of these estimates or that a third party using different methods to assemble, analyse or compute market data would obtain the same results. Management's estimates are subject to risks and uncertainties and are subject to change based on various factors. The Company does not intend, and does not assume any obligation, to update the industry or market data set forth herein, other than as required by article 16 of the Prospectus Directive.

Industry publications or reports generally state that the information they contain has been obtained from sources believed to be reliable, but the accuracy and completeness of such information is not guaranteed. The Company has not independently verified and cannot give any assurance as to the accuracy or completeness of market data contained in this Prospectus that were extracted or derived from these industry publications or reports. Market data and statistics are inherently predictive and subject to uncertainty and not necessarily reflective of actual market conditions. Such statistics are based on market research, which itself is based on sampling and subjective judgments by both the researchers and the respondents, including judgments about what types of products and transactions should be included in the relevant market.

As a result, prospective investors should be aware that statistics, data, statements and other information relating to markets, market sizes, market shares, market positions and other industry data in this Prospectus and estimates and assumptions based on that information are necessarily subject to a high degree of uncertainty and risk due to the limitations described above and to a variety of other factors, including those described in Section 1 (Risk Factors) and elsewhere in this Prospectus.

## **2.8 Incorporated by Reference**

The Articles of Association (official Dutch version and an English translation thereof) are incorporated in this Prospectus by reference and, as such, form part of this Prospectus.

Copies of these documents can be obtained in electronic form from the Company's website ([www.themisbio.com/investors](http://www.themisbio.com/investors)). Prospective investors should only rely on the information that is provided in this Prospectus or incorporated by reference into this Prospectus.



No other documents or information, including the contents of the Company's website ([www.themisbio.com](http://www.themisbio.com)) or of websites accessible from hyperlinks on that website, form part of, or are incorporated by reference into, this Prospectus.

## **2.9 Definitions and Glossary**

Certain terms used in this Prospectus, including all capitalized terms and certain technical and other items, are defined and explained in Section 21 (Definitions and Glossary).

## **2.10 Enforceability of Judgments**

The ability of Shareholders in certain countries other than the Netherlands, in particular in the United States, to bring an action against the Company may be limited under applicable law. At the date of this Prospectus, the Company is a private company with limited liability (*besloten vennootschap met beperkte aansprakelijkheid*) incorporated under the laws of the Netherlands and has its official seat in Amsterdam, the Netherlands and its principal place of business in Vienna, Austria. Shortly after the determination of the Offer Price, the Company will be converted into a public limited liability company (*naamloze vennootschap*) incorporated under the laws of the Netherlands with its official seat in Amsterdam, the Netherlands, and its principal place of business in Vienna, Austria.

All of the Managing Directors, senior management and Supervisory Directors (other than Mr. Glenn Rockmann) are resident of countries other than the United States. All or a substantial proportion of the assets of these individuals are located outside the United States. Themis' assets are predominantly located outside the United States. As a result, it may not be possible or it may be difficult for investors to effect service of process within the United States upon Themis or such persons, or to enforce against them in US courts a judgment obtained in such courts, including judgments predicated on the civil liability provisions of US federal securities laws or the securities laws of any state or territory within the United States.

The United States and the Netherlands currently do not have a treaty providing for reciprocal recognition and enforcement of judgments, other than arbitration awards, in civil and commercial matters. In addition, the countries of residence of the Managing Directors, the Supervisory Directors and of the Company's employees may also not have a treaty providing for the reciprocal recognition and enforcement of judgments. Consequently, a final judgment for payment given by a court in the United States, whether or not predicated solely upon US securities laws, would not be enforceable in the Netherlands. Accordingly, a final judgment for payment rendered by a court in the United States, whether or not predicated solely upon US securities laws, will not be recognized and enforced by the Dutch courts. However, if a person has obtained a final and conclusive judgment for the payment of money rendered by a court in the United States which is enforceable in the United States and files his claim with the competent Dutch court, the Dutch court will generally give binding effect to such foreign judgment insofar as it finds that (i) the jurisdiction of the US court has been based on a ground of jurisdiction that is generally acceptable according to international standards, (ii) the judgment by the US court was rendered in legal proceedings that comply with the standards of the proper administration of justice that includes sufficient safeguards (*behoorlijke rechtspleging*) and (iii) the judgment by the US court is not incompatible with a decision rendered between the same parties by a Dutch court, or with a previous decision rendered between the same parties by a foreign court in a dispute that concerns the same subject and is based on the same cause, provided that the previous decision qualifies for acknowledgement in the Netherlands and except to the extent that the foreign judgment contravenes Dutch public policy (*openbare orde*). It is uncertain whether this practice extends to default judgments as well. Dutch courts may deny the recognition and enforcement of punitive damages or other awards. Moreover, a Dutch court may reduce the amount of damages granted by a US court and recognize damages only to the extent that they are necessary to compensate actual losses or damages. Enforcement and recognition of judgments of US courts in the Netherlands are solely governed by the provisions of the Dutch Civil Procedure Code (*Wetboek van Burgerlijke Rechtsvordering*).

### 3. Forward-looking Statements

Certain statements in this Prospectus constitute forward-looking statements. Forward-looking statements appear in a number of places in this Prospectus, including, without limitation, under Section 8 (*Operating and Financial Review*) and Section 10 (*Business Description*). Forward-looking statements are sometimes identified by the use of forward-looking terminology such as “aim,” “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “target,” “potential,” “would,” “could,” “should,” “continue,” or the negative thereof, other variations thereon or similar expressions. Other forward-looking statements can be identified by the context in which the statements are made.

Although management believes that the expectations reflected in these forward-looking statements are reasonable, such forward-looking statements are based on management’s current views and assumptions and involve known and unknown risks, uncertainties and other factors, many of which are outside the control of the Company and are difficult to predict, that may cause actual results, performance, achievements or developments to differ materially from any future results, performance, achievements or developments expressed or implied from the forward-looking statements. Some of the factors that could cause actual results to differ materially from those contemplated by the forward-looking statements include, but are not limited to, those discussed in Section 1 (*Risk Factors*).

Should one or more of these risks or uncertainties materialize, or should any underlying assumptions prove to be incorrect, the Company’s actual financial condition, cash flows or results of operations could differ materially from what is described herein as anticipated, believed, estimated or expected. Investors are urged to read the Sections of this Prospectus entitled Section 1 (*Risk Factors*), Section 8 (*Operating and Financial Review*) and Section 10 (*Business Description*) for a more complete discussion of the factors that could affect the Company’s future performance and the industry in which it operates.

Such forward-looking statements contained in this Prospectus speak only as of the date of this Prospectus and are expressly qualified in their entirety by the cautionary statements included in this Prospectus. Without prejudice to its obligations under Dutch law in relation to disclosure and on-going information, the Company undertakes no obligation to update publicly or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

## 4. Reasons for the Offering and Use of Proceeds

### 4.1 Reasons for the Offering

The principal purpose of the Offering is to obtain additional capital to support the execution of Themis' strategy (as described in more detail in Section 10 (*Business Description*) below). Themis is a biotech company focused on immunomodulation to develop therapeutics for infectious diseases and cancer. The further development and commercialization of lead product candidate, MV-CHIK, is its main objective. In addition, the Offering will also create a public market for the Shares, allowing future access to the public equity markets to obtain funding and to create liquidity for its shareholders.

### 4.2 Proceeds and Expenses of the Offering

Assuming that the Offering is fully subscribed and the Offer Price is at the low-end or at the high-end of the Offer Price Range, the table below sets out (i) the expected gross proceeds, (ii) the expected net proceeds and (iii) the expected aggregate administrative, legal and audit expenses as well as the other costs and expenses in connection with the Offering, including those with respect to the AFM and Euronext Amsterdam N.V. and the fees and commissions payable to the Underwriters (which for these purposes are assumed to have been equal to 5.5% of the gross proceeds of the Offering other than in respect of the Committing Shareholders which are paying a 4.4% commission and does not include any discretionary commission which the Company may decide, in its sole discretion, to pay to the Underwriters), with respect to (a) the Offering without exercise of the Increase Option and the Over-Allotment Option, (b) the Offering including exercise of the Increase Option in full, (c) the Offering including exercise of the Over-Allotment Option in full and (d) the Offering including exercise of the Increase Option and Over-Allotment Option in full.

	Gross proceeds		Net proceeds		Aggregate expenses, costs and fees	
	Low-end of the Offer Price Range	High-end of the Offer Price Range	Low-end of the Offer Price Range	High-end of the Offer Price Range	Low-end of the Offer Price Range	High-end of the Offer Price Range
	<i>(in EUR millions)</i>					
Offering, without the Increase Option and the Over-Allotment Option .....	35	42	32	39	3	3
Offering, including Increase Option .....	40	48	37	45	3	4
Offering, including Over-Allotment Option ..	40	48	37	45	3	4
Offering, including Over-Allotment and Increase Option .....	46	56	43	51	3	4

Investors will not be charged expenses by the Company.

### 4.3 Use of Proceeds

Assuming that the Offering is fully subscribed for and the Offer Price is at the low-end of the Offer Price Range, and excluding the exercise of the Increase Option and the Over-Allotment Option, Themis currently anticipates that over the coming several years it will use the net proceeds of the Offering, in order of importance, as follows:

- approximately EUR 30 million (approximately 95% of the net proceeds of the Offering) to conduct the phase 3 clinical trials for Chikungunya, in particular for manufacturing the vaccine and testing it on approximately 3,000 subjects including 500 batch control subjects in three different regions around the world, and bring it through to phase 3 results (excluding regulatory approvals);
- up to approximately EUR 2 million (up to approximately 5% of the net proceeds of the Offering) to increase research and development in the immuno-oncology field; and

the remainder will be used:

- to increase the commercialization capabilities; and
- for general corporate purposes.

Assuming the Offering is fully subscribed and the Offer Price is at the low-end of the Offer Price Range, including the exercise of the Increase Option and the Over-Allotment Option, Themis currently anticipates that over the coming several years it will use the net proceeds of the Offering, as follows:

- approximately EUR 30 million (approximately 70% of the net proceeds of the Offering) to conduct the phase 3 clinical trials for Chikungunya, in particular for manufacturing the vaccine and testing it on approximately 3,000 subjects including 500 batch control subjects in three different regions around the world, and bring it through to phase 3 results (excluding regulatory approvals);
- approximately EUR 4 million to EUR 9 million (approximately 10% to 20% of the net proceeds of the Offering) to increase research and development in the immuno-oncology field;
- up to approximately EUR 4 million (up to approximately 10% of the net proceeds of the Offering) to further develop the other product candidates, such as vaccines against RSV, CMV and Noro; and
- the remainder will be used:
  - to increase the commercialization capabilities; and
  - for general corporate purposes.

As of the date of this Prospectus, Themis cannot predict with certainty all of the specific uses for the net proceeds from the Offering, or the amounts to be actually spent on the uses set forth above. The amounts and timing of its actual use of the net proceeds may vary depending on numerous factors, among others the progress of Themis' development, progress of its research, the cost of, status of and results from preclinical development programs and clinical trials, any collaboration that Themis may enter into for product candidates and any unforeseen cash needs. At the date of this Prospectus, Themis cannot estimate the amount of time or use of proceeds needed to conduct the above-mentioned trial. As a result, Themis retains broad discretion in the use of the net proceeds from the Offering.

Pending the use of the proceeds from the Offering, Themis intends to invest the net proceeds in interest-bearing, cash and cash equivalent instruments or short-term certificates of deposit.

## **5. Dividend Policy**

### **5.1 General**

Pursuant to Dutch law and the Articles of Association, the distribution of profits will take place following the adoption of the Company's annual accounts by the General Meeting, from which the Company will determine whether such distribution is permitted. The Company may make distributions to the Shareholders, whether from profits or from its freely distributable reserves, only insofar as its shareholders' equity exceeds the sum of the paid-up and called-up share capital plus the reserves required to be maintained by Dutch law or pursuant to the Articles of Association.

Subject to Dutch law and the Articles of Association, the Management Board, with the prior approval of the Supervisory Board, may determine which part of the Company's profits as per its financial statements for the relevant financial year will be added to the reserves in consideration of the Company's reserves and dividends policy. The remaining part of the profits will be at the disposal of the General Meeting. Distributions of dividends will be made *pro rata* to the nominal value of each Share.

Subject to Dutch law and the Articles of Association, the Management Board, with the prior approval of the Supervisory Board, may resolve to distribute an interim dividend if it determines such interim dividend to be justified by the Company's profits. For this purpose, the Management Board must prepare an interim statement of assets and liabilities. Such interim statement shall show the financial position of the Company not earlier than on the first day of the third month before the month in which the resolution to make the interim distribution is announced. An interim dividend can only be paid if (a) an interim statement of assets and liabilities is drawn up showing that the funds available for distribution are sufficient, and (b) the Company's shareholders' equity exceeds the sum of the paid-up and called-up share capital plus the reserves required to be maintained by Dutch law.

Upon a proposal of the Management Board, with the prior approval of the Supervisory Board, the General Meeting may resolve that the Company makes distributions to Shareholders from one or more of its freely distributable reserves, other than by way of profit distribution, subject to the due observance of the Company's policy on reserves and dividends. Distributions from the Company's distributable reserves may be made throughout the financial year and need not be based on the Company's annual accounts adopted by the General Meeting. Any such distributions will be made *pro rata* to the nominal value of each Share.

### **5.2 Entitlement to Dividends**

All Shares, including the Offer Shares, are equally entitled to dividends and other distributions, if and when declared.

### **5.3 Dividend Policy and History**

Themis has not generated any revenues to date and, consequently, has never declared or paid any cash dividends historically. Furthermore, the Company does not expect to generate revenues in the near future and in any event to retain all earnings, if any, generated by Themis' operations for the development and growth of its business and therefore does not anticipate paying any dividends to the Shareholders in the foreseeable future.

The Company intends to retain future earnings, if any, generated by the Company's operations to finance Themis' operation and business and it does not anticipate paying any dividends to Shareholders in the foreseeable future.

The Company's dividend policy will be reviewed and may be amended from time to time and distribution of any dividends will be upon a proposal thereto by the Management Board, with the prior approval of the Supervisory Board, subject to compliance with applicable law and any contractual provisions that restrict or limit the Company's ability to pay dividends, including under agreements for indebtedness that it may incur, and after taking into account many factors, including Themis' financial condition, results of operations, legal requirements, capital requirements, business prospects and other factors that the Management Board deems relevant.

### **5.4 Dividend Ranking**

All Shares, including the Offer Shares, rank equally in all respects and will be eligible for any dividend distribution that may be declared on the Shares in the future.

## **5.5 Manner and Time of Dividend Payments**

Payment of any dividend on the Shares in cash will be made in euro. Dividends on the Shares will be paid to the Shareholders through Euroclear Netherlands, the Dutch centralized securities custody and administration system, and credited automatically to the Shareholders' accounts without the need for the Shareholder to present documentation proving ownership of the Shares. The Management Board may set a record date for dividend and other distributions. In relation to dividend distributions, there are no restrictions under Dutch law in respect of holders of Shares who are non-residents of the Netherlands. However, see Section 18 (Taxation) for a discussion of certain aspects of taxation of dividends and refund procedures for non-residents of the Netherlands.

## **5.6 Uncollected Dividends**

An entitlement to any dividend distribution shall be barred five years after the date on which those dividends were released for payment. Any dividend that is not collected within this period reverts to the Company and is allocated to its general reserves.

## **5.7 Taxation of Dividends**

Dividends may be subject to withholding tax in the Netherlands. See Section 18 (Taxation) for a discussion of certain aspects of taxation of dividends.

## 6. Capitalization, Indebtedness and Working Capital

This section sets forth Themis' capitalization and indebtedness as of 30 June 2018. The historical financial information has been extracted or derived from the unaudited condensed interim financial statements as of and for the six month period ended 30 June 2018 and the internal accounting records of Themis Bioscience GmbH. It is presented on (i) a historical basis as of 30 June 2018, (ii) adjusted to reflect the effects from the Series C2/C3 Capital Increase (as defined in Section 10.11 (*Business Description—Material Contracts*)), (iii) adjusted to reflect the receipt of the estimated net proceeds of the Offering after deduction of all estimated costs and assuming that the Offering is fully subscribed for and the Offer Price is at the low-end or high-end of the Offer Price Range, including the effects from the issuance of the Loan Notes under the Arrangements and (iv) adjusted to reflect the effects from the Series C2/C3 Capital Increase and the receipt of the estimated net proceeds of the Offering after deduction of all estimated costs and assuming that the Offering is fully subscribed for and the Offer Price is at the low-end or the high-end of the Offer Price Range, and including the issuance of the Omnes Funds Shares, which Shares do not form part of the Offering.

The tables should be read in conjunction with, and are qualified by reference to, Section 7 (*Selected Financial Information*), Section 8 (*Operating and Financial Review*), Section 10.11.1 (*Business Description—Material Contracts—Financing Agreements*) and Section 22 (*Historic Financial Information*).

### 6.1 Capitalization

The table below sets out Themis' capitalization:

- on a historical basis as of 30 June 2018;
- on an adjusted basis as of 30 June 2018, including the effects from the Series C2/C3 Capital Increase;
- on an adjusted basis as of 30 June 2018, including the receipt of the estimated net proceeds of the Offering, and therefore after deduction of all estimated costs in connection with the Offering, including those with respect to the AFM and Euronext Amsterdam N.V. and the fees and commissions payable to the Underwriters (which for these purposes are assumed to have been equal to 5.5% of the gross proceeds of the Offering other than in respect of the Committing Shareholders which are paying a 4.4% commission), and assuming that the Offering is fully subscribed for and the Offer Price is at the low-end and at the high-end of the Offer Price Range (but, excluding the effects from the Series C2/C3 Capital Increase); and
- on an adjusted basis as of 30 June 2018, including (i) the effects from the Series C2/C3 Capital Increase, (ii) the receipt of the estimated net proceeds of the Offering, and therefore after deduction of all estimated costs in connection with the Offering, including those with respect to the AFM and Euronext Amsterdam N.V. and the fees and commissions payable to the Underwriters (which for these purposes are assumed to have been equal to 5.5% of the gross proceeds of the Offering other than in respect of the Committing Shareholders which are paying a 4.4% commission), and assuming that the Offering is fully subscribed for and the Offer Price is at the low-end and at the high-end of the Offer Price Range, and (iii) on an adjusted basis as of 30 June 2018, including the effects from the issuance of the Loan Notes under the Arrangements and the issuance of the Omnes Funds Shares, which Shares do not form part of the Offering.

	<b>Actual</b>	<b>As adjusted to reflect</b>	<b>As adjusted to reflect</b>		<b>As adjusted to reflect</b>	
	<b>Actual as of 30 June 2018</b>	<b>Series C2/C3 Capital Increase</b>	<b>Net Proceeds of the Offering* (excluding the Series C2/C3 Capital Increase)</b>		<b>Series C2/C3 Capital Increase and the Net Proceeds of the Offering plus the Omnes Funds Shares</b>	
	<b>Themis Bioscience GmbH</b>	<b>Themis Bioscience GmbH</b>	<b>Themis</b>		<b>Themis</b>	
			Low-end of the Offer Price Range	High-End of the Offer Price Range	Low-end of the Offer Price Range	High-End of the Offer Price Range
<i>(in EUR thousands)</i> <i>(unaudited)</i>						
<b>Total current debt<sup>(1)</sup> .....</b>	<b>795</b>	<b>795</b>	<b>795</b>	<b>795</b>	<b>795</b>	<b>795</b>
Guaranteed <sup>(2)</sup> .....	-	-	-	-	-	-
Secured <sup>(3)</sup> .....	-	-	-	-	-	-
Not guaranteed/unsecured.....	795	795	795	795	795	795
<b>Total non-current debt<sup>(4)</sup> .....</b>	<b>1,149</b>	<b>1,149</b>	<b>1,149</b>	<b>1,149</b>	<b>1,149</b>	<b>1,149</b>
Guaranteed <sup>(2)</sup> .....	-	-	-	-	-	-
Secured <sup>(3)</sup> .....	-	-	-	-	-	-
Not guaranteed/unsecured.....	1,149	1,149	1,149	1,149	1,149	1,149
<b>Shareholders' equity<sup>(5)</sup> ....</b>	<b>(1,477)</b>	<b>4,023</b>	<b>30,463</b>	<b>37,078</b>	<b>37,363<sup>(6)</sup></b>	<b>44,123<sup>(6)</sup></b>
Nominal capital.....	152	176	224	224	251 <sup>(6)</sup>	251 <sup>(6)</sup>
Capital reserves.....	20,060	25,536	51,927	58,542	58,801 <sup>(6)</sup>	65,416 <sup>(6)</sup>
Retained earnings.....	(21,689)	(21,689)	(21,689)	(21,689)	(21,689) <sup>(6)</sup>	(21,689) <sup>(6)</sup>
<b>Total Capitalization .....</b>	<b>467</b>	<b>5,967</b>	<b>32,407</b>	<b>39,022</b>	<b>39,307<sup>(6)</sup></b>	<b>45,922<sup>(6)</sup></b>

\* Assuming that the Offering is fully subscribed and that the Offer Price is at the low-end and on the high-end of the Offer Price Range and excluding the exercise of the Increase Option and the Over-Allotment Option, the estimated net proceeds amount to approximately EUR 32 million and EUR 39 million, respectively.

<sup>(1)</sup> Shown as current financial liabilities in the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018.

<sup>(2)</sup> No guarantees were issued by third parties in favor of Themis Bioscience GmbH.

<sup>(3)</sup> All of Themis Bioscience GmbH's current debts are unsecured.

<sup>(4)</sup> Shown as non-current financial liabilities in the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018.

<sup>(5)</sup> Shown as total equity in the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018.

<sup>(6)</sup> The figures presented reflect the Arrangements and the issuance of the Omnes Funds Shares.

In July/August 2018 Themis Bioscience GmbH received further funding from current investors amounting to EUR 5,500 thousand in the context of the Series C2/C3 Capital Increase, which improved Themis Bioscience GmbH's cash position substantially. As a result, the nominal capital increased from EUR 152 thousand as of 30 June 2018 to EUR 176 thousand and the capital reserves increased by EUR 5,476 thousand before deduction of equity transaction costs associated with the registration of the capital increase in the Austrian commercial register on 11 August 2018. Otherwise, there has been no material change since 30 June 2018.

## 6.2 Indebtedness

The table below sets out Themis' indebtedness:

- on a historical basis as of 30 June 2018;
- on an adjusted basis as of 30 June 2018, including the effects from the Series C2/C3 Capital Increase;
- on an adjusted basis as of 30 June 2018, including the receipt of the estimated net proceeds of the Offering, and therefore after deduction of all estimated costs in connection with the Offering, including those with



respect to the AFM and Euronext Amsterdam N.V. and the fees and commissions payable to the Underwriters (which for these purposes are assumed to have been equal to 5.5% of the gross proceeds of the Offering other than in respect of the Committing Shareholders which are paying a 4.4% commission), and assuming that the Offering is fully subscribed for and the Offer Price is at the low-end and at the high-end of the Offer Price Range (but, excluding the effects from the Series C2/C3 Capital Increase); and

- on an adjusted basis as of 30 June 2018, including (i) the effects from the Series C2/C3 Capital Increase, (ii) the receipt of the estimated net proceeds of the Offering, and therefore after deduction of all estimated costs in connection with the Offering, including those with respect to the AFM and Euronext Amsterdam N.V. and the fees and commissions payable to the Underwriters (which for these purposes are assumed to have been equal to 5.5% of the gross proceeds of the Offering other than in respect of the Committing Shareholders which are paying a 4.4% commission), and assuming that the Offering is fully subscribed for and the Offer Price is at the low-end and at the high-end of the Offer Price Range, and (iii) on an adjusted basis as of 30 June 2018, including the effects from the issuance of the Loan Notes under the Arrangements and the issuance of the Omnes Funds Shares, which Shares do not form part of the Offering.

	Actual	As adjusted to reflect	As adjusted to reflect		As adjusted to reflect	
	Actual as of 30 June 2018 Themis Bioscience GmbH	Series C2/C3 Capital Increase Themis Bioscience GmbH	Net Proceeds of the Offering* (excluding the Series C2/C3 Capital Increase) Themis		to reflect the Series C2/C3 Capital Increase and the Net Proceeds of the Offering plus the Omnes Funds Shares Themis	
			Low- end of the Offer Price Range	High- End of the Offer Price Range	Low- end of the Offer Price Range	High- End of the Offer Price Range
<i>(in EUR thousands) (unaudited)</i>						
A. Cash <sup>(1)</sup>	5,178	10,678	37,118	43,733	44,018**	50,633**
B. Cash equivalents <sup>(2)</sup>	43	43	43	43	43	43
C. Trading securities	-	-	-	-	-	-
<b>D. Liquidity (A+B+C)</b>	<b>5,221</b>	<b>10,721</b>	<b>37,161</b>	<b>43,776</b>	<b>41,061</b>	<b>50,676</b>
<b>E. Current financial receivable</b>	-	-	-	-	-	-
F. Current bank debt	-	-	-	-	-	-
G. Current portion of non-current debt	-	-	-	-	-	-
H. Other current financial debt <sup>(3)</sup>	795	795	795	795	795	795
<b>I. Current financial debt (F+G+H)</b>	<b>795</b>	<b>795</b>	<b>795</b>	<b>795</b>	<b>795</b>	<b>795</b>
<b>J. Net current financial indebtedness (I-E-D)</b>	<b>(4,426)</b>	<b>(9,926)</b>	<b>(36,366)</b>	<b>(42,981)</b>	<b>(43,266)</b>	<b>(49,881)</b>
K. Non-current bank loans	-	-	-	-	-	-
L. Bond issued	-	-	-	-	-	-
M. Other non-current loans <sup>(4)</sup>	1,149	1,149	1,149	1,149	1,149	1,149
<b>N. Non-current financial indebtedness (K+L+M)</b>	<b>1,149</b>	<b>1,149</b>	<b>1,149</b>	<b>1,149</b>	<b>1,149</b>	<b>1,149</b>
<b>O. Net financial indebtedness (J+N)</b>	<b>(3,277)</b>	<b>(8,777)</b>	<b>(35,217)</b>	<b>(41,832)</b>	<b>(42,117)</b>	<b>(48,732)</b>

\* Assuming that the Offering is fully subscribed and that the Offer Price is at the low-end or high-end of the Offer Price Range and excluding the exercise of the Increase Option and the Over-Allotment Option, the estimated net proceeds amount to approximately EUR 32 million and EUR 39 million, respectively.

\*\* The figures presented reflect the Arrangements and the issuance of the Omnes Funds Shares.

<sup>(1)</sup> Shown as cash and cash equivalents in the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018.

<sup>(2)</sup> Shown as other financial assets in the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018.

<sup>(3)</sup> Shown as current financial liabilities in the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018.

<sup>(4)</sup> Shown as non-current financial liabilities in the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018.

Except as described above, there has been no material change in Themis' indebtedness since 30 June 2018.

### **6.3 Indirect and Contingent Indebtedness**

As of 30 June 2018 Themis did not have any indirect or contingent indebtedness.

### **6.4 Statement on Working Capital**

Themis currently does not have sufficient working capital for its present requirements for the twelve months following the date of this Prospectus. However, Themis believes that it has, based on the current available cash resources, sufficient working capital to continue its current operations until the second quarter of 2019.

Based on its present requirements resulting from its current business plan, Themis expects, without limitation, to require funds for the following:

- the conducting of the phase 3 clinical trials for Chikungunya, in particular for manufacturing the vaccine and testing it on approximately 3,000 subjects including 500 batch control subjects in three different regions around the world, and bring it through to phase 3 results;
- the increasing of research and development in the immuno-oncology field; and
- the further development of the other product candidates, such as vaccines against RSV, CMV and Noro.

Themis believes its operations will require cash resources in the range of EUR 20 million to EUR 24 million to provide it with sufficient working capital for the next twelve months following the date of this Prospectus, which cash resources will, *inter alia*, be obtained from the Offering, it being understood that if the Offering is completed and the Offer Price is set at the low-end of the Offer Price Range, net proceeds of approximately EUR 32 million will be generated assuming no exercise of the Increase Option or the Over-Allotment Option. As such, these proceeds, together with Themis' current cash resources, will provide it with sufficient working capital for the next twelve months following the date of this Prospectus.

If the Offering should be withdrawn or otherwise not be completed, Themis believes it would require additional funds to cover the deficit in its working capital for the next twelve months following the date of this Prospectus. In that event, Themis may seek to enter into debt or equity financing arrangements by means of private or public offerings. It may then delay, reduce the scope of, eliminate or divest clinical programs and consider other cost reduction initiatives. Themis believes that the actions mentioned above are likely to be successful and that the implementation of these cost reduction and/or financing measures would provide it with sufficient cash to maintain its operations for at least twelve months from the date of the Prospectus.

Based on the assumptions set out in Section 4.2 (*Reasons for the Offering and Use of Proceeds—Proceeds and Expenses of the Offering*), Themis expects that the net proceeds of the Offering (and, for the avoidance of doubt, therefore excluding the proceeds of the Omnes Funds Shares) will approximately be (i) EUR 32 million without exercise of the Increase Option or the Over-Allotment Option, (ii) EUR 37 million with full exercise of the Increase Option only, (iii) EUR 37 million with full exercise of the Over-Allotment Option only and (iv) EUR 43 million with full exercise of the Increase Option and the Over-Allotment Option, which in each case considerably exceeds the working capital shortfall of approximately EUR 20 million referred to above. Consequently, if the Offering is completed and the expected net proceeds of the Offering are generated, these proceeds together with Themis' current cash resources will provide it with sufficient working capital for the next twelve months following the date of this Prospectus.

If the Offering should be withdrawn or otherwise not be completed, Themis would pursue various additional alternatives, including seeking additional investors, obtaining further funding from existing investors through additional funding rounds and/or delaying, reducing the scope of, eliminating or divesting clinical programs and considering other cost reduction initiatives, such as reducing the amount of space being rented by Themis, postponing hiring new personnel and/or reducing the size of the current workforce. There is material uncertainty that Themis will be able to continue as a going concern as it may fail to complete other financing alternatives and further, that it may not raise additional funding. Although Themis would be using its best efforts to undertake such alternative measures, it can provide no assurance that such actions, in the absence of the completion of the Offering, will be sufficient to provide it with the working capital needed for the twelve months following the date of this Prospectus. If it is unable to generate such working capital in a sufficient amount, there is material uncertainty as to whether Themis will be able to continue as a going concern and its

business, financial condition and/or results of operations would be materially and adversely affected and Themis may ultimately be required to file for insolvency (see also Section 1.1 (*Risk Factors—Risks Related to Themis’ Business Activities and Industry*)).

## 7. Selected Financial Information

Prospective investors should read this Section 7 (Selected Financial Information) in conjunction with Section 8 (Operating and Financial Review) and Section 22 (Historic Financial Information) and additional financial information contained elsewhere in this Prospectus. Prospective investors should read the entire Prospectus and not just rely on the information contained in this section.

The financial information set forth below is extracted or derived from, and should be read in conjunction with, the audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016 as well as the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018, included elsewhere in this Prospectus. The audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016 have been prepared in accordance with IFRS, and the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018 have been prepared in accordance with IFRS on interim financial reporting (IAS 34).

Where financial information in the following tables is labelled “audited”, this means that it has been extracted from the audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016. The label “unaudited” is used in the following tables to indicate financial information that was not taken from the above-mentioned audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016 but has been extracted or derived from the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018 and/or the internal accounting records of Themis Bioscience GmbH or is calculated from the above-mentioned sources.

### 7.1 Statement of Comprehensive Income

	For the six months ended 30 June		For the financial year ended 31 December	
	2018	2017	2017	2016
	(in EUR thousands) (unaudited)		(in EUR thousands) (audited)	
Other operating income .....	2,717	1,049	2,567	1,775
Research and development expenses .....	(3,541)	(2,708)	(5,907)	(5,202)
Administrative expenses .....	(702)	(446)	(992)	(581)
Other operating expenses .....	(22)	(25)	(81)	(56)
<b>Operating loss .....</b>	<b>(1,549)</b>	<b>(2,130)</b>	<b>(4,413)</b>	<b>(4,063)</b>
Financial income .....	0	1	1	4
Financial expense .....	(10)	(9)	(451)	(19)
<b>Financial result .....</b>	<b>(10)</b>	<b>(8)</b>	<b>(450)</b>	<b>(15)</b>
<b>Loss before income tax .....</b>	<b>(1,559)</b>	<b>(2,139)</b>	<b>(4,863)</b>	<b>(4,078)</b>
Income tax .....	(1)	(1)	(2)	(2)
<b>Loss and total comprehensive loss for period/year .....</b>	<b>(1,560)</b>	<b>(2,139)</b>	<b>(4,865)</b>	<b>(4,080)</b>

### 7.2 Statement of Financial Position

	As of 30 June	As of 31 December	
	2018	2017	2016
	(in EUR thousands) (unaudited)	(in EUR thousands) (audited)	
<b>ASSETS</b>			
Intangible assets .....	24	12	15
Property, plant and equipment .....	195	40	42
<b>Non-current assets .....</b>	<b>219</b>	<b>51</b>	<b>57</b>
Other receivables .....	1,497	1,427	741
Income tax receivables .....	1	1	0
Other assets .....	354	308	73
Other financial assets .....	43	43	171
Cash and cash equivalents .....	5,178	3,672	3,127

	<b>As of 30 June</b>	<b>As of 31 December</b>	
	<b>2018</b>	<b>2017</b>	<b>2016</b>
	<i>(in EUR thousands)</i>	<i>(in EUR thousands)</i>	
	<i>(unaudited)</i>	<i>(audited)</i>	
<b>Current assets .....</b>	<b>7,073</b>	<b>5,451</b>	<b>4,112</b>
<b>Total assets .....</b>	<b>7,292</b>	<b>5,502</b>	<b>4,169</b>
<b>EQUITY AND LIABILITIES</b>			
<b>Equity<sup>(1)</sup></b>			
Nominal capital .....	152	130	130
Capital reserves .....	20,060	15,196	15,196
Contributions made for a resolved capital increase .....	0	4,455	0
Retained earnings .....	(21,689)	(20,128)	(15,264)
<b>Total equity .....</b>	<b>(1,477)</b>	<b>(347)</b>	<b>63</b>
<b>Liabilities</b>			
Financial liabilities .....	1,149	1,604	1,651
Other non-current liabilities .....	57	71	61
<b>Non-current liabilities .....</b>	<b>1,207</b>	<b>1,675</b>	<b>1,712</b>
Financial liabilities .....	795	327	0
Trade payables and other current liabilities .....	6,768	3,847	2,394
<b>Current liabilities .....</b>	<b>7,562</b>	<b>4,173</b>	<b>2,394</b>
<b>Total liabilities .....</b>	<b>8,769</b>	<b>5,849</b>	<b>4,106</b>
<b>Total equity and liabilities .....</b>	<b>7,292</b>	<b>5,502</b>	<b>4,169</b>

<sup>(1)</sup> Shown as negative equity in the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018 and as negative equity/equity in the audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016.

### 7.3 Selected Cash Flow Statement Information

	<b>For the six months ended</b>		<b>For the financial year ended</b>	
	<b>30 June</b>		<b>31 December</b>	
	<b>2018</b>	<b>2017</b>	<b>2017</b>	<b>2016</b>
	<i>(in EUR thousands)</i>		<i>(in EUR thousands)</i>	
	<i>(unaudited)</i>		<i>(audited)</i>	
Cash flow from operating activities .....	1,349	(2,012)	(3,868)	(4,218)
Cash flow utilized by investing activities .....	(189)	(5)	(16)	(44)
Cash flow from financing activities .....	346	(0)	4,428	6,964
<b>Net cash flow .....</b>	<b>1,506</b>	<b>(2,017)</b>	<b>545</b>	<b>2,702</b>
<b>Cash and cash equivalents at beginning of period .....</b>	<b>3,672</b>	<b>3,127</b>	<b>3,127</b>	<b>425</b>
<b>Cash and cash equivalents at end of period .....</b>	<b>5,178</b>	<b>1,111</b>	<b>3,672</b>	<b>3,127</b>

## 8. Operating and Financial Review

*Prospective Investors should read this Section 8 (Operating and Financial Review) in conjunction with Section 2.7 (Important Information—Presentation of Financial Information), Section 7 (Selected Financial Information), Section 10 (Business Description), Section 22 (Historic Financial Information) and additional financial information contained elsewhere in this Prospectus. Prospective investors should read the entire Prospectus and not just rely on the information contained in this section.*

*The financial information set forth below is extracted or derived from, and should be read in conjunction with, the audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016, and the unaudited condensed interim financial statement of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018, included elsewhere in this Prospectus. The Company was incorporated on 14 September 2018 for the purpose of the listing and before the listing, conducted no operations. Accordingly, there is no historical financial information for the Company for the financial years ended 31 December 2017 and 2016 and the six month period ended 30 June 2018. Because the Company is only a holding company, the Company is of the view that the audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016 and the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018 provide the information required to be presented with regard to the Company's financial years ended 31 December 2017 and 2016 and the six month periods ended 30 June 2018 and 2017 so that prospective investors may make an informed investment decision to acquire shares in the Company. The audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016 have been prepared in accordance with IFRS and the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018 have been prepared in accordance with IFRS on interim financial reporting (IAS 34).*

*With regard to historical financial information as of and for the financial years ended 31 December 2017 and 2016 as well as prior periods and as of 30 June 2018 and for the six month periods ended 30 June 2018 and 2017 presented in the Prospectus, references to Themis refer to Themis Bioscience GmbH, unless otherwise indicated.*

*Where financial information in the tables in this Prospectus is labelled “audited”, this means that it has been extracted from the audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016. The label “unaudited” is used in the tables in this Prospectus to indicate financial information that was not taken from the above-mentioned audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016 but has been extracted or derived from the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018 and/or the internal accounting records of Themis Bioscience GmbH or is calculated from the above-mentioned sources. All of the financial data presented in the text and tables below are shown in thousands of euros, except as otherwise stated. Certain data in this Prospectus, including financial, statistical, and operating information has been rounded. As a result of the rounding, the totals of data presented in this Prospectus may vary slightly from the actual arithmetic totals of such data. Percentages have been rounded and accordingly may not add up to 100%. Financial information presented in parentheses in tables denotes the negative of such number presented. In respect of financial data set out in this Prospectus, a dash (“–”) signifies that the relevant figure is not available, while a zero (“0”) signifies that the relevant figure is available but has been rounded to zero. Themis' historical results are not necessarily indicative of the results that should be expected in the future.*

*Some of the information contained in the following discussion contains forward-looking statements that are based on assumptions and estimates and are subject to known and unknown risks and uncertainties. Prospective investors should read Section 3 (Forward-looking Statements) for a discussion of the risks and uncertainties related to these statements. Themis' actual results and the timing of events could differ materially from those expressed or implied by these forward-looking statements as a result of various factors, including those discussed below and elsewhere in this Prospectus, particularly in Section 1 (Risk Factors) and Section 9 (Industry Overview).*

### 8.1 Overview

Themis is an immunomodulation clinical-stage biopharmaceutical group that focuses on the development of products to protect against infectious diseases and for the treatment of cancer. Through modulating an effective immune response, Themis aims to develop vaccines for vaccinations against infectious diseases and virotherapy based treatment for cancer. In developing its vaccines, Themis uses a measles vaccine-based platform technology (**MV Platform**) which is built upon one of the safest and most efficacious vaccines available, the measles vaccine. This measles vaccination has been used for more than 50 years in over one billion children and consists of the live attenuated measles virus. Themis has further developed the measles vaccine into an active delivery vehicle enabling the addition of antigens that are designed to protect against or treat other diseases. This uniquely integrated immunomodulation technology provides Themis with the ability to target specific diseases and allows for platform versatility and the ability to address a wide

range of indications. Themis technology platform is supported by a fully aseptic, commercial manufacturing infrastructure to enable plug-and-play vaccine development and cost-efficient production.

Themis has incurred significant losses in each year of operations, as it has devoted a significant amount of its resources to preclinical and clinical development and research. As of 30 June 2018 Themis has incurred accumulated losses of EUR 21,689 thousand. It expects to continue to incur substantial operating losses in the future. Themis will not receive any revenues or net cash flows from sales of its products unless they have been approved by the EMA, FDA or similar regulatory authorities in other countries and commercialized successfully, which Themis does not expect to be before 2021. With the help of licensing revenues that may consist of upfront and milestone payments, as well as royalties, further growth should be enabled, but it cannot be guaranteed that Themis will ever become profitable.

## **8.2 Key Factors Affecting Results of Operations and Financial Condition**

Themis believes that the following factors have had and will continue to have a material effect on its results of operations and financial condition.

### **8.2.1 *Ability to Generate Revenues***

As of the date of this Prospectus, Themis has not generated any revenues during the periods covered by the historical financial information included in this Prospectus.

Themis does not expect to generate any revenues from any product candidates that it develops until and unless Themis obtains regulatory approval and commercializes its products by entering into collaborative agreements or licensing agreements with third parties. It is unclear if or when this will ever happen.

The commercial plans of Themis include generating revenues from direct product sales and/or license fees, milestone payments and royalties resulting from establishing licensing and/or distribution arrangements in respect of its products with partners in selected countries. Themis does not currently have any such licensing or distribution arrangements in place. Themis expects that any revenues it may generate will fluctuate from year to year as a result of the amount and timing of payments that Themis receives upon the sale of its products and the timing and value of any partnership deals it enters into, to the extent that any products are approved and are successfully commercialized.

Even if Themis succeeds in generating revenues in accordance with its commercial plans, its ability to achieve profitability will depend on its ability to generate revenues and other income in excess of its costs and expenses.

Any revenues that Themis may generate from the sale of any products approved for sale will be primarily determined by the volume of products sold as well as the price Themis is able to achieve for such products. The commercial success of Chikungunya and any of Themis' other future products will depend on the rate and degree of market acceptance of these products among physicians, patients, health care payers, including government agencies, and the medical community. The commercial success of any of these products will further depend upon the acceptance of such products as safe and effective by the medical community and patients and the products' pharmacoeconomic benefits. The rate and speed of acceptance will directly impact on the commercial success of the product. The market acceptance of Themis' products could be affected by a number of other factors, including:

- the timing of receipt of marketing approvals;
- Themis' success in navigating government procurement;
- regulations the cost-effectiveness and availability of coverage on formularies and adequate reimbursement for the products;
- sales, marketing and distribution effort;
- potential product liability claims;
- relative convenience, ease of administration and other perceived advantages over alternative products and therapies;
- the resources and the effectiveness of potential partners, especially in regard to for distribution;
- limitations, precautions, warnings and other wording in the summary of product characteristics; and

- patient information leaflets, package labelling or instructions for use.

Since Themis does not yet generate significant regular revenues it is essential for it to ensure access to adequate liquidity in order to carry out its research and development programs to the planned extent and timeframe. Therefore Themis uses liquidity as its key performance indicator.

## 8.2.2 *Public Grants and Austrian Research Premium (Tax Credits)*

Since it does not yet generate revenues, but requires significant amounts of liquidity in order to continue operating, Themis relies, and will likely continue to rely, on grants from public institutions and state-owned organizations. In addition, Themis receives certain tax credits from the Austrian government in connection with spent research and development expenses. Themis has entered into a contract with CEPI to receive funding for the development of vaccines against the Lassa fever and MERS and with Innovative UK to receive funding for the development of a Zika vaccine and a Chikungunya vaccine (for further details see Section 10.11.2 (Business Description—Material Contracts—Grants)). These funds and tax credits, which it records as other operating income, are granted to support specific research and/or development projects and to support investments in required capital equipment, primarily machinery and laboratory equipment. In the financial year ended 31 December 2017, Themis received an amount of EUR 2,534 thousand from public grants and Austrian research premium accounted for under other operating income.

The research and development grant agreements include a budget that specifies the amount and nature of expenses allowed during the entire grant term. Grants relating to a research and development expense item are recognized as other operating income. Themis only recognizes grant income when it is reasonably assured that the grant will be received. For further description see Section 10.11.2 (Business Description—Material Contracts—Grants).

In 2018 CEPI agreed with Themis on funding the development of a vaccine against Lassa and MERS with up to USD 37,500 thousand for a period of five years. The receipt of the funds is conditioned on achieving defined milestones and clinical results. For further description see Section 10.11.2 (Business Description—Material Contracts—Grants).

The following table provides an overview of the public grants as contracted by Themis and other operating income recognized from public grants in the period indicated:

<b>Grant Institution</b>	<b>Total grants</b>	<b>Aggregate other operating income recognized from public grants in the period from 1 January 2016 to 30 June 2018</b>
	<i>(in thousands)</i> <i>(unaudited)</i>	<i>(in EUR thousands)</i> <i>(unaudited)</i>
UK SBRI .....	GBP 1,000	1,158
UK SBRI .....	GBP 3,000	1,189
EU (H2020) .....	EUR 3,192	1,097
CEPI .....	USD 37,500	1,057

Themis is permanently in discussion with national and international institutions and governments to fund ongoing and future research projects.

## 8.2.3 *Research and Development Expenses*

Research and development are, and are likely to remain, critical to Themis' future financial success. To date, Themis has devoted substantially most of its resources to research and development efforts relating to its product candidates, including carrying out pre-clinical research and development, conducting clinical studies, providing general and administrative support for these operations and protecting Themis' intellectual property. In 2016, 2017 and the six months ended 30 June 2018, research and development expenses represented 89.1%, 84.6% and 83.0%, respectively, of Themis' total operating expenses (comprising research and development expenses, administrative expenses and other operating expenses).

Themis is obliged to use grants and governmental and quasi-governmental subsidies for specific research and development projects. The public grant proceeds were applied to the specific research projects as follows for the periods indicated:



Research and Development Project	For the six months ended	For the financial year ended	
	30 June 2018	31 December 2017	31 December 2016
	<i>(in EUR thousands)</i> <i>(unaudited)</i>		
SBRI ZIKA	107	741	310
ZIKAVAX H2020	602	389	106
SBRI CHIK	575	593	0
FFG LOAN PHASE 2	-	1,561	1,227
CEPI	1,057	-	-
	<b>2,341</b>	<b>3,284</b>	<b>1,643</b>

Research and development expenses consist of costs incurred that are directly attributable to the development of Themis' platform technology and product candidates. Those expenses include:

- salaries for research and development staff and related expenses, including management benefits and expenses for share-based compensation;
- costs for production of drug substances by contract manufacturers;
- service fees and other costs related to the performance of clinical trials and preclinical testing;
- costs of related facilities, materials and equipment;
- costs associated with obtaining and maintaining patents and other intellectual property;
- amortization and depreciation of intangible and tangible fixed assets used to discover and develop Themis' clinical compounds and pipeline candidates; and
- other expenses directly attributable to the development of Themis' product candidates and preclinical pipeline.

Research and development activities are the primary focus of Themis' business. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. In general, Themis expects that its research and development expenses will increase in absolute terms in future periods as Themis continues to invest in research and development activities related to developing its pipeline product candidates, and as programs advance into later stages of development and Themis enters into larger clinical trials.

The costs of clinical studies may vary significantly over the life of a project owing to factors that include, but are not limited to, the following:

- per subject study costs;
- the number of subjects that participate in the studies;
- the number of sites included in the studies;
- the number of countries in which the study is conducted;
- the length of time required to enroll eligible subjects;
- the drop-out or discontinuation rates of subjects;
- potential additional safety monitoring or other studies requested by regulatory agencies;
- the duration of subject follow-up;
- the nature of the condition the product is intended to treat; and

- the efficacy and safety profile of the product candidate.

The process of conducting the necessary clinical research to obtain regulatory approval is costly and time-consuming and the successful development of Themis' product candidates is highly uncertain.

Themis focuses on the development of products to protect against infectious diseases and for the treatment of cancer. Accordingly, Themis' research and development expenses depend on, and are driven by, the regulatory framework within which the relevant product candidates, including the relevant pre-clinical and clinical studies, are carried out. Such regulatory framework contains a set of processes and criteria that must be adhered to in order to comply with the applicable regulatory requirements. Therefore, Themis' research and development expenses are a reflection of the requirements imposed by the underlying regulatory framework.

To the extent the regulatory requirements grant Themis discretion in selecting service providers to conduct studies, Themis selects such service providers by taking into consideration their experience and reputation.

Themis expects that its research and development expenses will continue to be primarily driven by the detailed regulatory requirements with which it needs to comply.

#### **8.2.4 *Selling and Distribution Expenses***

Given its stage of development, Themis has not yet incurred any selling and distribution expense. If any of its products were to be approved for marketing, however Themis would likely have to incur substantial selling and distribution expenses, in order to establish an infrastructure for independent marketing, direct sales and distribution. Additional costs would be incurred for manufacturing commercial quantities of Themis' products.

### **8.3 Description of Statement of Comprehensive Income Line Items**

#### **8.3.1 *Other Operating Income***

Other operating income comprises mainly income from various grants from national and international institutions, Austrian research premiums (tax credits), income from mezzanine capital and other operating income such as insurance refund, gain on sale of assets and exchange rate differences.

#### **8.3.2 *Research and Development Expenses***

Research and development expenses in the periods under review are related to costs incurred for research conducted to gain new scientific or technical knowledge and understanding. For the periods under review, Themis research and development expenses mainly reflect personnel expense, cost of material, clinical phase I and II studies, depreciation expense and others. Other research and development expenses consist of infrastructure expenses, advisory and external consultancy expenses, travel expenses, shares based payments and other expenses.

#### **8.3.3 *Administrative Expenses***

Administrative expenses consist principally of personnel expense, depreciation expense and others. Other administrative expenses include the following: infrastructure expenses, advisory and external consultancy expenses, travel expenses, legal expenses, share based payments, advertising and others.

#### **8.3.4 *Other Operating Expenses***

Other operating expenses include all other costs, which cannot directly allocated to research and development or administrative expenses, such as exchange rate differences, fees, taxes and other charges.

#### **8.3.5 *Financial Income***

All profits from financial assets are shown in the financial result under the position financial income. In the financial years ended 31 December 2017 and 2016 and the six months ended 30 June 2017 there is only financial income from interests of bank deposits.

### 8.3.6 Financial Expense

Financial expense consists of interest payable on borrowings of all kinds (e.g., bank debt and other loans) and are expensed as incurred. There was no capitalization of borrowing costs in the financial years ended 31 December 2017 and 2016 and the six months ended 30 June 2018 and 2017.

### 8.3.7 Income Tax

Themis Bioscience GmbH is loss making and therefore has not paid any corporation tax, except the minimum corporate income tax (EUR 2 thousand *per annum.*) in Austria. Themis Bioscience GmbH is entitled to claim tax credits according § 108c Austrian Income Tax Act (*Einkommenssteuergesetz, EStG*) for certain qualifying research and development expenditure.

## 8.4 Statement of Comprehensive Income

The following table provides an overview of Themis Bioscience GmbH's results of operations for the periods indicated:

	For the six months ended 30 June		For the financial year ended 31 December	
	2018	2017	2017	2016
	(in EUR thousands) (unaudited)		(in EUR thousands) (audited)	
Other operating income.....	2,717	1,049	2,567	1,775
Research and development expenses .....	(3,541)	(2,708)	(5,907)	(5,202)
Administrative expenses .....	(702)	(446)	(992)	(581)
Other operating expenses	(22)	(25)	(81)	(56)
<b>Operating loss.....</b>	<b>(1,549)</b>	<b>(2,130)</b>	<b>(4,413)</b>	<b>(4,063)</b>
Financial income .....	0	1	1	4
Financial expense .....	(10)	(9)	(451)	(19)
<b>Financial result .....</b>	<b>(10)</b>	<b>(8)</b>	<b>(450)</b>	<b>(15)</b>
<b>Loss before income tax.....</b>	<b>(1,559)</b>	<b>(2,139)</b>	<b>(4,863)</b>	<b>(4,078)</b>
Income tax.....	(1)	(1)	(2)	(2)
<b>Loss and total comprehensive loss for period/year .....</b>	<b>(1,560)</b>	<b>(2,139)</b>	<b>(4,865)</b>	<b>(4,080)</b>

#### 8.4.1 Comparison of the six months ended 30 June 2018 and 2017

##### *Other operating income*

Other operating income increased by EUR 1,668 thousand from EUR 1,049 thousand in the six months ended 30 June 2017 to EUR 2,717 thousand in the six months ended 30 June 2018. This increase was mainly due to an increase in public grants, in particular a EUR 1,057 thousand grant received from CEPI in the six months ended 30 June 2018 as part of a larger up to US\$ 37,500 thousand grant to fund the development of a vaccine against Lassa and MERS payable over five years subject to achieving certain milestones and clinical results.

##### *Research and development expenses*

Research and development expenses increased by 30.8% from EUR 2,708 thousand in the six months ended 30 June 2017 to EUR 3,541 thousand in the six months ended 30 June 2018. This increase was mainly driven by the additional research expenses in connection with the development of the Lassa vaccine funded by CEPI and the finalization of the phase 2 clinical trials for Chikungunya.

##### *Administrative expenses*

Administrative expenses increased by 57.4% from EUR 446 thousand in the six months ended 30 June 2017 to EUR 702 thousand in the six months ended 30 June 2018. This increase was mainly driven by legal and advisory and external consultancy expenses and higher travel expenses due to increased corporate development and research and development activities in connection with the Lassa project and the finalization of phase 2 of Chikungunya.

### *Financial expense*

Financial expense increased by 11.1% from EUR 9 thousand in the six months ended 30 June 2017 to EUR 10 thousand in the six months ended 30 June 2018. This increase was mainly due to higher interest expense following an increase in loans in the nominal amount of EUR 300 thousand granted in July 2017.

### *Loss before income tax*

As a result of the above factors, Themis' loss before income tax decreased by 27.1% from EUR 2,139 thousand in the six months ended 30 June 2017 to EUR 1,559 thousand in the six months ended 30 June 2018. The higher expenses were offset by the increasing other operating income from public grants.

### *Income tax*

Income tax remained unchanged at a level of EUR 1 thousand in the six months ended 30 June 2018 compared to the six months ended 30 June 2017.

## **8.4.2 Comparison of financial years ended 31 December 2017 and 2016**

### *Other operating income*

Other operating income increased by 44.6% or EUR 792 thousand, from EUR 1,775 thousand in the financial year ended 31 December 2016 to EUR 2,567 thousand in the financial year ended 31 December 2017. This increase was mainly due to higher income from public grants, in particular two research grants from the Small Business Research Initiative (**SBRI**) in United Kingdom amounting to EUR 1,496 thousand in the financial year ended 31 December 2017 compared to EUR 169 thousand in the financial year ended 31 December 2016. In the financial year ended 31 December 2016 the outstanding Austrian governmental subsidized loan from Austria Wirtschaftsservice GmbH (**AWS**) amounting to EUR 1,000 thousand was recognized as income from mezzanine capital, being part of other operating income, after the conditions for repayment have not been met until the expiration date of the loan term, 30 June 2016. Additionally an Austrian research premium (pursuant to § 108c EStG) was recorded in other operating income and amounted to EUR 500 thousand in the financial year ended 31 December 2016 and EUR 648 thousand in the financial year ended 31 December 2017.

### *Research and development expenses*

Research and development expenses increased by 13.6% from EUR 5,202 thousand in the financial year ended 31 December 2016 to EUR 5,907 thousand in the financial year ended 31 December 2017. This increase was mainly driven by the clinical trial phase 2 costs for Chikungunya and the optimization of the up- and downstream process with CMOs for manufacturing the drug product for Chikungunya. Research and development expenses represented 84.6% of Themis' total operating expenses (comprising research and development expenses, administrative expenses and other operating expenses) of EUR 6,979 thousand for the financial year ended 31 December 2017, compared to 89.1% of Themis' total operating expenses of EUR 5,839 thousand for the financial year ended 31 December 2016.

### *Administrative expenses*

Administrative expenses increased by 70.7% from EUR 581 thousand in the financial year ended 31 December 2016 to EUR 992 thousand in the financial year ended 31 December 2017. This increase was mainly due to an increase in operating activities, especially higher advisory and external consultancy expenses due to the preparation of Series C financing round, increased personnel expense resulting from an increase in the number of administrative personnel and the expense for share based payments associated with the employee bonus program.

### *Financial income*

Financial income amounted to EUR 4 thousand in the financial year ended 31 December 2016 compared to EUR 1 thousand in the financial year ended 31 December 2017. The higher finance income in 2016 results from the investment of the paid shareholder equity into a fixed deposit account with a slightly higher interest rate.

### *Financial expense*

Financial expense increased by EUR 432 thousand from EUR 19 thousand in the financial year ended 31 December 2016 to EUR 451 thousand in the financial year ended 31 December 2017. This increase was mainly due to

the fair value adjustments of convertible bond amounting to EUR 432 thousand in the financial year ended 31 December 2017 relating to the EUR 1,525 thousand principal amount of convertible bond issued in 2017.

#### *Loss before income tax*

As a result of the above factors, Themis' loss before income tax increased by 19.2% from EUR 4,078 thousand in the financial year ended 31 December 2016 to EUR 4,863 thousand in the financial year ended 31 December 2017.

#### *Income tax*

Income tax expenses amounted to EUR 2 thousand in the financial years ended 31 December 2017 and 2016.

### **8.5 Statement of Financial Position**

The following table provides an overview of Themis Bioscience GmbH's financial positions as of the dates indicated:

	<b>As of 30 June</b>	<b>As of 31 December</b>	
	<b>2018</b>	<b>2017</b>	<b>2016</b>
	<i>(in EUR thousands)</i>	<i>(in EUR thousands)</i>	
	<i>(unaudited)</i>	<i>(audited)</i>	
<b>ASSETS</b>			
Intangible assets .....	24	12	15
Property, plant and equipment .....	195	40	42
<b>Non-current assets .....</b>	<b>219</b>	<b>51</b>	<b>57</b>
Other receivables .....	1,497	1,427	741
Income tax receivables .....	1	1	0
Other assets .....	354	308	73
Other financial assets .....	43	43	171
Cash and cash equivalents .....	5,178	3,672	3,127
<b>Current assets .....</b>	<b>7,073</b>	<b>5,451</b>	<b>4,112</b>
<b>Total assets .....</b>	<b>7,292</b>	<b>5,502</b>	<b>4,169</b>
<b>EQUITY AND LIABILITIES</b>			
<b>Equity<sup>(1)</sup></b>			
Nominal capital .....	152	130	130
Capital reserves .....	20,060	15,196	15,196
Contributions made for a resolved capital increase .....	0	4,455	0
Retained earnings .....	(21,689)	(20,128)	(15,264)
<b>Total equity .....</b>	<b>(1,477)</b>	<b>(347)</b>	<b>63</b>
<b>Liabilities</b>			
Financial liabilities .....	1,149	1,604	1,651
Other non-current liabilities .....	57	71	61
<b>Non-current liabilities .....</b>	<b>1,207</b>	<b>1,675</b>	<b>1,712</b>
Financial liabilities .....	795	327	0
Trade payables and other current liabilities .....	6,768	3,847	2,394
<b>Current liabilities .....</b>	<b>7,562</b>	<b>4,173</b>	<b>2,394</b>
<b>Total liabilities .....</b>	<b>8,769</b>	<b>5,849</b>	<b>4,106</b>
<b>Total equity and liabilities .....</b>	<b>7,292</b>	<b>5,502</b>	<b>4,169</b>

(1) Shown as negative equity in the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018 and as negative equity/equity in the audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016.

#### **8.5.1 Assets**

Themis' non-current assets include intangible assets and property, plant and equipment.

The increase in non-current assets as of 30 June 2018 was the result of the acquisition of laboratory equipment (bioreactor). As a result, non-current assets increased from EUR 51 thousand as of 31 December 2017 to EUR 219 thousand as of 30 June 2018.

The decrease in non-current assets from EUR 57 thousand as of 31 December 2016 to EUR 51 thousand as of 31 December 2017 was the result of the linear amortization and depreciation of the intangible assets and property, plant and equipment.

Themis' current assets mainly comprised of cash and cash equivalents, other receivables and other assets. Cash and cash equivalents include payments from public grants, Austrian research premium (tax credit), subsidies and proceeds from shareholders from capital increases. As of 31 December 2017, Themis' cash and cash equivalents amounted to EUR 3,672 thousand. Other receivables primarily include receivables from research premium (tax credit pursuant to § 108c EStG) and receivables from other public grants (SBRI).

The movements in current assets from EUR 5,541 thousands as of 31 December 2017 to EUR 7,073 thousands as of 30 June 2018 primarily relate to the payment from CEPI for the development of the Lassa and MERS vaccine amounting to EUR 5,064 thousand in May 2018, which increased Themis' cash and cash equivalents accordingly.

The movements in current assets from EUR 4,112 thousand as of 31 December 2016 to EUR 5,541 thousand as of 31 December 2017 primarily relate to the increased other receivables from public grants.

### 8.5.2 *Equity*

Themis' total equity includes its nominal capital, capital reserves, contributions made for resolved capital increase and retained earnings comprising the loss for the year or period and the accumulated losses from previous periods carried forward.

The decrease in total equity from 31 December 2017 to 30 June 2018 was primarily due to the loss for the period in the six months ended 30 June 2018 of EUR 1,560 thousand. The total equity as of 30 June 2018 amounted to a negative equity of EUR 1,477 thousand and consisted of nominal capital of EUR 152 thousand, capital reserves of EUR 20,060 thousand and accumulated losses of EUR 21,689 thousand. For additional discussion of Themis' negative equity see also the unaudited condensed interim financial statements of Themis Bioscience GmbH as of and for the six month period ended 30 June 2018 Section 22 (Historic Financial Information).

The change in total equity from 31 December 2016 to 31 December 2017 was due to a capital increase (Series C 1) of EUR 2,608 thousand, the conversion of convertible loans in the amount of EUR 1,957 thousand together with the related transaction costs of EUR 110 thousand and the loss for the year in the financial year ended 31 December 2017 of EUR 4,865 thousand. The total equity as of 31 December 2017 amounted to a negative equity of EUR 347 thousand and consisted of nominal capital of EUR 130 thousand, capital reserves of EUR 15,196 thousand, contributions made for resolved capital increase of EUR 4,455 thousand and accumulated losses of EUR 20,128 thousand. For additional discussion of Themis' equity see also the audited financial statements of Themis Bioscience GmbH as of and for the financial year ended 31 December 2017 and 2016 in Section 22 (Historic Financial Information).

### 8.5.3 *Liabilities*

Themis' non-current liabilities relate primarily to non-financial liabilities from various governmental agencies. These loans bear an interest rate below market interest rate and are granted for certain research and development projects. Themis' total current liabilities relate to current financial liabilities trade payables and other current liabilities. Non-current financial liabilities comprise the amounts that are due for repayment commencing twelve months after the respective statement of financial position date. The amounts that are due for repayment within twelve months after the respective statement of financial position date are presented as current financial liabilities. The financial liabilities, including borrowings and trade and other payables, are measured subsequent to initial recognition at amortized cost using the effective interest method.

Non-current financial liabilities decreased from EUR 1,604 thousand as of 31 December 2017 to EUR 1,149 thousand as of 30 June 2018 and current financial liabilities increased from EUR 327 thousand as of 31 December 2017 to EUR 795 thousand as of 30 June 2018 as a result of reclassification of loans from non-current financial liabilities to current financial liabilities as part of the loans needs to be repaid within the next twelve months.

Trade payables and other current liabilities increased from EUR 3,847 thousand as of 31 December 2017 to EUR 6,768 thousand as of 30 June 2018. The increase results primarily from deferred income from government grants.

Non-current financial liabilities remained stable in the years ended 31 December 2016 and 31 December 2017. Current financial liabilities increased from EUR 0 as of 31 December 2016 to EUR 327 thousand as of 31 December 2017 as a result of the reclassification of loans to the position current financial liabilities according the repayment terms.

Trade payables and other current liabilities increased from EUR 2,394 thousand as of 31 December 2016 to EUR 3,847 thousand as of 31 December 2017 mainly due to increased trade payables in connection with research and development activities relating to Themis' product candidates. The increase further resulted from the liability for cash-settled share-based payments for the exit bonus participation program (**EBPP**), which was accounted for the first time as the bonus program was introduced in 2017.

## 8.6 Significant Change since 30 June 2018

Themis Bioscience GmbH signed on 21 July 2018 the contracts for the second and third tranche of the Series C financing round after fulfilment of defined milestones. The capital increase was registered in the Austrian commercial register on 11 August 2018 and amounted to EUR 5,500 thousand before deduction of equity transaction costs, which improved Themis Bioscience GmbH's cash position substantially and provides the necessary cash funds to initiate preparation of phase 3 clinical studies for Chikungunya, in particular by preparing (i) the phase 3 clinical trial design including scientific advice and aligning with EMA and FDA, (ii) the manufacturing strategy, (iii) efficacy studies in animal models as well as (iv) the toxicology program. Themis Bioscience GmbH received the funding from the Series C financing round in July/August 2018. For further information, please read Section 10.11.1 (Business Description – Material Contracts – Financing Agreements).

## 8.7 Liquidity and Capital Resources

### 8.7.1 Overview

Themis' liquidity requirements primarily relate to the funding of research and development expenses, administrative expenses, capital expenditures and working capital requirements. Historically, Themis was funded almost exclusively through the issuance of shares to venture capital investors in several rounds of equity financing.

Additionally, Themis has received governmental and quasi-governmental grants, Austrian research premium (tax credits) and loans to finance its operations. Themis has incurred losses since inception and resulting negative cash flows from operating activities for the years ended 31 December 2016 and 2017. Themis is obliged to use such grants for specific purposes, such as clinical trials, toxicological studies, as well as for specific expenses incurred by Themis, which include expenses for manufacturing of the product candidates including consumables and equipment, toxicological studies, clinical trials, salaries for project related personnel, as well as some indirectly related costs such as travel, lease and shipment costs and costs for research and development consulting. For further details see Section 10.11.2 (Business Description—Material Contracts—Grants).

From its inception through 31 August 2018, Themis Bioscience GmbH has funded its operations primarily through private placements of equity. Themis Bioscience GmbH has completed the following funding rounds through the issuance of convertible loans and preference shares with cash inflows totalling EUR 25,434 thousand excluding transaction costs since its inception:

Financing round	Funds	In EUR thousands (unaudited)	Financial Year/Month
Inception	Equity	83	2009
Series A 1	Equity	1,500	2011
Series A 1.1	Equity	1,000	2012
Series A 2	Equity	2,501	2012
Bridge finance	Loan Note*	700	2014
Series B 1	Equity	2,900	2015
Series B 2	Equity	4,225	2016
Series B 3	Equity	2,450	2016
Bridge finance	Loan Note**	1,525	2017
Series C 1	Equity	3,050	2017
Series C 2	Equity	3,500	July/August 2018
Series C 3	Equity	2,000	July/August 2018
<b>TOTAL</b>		<b>25,434</b>	

\* converted into equity with Series B1 financing

\*\* converted into equity with Series C 1 financing

Following the completion of the equity funding and the Offering, Themis' principal sources of funds are expected to be cash and cash equivalents from financing activities. Themis' primary uses of cash have been and will likely continue to be for the foreseeable future, to fund research and development and working capital requirements.

## 8.7.2 Cash flows

The following table provides an overview of Themis Bioscience GmbH's cash flows for the periods indicated:

	For the six months ended		For the financial year ended	
	30 June		31 December	
	2018	2017	2017	2016
	(in EUR thousands)		(in EUR thousands)	
	(unaudited)		(audited)	
<b>Cash flow from operating activities</b>				
Loss before income tax .....	(1,559)	(2,139)	(4,863)	(4,078)
Adjustments for:				
Financial income recognized in profit or loss.....	0	(1)	(1)	(4)
Financial expense recognized in profit or loss ...	10	9	451	19
Depreciation and amortization expense.....	21	10	20	14
Net book value of disposals of assets .....	0	0	1	0
Valuation share-based payments .....	(115)	181	330	0
Non-cash-income from remission of a debt.....	0	0	0	(1,000)
Changes in other receivables .....	(116)	(147)	(796)	(562)
Changes in trade and other liabilities .....	3,109	81	1,009	1,413
Interest paid .....	0	(9)	(20)	(19)
Interest received .....	0	4	4	1
Income taxes paid.....	(1)	(2)	(3)	(2)
<b>Cash flow from operating activities.....</b>	<b>1,349</b>	<b>(2,012)</b>	<b>(3,868)</b>	<b>(4,218)</b>
Purchase of plant and equipment and intangible assets .....	(189)	(5)	(16)	(44)
<b>Cash flow utilized by investing activities.....</b>	<b>(189)</b>	<b>(5)</b>	<b>(16)</b>	<b>(44)</b>
Proceeds from shareholders .....	450	0	2,608	6,675
Proceeds from long-term borrowings.....	-	-	300	500
Proceeds from convertible loans .....	-	-	1,525	0
Repayments of long-term borrowings.....	-	-	0	(140)
Equity transaction costs .....	(104)	0	(6)	(70)
<b>Cash flow from financing activities .....</b>	<b>346</b>	<b>0</b>	<b>4,428</b>	<b>6,965</b>
<b>Net cash flow.....</b>	<b>1,506</b>	<b>(2,017)</b>	<b>545</b>	<b>2,702</b>
Cash and cash equivalents at beginning of period .....	3,672	3,127	3,127	425
Cash and cash equivalents at end of period.....	5,178	1,110	3,672	3,127

### *Cash flow from operating activities*

Cash flow from operating activities reflects Themis' loss before income tax for the respective period adjusted for, among other things, depreciation and amortization expense, financial income and financial expense recognized in profit or loss resulting from the loan notes, valuation share-based payments and changes in operating assets and liabilities.

Cash flow from operating activities was mainly derived from the losses generated in the respective periods, which in turn is mainly driven by research and development as well as administrative expenses incurred. Research and development expenses vary over time depending on the development stage of each clinical program and the activities related to those clinical programs.

The increase in cash flow from operating activities from a cash outflow of EUR 2,012 thousand in the six months ended 30 June 2017 to a cash inflow of EUR 1,349 thousand in the six months ended 30 June 2018 was mainly a result of the grant payment amounting to EUR 5,064 thousand from CEPI. For further details see Section 10.11.2 (Business Description—Material Contracts—Grants).

The increase of 8.3% in cash flow from operating activities from a cash outflow of EUR 4,218 thousand in the financial year ended 31 December 2016 to a cash outflow of EUR 3,868 thousand in the financial year ended 31 December 2017 is primarily due to the adjustment for the non-cash-income from remission of debt relating to the recognition of the outstanding Austrian governmental loan from AWS (EUR 1,000 thousand in 2016) as income from mezzanine capital, the increase in the adjustment for financial expense recognized in profit or loss and the valuation share-based payments in 2017.



### *Cash flow utilized by investing activities*

Cash flow utilized by investing activities reflects, among other things, cash paid for the purchase of and proceeds from the disposal of plant and equipment and intangible assets.

The increase in cash flow utilized by investing activities from a cash outflow of EUR 5 thousand in the six months ended 30 June 2017 to a cash outflow of EUR 189 thousand in the six months ended 30 June 2018 is due to the purchase of additional laboratory equipment (bioreactor).

The decrease in cash flow utilized by investing activities from a cash outflow of EUR 44 thousand in the financial year ended 31 December 2016 to a cash outflow of EUR 16 thousand in the financial year ended 31 December 2017 is due to lower purchase of plant and equipment and intangible assets in the financial year ended 31 December 2017 compared the financial year ended 31 December 2016.

### *Cash flow from financing activities*

Cash flow from financing activities reflects proceeds from the issuance of shares, proceeds from borrowings and the repayment of borrowings as well as the respective related transaction costs and interest payments.

The increase in cash flow from financing activities from EUR 0 in the six months ended 30 June 2017 to EUR 346 thousand in the six months ended 30 June 2018 is mainly due to the remaining proceeds from shareholders in connection with the capital increase (Series C1 financing round) concluded in December 2017 but finally paid in January 2018.

The decrease in cash flow from financing activities from EUR 6,965 thousand in the financial year ended 31 December 2016 to EUR 4,428 thousand in the financial year ended 31 December 2017 is due to the decrease in proceeds from shareholders (Series B2 and B3 financing round concluded in 2016). The financial year ended 31 December 2017 includes the proceeds from the convertible loan (EUR 1,525 thousand) paid by the shareholders in 2017 and the first tranche of Series C1 financing round, which was not fully paid in 2017 (EUR 450 thousand paid in January 2018). Furthermore, Themis received proceeds from long-term borrowings of EUR 300 thousand by the Austrian Research and Promotion Agency to finance a clinical trial phase 2 in the financial year ended 31 December 2017 and of EUR 500 thousand in the financial year ended 31 December 2016.

### **8.7.3 Capital Expenditures**

The following table provides an overview of Themis Bioscience GmbH's capital expenditures for the periods indicated:

	<b>For the six months ended 30 June</b>		<b>For the financial year ended 31 December</b>	
	<b>2018</b>	<b>2017</b>	<b>2017</b>	<b>2016</b>
	<i>(in EUR thousands)</i>		<i>(in EUR thousands)</i>	
	<i>(unaudited)</i>		<i>(audited, unless otherwise indicated)</i>	
Purchase of plant and equipment and intangible assets .....	189	5	16	44
<b>Capital expenditures (unaudited) .....</b>	<b>189</b>	<b>5</b>	<b>16</b>	<b>44</b>

Themis' capital expenditures are relatively insignificant as it outsources the majority of its manufacturing process and research and development activities to CROs and CMOs and does not capitalize these costs. Correspondingly, Themis' expenses reflect the costs associated with such outsourcing activities.

### **8.7.4 Commitments and Contingencies**

As of 30 June 2018, Themis Bioscience GmbH does not have any commitments and contingencies other than operating leases which are summarized in the table of contractual obligations and commercial commitments below:

	<b>Total</b>	<b>&lt;1 year</b>	<b>1 to 3 years</b>	<b>3 to 5 years</b>	<b>&gt;5 years</b>
			<i>(in EUR thousands)</i>		
			<i>(unaudited)</i>		
Operating lease agreements .....	240	111	122	6	0
License agreements.....	-	-	-	-	-
<b>Total contractual obligations .....</b>	<b>240</b>	<b>111</b>	<b>122</b>	<b>6</b>	<b>0</b>

#### *Operating lease agreements*

Themis leases laboratory and office space and company cars under various cancellable operating leases with third parties. The lease agreements expire in June 2020. Lease payments recognized as expense under these operating leases totalled EUR 101 thousand and EUR 123 thousand for the financial years 31 December 2016 and 2017, respectively.

#### *License agreements*

Under the terms of the license agreements to which Themis is party, there are no remaining material milestone payments, though Themis is obligated to pay on-going maintenance costs. See Section 10.11 (Business Description—Material Contracts) for a more detailed description of Themis' license agreements.

Themis has patents and has filed for various patent applications which also result from inventions made by its employees. No royalties needs to be paid to employees.

#### *Contingencies*

There are no current claims or litigation against Themis, which may have a material effect on the financial position of Themis. However, due to the inherent nature of intellectual property rights, there remains the possibility of unasserted claims related to intellectual property of which Themis is not yet aware.

### **8.8 Qualitative and Qualitative Disclosure About Market Risk**

As a result of its operating and financing activities, Themis is exposed to market risks that may affect its financial position and results of operations. Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices will potentially cause economic losses to Themis.

Senior management is responsible for implementing and evaluating policies which govern Themis' funding, investments and any use of derivative financial instruments. Management monitors risk exposure on an ongoing basis.

#### **8.8.1 Credit Risk**

Financial instruments that potentially expose Themis to credit risk consist primarily of cash and cash equivalents as Themis has not yet generated any revenues and so has no trade receivables. Following the Offering, Themis expects to have significant liquid funds in excess of immediate working capital requirements. Themis will seek to manage credit risk to reduce this risk through diversification. The maximum exposure to credit risk is equal to the carrying amount of these instruments.

#### **8.8.2 Foreign Currency Risk**

Themis conducts business in countries outside the Eurozone and is therefore subjected to foreign exchange risks. Future business may be conducted to a higher extent in other currencies, namely the dollar and pound sterling. Themis is aware of the foreign exchange risks and investigates with every foreign exchange related transaction whether a corresponding hedge is favourable and necessary.

As a result of purchases denominated in dollars and pound sterling, Themis' statement of financial position can be affected by movements in the dollar/euro and pound sterling/euro exchange rates. These transactions are generally short term in nature, thus Themis' exposure to currency risk was immaterial in the past. In the future, Themis may enter into currency hedging arrangements, if the management believes it to be appropriate.

Themis Bioscience GmbH is exposed to foreign exchange risk primarily with respect to the British pound (GBP). The following provides an overview of Themis' assets and liabilities that are denominated in a currency that is not Themis' functional currency as of the dates indicated:

	<b>GBP translated in EUR</b>	
	<b>As of 31 December 2017</b>	<b>As of 31 December 2016</b>
	<i>(in EUR thousands)</i>	
	<i>(audited)</i>	
Other receivables .....	638	169
Cash and cash equivalents .....	260	0
Trade payables .....	(31)	0
<b>Total .....</b>	<b>867</b>	<b>169</b>

### 8.8.3 *Liquidity Risk*

Themis monitors its risk exposure to a shortage of funds using a cash forecast. This tool considers the maturity of both Themis' financial investments, i.e. financial assets (e.g. accounts receivable, other financial assets) and financial liabilities (e.g. loans, accounts payable as well as other payables) and projected cash flows from operations. Due to the inherent nature of Themis being a biopharmaceutical company, the operations of the business are cash intensive. Themis maintains detailed budgets to predict as accurately as possible the timing of cash flows, to ensure that sufficient funding can be made available or appropriate measures to minimize expenditures are implemented to avoid any anticipated cash shortfalls. To achieve this objective, Themis pursues various alternatives, including entering into collaboration or licensing agreements, seeking additional investors, obtaining further funding from existing investors through an additional funding round and/or delaying, reducing the scope of, eliminating or divesting clinical programs and considering other cost reduction initiatives, such as reducing the amount of space being rented by Themis, postponing hiring new personnel and/or reducing the size of the current workforce.

The following table shows the residual maturities of non-derivative financial liabilities and receivables as of 31 December 2017. The amounts disclosed are the contractual undiscounted cash flows.

	<b>Maturity</b>		
	<b>Less than 1 year</b>	<b>Between 1 and 5 years</b>	<b>Over 5 years</b>
	<i>(in EUR thousands)</i>		
	<i>(audited)</i>		
Borrowings .....	344	1,723	0
Trade payables .....	2,291	0	0
Other receivables .....	(30)	0	0
<b>Total .....</b>	<b>2,605</b>	<b>1,723</b>	<b>0</b>

## 8.9 **Critical Accounting Policies**

Themis Bioscience GmbH prepared its financial statements in accordance with IFRS. The preparation of its financial statements requires management to make judgments, estimates, and assumptions that affect the application of the accounting policies and the reported amounts of income, expenses, assets and liabilities, and the disclosure of contingent liabilities at the respective reporting date. Themis bases these estimates and associated assumptions on historical experience and various other factors that the management believes to be reasonable under the circumstances, the results of which form the basis of making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. The estimates and underlying assumptions are reviewed on an on-going basis. Actual results may differ from these estimates.

Themis has identified the following critical accounting policies that require management to make significant estimates and judgments in the preparation of Themis' financial statements. Themis considers an accounting policy to be critical if it requires management to make an accounting estimate based on assumptions about matters that are highly uncertain at the time the estimate is made and/or if the reasonable use of different estimates in the current period, or changes in the accounting estimate that are reasonably likely to occur from period to period, would have a material impact on the financial presentation. When reviewing Themis' financial statements, prospective investors should consider the effect of estimates on its critical accounting policies, the judgments and other uncertainties affecting application of these policies and the sensitivity of Themis' reported financial results to changes in conditions and assumptions. Themis' actual results may differ materially from these estimates.

### 8.9.1 *Intangible Assets*

Acquired computer software licenses are capitalized on the basis of the costs incurred to acquire the software and bring it into use. These costs are amortized on a straight-line basis over their estimated useful lives (2.5-4 years).

### 8.9.2 *Property, Plant and Equipment*

Property, plant and equipment are stated at historical cost less accumulated depreciation and amortization. Historical costs include the acquisition price, ancillary costs and subsequent acquisition costs less any discounts received on the acquisition price.

Subsequent costs are included in the asset's carrying amount or recognized as a separate asset where appropriate, but only when it is probable that future economic benefits associated with the item will accrue to Themis and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. All other repair and maintenance costs are charged to the statement of profit and loss and other comprehensive income (loss) during the financial period in which they are incurred.

Depreciation on assets is calculated using the straight-line method over the estimated useful lives of the assets. In calculating the estimated useful life, the economic and technical life expectancy has been taken into consideration. The estimated useful lives of property, plant and equipment range between 3-15 years. The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each reporting date. When assets are sold, closed down or scrapped, the difference between the net proceeds and the net carrying amount of the asset is recognized as a gain or a loss in other operating income or expenses.

### 8.9.3 *Cash and Cash Equivalents*

Cash and cash equivalents are classified as cash on hand and deposits held with banks and may include other short-term highly liquid investments with original maturities of less than three months and bank overdrafts. They are recorded at their principal amount.

### 8.9.4 *Equity Instrument*

An equity instrument is any contract that evidences a residual interest in the assets of Themis after deducting all of its liabilities. Equity instruments issued by Themis are recorded at the proceeds received, net of direct issue costs (transaction costs).

### 8.9.5 *Financial Instruments*

Financial assets and financial liabilities are recognized when Themis becomes a party to the contractual provisions of the instrument.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in profit or loss.

Themis classifies its financial assets into the following categories: (a) Loans and receivables, (b) Held-to-maturity financial assets and (c) Available-for-sale financial assets. The classification of the financial instruments depends on the purpose for which the financial instruments were acquired. Management determines the classification of its financial instruments at the time of initial recognition, and reviews the classification at each reporting date.

Loans and receivables are non-derivative financial instruments with fixed or determinable payments that are not quoted in an active market. They are included in current assets, except for items with maturities greater than 12 months after the end of the reporting period, which are classified as non-current assets. Loans and receivables are classified as long-term or current receivables in the statement of financial position. Loans and receivables are carried at amortized cost.

Themis currently does not have any held-to-maturity financial assets and/or available-for-sale financial assets.

Financial liabilities are classified as either liabilities “at fair value through profit or loss”, FVTPL, or “other financial liabilities” and include the convertible bonds, borrowings, trade payables and other financial liabilities as described in more detail below.

#### **8.9.6 Convertible Bond (FVTPL)**

In 2017 Themis Bioscience GmbH entered into a convertible bond agreement with some of its shareholders. Depending on the occurrence of specified future events the lenders have the right or obligation to convert their claim for repayment of the bond into shares in Themis Bioscience GmbH. The conversion price, both in the case of a conversion right and a conversion obligation, is derived from a future share price, which can be assumed to correspond to the market value at the respective time.

The convertible bond represents a compound financial instrument containing an interest bearing loan and embedded derivative instruments (e.g. in form of an equity conversion right/obligation for the holders of the instrument). Due to the fact that the conversion price is not yet fixed but is dependent on future developments, the whole instrument is considered a financial liability in accordance with IAS 32.

The convertible bond has been designated as “at fair value through profit or loss” (FVTPL); thus embedded derivatives have not been separated from the host contract, but the whole instrument has been accounted for as compound financial instrument measured at fair value at inception and in subsequent periods, with any gains or losses arising on remeasurement recognized in profit or loss under financial income/expense.

Fair value has been determined by discounting expected future cash flows using an interest rate of 32%, which was considered to be the best estimate for a market interest rate of a comparable instrument for Themis Bioscience GmbH. At the time of conversion, the fair value has been determined based on the fair value of the share price agreed in the 2017 capital increase.

Upon conversion of the convertible bond in December 2017, the fair value of the liability has been reclassified into equity. The respective amount is stated under line item “Contributions made for a resolved capital increase” as the capital increase was entered into the commercial register on 16 January 2018.

#### **8.9.7 Other Financial Liabilities**

Other financial liabilities (including borrowings and trade and other payables) are subsequently measured at amortized cost using the effective interest rate method. The effective interest method is a method of calculating the amortized cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash flows through the expected life of the financial instrument, or, where appropriate, to the net carrying amount on initial recognition.

Themis has obtained loans from various governmental agencies for certain research and development projects. These loans bear an interest rate below the market interest rate. According to IAS 20.10A the benefit of a government loan at a below-market rate of interest is treated as a government grant. The benefit due to the difference between the market rate of interest and the rate of interest charged by the governmental organization is measured as the difference between the initial carrying value of the loan determined in accordance with IAS 39 and the proceeds received. This benefit is deferred (recorded in the line item other non-current/current liabilities), and recognized through profit and loss over the term of the corresponding financial liabilities in accordance with IAS 20.10A. The loan is recognized and measured in accordance with IAS 39 Financial Instruments: Recognition and Measurement.

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Trade payables are classified as current liabilities if payment is due within one year or less. If not, they are presented as non-current liabilities. Trade payables are recognized initially at fair value and subsequently measured at amortized cost.

#### **8.9.8 Grant Income**

Grant income comprises (a) grants received from the European Commission (Horizon 2020) and SBRI and (b) the research premium from the Austrian government.

The grants from the Austrian Research Promotion Agency (Österreichische Forschungsförderungsgesellschaft, or FFG) were provided to support specific research projects and are recognized according to the progress of the respective project. The research premium is calculated as 12% of a specified research and development cost base. It is recognized to the extent the research and development expenses have been incurred. All grants are non-refundable as

long as the conditions of the grant are met. Themis is and has been in full compliance with the conditions of the grants and all related regulations. If, in the future, compliance with all obligations cannot be fully assured, any related contingent liability will be treated in accordance with IAS 37.

#### **8.9.9 Research and Development Expenses (IAS 38)**

Research expenses are defined as costs incurred for current or planned activities undertaken with the prospect of gaining new scientific or technical knowledge and understanding. Development expenses are defined as costs incurred for the application of research findings or specialist knowledge to production, production methods, services or goods prior to the commencement of commercial production or use.

All research costs are expensed as incurred. Development expenditures on an individual project are recognized as an intangible asset when Themis can demonstrate the following:

- It is technically feasible to complete the intangible asset so that it will be available for use or sale;
- Management intends to complete the intangible asset and to utilize or sell it;
- There is an ability to utilize or sell the intangible asset;
- It can be demonstrated how the intangible asset will generate probable future economic benefits;
- Adequate technical, financial and/or other resources to complete the development and to utilize or sell the intangible asset are available; and
- The expenditure attributable to the intangible asset during its development can be reliably measured.

Themis' projects are currently in the research and development phase and marketing approval by European and foreign regulatory authorities is not, nor will be, available for any product in the near future. Therefore, expenditure on research and development is not capitalized as an intangible asset, but is recognized as an expense in the period in which it is incurred.

#### **8.9.10 Employee Benefits**

Themis is legally required to make monthly contributions to a state plan classified as a defined contribution plan. These contributions are recognized under personnel expense in the statement of comprehensive income in the year or period to which they relate.

Themis makes further payments to defined contribution personal pension schemes. The assets of the schemes are held separately from Themis in independently administered funds. Contributions made Themis are charged to the statement of comprehensive income in the year or period to which they relate.

#### **8.9.1 Share-based Payments**

Themis Bioscience GmbH operates a share-based compensation plan in form of the EBPP entitling the beneficiaries to a bonus payment in the event of specific exit events. Depending on the exit event and further conditions, the exit bonus may be settled in cash or shares (equity instruments) of Themis.

The fair value of such share-based compensation is recognized as an expense for the employee services received in exchange for the grant of the bonus. Share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date (if equity-settled) or at the balance sheet date (if cash-settled) and recognized as an expense over the respective vesting period.

#### **8.9.2 Current and Deferred Income Tax**

Income tax on the result for the year or period comprises current and deferred tax. Income tax is recognized in the statement of comprehensive income except to the extent that it relates to items recognized directly in equity, in which case it is recognized in equity.

Current tax is the expected tax payable or receivable on the taxable income for the year or period, using tax rates enacted or substantively enacted at the balance sheet date, and any adjustment to tax payable in respect of previous years.

Deferred tax is provided using the balance sheet liability method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The amount of deferred tax provided is based on the expected manner of realization or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the balance sheet date. The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and Themis intends to settle its current tax assets and liabilities on a net basis. Deferred tax assets have not been recognized up to the end of the reporting period, as it is not foreseeable, when future taxable profits will be available against which the temporary differences can be utilized.

#### 8.9.3 *Operating Leases*

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to the statement of comprehensive income on a straight-line basis over the period of the lease. Benefits received and receivable as an incentive to sign an operating lease are recognized on a straight-line basis over the period of the lease.

## 9. Industry Overview

### 9.1 The Biotech Industry

#### 9.1.1 *Innovation in the biotech industry*

Historically many drugs have been successfully developed that are so-called small molecules. A small molecule is an organic compound that may regulate a biological compound, with a low molecular weight and a size of the order of one nanometer. Small molecule drugs are chemically synthesized and designed to exert a therapeutic effect in the human body. Famous small molecule-based drug classes include, for example, anti-depressants to fight depression, antibiotics to combat bacteria, and statins to lower cholesterol. Over the last decades, novel drug design technologies emerged, including the use of living cells and organisms in order to produce larger and more complex molecules and biologics that mimic or specifically target physiological functions. This trend towards more complex drugs was driven by rapidly advancing technologies including microscopy, genetic profiling and many more that enabled scientists to zoom in further in the human body. A new generation of drugs was developed that delivered solutions for previously untreatable diseases and hence contributed to an increased average life expectancy. The most famous example may be insulin, which is a protein provided to diabetic patients to regulate sugar levels. Unravelling biological pathways in the human body and disease causalities followed by rational-based drug design has become the new standard and is inherent to the biotech industry. A biotech company is characterized by its focus on new therapeutic strategies based on innovative drug development technologies. Themis is a biotech company with an innovative therapeutic strategy based on the existing measles vaccine. Themis exploited the established measles vaccine towards a plug and play platform, where recombinant technologies allow disease specific vaccine or therapy development.

#### 9.1.2 *Introducing immunomodulation*

The immune system represents an academic study in itself, the science of immunology. Two centuries ago, the discovery of vaccination by Edward Jenner fueled immunology research and development. The human body protects itself against diseases through innate and adaptive immunity. These two main defense mechanisms use different molecular pathways to prevent and destroy pathogens, or “foreign bodies”, such as tumor cells. Over the last two decades pharma and biotech companies have proven to be successful in supporting the human immune system in pathogen or tumour destruction by the development of therapeutic antibodies. Recently, even more advanced approaches have been approved that trigger the existing human immune system and therewith achieve a sustained therapeutic effect. Themis focuses on the current shift towards active immunomodulation approaches and aims to develop therapeutics that have a prolonged therapeutic effect, leading to improved patient benefit.

#### 9.1.3 *Infectious diseases*

Infectious diseases are diseases caused or transmitted by external living organisms including animals, viruses, bacteria and other pathogens. HIV, malaria and flu are three commonly known examples. The relative risk on particular infectious diseases can vary across different areas in the world, as species that transmit infectious diseases can have naturally restricted living areas. Endemic infectious diseases are infectious diseases regularly found in a certain area. Chikungunya, Dengue, Zika, Lassa and MERS are all examples of infectious diseases that mostly occur in tropical areas (i.e. endemic areas). However climate change and increased travelling are contributing to an enhanced global spread of these tropical diseases, as a result the last decade has seen outbreaks reported in both the US and Europe. Vaccination against infectious disease pathogens may prevent the impact of a potential novel outbreak. Examples of biotech companies focusing on infectious disease indications include Valneva (formerly Intercell) and Emergent Biosolutions.

#### 9.1.4 *Vaccines*

Vaccines have been used over many years for a wide range of mostly infectious disease indications. Traditionally a vaccine consists of a, or part of a weakened pathogen that is injected into healthy subjects in order to create an immune response and prevent them from the disease at the moment they are exposed to it later in life. Significant progress has been made in the development of innovative vaccine design technologies aimed to improve the protective effect both in strength and dynamic range across different pathogen variants. Also, the risk on severe side effects including strong fever has become much less over the years. The recently introduced HPV vaccine to prevent cervical cancer, Gardasil, is produced with recombinant gene technology that protects against the most prevalent cancerous HPV strains.

#### 9.1.5 *Cancer*

Cancer is a class of diseases characterised by abnormal growth of cells in the body. Cancer cells have the ability to replicate and grow rapidly, despite restrictions of space or nutrients. A tumour is a collection of cells that services no



purpose, but is not necessarily cancerous, for example, benign tumours are non-cancerous and don't have the ability to invade other tissues and therefore often don't need treatment. Malignant tumours, however, are cancerous and can grow rapidly, invading and destroying nearby normal tissue and spreading throughout the body systemically. Surgical removal is often required but unfortunately not always a complete cure as cancer cells have already left the tumour and distributed themselves across the body.

#### 9.1.6 *Immuno-oncology*

Themis has developed an immunomodulation platform technology that can also be applied to a variety of oncology indications. Immuno-oncology has become an important focus area and is a rapidly evolving field in anti-cancer treatment (Source: e.g. Merck & Co., <https://www.merck.com/about/featured-stories/leader-in-immuno-oncology.html>; Novartis, <https://www.novartis.com/our-science/research-disease-areas/immuno-oncology>).

Immuno-oncology therapy aims to trigger the patient's immune system to kill the tumour cells. Conventional chemotherapy is not cancer cell specific and therefore can cause debilitating side effects for patients. Immuno-oncology therapy has proven to be a more targeted approach. There have been many successes over the last years, including significant gain in progression free and overall survival of cancer patients, making it a more so-called "chronic disease". Currently many different immuno-oncology approaches are being developed by a wide range of biotech companies and the first virotherapy product IMLYGIC (oncolytic virus) from Amgen received FDA regulatory approval in 2018.

## 9.2 **Drug Development**

The development of a new biologic (i.e. a biologic medical product, which is a medicinal preparation created by a biological process) is often a cost consuming process which can typically take from eight to 17 years (Source: Niranjana Kanasa-athan et al. Pediatrics 2011;127:S16-S22), or, in case of Malaria or HIV vaccines even longer. The costs for the whole process from discovery and early research to market authorization by regulatory authorities have risen over the last decades, due to increased regulatory requirements resulting in more costly clinical trials. The development process for biologics consists of the following phases: (i) research phase, (ii) early development phase, (iii) late development phase and (iv) registration phase. For further information on the regulatory approval process, please also see Section 11 (Regulation).

#### 9.2.1 *Research Phase*

The typical research phase, when the new biologic is discovered and developed in the laboratory, takes between two and five years and can cost up to USD 20 million (Source: Niranjana Kanasa-athan et al. Pediatrics 2011;127:S16-S22). After successful laboratory experiments and results, often animal testing is performed, which is called pre-clinical development. It should be noted that these animal experiments are subject to strict regulatory requirement and may only be committed after approval by the authorities.

#### 9.2.2 *Early Development Phase*

The early clinical development phase, which includes the completion of a first-in-human proof-of-concept (PoC), the phase 1 safety PoC, to investigate the safety of the new biologic, usually adds another two to three years to the development timeline and increases the associated costs up to USD 50 - USD 100 million (Source: Niranjana Kanasa-athan et al. Pediatrics 2011;127:S16-S22). During this phase the manufacturing process for the new biologic is developed at lab scale (i.e. to supply tests in animals) and up to pilot scale (i.e. to supply phase 1 clinical trials with cGMP material).

#### 9.2.3 *Late Development Phase*

Following the human PoC, the late stage development phase can add up to seven years to the development cycle and may increase the development costs up to over USD 500 million (Source: Niranjana Kanasa-athan et al. Pediatrics 2011;127:S16-S22). The late stage development comprises phase 2 clinical trials and phase 3 clinical trials: phase 2 clinical trials include dose selection, safety and immunogenicity or preliminary efficacy read-outs. The final stage of the late development phase comprises large scale phase 3 efficacy trials to further evaluate safety and the efficacy of the biologic in a large, heterogeneous population.

During the late development phase, the manufacturing process is usually scaled up to first supply phase 2 clinical trials with cGMP material and later further scaled up to commercial scale for supply of phase 3 clinical trials, process validation at commercial scale and pre-approval stockpiling. Process validation is a requirement by the regulatory authorities, such as FDA and EMA, to verify that the new biologic can be manufactured repeatedly at commercial scale

in the required quality. Manufacturing at this stage usually requires a dedicated manufacturing facility, which adds significantly to the costs.

### 9.2.4 *Registration Phase*

After successful completion of the phase 3 clinical trials the registration phase can again add up to two years to the overall timeline before the new biologic is finally approved by the authorities. During the development phase additional clinical trials can be required by the authorities increasing the total development costs.

Themis' MV Platform is designed to reduce this lengthy and costly development process down to the minimal required timeline to conduct the clinical trials for each candidate, as all data, knowledge and processes developed with one candidate can directly be transferred to other platform products. Themis believes that this advantage also applies to the development costs, since the costly manufacturing processes do not have to be re-developed and with its single-use high-yield manufacturing process a dedicated facility is not required.

### 9.2.5 *Likelihood of Regulatory Approval*

The likelihood of ultimate regulatory approval (**LOA**) of a clinical trial is critical for clinical researchers and biopharma investors to evaluate when making scientific and economic decisions. Based on historical statistics, the LOA from one phase to the next and ultimately through to regulatory approval has varied by therapeutic group. Vaccines for infectious diseases have the highest overall LOA percentage of any therapeutic area and the highest LOA from phase 3 through to approval, of 85.4 per cent. (*Source: Hay et al. 2014; Clinical development success rates for investigational drugs, Nature Biotechnology 32 (1)*).

The following figure provides a breakdown of LOA by phase and overall across all therapeutic areas:

All Indications (Industry)								
Therapeutic group	Phase 1 to Phase 2		Phase 2 to Phase 3			Phase 3 to Approval		Overall
	Total paths	POS <sub>1,2</sub> , % (SE, %)	Total paths	POS <sub>2,3</sub> , % (SE, %)	POS <sub>2,APP</sub> , % (SE, %)	Total paths	POS <sub>3,APP</sub> , % (SE, %)	POS, % (SE, %)
Oncology	17 368	57.6 (0.4)	6533	32.7 (0.6)	6.7 (0.3)	1236	35.5 (1.4)	3.4 (0.2)
Metabolic/ Endocrinology	3589	76.2 (0.7)	2357	59.7 (1.0)	24.1 (0.9)	1101	51.6 (1.5)	19.6 (0.7)
Cardiovascular	2810	73.3 (0.8)	1858	65.7 (1.1)	32.3 (1.1)	964	62.2 (1.6)	25.5 (0.9)
CNS	4924	73.2 (0.6)	3037	51.9 (0.9)	19.5 (0.7)	1156	51.1 (1.5)	15.0 (0.6)
Autoimmune/ Inflammation	5086	69.8 (0.6)	2910	45.7 (0.9)	21.2 (0.8)	969	63.7 (1.5)	15.1 (0.6)
Genitourinary	757	68.7 (1.7)	475	57.1 (2.3)	29.7 (2.1)	212	66.5 (3.2)	21.6 (1.6)
Infectious disease	3963	70.1 (0.7)	2314	58.3 (1.0)	35.1 (1.0)	1078	75.3 (1.3)	25.2 (0.8)
Ophthalmology	674	87.1 (1.3)	461	60.7 (2.3)	33.6 (2.2)	207	74.9 (3.0)	32.6 (2.2)
Vaccines (Infectious Disease)	1869	76.8 (1.0)	1235	58.2 (1.4)	42.1 (1.4)	609	85.4 (1.4)	33.4 (1.2)
Overall	41 040	66.4 (0.2)	21 180	58.3 (2.3)	35.1 (2.2)	7532	59.0 (0.6)	13.8 (0.2)
All without oncology	23 672	73.0 (0.3)	14 647	27.3 (0.4)	27.3 (0.4)	6296	63.6 (0.6)	20.9 (0.3)

Source: Hay et al. 2014; Clinical development success rates for investigational drugs, Nature Biotechnology 32 (1). Data shown by therapeutic group, using data from 1 January 2000, to 31 October 2015. SE denotes the standard error.

## 10. Business Description

### 10.1 Overview

Themis is a clinical-stage immunomodulation biopharmaceutical group that focuses on the development of products to protect against infectious diseases and for the treatment of cancer. Through modulating an effective immune response, Themis aims to develop vaccines for use against infectious diseases and virotherapy based treatments for cancer. In developing its vaccines, Themis uses a measles vaccine-based platform technology (*MV Platform*) which is built upon one of the safest and most efficacious vaccines available, the measles vaccine. This measles vaccination has been used for more than 50 years in over one billion children and consists of the live attenuated measles virus. Themis has further developed the measles vaccine into an active delivery vehicle enabling the addition of antigens that are designed to protect against or treat other diseases. This uniquely integrated immunomodulation technology provides Themis with the ability to target specific diseases and allows for platform versatility and the ability to address a wide range of indications. Themis' technology platform is supported by a fully aseptic, commercial manufacturing infrastructure to enable plug-and-play vaccine development and cost-efficient production.

Themis selected an infectious disease with high unmet medical need, namely Chikungunya fever, as a primary indication to optimize and validate its technology platform. Chikungunya is a mosquito-borne viral disease with transmission and outbreaks in over 100 countries including in the Caribbean, South America, India, Southeast Asia and Africa. Recently, in 2017, Chikungunya outbreaks were recorded in France and Italy. The virus can be imported to new countries by infected travellers. In addition, the mosquitos able to transmit the disease are expanding their footprint. Clinical symptoms of the disease are fever, joint and muscle pain, headache, nausea and rash. The infection rate during an outbreak can reach up to 90% (*Source: WHO, PD-VAC; 2015*), with a recent outbreak in 2006 in French overseas territory La Réunion infecting over 30% of its total population. In addition, long-term effects or life-long serious health impairment have more broadly been observed in up to 60% of patients (*Source: Smalley et al., Vaccine 2016; 2976-2981*) and fatal cases have also been recorded, especially recently in Brazil (*Source: Brazil Ministry of Health*). Additionally, recent publications show a correlation of birth defects in infants with Chikungunya infections (*Source: Mehta et al, PLoS Negl Trop Dis 2018 12(2)*). Currently, there is no vaccine for prevention or medicine for treatment of the disease. People can protect themselves only by preventing mosquito bites. Chikungunya has a defined immunogenicity profile (i.e. the biological entities responsible for immunity are known) and represents a significant unmet need with an estimated market opportunity of approximately USD 500,000 thousand annually by 2035 (*Source: VacZine Analytics*).

Themis' lead product candidate, MV-CHIK, has already completed its primary European phase 2 clinical trial (*EU CHIK Phase 2 Trial*), reporting positive immunogenicity data and a strong safety profile that is similar to the commonly used measles vaccine. In totality to date, MV-CHIK has reported excellent immunogenicity in over 500 subjects around the globe. MV-CHIK is currently in preparation for its pivotal phase 3 clinical trials, which is expected to be a double blinded, placebo controlled multi-centre study in 2,500 healthy adults. The clinical batch-to-batch consistency will be demonstrated in an additional 500 subjects in a parallel study. The trial is expected to recruit its first patient in the first half of 2020, subject to approval by the EMA and the FDA. Currently, Themis is in communication with EMA and FDA through formal scientific advice meetings (namely the EMA PRIME kick off and the, FDA end-of-phase 2 meeting) to align the phase 3 strategy to the respective regulatory requirements. Themis has received the "PRIME" designation for MV-CHIK from the EMA and intends to apply for the corresponding "Breakthrough" designation from the FDA (*Source: EMA publication 20180606*). This would allow for an expedited approval process and greater efficiency through conducting a parallel approach, including joint meetings with both the EMA and the FDA. To obtain EMA and FDA approval of the phase 3 clinical trials of MV-CHIK, Themis must first align with both the EMA and the FDA on the open points: phase 3 clinical trial design, manufacturing strategy, efficacy study in animal model as well as the toxicology program. Meetings with the regulatory authorities are currently planned for early 2019 and answers from both regulators would then be expected in the first quarter of 2019. Based on such answers, Themis will then write a final study protocol, align all manufacturing activities with any additional requirements, engage in site selection and perform all other tasks in preparation of submitting the phase 3 clinical trial application to the regulators, which it currently expects to be able to do in the second half of 2019. Approval of the phase 3 clinical trial application would then be expected in the first quarter of 2020. Final results are targeted for the second half of 2020, BLA submission to the FDA and MMA submission to the EMA are targeted for early 2021 and approval of MV-CHIK is targeted in mid-2021.






There are currently no approved vaccinations for Chikungunya and no other company, to the Management Board's knowledge, currently has an active clinical program that has completed phase 2 trials or advanced into pivotal phase 3 trials in the Chikungunya application.

The strong safety profile and immunogenicity in terms of humoral (antibodies) and cellular (T-cells) responses demonstrated in the clinical trials of MV-CHIK to date, and other pre-clinical trials, provide positive indications for the broad applicability of the MV Platform in immuno-oncology and other infectious diseases. In particular, beyond infectious disease indications, the Management Board believes that its MV Platform is a logical choice in immuno-

oncology as the measles vaccine virus has been shown to possess profound oncolytic capabilities (*Source*: Noll et al., Int. J. Oncol 2013;43:103-112). Preliminary in-vitro data from pre-clinical trials demonstrated the ability to reduce cancer cells. The intrinsic anti-tumour effect of the MV Platform was further enhanced by arming the vector with specific tumour killing payload.

Themis has also completed pre-clinical trials in a number of additional infectious disease indications and is currently preparing for phase 1 clinical trials across specific indications. In relation to the development of vaccines against the Zika virus, Lassa fever and MERS, Themis has entered into partnered programs. The development of these products is sponsored by the European Commission (Horizon 2020), the UK Government (Innovate UK) and the Coalition of Emergency Preparedness Innovation (**CEPI**), as described in more detail below. The measles-based Lassa vaccine is expected to enter into a phase 1 clinical trial in Belgium in early 2019. Confirmation from the local regulatory authority to prepare the trial with the planned protocol was obtained after a scientific advice meeting was held with positive and supportive feedback.

The following provides an overview of Themis' current product pipeline:

		Pre-clinical	Phase 1	Phase 2	Phase 3	Status/Next Steps
Infectious Diseases	Unencumbered	  	Chikungunya			Phase 3 submission target H2 '19 (Eligible for FDA PRV)
		 	ZIKA			Fully funded Phase 1, two independent candidates
		RSV / Noro / CMV				Proof of Concept completed
	Partnered	CEPI	Lassa			Fully funded, Phase 1 submission ready (Eligible for FDA PRV)
		CEPI	MERS			Fully funded, pre-clinical Proof of Concept
Immu-Oncology		Activator Enzyme <sup>(1)</sup>				Various tumor killing antigens under development, Proof of Concept in mice Planned first clinical trial: intra-tumoral application in GI tumors <sup>(3)</sup>
		ICI <sup>(2)</sup>				
		Cytokine				

Source: Internal information provided by Themis

(1) ICI – Immune Checkpoint Inhibitors

(2) Activator gene to convert inactive prodrug into active chemotherapy

(3) GI – Gastro Intestinal

Themis has been able to raise funding in an aggregate amount of EUR 25,400 thousand by experienced venture capital providers and over EUR 45,000 thousand by prestigious grant providers. In relation to its partnered programs, Themis has agreed to receive funding from CEPI in an aggregate amount of up to USD 37,500 thousand, to develop vaccine candidates for Lassa fever and MERS. The contract includes the potential extension of funding for potential phase 3 trials and stockpiling. Furthermore, Themis has been successful in obtaining several non-dilutive grants from various grant providers including Horizon 2020 and is planning to apply for further grants in the near-future, which if received could help further accelerate its various pipeline programs.

## 10.2 Themis' Competitive Strengths

Themis believes the following are its main competitive strengths:

### **10.2.1 *Addressing significant unmet medical need with a phase 2b completed vaccine candidate***

Chikungunya fever is a viral outbreak disease and represents a significant unmet medical need around the world. The disease is endemic predominantly in tropical regions of the world and has caused numerous unpredictable outbreaks in recent years. The clinical symptoms include fever, muscle pain, joint pain, arthralgia, nausea and rash. Importantly, infection rates during an outbreak can reach up to 90% of the affected populations (*Source: WHO, PD-VAC; 2015*) and lead to long-term health impairment (*Source: Smalley et al., Vaccine 2016; 2976-2981*). Notably, in 2017, there were 165 confirmed deaths associated with Chikungunya in Brazil (*Source: Brazil Ministry of Health*). There is no specific treatment against Chikungunya, and a vaccine is urgently needed.

Themis has developed a vaccine candidate, MV-CHIK, to prevent Chikungunya infection and disease. Product development strategies in biotechnology are complex, and usually combine a number of animal experiments, three phases of clinical development, as well as sophisticated and strongly regulated manufacturing operations. MV-CHIK has already been tested in approximately 500 adult subjects and has also been tested in relevant animal experiments. So far, the vaccine candidate has demonstrated a good safety and immunogenicity profile, which results support moving the product candidate forward to the last clinical stage, the phase 3 clinical trials, successful completion of which would allow Themis to apply for marketing authorization in Europe and the United States.

Themis has received EMA PRIME designation for MV-CHIK, emphasizing the current unmet medical need which should facilitate an accelerated regulatory approval track towards approval with the EMA. In addition, it intends to apply for Breakthrough Designation status from the FDA, which would provide similar regulatory review benefits to the EMA's PRIME status, and in August 2018, the FDA added the Chikungunya indication to its priority review voucher program, for which Themis could be eligible and which has historically been worth USD 100 – 150 million if sold.

### **10.2.2 *Versatile immunomodulation technology platform is underpinned by a safe measles vaccine and “plug-and-play” manufacturing capabilities***

Themis has developed an immunomodulation technology platform that it believes can be used to generate vaccines against a variety of infectious diseases, as well as in the treatment of cancer. The platform is based on the measles virus vaccine, which has been engineered to express certain antigens, allowing the human body to generate protective mechanisms. Those mechanisms include antibodies and T-cells, which enable the human body to fight infection. Additionally, the measles virus vaccine has the natural ability to kill tumour cells through various biological and immunological pathways.

Themis' manufacturing processes have been developed to allow for a “plug-and-play” manufacturing system. This means that, independent of the antigen the viral vector is expressing, the manufacturing system is largely the same. Therefore, the same procedures, materials and equipment can be used for different vaccine product candidates, and development timelines for new product candidates can be significantly shortened.

### **10.2.3 *Immunomodulation technology platform is well positioned in immuno-oncology***

The measles virus vaccine vector has been shown in pre-clinical studies to have intrinsic oncolytic activity. This means that the vector is able to destroy tumour cells. There are various mechanisms involved. Importantly, the entry port into the cell is a specific receptor (CD46) which is overrepresented in tumour cells. Furthermore, compared to normal cells, certain immune defense mechanisms are hampered in tumour cells by the vector. This oncolytic effect is pronounced or increased by adding specific tumour killing properties to the vector. This means that the viral vector allows the human immune system to stimulate or block certain pathways, thereby stimulating the human body's natural defense mechanisms (*Source: Noll et al., Int. J. Oncol 2013;43:103-112*).

Both in vitro and animal experiments have already demonstrated the positive effects of this vector in destroying tumour cells. This demonstrates the extensive possibilities of Themis' immunomodulation technology platform to provide solutions for a variety of medical needs.

### **10.2.4 *Experienced management team and supervisory board with proven track record***

Themis was founded, and has been managed, by dedicated and experienced managers and scientists with expertise in the relevant areas. The CEO, Erich Tauber, has over 15 years of experience in biotech companies and was responsible for the development and commercialization of a vaccine against Japanese encephalitis in a very similar setting. David Maier, the CFO, and Katrin Ramsauer, the CSO, have substantial experience in related sectors and have been critical for Themis' growth so far. The Supervisory Board is comprised of a number of vaccine industry experts, including Gerd Zettlmeissl, who was CEO of Intercell, a vaccine development biotech company. Additional board

members include Jean-Paul Prieels, formerly the head of development at GSK vaccines, and Philippe Dro, a serial entrepreneur who has completed several biotech exits.

#### 10.2.5 *Investment secured from reputable, specialist investors and non-dilutive grant funding*

Themis has, to date, secured investments from reputable specialist investors of EUR 25,400 thousand. These investors are Paris-based Ventech and Omnes Capital, Munich-based Wellington Partners, Vienna-based Gründerfonds, and New York-based GHIF. Those venture capital funds have invested in Themis and have helped strengthen it, not just through financial support, but also through their know-how and access to their networks.

In addition, up to EUR 45,000 thousand have been granted in non-dilutive funds from prestigious institutions, including Horizon 2020 of the European Commission, Innovate UK, Austrian national grantees, as well as from CEPI, a newly-created alliance of reputable organizations, such as the Bill and Melinda Gates Foundation, Wellcome Trust and the World Economic Forum (**Research Grants**). Themis was the first company to be awarded a development contract for important outbreak diseases, namely MERS and Lassa fever.

### 10.3 Strategy

Themis aims to develop vaccines for use against infectious diseases and biotherapy-based cancer treatment using its MV Platform.

Themis' primary focus is the continued development of its MV-CHIK programme, whilst also focusing on the development of its earlier-stage pipeline in both infectious diseases and immuno-oncology. In order to best access the Chikungunya market opportunity estimated at approximately USD 500 million annually by 2035 (*Source: VacZine Analytics*), Themis continues to consider all options, including full commercialization through an internal sales force or licensing of the product to a third party. Currently, it expects that its commercialization strategy will form a hybrid model comprising an internal sales force distributing in certain territories with distribution partners in certain other regions.

Themis' development strategy in its earlier-stage pipeline consists of in-house development plans, both pre-clinical and clinical, funded through both internal means and non-dilutive external research grants, including the up to EUR 45,000 thousand secured from the Research Grants and future applications to receive additional grant funding.

To achieve its strategic objectives and successfully pursue its business plan, Themis relies on the following key underlying assumptions:

- it will have the ability to timely commercialize its product candidates through immunomodulation technology;
- the market models, such as from VacZine Analytics, are correct;
- its technology is in fact sufficiently scalable.

As Themis is a clinical-stage biopharmaceutical group focusing on the development of vaccines, its business plan inherently depends on the timely implementation of its strategic objectives. Any deviation from anticipated schedules affects its cost base and, correspondingly, its funding needs. In addition, its ability to successfully commercialize its product candidates depends on the marketability of the relevant product candidate, which in turn depends on the accuracy of the market models.

### 10.4 The Themis Platform

The MV Platform is built upon one of the safest and most efficacious vaccines available, the live attenuated measles vaccine (*Source: Tangy, Frederic & Naim, Hussein (2005), Live Attenuated Measles Vaccine as a Potential Multivalent Pediatric Vaccination Vector. Viral immunology. 18. 317-26. 10.1089/vim.2005.18.317*). It has been demonstrated to be safe (i.e. very few adverse events or side-effects during or after application even in children), with an immunogenicity rate of approximately up to 83% after one administration and up to 100% after two administrations of high dosage MV-CHIK.

The measles vaccine induces a life-long immunity against measles by efficiently stimulating long-lasting B- and T-cells. Specifically, Themis uses the self-adjuvanting Schwarz strain measles virus (**Schwarz Measles Virus**), the prevalent measles vaccine strain, to design vaccines against infectious diseases and cancer targets.

The MV Platform consists of the following three key elements:

- the viral vector technology, which uses the Schwarz Measles Virus as a safe and efficacious delivery vehicle;
- the advanced antigen design capabilities for targeting specific infectious diseases and tumour types (***Vector Technology***); and
- the proprietary, state-of-the-art, plug-and-play, fully aseptic, industrialized manufacturing infrastructure (***Manufacturing Technology***).

#### 10.4.1 ***Vector Technology***

The Vector Technology is based on the modified Schwarz Measles Virus genetic sequence and on the technique of effectively creating the recombinant viruses in cell culture. Such genetic sequence is designed to allow the insertion of foreign genes for the generation of stable recombinant measles viruses. Following the insertion of foreign genes, these specific newly-designed genetic sequences are then delivered into specifically engineered cell lines tailor-made to generate and release recombinant viruses. This approach has, for example, been utilized by Themis, Institut Pasteur and others for the creation of recombinant measles viruses encoding for antigens or structural genes of the Chikungunya virus, the Zika virus, RSV (as defined below), CMV (as defined below), Noro virus, Dengue virus, West Nile virus, HIV, SARS Corona virus, Hepatitis B and C as well as specific genes to target cancer.

Genetic information encoding for proteins that are incorporated into or expressed on the surface of the pathogen or cancer cells are responsible to trigger an immune responses (i.e. the activation of the body's defense mechanisms) against the pathogens or malformed cells. The genes can be inserted into the measles genome. This allows the generation of encoded individual proteins in equal amounts at the same time. In some cases, the proteins can form complex multi-protein structures that can mimic the pathogens pattern and present this to the immune system in the most efficient way. For example, the Chikungunya vaccine encodes for all Chikungunya virus proteins that can form the virus particle, so called virus like particles (***VLPs***).

In general, a VLP is an empty virus shell. It looks like the real virus but cannot replicate in the target cell, since it lacks the gene cargo of the virus. Because the surface of the VLP is the same as of the real virus, the immune-system can respond to the VLP the same way as to the active virus. This mechanism is widely used in the vaccine industry and already licensed with the human papilloma virus vaccine (HPV vaccine, Gardasil® by Merck & Co.). However, to trigger or activate the immune-system to respond to the VLP an adjuvant is usually required. It is therefore an advantage of Themis' Vector Technology that the live measles virus can activate the immune system and trigger an immune response, thus acting as an adjuvant itself. All products based on Themis' Vector Technology are self-adjuvanted products, which means they do not require the use of additional adjuvants.

In particular, the Management Board believes that its MV Platform is a compelling and logical choice for cancer treatment in the field of immuno-oncology as the measles vaccine virus has been shown to possess oncolytic capabilities (*Source: Noll et al., Int. J. Oncol 2013;43:103-112*). The potential of the MV Platform to function as oncolytic virus vaccine has been shown with in vitro data where a significant reduction in cancer cells was observed. The Vector Technology comprises intellectual property exclusively licensed by Themis (i) from the Institut Pasteur for infectious diseases and (ii) from Max-Planck-Innovations for cancer applications (please also see the Section 10.11 (Business Description—Material Contracts)). These licensed technologies are used together to efficiently program the immune system to generate a targeted immune response against diseases.

#### 10.4.2 ***Manufacturing Technology***

Themis has developed its own optimized and standardized Manufacturing Technology that can be used for every potential Themis product based on Themis' Vector Technology. For manufacturing following cGMP, vero cells are cultivated on micro carriers in a single-use stirred-tank bioreactor system for virus replication. The virus is purified using Themis' high-yield purification and concentration process (patent pending) prior to formulation and fill-and-finish. For cost-effective storage of the products Themis is developing a formulation which will be designed to stabilize the products at 2-8°C storage temperature with an expected shelf life of two years, whereas other live viral vectors must be stored below -20°C or even below -60°C. Themis expects that its Manufacturing Technology will shorten the development cycle from discovery through to the clinic through cost-efficient production and the expected ability to up-scale for full commercialization.

#### 10.4.3 ***Multiple uses of the MV Platform***

The safety and immunogenicity of Themis' MV Platform in healthy humans was demonstrated in multiple phase 1 and phase 2 clinical trials using MV-CHIK and confirmed in phase 1 clinical trial using Themis' Zika vaccine. The

safety database showing a high standard safety profile, also compared to licensed vaccines, contains data of more than 500 people. This safety profile confirmation with the Zika vaccine also validates the transferability of safety data between platform candidates. The strong safety profile of Themis' MV Platform is expected to be especially beneficial to cancer patients, considering their often weakened immune system due to chemotherapy cycles and surgery.

The plug-and-play vaccine Manufacturing Technology allows shortened development cycles of three months from design to cGMP manufacturing, which is, in the opinion of the Management Board, uncommon for live viral vectors. In general, when a new biologic is developed, a difficult task is to develop a cGMP ready manufacturing process. This can delay the start of first-in-human trials. Further, when using a platform technology comparable to Themis' Vector Technology, the manufacturing process must usually be re-developed and adapted to every new product. Themis' Manufacturing Technology is designed to be applied without re-development requirements or adaptations, thereby allowing Themis to transfer process knowledge and data from one candidate directly to other platform candidates. These advantages of the Manufacturing Technology enable Themis to work towards platform approval processes, which are to date only applied to influenza vaccines.

## **10.5 Immunomodulation: Chikungunya**

Themis' lead product candidate, MV-CHIK, has already completed its EU CHIK Phase 2 Trial, which resulted in positive immunogenicity data and a strong safety profile that is similar to the commonly used measles vaccine. See also Section 20 (Recent Developments). MV-CHIK is currently in preparation for its pivotal phase 3 clinical trials, which is expected to be a double blinded, placebo controlled multi-center study in 2,500 healthy adults and a immunogenicity, safety and clinical batch-to-batch consistency study with up to 500 subjects. The trials are expected to recruit the first volunteer in the first half of 2020, subject to approval by the EMA and the FDA. Themis has already received the PRIME designation for MV-CHIK from the EMA and is hoping to receive the commensurate Breakthrough Therapy Designation from the FDA. This would allow for an expedited approval process and greater efficiency through conducting a parallel approach, even to the point of holding joint meetings with both the EMA and the FDA.

To obtain EMA and FDA approval of the phase 3 clinical trials of MV-CHIK, Themis must first complete the end-of-phase 2 meetings with both the EMA and the FDA to discuss the open points: phase 3 clinical trial design, manufacturing strategy, efficacy study in animal model as well as the toxicology program. Such meetings are planned for early 2019 and answers from the regulators would then be expected in the first quarter of 2019. Based on such answers, Themis will then write a final study protocol, align all manufacturing activities with any additional requirements, engage in site selection and perform all other tasks in preparation of submitting the phase 3 clinical trial application to the regulators, which it currently expects to be able to do in the early 2020. Approval of the phase 3 clinical trial application would then be expected in the first quarter of 2020. Final results and submission to the FDA and EMA are targeted for early 2021 and approval of MV-CHIK is targeted in mid-2021. There are currently no approved vaccinations for Chikungunya and no other company, to the Management Board's knowledge, currently has an active clinical program that has completed phase 2 trials or advanced into pivotal phase 3 trials in the Chikungunya application.

### **10.5.1 Outbreak and Symptoms**

Chikungunya is a mosquito-borne viral disease with continued transmission and outbreaks in over 100 countries including in the Caribbean, South America, India, Southeast Asia and Africa (see chart below). In 2017, outbreaks were recorded in France and Italy. The virus can be imported to new countries by infected travellers. Clinical symptoms of the disease are fever, joint and muscle pain, headache, nausea and rash. The infection rate during an outbreak can reach or exceed 90%, with a recent outbreak in French overseas territory La Réunion infecting over 30% of its total population during the outbreak. Long-term effects or life-long serious health impairment are observed up to 60% of patients (*Source*: Smalley et al., Vaccine 2016; 2976-2981). Fatal cases have also been recorded, even in developed countries. Recent publications show a potential correlation of birth defects in infants also with Chikungunya virus infections (*Source*: Mehta et al, PLoS Negl Trop Dis 2018 12(2)). Currently, there is no vaccine for prevention or medicine for treatment of the disease. People can protect themselves only by preventing mosquito bites.

Chikungunya outbreaks usually last three to six months and have a significant economic impact. This impact has for example been assessed for the outbreak in Columbia in 2014, which resulted in an estimated economic burden (direct medical burden plus loss of productivity) of at least USD 74,000 thousand from just over 100,000 cases (*Source*: Cardona-Ospina et al. Royal Society of Tropical Medicine. 2015). In 2016 and 2017 Chikungunya several hundred cases were reported in non-endemic areas like the US or Europe (*Source*: ECDC, CDC, WHO). Recent data from Brazil show recurring high numbers of cases from 2016 to 2018 and corresponding high numbers of Chikungunya related deaths. In 2017 alone 165 Chikungunya related deaths were confirmed in approximately 170,000 confirmed cases. This relates to an annual mortality rate of 1 in 1,000 patients. The data further show that Zika and Dengue incidents peaked in 2016 but remained low in 2017 and 2018, whereas Chikungunya incidents show outbreaks in every year (*Source*: Brazilian government, <http://portal.arquivos2.saude.gov.br/images/pdf/2018/agosto/07/2018-040.pdf>).

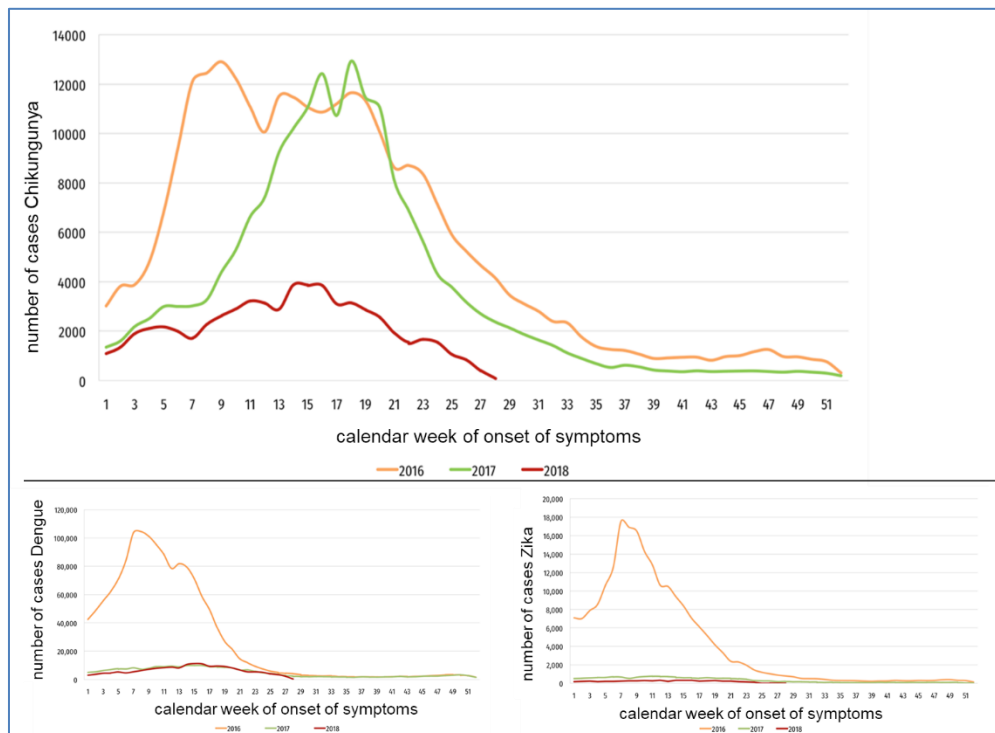


La Réunion Outbreak <sup>(3)</sup>	US & Caribbean Outbreak	Brazil Outbreak	US Outbreak	France and Italy Outbreak
<ul style="list-style-type: none"> <li>• Approx. 255k reported cases</li> <li>• Over 200 deaths related to the outbreak</li> </ul>	<ul style="list-style-type: none"> <li>• Over 5.5k reported cases (US) and over 2m in Caribbean</li> </ul>	<ul style="list-style-type: none"> <li>• Over 440k reported cases<sup>(4)</sup></li> <li>• Caused over 160 fatalities<sup>(5)</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Over 400 reported cases<sup>(2)</sup></li> <li>• Majority travelers returning from affected states<sup>(2)</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Unrelated outbreaks<sup>(2)</sup></li> <li>• Approx. 300 reported cases<sup>(2)</sup></li> </ul>
La Réunion Island 2005-2006	US and Caribbean 2014-2015	Brazil 2016-2017	US 2016	France and Italy 2017

Sources: (2) ECDC, CDC, WHO; (3) Josseran et al. (2006). Chikungunya Disease Outbreak, Reunion Island. Emerging Infectious Diseases, CDC; (4) Dias et al. (2018). Seroprevalence of Chikungunya Virus after Its Emergence in Brazil. Emerging Infectious Diseases, CDC; (5) Brazil Ministry of Health

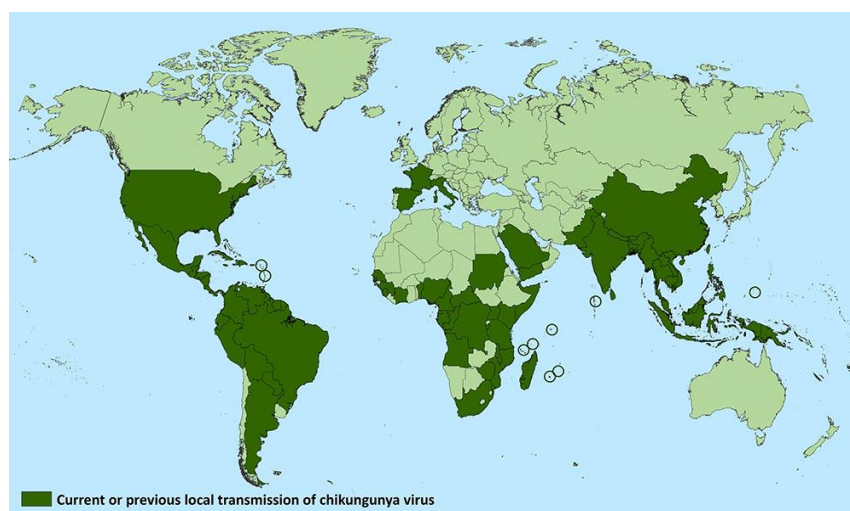
The following provides an overview of the number of Chikungunya cases recorded per week in 2016, 2017 and 2018 versus the equivalent for Dengue and Zika. The data demonstrates a more consistent prevalence of Chikungunya in Brazil versus other infectious diseases:

Reported Chikungunya Cases per Week for Brazil:



Source: Brazilian government, <http://portalarquivos2.saude.gov.br/images/pdf/2018/agosto/07/2018-040.pdf>.

The figure below highlights countries where there has been a previously reported outbreak of Chikungunya:



Source: <https://www.cdc.gov/chikungunya/images/CHIK-World-Map-05-29-2018.jpg>, accessed on 12-Jul-2018.

### 10.5.2 *Market overview*

Themis estimates the global Chikungunya market for a Chikungunya vaccine to be worth approximately USD 500 million annually from traveller and endemic private markets, including government contracts, by 2035. (*Source*: VacZine Analytics). Please also read Section 1.1.5 (Risk Factors—Risks Related to Themis’ Business Activities and Industry – Themis’ business plan is based on market models that may prove to be wrong.).

### 10.5.3 *Application of the MV Platform*

#### *Vector Technology and Mechanism of Action*

For the generation of MV-CHIK, the Chikungunya virus structural gene sequence was inserted in the Schwarz Measles Virus. The original genetic information was obtained from a clinical isolate from a patient during the La Réunion outbreak in 2006.

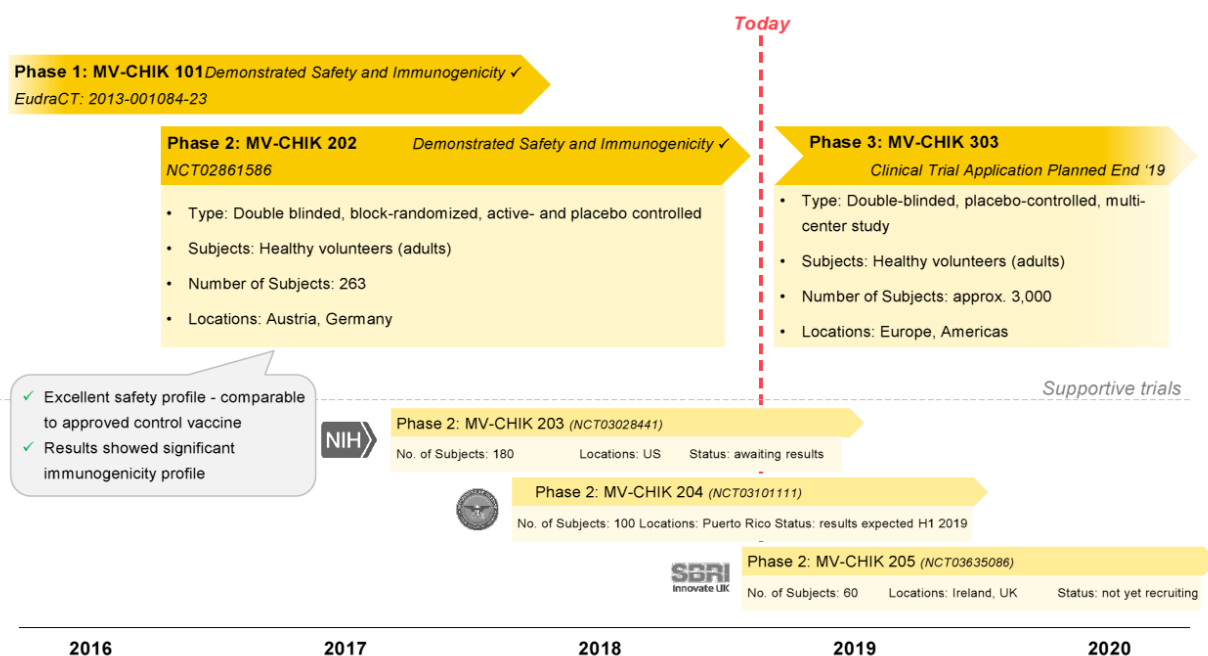
The expression of the entire structural gene cassette during virus replication allows the assembly of Chikungunya VLPs which in turn allow the presentation of the relevant antigenic epitopes. The Chikungunya antigens induce the effective production of antibodies against the Chikungunya virus. For Chikungunya, as well as for other related alphaviruses, it is known that neutralizing antibodies protect against the disease. That the human body produces Chikungunya virus neutralizing antibodies after one or two immunizations was shown in a phase 1 clinical trial (*Source*: EudraCT: 2013-001084-23 / CITE: Ramsauer et al. 2015). Animal studies in measles vaccine virus-susceptible mice showed that the passive serum transfer of previously immunized mice to naïve mice conferred protection against Chikungunya lethal virus challenges.

#### *Manufacturing Technology*

The Manufacturing Technology was developed and qualified by Themis using MV-CHIK as model candidate. The Manufacturing Technology was applied as described in the Section 10.9 (Business Description—Manufacturing) below.

### 10.5.4 *Clinical Development Status*

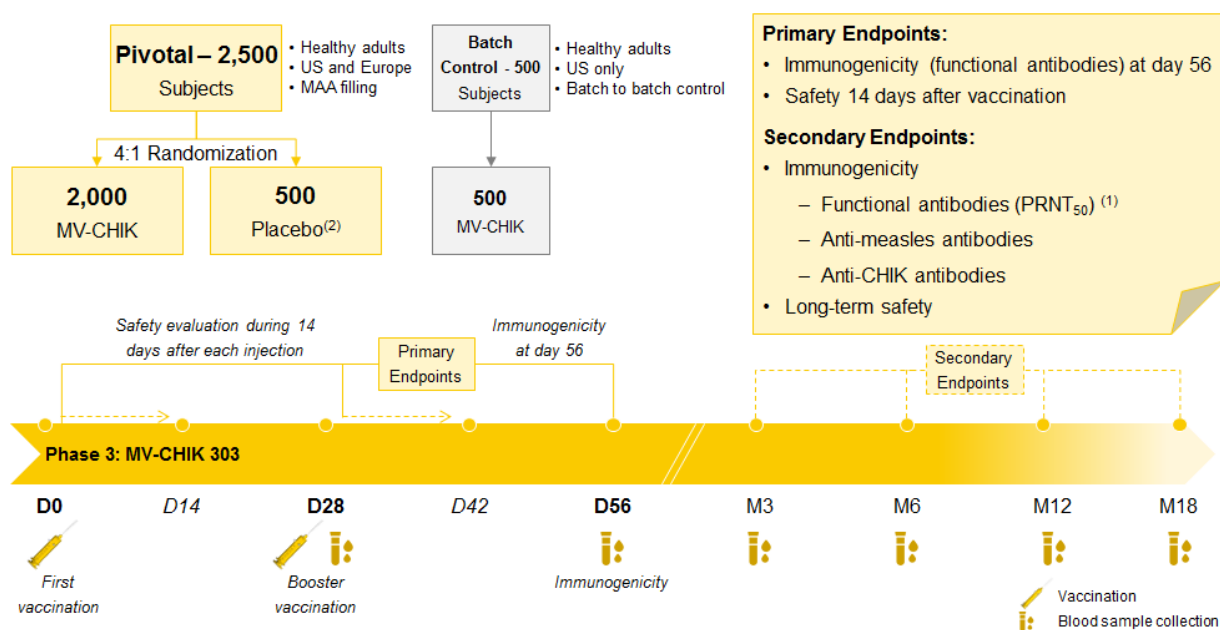
Themis’ lead product candidate, MV-CHIK, has already completed its EU CHIK Phase 2 Trial, which resulted in positive immunogenicity data and a strong safety profile that is similar to the commonly used measles vaccine. Please also see Section 20 (Recent Developments). MV-CHIK is currently in preparation for its pivotal phase 3 clinical trial program comprising various double blinded, placebo controlled multi-centre studies in healthy adults. Studies will include immunogenicity, safety and clinical batch-to -batch consistency studies. Overall, approximately 2,500 subjects are to be included, with up to 500 subjects in the latter study. The trials are expected to recruit the first volunteer in the first half of 2020, subject to approval by the EMA and the FDA. Currently, Themis is in communication with EMA and FDA through formal scientific advice meetings (namely the EMA PRIME kick off and the FDA end-of-phase 2 meeting) to align the phase 3 strategy to the respective regulatory requirements. Themis has already received the PRIME designation for MV-CHIK from the EMA and is hoping to receive the commensurate Breakthrough Therapy Designation from the FDA. This would allow for an expedited approval process and greater efficiency through conducting a parallel approach, even to the point of holding joint meetings with both the EMA and the FDA. To obtain EMA and FDA approval of the phase 3 clinical trials of MV-CHIK, Themis must first complete the end-of-phase 2 meetings with both the EMA and the FDA to discuss the open points: phase 3 clinical trial design, manufacturing strategy, efficacy study in animal model as well as the toxicology program. Such meetings are planned for early 2019 and answers from the regulators would then be expected in the first quarter of 2019. Based on such answers, Themis will then write a final study protocol, align all manufacturing activities with any additional requirements, engage in site selection and perform all other tasks in preparation of submitting the phase 3 clinical trial application to the regulators, which it currently expects to be able to do in the last quarter of 2019. Approval of the phase 3 clinical trial application would then be expected in the first quarter of 2020. Final results are targeted for the second half of 2020, submission to the FDA and EMA are targeted for early 2021 and approval of MV-CHIK is targeted in mid- 2021. There are currently no approved vaccinations for Chikungunya and no other company, to the Management Board’s knowledge, currently has an active clinical program that has completed phase 2 trials or advanced into pivotal phase 3 trials in the Chikungunya application. The table below presents the current status of Themis’ clinical development for MV-CHIK:



Source: Internal information provided by Themis.

After publishing the interim data from the EU CHIK Phase 2 Trial, Themis approached FDA and EMA for advice on the regulatory pathway to licensure of MV-CHIK. Both agencies confirmed the possibility to use an alternative pathway to licensure combining pivotal safety studies with animal data showing protection by human sera in a NHP passive transfer model. These discussions arose during a Type C meeting with the FDA and a Scientific Advice Meeting with the EMA, and Themis subsequently received PRIME status from the EMA in June 2018.

The figure below presents the currently anticipated phase 3, multicentre, double-blinded, placebo-controlled study design:



Source: Internal information provided by Themis.

(1) PRNT50= Plaque reduction neutralization test; the serum dilution required to reduce the number of plaques by 50% versus non diluted;

(2) Placebo: physiological saline solution (0.9% NaCl)

Themis has not yet held its end-of-phase 2 meetings with the EMA or FDA. They are expected to take place in early 2019. Following the additional feedback obtained from these meetings, Themis plans to submit its phase 3 clinical protocol in early 2020, with trial design approval and first patient recruited in the first quarter of 2020.

#### *Pre-clinical development*

The research phase for MV-CHIK was completed at the Institut Pasteur. After the successful generation of MV-CHIK, the early development phase was initiated as research collaboration between Themis and the Institut Pasteur with an initial immunogenicity proof-of-concept conducted at the Institut Pasteur. Three pre-clinical studies in relevant animal models were conducted:

- an analysis of the immunogenicity and protective efficacy of a single dose of MV-CHIK,
- an analysis of the immunogenicity and protective efficacy of two doses of MV-CHIK, and
- a toxicity study.

The first two pre-clinical studies showed that the MV-CHIK provided full protection against a lethal Chikungunya virus challenge when tested on CD46-IFNAR mice, a valid animal model for the MV Platform.

The toxicity study is a requirement for the application for a first-in man clinical trial and was conducted in non-human primates (*NHP*, cynomolgus macaques). All NHP showed no signs of systemic or local toxicity.

With these results and the release certificates of the first cGMP batch from the Manufacturing Technology, Themis submitted the clinical trial application for the first-in-human phase 1 clinical trial using a product based on the MV Platform, MV-CHIK.

#### *Phase 1 clinical trial*

The first clinical trial was also the clinical PoC for the MV Platform and was designed to verify the safety of the MV Platform in humans and to provide first insights into the immunogenicity of MV-CHIK. In a phase 1 clinical trial, completed in 2014, MV-CHIK was tested for safety and immunogenicity in 36 healthy volunteers. The vaccine showed a good tolerability and safety profile. The vaccine induced high neutralizing antibody levels in all dose groups tested. Adverse events or local reactions were observed, in proportions of subjects customary in clinical trials. Between the dosage groups a dose-dependent immune-response was observed, showing higher antibody titers in dosage groups with higher doses. In addition, the independence of pre-existing immunity was confirmed by investigating the immune-response to MV-CHIK in correlation to the measured anti-measles immunity at day of first dosing. All results of this clinical PoC phase 1 trial were published in The Lancet Infectious Diseases in May 2015.

#### *Additional early development studies*

Before starting phase 2 clinical trials, Themis completed various additional non-clinical studies confirming a positive safety and immunogenicity profile of the vaccine supporting the start of the phase 2 studies. The results of these studies demonstrated that the immunization induced high titers of neutralizing antibodies against Chikungunya virus. The immunization protected all vaccinated animals against the disease. MV-CHIK induces neutralizing antibodies, which showed cross protection against different strains of Chikungunya.

#### *Phase 2 clinical trials*

After collection of the additional non-clinical data, Themis requested scientific advice for a phase 2 clinical trial in Europe and following the release of the cGMP clinical batch submitted a clinical trial application in early 2016.

The phase 2 clinical trial was conducted in Europe starting in August 2016 and was completed in May 2018. The final study data are already available. The study was conducted in Germany and Austria (see NCT02861586; EudraCT Number: 2015-004037-26). 263 subjects aged 18-55 years were enrolled into six different cohorts to determine (1) the optimal dose level of MV-CHIK and (2) the optimal vaccination schedule of MV-CHIK (i.e. one vs. two administrations) to carry forward for phase 3 development. The immunogenicity of the vaccine was confirmed by the presence of neutralizing antibodies against the Chikungunya virus. The final analysis was performed after all subjects have completed all visits. In addition, the independence of the MV Platform immunogenicity from the pre-existing immunity against measles was confirmed.

## Phase 2 clinical trials – final results

Themis is preparing to publish positive final results of its phase 2 clinical trial for its lead product candidate, MV-CHIK, in a leading peer-reviewed scientific journal (the manuscript has been approved for publication by the journal and is awaiting publication). The final results of the phase 2 clinical trials demonstrate strong immunogenicity data and continued to demonstrate that the MV Platform has a compelling safety profile for both the high and low dosage regimen.

Immunogenicity was measured by the quantification of functional antibodies by plaque reduction neutralization assays. This is a standard assay to determine the capability of the antibodies to bind and inactivate an infectious virus in the test tube. The overall rate of subjects that show a functional response was shown in per cent, which is the rate of seroconversion. As shown in the figure below, results demonstrated that in the higher dosage arm, seroconversion was up to 87% after the first immunization and up to 96% after the second immunization, after one month interval (day 56) at the higher selected dose. Up to 100% of the study subjects that were in the six month booster injection study groups demonstrated seroconversion. Antibody titers remained high for the observation period across all study groups.

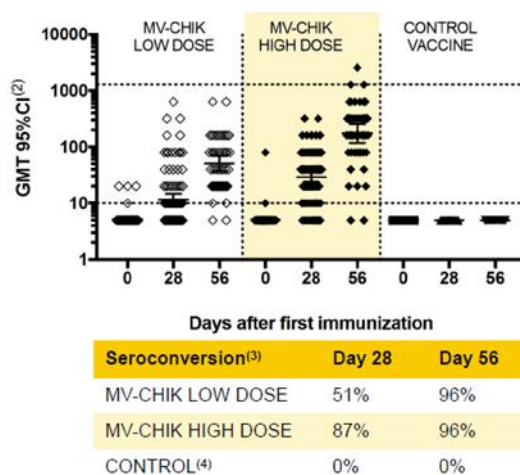
In conclusion, an up to 87% seroconversion rate was reached after a single injection and an up to 100% conversion rate was reached after a booster injection, depending on the interval between the primary and booster injection. The primary endpoint, however, was based on a one month interval between the two injections (day 56) and showed an up to 96% seroconversion rate.

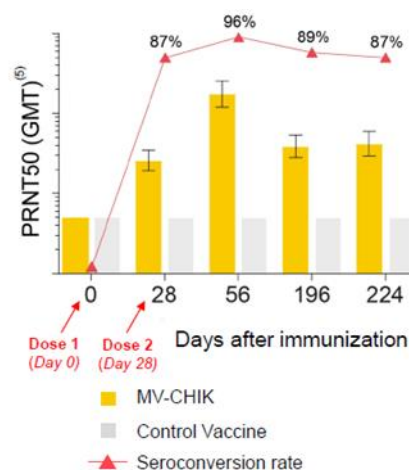
MV-CHIK was able to induce high levels of neutralizing antibodies. After two doses, higher levels of antibodies were observed than after one and with higher doses, higher levels were observed.

Safety endpoints included local and systemic reactions. Immunogenicity endpoints included immune responses, namely neutralizing antibodies. These neutralizing antibodies are functional antibodies and are able to kill a virus in a test system. The same antibodies are found in people who were exposed to the infection (*Source: Smalley et al., Vaccine 2016*). The concentration of antibodies in serum (a portion of human blood) is called “titer”. It is assumed that titers greater than ten are associated with protection against infection (*Source: Yoon et al, Neg Trop Dis 2015*). The percentage of subjects having protective titers is called the “seroconversion rate”. In the completed trial, MV-CHIK was tested in a lower dosage with two vaccinations one or five months apart, and in a higher concentration, also one or five months apart.

This immunogenicity data from all dosage groups confirm the data from the phase 1 clinical trial. The results of the higher dose indicate the potential for a single dose, single injection vaccine based on the MV Platform.

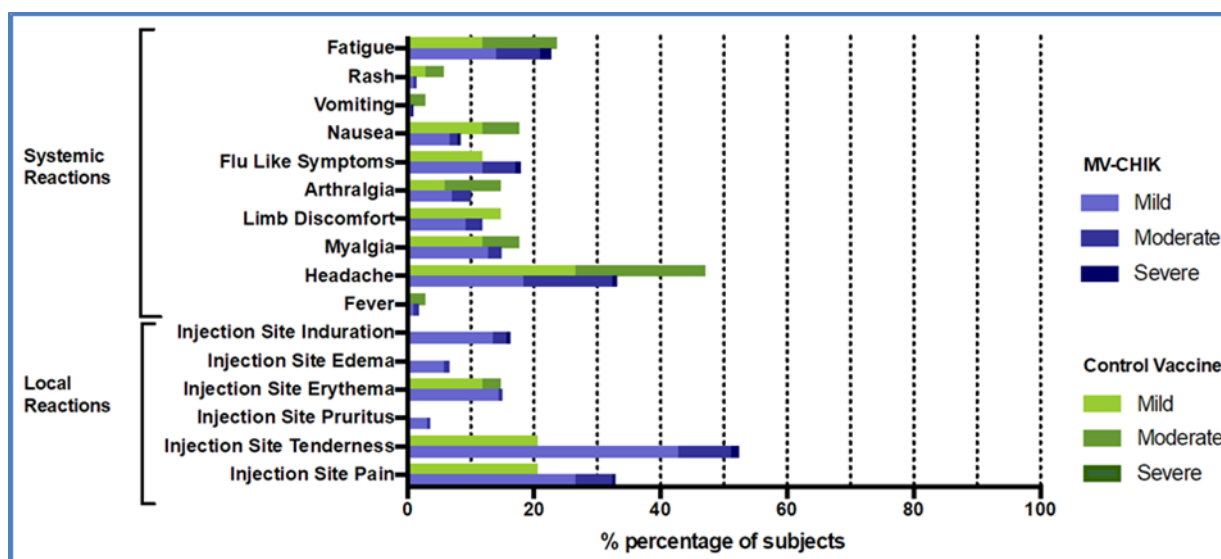
Furthermore, the data from the secondary groups revealed that a measles prime does not affect the MV Platform, with no immunogenicity differences between the primary and secondary groups. These results demonstrate the additional potential of the MV Platform that it can be used in the same subject for different indications without interference. For example, a person vaccinated with MV-CHIK could be vaccinated six months later with a different vaccine based on the MV Platform without interference of the two vaccines.





Source: Ramsauer et al, 2018 (in press); Control was the approved measles vaccine Priorix®; GMT = geometric mean neutralizing antibody titers

The safety profile of the MV Platform against the licensed measles vaccine from the EU CHIK Phase 2 Trial is shown in the figure below:



Source: Ramsauer et al., 2018 (in press).

In general, the data show a comparable or even improved safety profile of the MV Platform versus the control vaccine (Priorix®, licensed MMR vaccine) (**Control Vaccine**). The blue bars show the safety profile for the MV Platform and the green bars for the Control Vaccine. In general, the safety profile of the MV Platform is comparable or even superior to the Control Vaccine. The higher rate of local reactions can be related to the higher activity of the MV Platform with up to 100 times higher concentrations compared to the control vaccine.

Overall, the data generated from the EU CHIK Phase 2 Trial has encouraged the Management Board of Themis Group to continue the development of its Chikungunya vaccination and begin planning for its pivotal phase 3 trial.

#### Additional Investigator Led Trials

Following the Chikungunya outbreak in the Caribbean in 2013/2014, the United States National Institute of Health (**NIH**) and the United States Department of Defense (**DoD**) contacted Themis in order to start a collaboration and test MV-CHIK in American populations in the United States (NIH) and in an endemic population on Puerto Rico (DoD). Both studies were initiated in 2017 and final data will be available beginning of 2019. The US mainland study repeats Themis' EU CHIK Phase 2 Trial in the American population, which is more heterogeneous than the European population

in Germany and Austria. In the Puerto Rico study the DoD will investigate the safety and immunogenicity of MV-CHIK in an endemic setting and in previously Chikungunya exposed subjects. Both studies also include a long term follow up of twelve months to provide information on the duration of the immunogenicity. The study in Puerto Rico has recently been extended to also include elderly population, since in general with increasing age the immune system is weakening. Also, elderly people often did not receive measles vaccination but actually had measles as a child. Therefore, this study will also give important results on the applicability of the MV Platform in elderly populations which is not only important for the vaccine pipeline but especially for the application of the MV Platform to treat cancer.

#### *Regulatory Interaction and Phase 3 Clinical Trial Plans*

After publishing the interim data from the EU CHIK Phase 2 Trial, Themis approached FDA and EMA for advice on the regulatory pathway to licensure of MV-CHIK. Both agencies confirmed the possibility to use an alternative pathway to licensure combining pivotal safety studies with animal data showing protection by human sera in a NHP passive transfer model.

In preparation of the pivotal phase 3 clinical trial, Themis applied for and in July 2018 was subsequently granted PRIME status with the EMA. Themis' PRIME status designation was only the second for a vaccine overall, following an Ebola vaccine candidate from Merck & Co. PRIME status by EMA is the European equivalent of FDA's Breakthrough Therapy Designation, for which Themis has also applied with a decision by the FDA expected by the end of 2018. PRIME designation allows a close interaction with the EMA and enables and requires Themis and EMA to bring the vaccine candidate to market within 2.5 years from the date of designation through close interactions with a designated rapporteur and shortened review cycles. The rapporteur will also be responsible for reviewing and approving the market authorization application (*MAA*, which is similar to the biologics license application (*BLA*) in the US). Themis and the rapporteur are at this time framing the phase 3 clinical trial requirements to enable the MAA in 2.5 years from now at the latest.

Planning for a phase 3 program supporting a MAA in Europe and a BLA in the US, each of which is required to sell the product on the respective markets, was initiated in June 2018. The program includes a pivotal phase 3 study assessing the safety and immunogenicity of MV-CHIK in large, heterogeneous populations in the US and Europe plus an efficacy assessment using the alternative pathway as discussed and agreed with the FDA and EMA. In parallel with the phase 3 clinical trial, Themis plans to validate the manufacturing process with a process performance qualification (*PPQ*) in accordance with ICH, FDA and EMA guidelines. Finally, Themis plans to verify the batch-to-batch consistency in a follow-up clinical trial.

The phase 3 clinical trials are currently anticipated to be a multi-country, multi-center placebo controlled clinical trial in the US and the EU with approximately 2,500 subjects (2,000 MV-CHIK and 500 placebos). The clinical batch-to-batch consistency will be demonstrated in an additional 500 subjects in a parallel study. The inclusion of additional sites in endemic countries such as Brazil or India is currently being evaluated by Themis and any final decision on inclusion of these countries will depend strongly on the availability of reliable partners in these countries.

Primary endpoints from the pivotal phase 3 trial are currently anticipated to be immunogenicity (functional antibodies) at day 56, following the initial dose and the 28 day "booster" dose. Secondary endpoints are expected to include additional immunogenicity analysis (PRNT50), long-term safety and efficacy with regard to the transfer of human sera to NHPs.

#### *Priority Review Voucher Program*

The FDA's priority review voucher is an incentive to be the first applicant to obtain market approval for certain rare and neglected diseases. A priority review voucher has no expiry date and allows for shortened drug review times (from ten to six months) for any drug. Under the FDA's priority review voucher program, applicants who submit applications for drug or biological products to prevent or treat certain tropical diseases specified by the FDA may qualify for a tropical disease priority review voucher. A tropical disease priority review voucher can also be used to obtain priority review of a subsequent drug application that does not itself qualify for priority review. In August 2018, the FDA added Lassa fever and the Chikungunya virus to its list of tropical diseases. As a result, if Themis is able to submit a new drug application to the FDA for MV-CHIK and the Lassa vaccine, it may be able to obtain tropical disease priority review vouchers. Since such vouchers can be used to obtain priority review of a different drug application that does not itself qualify for priority review and can also be transferred to another company, they are very valuable, particularly if used by a company to obtain expedited approval of a blockbuster drug, thereby significantly increasing its revenues. If it is able to successfully obtain such vouchers, Themis believes it could potentially sell them for a material sum. Themis believes from recent historical data that the price can be in the range of USD 100,000 to 150,000 thousand.



### 10.5.5 *Competition*

There are currently no approved vaccinations for Chikungunya and no other company, to the Management Board's knowledge, currently has an active clinical program that has completed its phase 2 trial or advanced into pivotal phase 3 trials in the Chikungunya application. (*Source:* taken from [https://clinicaltrials.gov/ct2/results?term=vaccine&cond=chikungunya&recrs=e&age\\_v=&gndr=&type=&rslt=&phase=1&Search=Apply](https://clinicaltrials.gov/ct2/results?term=vaccine&cond=chikungunya&recrs=e&age_v=&gndr=&type=&rslt=&phase=1&Search=Apply) (accessed on 6-Oct-2018)) If it becomes the first product on the market, Themis' MV-CHIK would be the benchmark for all competitors. This means that all competitor products applying for market approval would need to show comparable or superior safety and immunogenicity to Themis' product. Themis believes that the excellent safety profile of the MV Platform and the self-adjuvanting effect of the Vector Technology put Themis in a strong competitive position.

The companies below are, to the Management Board's knowledge, the companies which are also currently engaged in developing a Chikungunya vaccine.

#### *Paxvax*

PaxVax, Inc. is a US-based specialty vaccines company that develops and commercializes vaccines against infectious diseases. In August 2018, the US based specialist vaccines company Emergent Biosolutions, Inc, purchased PaxVax. Its adjuvanted Chikungunya vaccine candidate uses a VLP technology which was in-licensed from the US National Institutes of Health. A phase 2 clinical trial was initiated in 2018 assessing various doses, formulations, and schedules of administration.

#### *Moderna*

Moderna Therapeutics, Inc. is a US-based developer of messenger RNA therapeutics. Its adjuvanted Chikungunya vaccine candidate has reached the primary endpoint of the phase 1 clinical trial.

#### *Bharat*

Bharat Biotech Ltd. is an India-based biotechnology company that researches, develops and manufactures vaccines and bio-therapeutics primarily for the Indian market. Its inactivated Chikungunya virus vaccine, which is administered through an intramuscular route, is currently in a phase 1 clinical trial in India.

#### *Valneva*

Valneva SE is a public French/Austrian vaccine company. Its live attenuated Chikungunya virus vaccine candidate is currently being tested in a phase 1 clinical trial.

### 10.5.6 *Commercialization*

Erich Tauber, Themis Co-Founder and CEO, has strong previous experience in commercializing a new approved vaccination, having led the development and subsequent commercialization of the first Japanese Encephalitis vaccines whilst Vice President of Product Development at Intercell AG. The Management Board believes that there is a large commercial opportunity in MV-CHIK once approved by the FDA and the EMA from travellers, the US and other militaries (for example, NATO) and urban populations in endemic countries. With over one billion travellers currently each year, of which 40% are first time travellers, over 50% of the US military's employees receiving mandatory vaccinations approximately 64% of US army stationed in a Chikungunya risk area (*Source:* Defense Manpower Data Center, DoD) and over 100 endemic countries, alongside the significant unmet medical need, Themis views the potential commercial opportunity for Chikungunya as substantial, with an estimated market opportunity of USD 500,000 thousand annually by 2035, according to VacZine Analytics.

Themis continues to consider all options, including full commercialization through an internal sales force or licensing of the product to a third party. Currently, it expects that its commercialization strategy will form a hybrid model comprising an internal sales force distributing in certain territories with distribution partners in certain other regions.

## 10.6 **Immunomodulation: Cancer**

### 10.6.1 *Disease and Market Overview*

Cancer is used as an umbrella term describing a range of related diseases. All of them share the uncontrolled growth of some of the body's cells, mostly forming solid tumours. In case of cancerous tumours, these tissues are



malignant and therefore can spread into or invade nearby tissues (*Source*: taken from [www.cancer.gov/about-cancer/understanding/what-is-cancer](http://www.cancer.gov/about-cancer/understanding/what-is-cancer) (accessed on 27-Jul-2018)).

Cancer is among the top causes for death in the developed world. The US National Institutes of Health estimates that in 2018 alone over 1,700 thousand new cases will be diagnosed in the USA and over 600,000 people will die from cancer. The four most prevalent cancer types are breast cancer, lung and bronchus cancer, prostate cancer and colorectal cancer with a combined incidence rate of approximately 50% of all new cases and cancer related deaths. (*Source*: US National Institutes of Health <https://seer.cancer.gov/statfacts/html/all.html>).

#### 10.6.2 *Application of the MV Platform in Cancer*

After successful completion of the EU CHIK Phase 2 Trial, as Themis' lead product candidate, and the validation of the safety profile of its MV Platform in healthy humans, Themis is actively pursuing its long-term strategy to utilize the MV Platform to treat cancer. The Management Board believes that the MV Platform is uniquely positioned for the immunotherapy field, as it is built on the measles virus, which

- has a safety history over 50 years of administration in healthy adults and children worldwide;
- has intrinsic oncolytic capabilities, which were discovered in the 1950s and subsequently well-understood, when a measles infection was observed to cure a patient suffering from a large glioblastoma; and
- has shown to work in clinical setting at the Mayo Clinic with a patient being cancer free five years after treatment of late stage multiple myeloma (*Source*: <http://www.startribune.com/mayo-clinic-patient-treated-by-massive-measles-dose-still-cancer-free-5-years-later/485087011/>).

In addition, Themis is exploiting its knowledge and experience in clinical validation and cGMP manufacturing to develop safe and effective cancer therapies using different approaches, such as adding different tumour killing and immune-modulatory payloads to increase the oncolytic effect or combining the oncolytic effect with other novel cancer therapies, known more commonly as “combination therapies”.

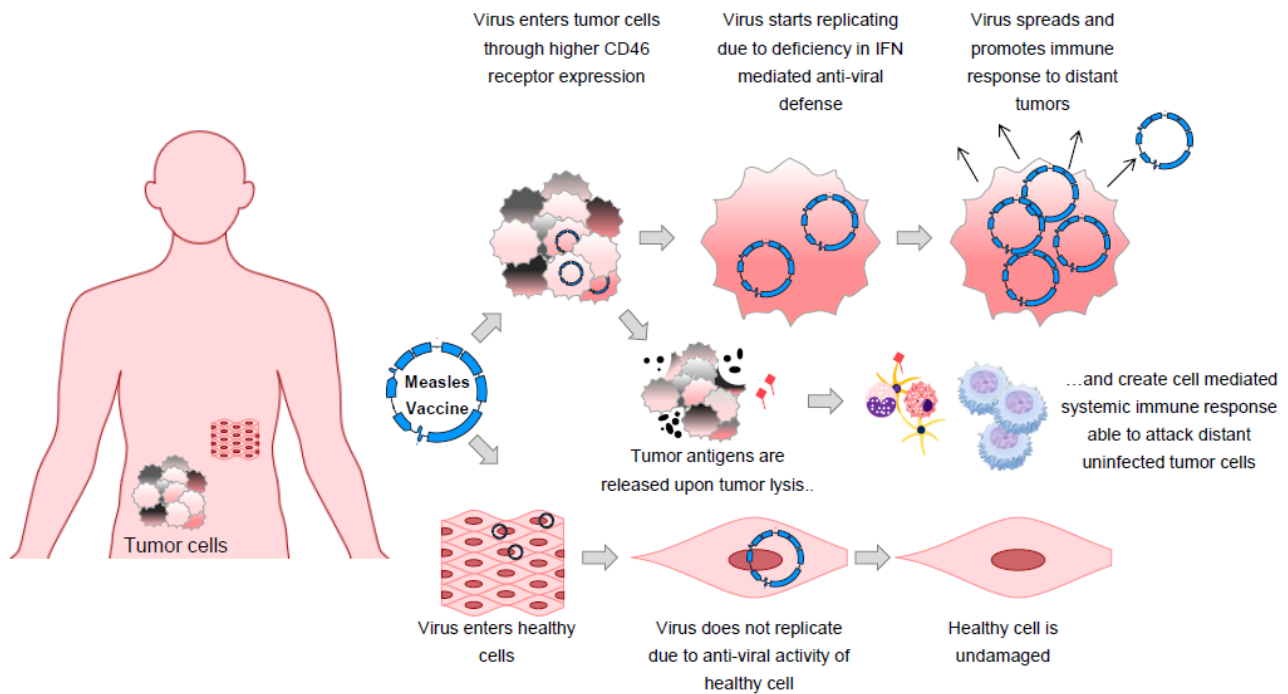
The MV Platform has the potential to offer powerful immuno-modulating capabilities thereby generating a new solution and broad applicability for cancer treatments, as well as for infectious diseases, due to the MV Platform's versatility.

#### *Vector Technology and Mechanism of Action*

In general, oncolytic viruses (**OVs**) which are administered intravenously or locally into tumours (intratumorally) spread and replicate within the tissue. This induces the destruction of malignant cells and triggers the activation of the immune system. In this way cancer cells are made visible to the immune system and immune cells can start to destroy malignant cells even in tissues distant from the primary tumour (i.e. metastases). However, some cancer cells are resistant to virus-induced cell death. Therefore, the oncolytic MV-based virotherapy of Themis is equipped with a tumour-killing payload (i.e. super-cytosine deaminase (SCD), **MV-SCD**). The MV-vector encodes a gene for an activator enzyme that catalyses the conversion of a safe, non-toxic and licensed anti-mycoticum (**5-FC**, prodrug) into a cytotoxic, clinically approved, chemotherapeutic drug (**5-FU**). In cancer cells 5-FU results in the inhibition of DNA and protein synthesis which triggers cell death even in those cells resistant to virus-induced destruction (i.e. local chemotherapy). This approach allows a highly targeted use of the chemotherapeutic drug rather than a systemic application that causes major side effects. Hence, MV-SCD shows superior anticancer activity compared to conventional oncolytic measles viruses, which was shown in in-vitro models. Another option to boost the immunomodulation effect in cancer therapy is the usage of immune checkpoint inhibitors (**ICIs**). These molecules break the immune-system evasion strategy of tumour cells. To evade the immune-system tumour cells can suppress the cell mediated immune response by activating so-called immune checkpoints. Using ICIs this activation is reverted, and the cell mediated immune response mechanism reassured. The below figure diagrammatically explains this intrinsic oncolytic effect of the measles vaccine and how it interoperates with both tumour and healthy cells.

Themis is working on target selection and optimization in IO and considers several options for tumour killing payload, including ICIs, cytokines and tumour antigens and plans to begin clinical development in 2019, subject to regulatory approval.

The diagrammatic below shows the mechanism of action in the use of the measles vector to suppress cancerous cells while leaving healthy cells undamaged:



Source: Internal information provided by Themis.

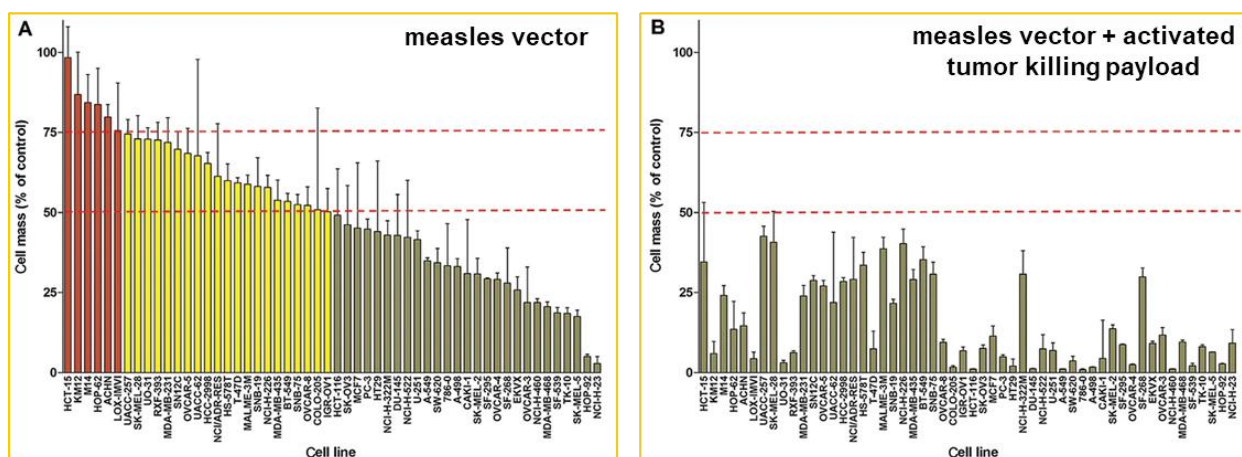
### Manufacturing Technology

Themis' Manufacturing Technology and proprietary, standardized development process is applied as described in the Section 10.9 (Business Description—Manufacturing) below. To increase the titer (i.e. virus concentration) in the final product the concentration step in the downstream process was adjusted to a higher concentration rate without changing the process steps or equipment. This contributes to a shortened development cycle from discovery to clinic that is cost-efficient and has a proven ability to scale to commercial quantities.

### 10.6.3 Clinical Development Status

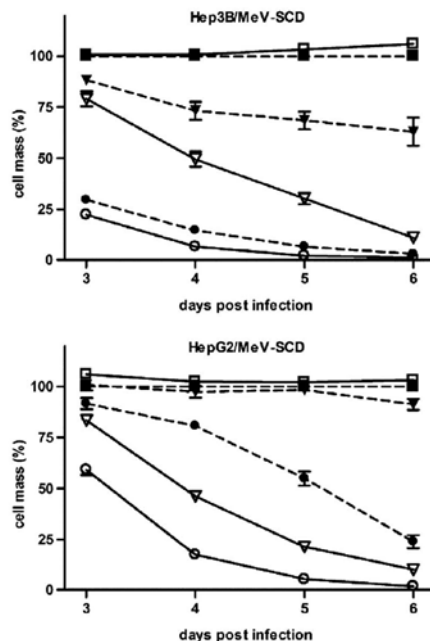
#### Research phase

To verify the efficacy of MV-SCD prior to any animal studies, in vitro tests using diverse cell culture models were conducted by the University Hospital Tuebingen. In 54 different cancer cell lines – including cell lines of the most aggressive and most common malignant tumour entities – the efficacy potential of MV-SCD was evaluated. A substantial reduction in cancer cell mass was already achieved with the MV-SCD alone for specific cancer cell lines. Although some cell lines were initially resistant to the oncolytic activity of MV-SCD, 100% of the tested cells lines were rendered susceptible after co-incubation with the prodrug 5-FC, which the tables below demonstrate versus a control for a number of tumour types.



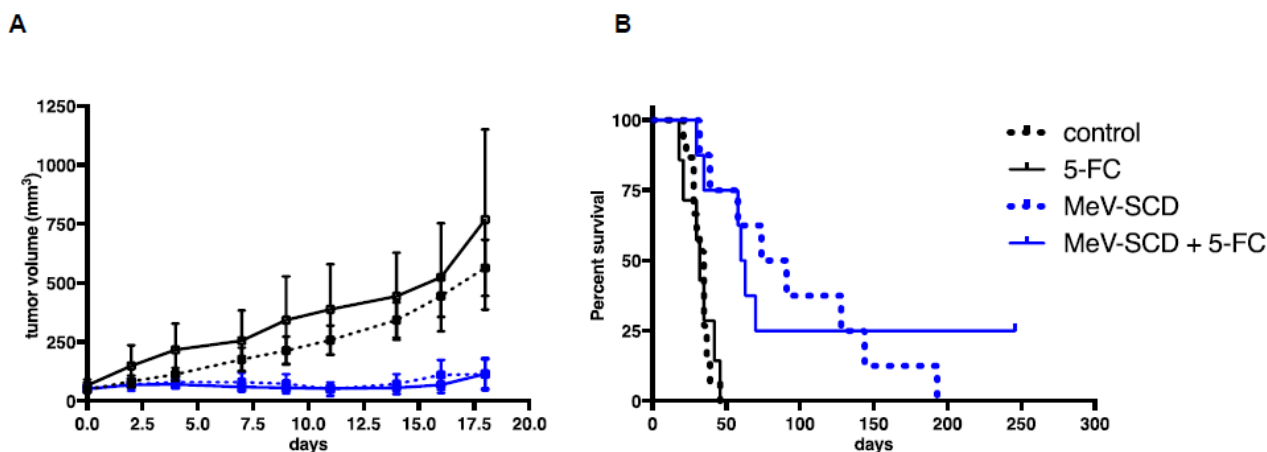
Source: Noll et al. 2013.

Chart (A) shows the effect for MV-SCD alone without payload activation by 5-FC; 27 cell lines are efficiently killed by MV-SCD alone (green bars). Six tumour cells (red bars) are resistant to the oncolytic effect of MV-SCD. Other cells (yellow bars) are partly resistant to the oncolytic effect. Chart (B) shows the same tumour cell lines and the effect of MV-SCD after payload activation (5-FC > 5-FU). All tumour cell lines are now efficiently killed, even the most resistant tumour cell lines.



### Early Development Phase

After confirmation and validation of the approach in-vitro the system was tested in vivo in immune-deficient mice and NHP in two pre-clinical studies. The 2013 study, conducted by Max Planck, provided an initial proof-of-concept, demonstrating in mice with Human Hepatocellular Carcinomas (liver cancer) demonstrated a strong anti-tumour effect and increased overall survival in mice. This survival effect seemed to be further enhanced by the addition of 5-FC, as demonstrated in charts (A) and (B) below:



Source: Lampe et al. (2013). An armed oncolytic measles vaccine virus eliminates human hepatoma cells independently of apoptosis, Gene Therapy. Page 51. Five intra-tumoural (i.t.) injections of MeV-SCD (d0-d4;  $2 \times 10^6$  pfu (plaque-forming units) daily) followed by seven injections of 5-FC i.p. (d5-d11; single daily doses of 500 mg 5-FC/kg body weight)

The efficacy studies demonstrated that mice receiving the combinational therapy survived longer than mice without treatment or those treated with MV-SCD only. Also, anti-tumour effects and reduction in tumour size and mean tumour volume were increased in groups treated with MV-SCD plus 5-FC.

To evaluate any possible side effects mediated by MV-SCD therapy healthy CD46-IFNAR mice and NHP were injected once with different concentrations of MV-SCD intravenously or intrahepatically in a toxicity and biodistribution study. The maximum concentration used in this study was 100 times higher than what Themis had previously used in other toxicity studies. Despite the increased dosage the study revealed the same non-toxicity results as the studies conducted with other products from the MV Platform (e.g. MV-CHIK). No shedding of infectious virus particles was detected, and no adverse effects were observed in mice or NHP after the application of one dose of MV-SCD in combination with 5-FC in both animal models confirming the safety profile seen in clinical trials using the MV Platform (see Section 10.5.4 (Business Description—Immunomodulation: Chikungunya—Clinical Development Status)).

Following the promising safety and efficacy data and building on the Manufacturing Technology Themis anticipates generating first-in-human data in the second half of 2019 with an initial focus on gastro intestinal tumours at the University Hospital in Tuebingen, Germany.

Themis plans to select new targets and initiate pre-clinical development by the end of 2018 and plans to select the next candidate for clinical development in the second half of 2019 following the first-in-human data.

#### 10.6.4 *Competition*

The immuno-oncology sector has many companies within it, at various stages of pre-clinical, clinical and commercial development, across a wide array of cancer indications. A sub-set of these companies are targeting the eliciting of an immune response using cancer vaccines, like Themis Group. To the best of their knowledge, the Management Board has compiled the below list of competitors currently with clinical trials focused on immuno-oncology and specifically virotherapy.

##### *ViraTherapeutics*

ViraTherapeutics develops oncolytic cancer vaccines based on a chimeric virus derived from the Vesicular Stomatitis Virus (VSV), so called VSV-GP. In September 2018, Boehringer Ingelheim exercised an option to acquire all shares of ViraTherapeutics for a total transaction value of EUR 210 million.

##### *Vyriad*

Vyriad is a clinical stage, biopharmaceutical company based in Rochester, MN, USA and a spin-out from the Mayo clinic. Vyriad is developing oncolytic virus therapies using a licensed VSV (vesicular stomatitis virus) and measles virus including marker and safety genes. Currently, Vyriad has started several Phase 1 clinical trials together with the Mayo clinic. Vyriad is using technology similar to Themis' technology but it is using another virus (VSV) as vector in addition to the measles virus as vector. Furthermore, Vyriad is using a different approach to treat cancer as no tumour killing payloads are added.

##### *Transgene*

Transgene, part of Institut Mérieux, is a publicly traded French biotechnology company focused on designing and developing targeted immunotherapies for the treatment of cancers and infectious diseases. Transgene's programs utilize viral vector technology with the goal of indirectly or directly killing infected or cancerous cells. Transgene has shown clinical proof-of-concept for the 5FC > 5FU concept with their Adenovirus/MVA technology.

##### *Amgen*

IMLYGIC® from Amgen (NASDAQ: AMGN) is the first licensed oncolytic virotherapy. It is built on a herpes simplex virus (HSV) with the known cytokine GM-CSF added as payload to treat advanced melanoma. IMLYGIC® is applied intratumorally and shows efficacy (i.e. tumour shrinkage of at least 50%) in 26.4% (*Source: Amgen publication, <https://imlygic.com/efficacy-clinical-trial-results/>*).

##### *OncoVita*

OncoVita is a French biotech company spin-out from Institut Pasteur. OncoVita has licensed the measles technology from Institut Pasteur for the oncology field and is currently preparing a Series A financing round. OncoVita is using a similar vector technology as the one Themis has licensed for the infectious diseases field, however, without access to Themis' Manufacturing Technology.

## *PsiOxus Therapeutics Limited*

PsiOxus is a UK based biotech company developing oncolytic cancer gene therapies. Using their adenovirus platform, the gene therapies are administered systemically but are designed to act locally in solid tumours. PsiOxus has partnered with Bristol-Myers Squibb and recently received a USD 15,000 thousand milestone payment for starting a phase 1 clinical trial.

## *Hookipa*

Hookipa Pharma Inc. is a biotech company based in Vienna, Austria and New York, USA developing treatments against cancer and infectious diseases. The development of their immuno-oncology technology has completed pre-clinical testing in mice and is preparing for phase 1 clinical trials.

## **10.7 Other platform vaccines**

In addition to its efforts to bring the first platform candidate to market by 2021 and to extend its reach into the immunotherapy field Themis has started the early development phase for vaccine candidates against respiratory syncytial virus (**RSV**), cytomegalovirus (**CMV**) and norovirus. All these indications are causing significant numbers of deaths and serious disease in the developing and the western world with no specific treatment or prevention available. Together with the Partnered Programs the Management Board estimates that these indications have a combined market potential of over USD 5 billion annually (*Source*: Company estimates, Market Data Forecast 2018, Mymetics, Novavax, VBI Vaccines, GlobalData 2013, Martsch et al. Vaccine (2012)). The RSV candidate is based on the pre-fusion F technology developed by the NIH. Themis has completed initial *in vivo* PoC studies using cotton rats, a widely used animal model for measles vectors showing promising humoral immune responses for all candidates.

## **10.8 Partnered Programs**

### **10.8.1 Lassa Fever and MERS-CoV (CEPI)**

In 2018, Themis was the first company to receive a prestigious development contract of up to USD 37,500 thousand from CEPI (please also see Section 10.11.2 (Business Description—Material Contracts—Grants)). The development contract allows Themis to develop innovative vaccines against Lassa fever and MERS-CoV up to phase 2 clinical trials over five years with the potential to extend the contract towards phase 3 trials and stockpiling. This contract and the associated increased visibility of Themis in the industry demonstrated MV Platform's potential in that among a group of 30 applicants, CEPI adjudged the MV Platform of Themis to have the highest potential for success.

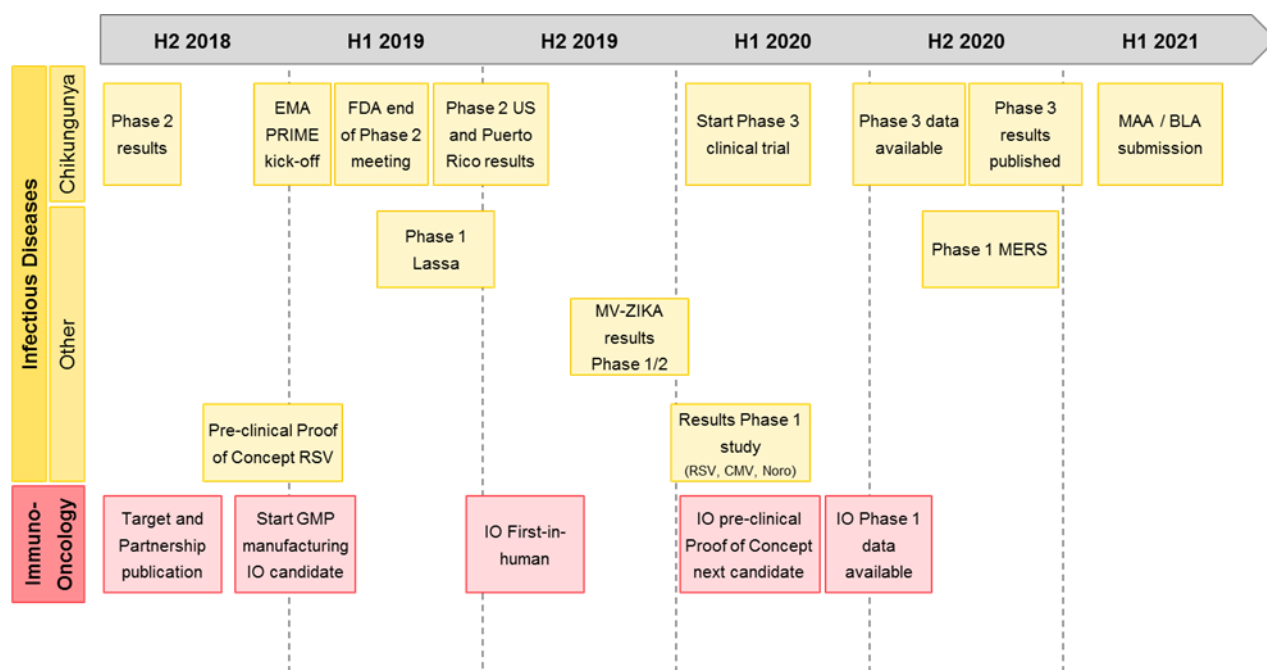
The Lassa fever candidate MV-LASV has completed pre-clinical *in vivo* testing showing protection of NHPs from Lassa fever after a single vaccination. Themis anticipates submitting the clinical trial application in 2018 in order to start a phase 1 clinical trial beginning of 2019.

The MERS-CoV candidate MV-MERS is continuing *in vivo* pre-clinical testing and Themis anticipates starting a phase 1 clinical trial beginning of 2020 following the extension of the CEPI contract upon successful completion of pre-clinical testing.

### **10.8.2 Zika virus (Innovate UK & Horizon 2020)**

In early 2016 the WHO declared the Zika outbreak in South America a Public Health Emergency of International Concern. Themis joined the effort towards a Zika vaccine with over EUR 4,000 thousand funding received by Innovate UK and the European Commission (Horizon 2020) (please also see Section 10.11.2 (Business Description—Material Contracts—Grants)). In a first step Themis showed quick response capabilities of its MV Platform to get from antigen selection to cGMP manufacturing within three months and initiated the first clinical trial a few months after, which confirmed the strong safety profile observed in the Chikungunya trials and showed limited immunogenicity in all treatment groups. In a second step the selected antigen was further optimized for immunogenicity and the clinical trial application for the subsequent clinical trial is anticipated for first half of 2019. All activities related to the Zika vaccine development are funded through Innovate UK or the Horizon 2020 program.

The graph below reflects Themis' expected news flow for the different programs in the pipeline until H1 2021:

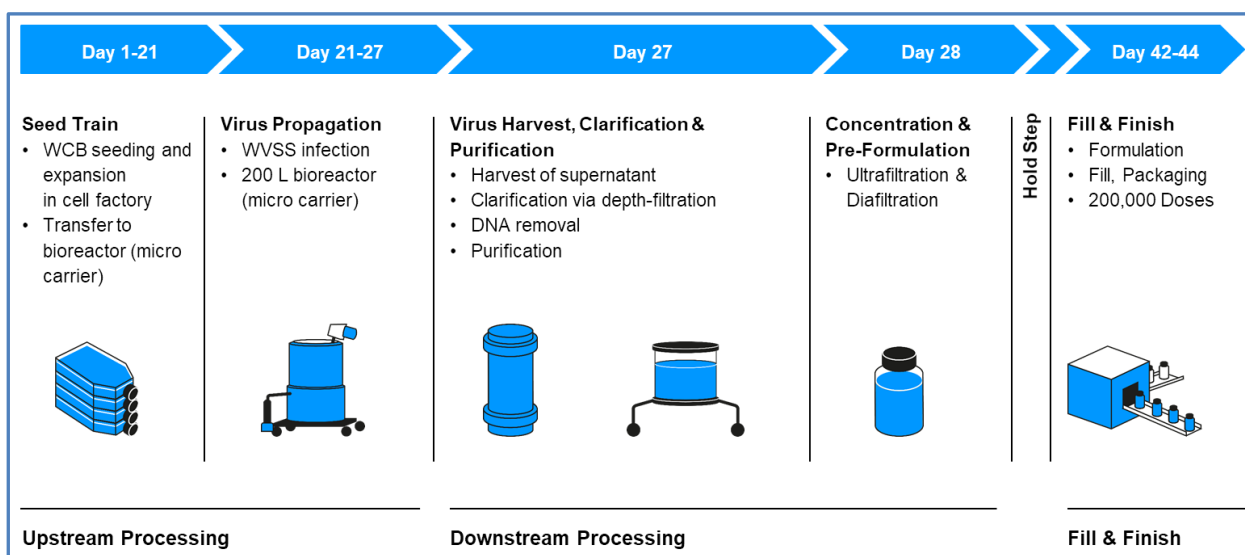


## 10.9 Manufacturing

In parallel to its clinical development program, Themis has developed a high yield, state-of-the-art, plug-and-play manufacturing infrastructure which can be used for every product based on Themis' Vector Technology. The process was designed to allow full aseptic handling of the virus in a completely closed system. For cGMP manufacturing, reliable contract manufacturing organizations (CMOs) were selected based on their capabilities to supply clinical trial material for the various stages of clinical development.

### 10.9.1 Manufacturing infrastructure

The below chart provides a general overview of Themis' proprietary manufacturing infrastructure:



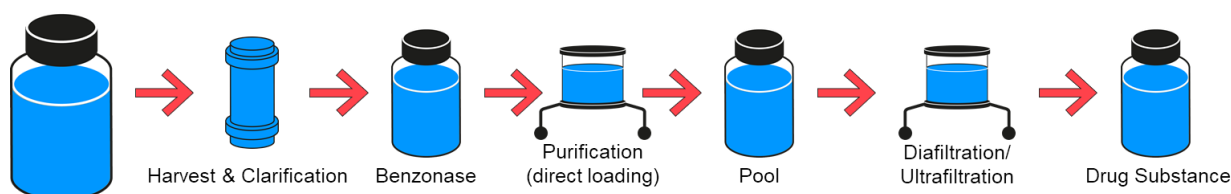
Source: Internal information provided by Themis.

Generally, biotechnological manufacturing processes can be divided in two separate streams. The upstream processes (**USP**) combine all operating steps to produce a crude, unpurified bulk material whereas the downstream process (**DSP**) combine all operating steps to purify and concentrate the respective material. Finally, the drug substance (i.e. purified and concentrated material) is diluted to target specification before fill and finish operations, where the final product is manufactured including labelling and packaging.

For the USP, vero cells are grown and expanded in cell culture flasks before they are seeded into a single-use stirred bioreactor, where they are further expanded on micro carrier. After expansion of the cells to the required volume, the cells are infected with virus seed stock (i.e. concentrated raw virus). The virus infects the cells and in turn the cells replicate and multiply the virus over up to six days. After replication the virus bulk is harvested and transferred to the DSP.

During DSP the harvested bulk is purified and concentrated over a proprietary sequence of different operations, different filtration steps and chromatography steps. Before final aliquoting and storage of the highly purified and concentrated bulk drug substance (**BDS**), the BDS is preformulated into the final buffer solution.

The following chart is a graphical description of the proprietary high yield DSP including harvest, purification, concentration and pre-formulation:



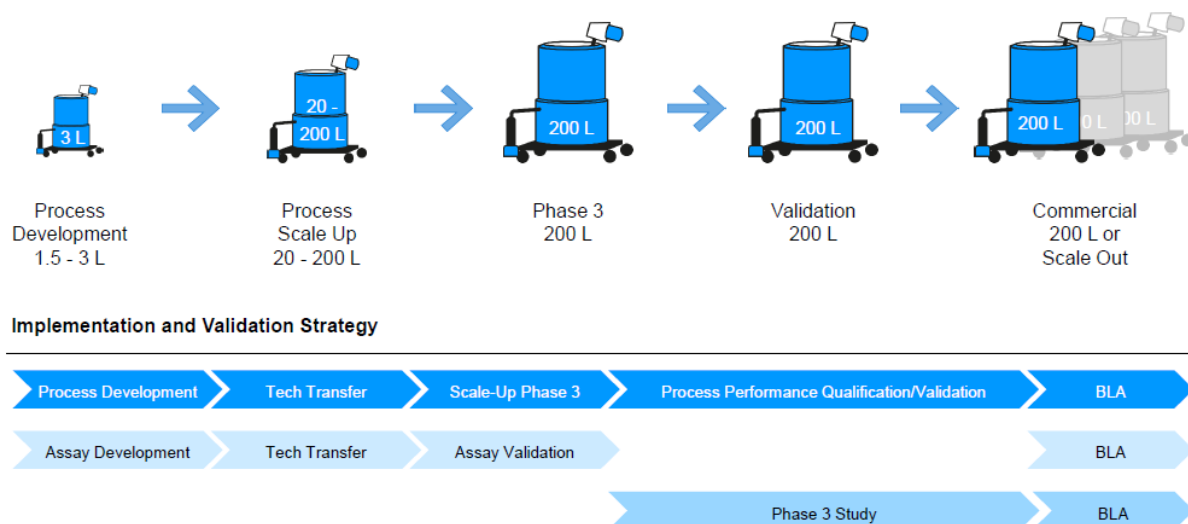
Source: Internal information provided by Themis.

After determination of the BDS virus concentration and before filling into the final container, the BDS is diluted to the specified target concentration. During fill and finish operations the product is filled into the final container, freeze-dried (if needed), visually inspected for flaws and subsequently labelled and packed for the target market and stored at 2-8°C.

The Management Board believes that the Company's manufacturing approach offers three primary benefits from its high yield downstream process, namely:

- (a) *Limited resources are required:* only off the shelf equipment and raw materials are required, which limits cost and capital expenditure whilst making the process more straightforward to implement and use;
- (b) *High process efficiency:* Themis' process produces a higher yield, approximately 60-80%, versus 10-30% for other live viruses, while also reducing the possible process steps and thus enhancing overall manufacturing efficiency and robustness; and
- (c) *Commercially feasible process:* per manufacturing run, over 200,000 doses are yielded, as an estimated cost of approximately EUR 1,000 thousand per run, equating to EUR 5.00 to EUR 6.00 per dose depending on the process parameters included.

Ahead of its planned phase 3 trial, the Company has begun the process of designing and implementing its manufacturing process scale up to validate its potential to deliver manufacturing at the required scale for full commercialization. A large portion of this work is planned for completion during 2019, ahead of the beginning of recruitment for the phase 3 trial. The following chart provides a graphical description of the planned process:



Source: Internal information provided by Themis.

### 10.9.2 *cGMP Manufacturing*

For cGMP manufacturing, reliable contract manufacturing organizations (*CMOs*) were selected based on their capabilities to supply clinical trial material for the various stages of clinical development.

#### *Phase 1*

For phase 1 clinical trial material (*CTM*) production, the BDS manufacturing process is run at a 5L-10L scale at an early stage CMO. Early stage CMOs, like Batavia Biosciences or Biological E Vaccines are selected for their flexible slot availability and experience in running early stage, newly developed manufacturing processes without many historical data available. Drug product manufacturing is usually performed by a specialized early stage fill & finish CMO using a liquid frozen formulation to enable an expedited move into clinic trials with minimal expenses.

#### *Phase 2*

For phase 2 clinical trials, the BDS manufacturing process is run again at the same scale at the early stage CMOs, just as for phase 1. Depending on the number of doses required for the phase 2 trials the batch size can be increased up to 20L. For drug product manufacturing a freeze-dried formulation at the same fill & finish CMO is used since the vaccine needs to be stored for longer periods, thus reducing the clinical trial expenses.

#### *Phase 3*

For phase 3 clinical trials, a re-evaluation of the CMO selection was necessary. Any CMO for phase 3 CTM manufacture needs to have the capabilities necessary for large scale manufacturing of CTM and PPQ (formerly process validation), which must be performed at the intended commercial scale as well as at the scale of future commercial manufacturing. Ideally, the CMO can manufacture the BDS and the drug product at one facility. After a thorough CMO selection process with pre-defined selection criteria a renowned and well established CMO was selected as preferred supplier for phase 3 clinical trial material and commercial supply with the capabilities for BDS and drug product manufacture. This selected CMO has both US and EU capabilities, and is able to supply CTM for phase 3 trials as well as, eventually, commercial products if market approval is granted in the relevant jurisdictions. The technology transfer to the commercial CMO was initiated in September 2018.

## 10.10 Intellectual Property

### 10.10.1 *Patent and patent applications*

As of the date of this Prospectus, Themis owns, co-owns and has exclusively licensed-in 11 patent families, i.e. the families referred to as TH1 to TH11 in the following, directed to its product candidates, in particular and their use, comprising more than 60 patents (more than 200 patents including individual validations from EP patents) and 46 presently pending patent applications in various jurisdictions, including particularly European countries and the United States and further including relevant jurisdictions of particular relevance for the specific diseases to be treated with



Themis' vaccine products. All license agreements with the licensor Institut Pasteur in the context of TH1 to TH6 and TH8 represent exclusive licenses granted to Themis.

The following provides a detailed family overview for TH1 to TH11.

<b>Patent Family</b>	<b>Description</b>	<b>Priority Date (earliest)</b>	<b>Expiry Date</b>	<b>Geography<sup>1</sup></b>	<b>Licensed-in / Co-owned / Proprietary</b>
TH1	Infectious cDNA of an approved vaccine strain of measles virus and use for immunogenic compositions	20 June 2002	EP: 20 June 2022 20 June 2023  US: 20 June 2023 3 March 2025	BR, CA, CN, EP (AT, BE, CH, CY, CZ, DE, DK, ES, EE, FI, FR, GB, HU, IE, IT, LI, LU, MC, NL, PT, RO, SE, SI, SK, TR), HK, IN, KR, US	licensed-in*
TH2	Recombinant measles viruses expressing epitopes of antigens of RNA viruses and use of the recombinant viruses for the preparation of vaccine compositions	20 June 2002	EP: 20 June 2022 20 June 2023  US: 20 August 2023 3 March 2025	BR, CA, CN, EP (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, HU, IE, IT, LI, LU, MC, NL, PT, SE, TR), IN, KR, US	licensed-in*
TH3	New Dengue and West-Nile viruses proteins and genes coding the foregoing	26 February 2003	EP: 26 February 2024  US: 26 October 2024 10 May 2028	BR, CA, EP (AT, BE, CH, DE, DK, ES, FI, FR, GB, IE, IT, LI, LU, NL, SE, TR), HK, IL, US, US	licensed-in*
TH4	Newly isolated and purified strains of the Chikungunya virus and nucleotide and peptide sequences	15 March 2006	EP / US: 15 March 2027	AU, CA, EP (AT, BE, BG, CH, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), IN, JP, US	licensed-in*
TH5	Cells and methodology to generate non-segmented negative-strand RNA viruses	22 December 2006	EP: 22 December 2026 21 December 2027  US: 21 December 2027 2 December 2029	BR, CA, CN, EP (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), IN, JP, KR, MX, US	licensed-in*
TH6	Chimeric polypeptides and their therapeutic application against a flaviviridae infection	20 June 2005	EP: 20 June 2026  US: 20 June 2026 24 September 2026 16 August 2027 21 June 2028	BR, CA, CN, EP (AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, TR), IN, MX, US	licensed-in*
TH7	Recombinant measles virus expressing Chikungunya virus polypeptides and their applications	27 September 2012	EP / US: 26 September 2033	AU, BR, CA, CN, EP (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), HK, IN, JP, KR, MX,	co-owned**

Patent Family	Description	Priority Date (earliest)	Expiry Date	Geography <sup>1</sup>	Licensed-in / Co-owned / Proprietary
				<b>PH, SG, TH, US</b>	
TH8	A Dengue virus chimeric polyepitope composed of fragments of non-structural proteins and its use in an immunogenic composition against Dengue virus infection	23 June 2014	EP / US: 22 June 2035	<b>AU, BR, CA, CN, EP, HK, IN, JP, KR, MX, PH, SG, TH, US</b>	licensed-in*
TH9	Chromatography based purification strategies for measles scaffold based viruses	23 December 2015	EP: 23 December 2035 23 December 2036  US: 23 December 2036	<b>EP, HK, US, ZA</b>	proprietary
TH10	Recombinant Zika vaccines	23 December 2015	EP: 29 March 2036 23 December 2036  US: 23 December 2036	<b>BR, EP, HK, MX, SG, US, ZA</b>	proprietary
TH11	Integrated manufacturing and chromatographic system for virus production	15 June 2018	EP: 15 June 2038	<b>EP</b>	proprietary
TH12	Oncolytic virus	20 August 2010	EP and US patents: 19 August 2031	<b>EP (AL, CH, DE, ES, FR, GB, IT, LI) JP, MX, US, US</b>	licensed-in

\* Patents licensed-in (exclusive license) from Institut Pasteur and partly co-owned by Centre National de la Recherche Scientifique (CNRS).

\*\* Patents co-owned by Themis and Institut Pasteur/CNRS.

<sup>1</sup> Explanation for “Geography” Column: Regular font style: pending application; **Bold font style: granted patent, presently in force.** Country codes in round brackets indicate validated countries (consolidated) stemming from at least one granted EP bundle patent.

#### *Patent Family TH1*

The licensed-in patent family for "infectious cDNA of an approved vaccine strain of measles virus and use for immunogenic compositions" (**TH1**) relates to the Measles Schwarz Virus and can be attributed to the Vector Technology. The patents from this family have a maximum term until 20 June 2023 and 3 March 2025, respectively.

Details for patents granted for EP/US:

**EP1** (EP1375512) from TH1 (validated and presently in force for AT, BE, CH, DE, DK, ES, FI, FR, GB, IE, IT, LI, LU, NL, PT, SE, TR) represents the core patent comprising several product claims covering the “matrix” of the Measles Schwarz Virus and thus the Vector Technology. Notably, the patent was opposed after grant. Still, the patent was maintained as granted without any amendments after opposition/appeal proceedings before the EPO underpinning the strength of this contradictory strengthened IP right.

**EP2** (EP2311853) from TH1 (validated and presently in force for AT, BE, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, HU, IE, IT, LI, LU, MC, NL, PT, RO, SE, SI, SK, TR) provides flanking protection in addition to **EP1** above in that a process for the preparation of a cDNA molecule and infectious Measles Schwarz Virus is provided.

**US1** (US9005961) from TH1 is directed to the expression vector for an infectious Measles Schwarz Virus.

**US2** (US9005925) from TH1 is directed to a method for generating infectious Measles Schwarz Virus and thus – as **EP2** – provides flanking protection for the complex process for providing the basic structure according to the Vector Technology.

Finally, **US3** (US9701944) from TH1 is directed to an expression vector for producing an infectious live-attenuated Measles Schwarz Virus.

#### *Patent family TH2*

The licensed-in patent family for “recombinant measles viruses expressing epitopes of antigens of RNA viruses and use of the recombinant viruses for the preparation of vaccine compositions” (**TH2**) relates to the Measles Schwarz Virus and, in part, so-called “rescue” methods relevant to obtain a functional virus at all. Furthermore, the family relates to the central element of a “docking site”, a so-called Additional Transcription Unit (ATU). This ATU is of importance to transform the Measles Schwarz Virus into a working tool so that the products of actual interest can be inserted as heterologous sequences and produced. The family can be attributed to the Vector Technology. The patents from this family have a maximum term until 20 June 2023 and 3 March 2025, respectively.

Details for patents granted for EP/US:

**EP1** (EP1375670) from TH2 (validated and presently in force for AT, BE, CH, DE, DK, ES, FI, FR, GB, IE, IT, LI, LU, NL, SE, TR) is based on the structural features of the “natural” Measles Schwarz Virus protected with TH1, but additionally comprises the general aspect of introducing a heterologous sequence in the Measles Schwarz Virus –to allow for inserting a sequence encoding a product of interest –which is a main aspect of the Vector Technology. The sequence inserted according to the main claim of this patent is a retroviral sequence. Also claimed is a recombinant Measles Schwarz Virus vector comprising an ATU. This element is relevant as “insertion or docking site” to introduce a heterologous product encoding sequence of interest to make the vector available as backbone for producing a product of actual interest.

**EP2** (EP1516058) from TH2 (validated and presently in force for AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE) is specifically directed to a heterologous product insert in the Measles Schwarz Virus vector selected from a Yellow Fever Virus insert, or a West-Nile virus insert.

**EP3** (EP2290091) from TH2 (validated and presently in force for AT, BE, CH, CY, DK, ES, FR, GB, HU, IT, LI, MC, NL, PT, SE, TR) is also directed to vectors in the context of the Measles Schwarz Virus including a heterologous insert and the “docking site” of the ATU.

**US1** (US9012214) from TH2 focuses on claims protecting detailed elements of the Measles Schwarz Virus vector as expression machine –also including the feature of a heterologous sequence to be inserted from a retrovirus or from a flavivirus.

**US2** (US9914937) from TH2 focuses on the protection of a rescue system relevant for the functional assembly of the Measles Schwarz Virus expressing a heterologous sequence of interest. Notably, the functional production of the Measles Schwarz Virus under this method requires the presence of a vero cell to obtain a functional virus and thus vaccine.

#### *Patent family TH3*

The licensed-in patent family for “new Dengue and West-Nile viruses proteins and genes coding the foregoing” (**TH3**) relates to Dengue virus vaccine products (**DENVnew**) and West-Nile virus vaccine products. The patents from this family have maximum terms between until 2024 and 2028, respectively. The family has a particular focus on specific inserts and thus products per se – in the context of the Vector Technology, but no immediately focusing on the aspect of the Measles Schwarz Virus.

Details for patents granted for EP/US:

**EP** (EP1599495) from TH3 (validated and presently in force for AT, BE, CH, DE, DK, ES, FI, FR, GB, IE, IT, LI, LU, NL, SE, TR) claims a recombinant virus comprising a West-Nile virus or Dengue virus derived sequence. The scope of protection focuses on the insert, rather than the Measles Schwarz Virus backbone and thus on the immunologically relevant product.

**US1** (US7556812) from TH3 provides protection for a specific West-Nile virus sequence independent of the Measles Schwarz Virus backbone.

**US2** (US8859240) from TH3 provides protection for a recombinant Measles virus, comprising a polynucleotide coding for a polypeptide which is the West-Nile virus secreted envelope glycoprotein – and thus for a combination of “backbone + insert”.

#### *Patent family TH4*

The licensed-in patent family for “newly isolated and purified strains of the Chikungunya virus and nucleotide and peptide sequences” (**TH4**) relates to Chikungunya virus sequences and Chikungunya virus-based vaccines. TH4 is relevant for the protection of the MV-CHIK, presently representing the most advanced product candidate of Themis. Patents from TH4 will have a term until 15 March 2027.

Details for patents granted for EP/US:

**EP** (EP2001900) from TH4 (validated and presently in force for AT, BE, BG, CH, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR) claims a very specific strain 05.115 from Chikungunya virus. Notably, also relevant sub-fragments of the virus – said sub-fragments being of importance as products in the context of the Vector Technology – are claimed.

**US** (US9442114) from TH4 focuses on a vector comprising a Chikungunya E2 protein as heterologous insert, said insert representing the structure exerting an immunological effect and thus being important as potential product.

#### *Patent family TH5*

The licensed-in patent family for “cells and methodology to generate non-segmented negative-strand RNA viruses” (**TH5**) relates to specific methods for producing infectious Schwarz Measles Virus and thus to relevant aspects of the rescue of the Schwarz Measles Virus per se representing a virus which can only be handled efficiently by selected laboratories and competitors in an efficient manner due to the complex nature and characteristics of this virus. Functional expression of the virus –and any potential product insert – is of utmost importance in the context of the Vector Technology. TH5 can thus also be attributed to the Vector Technology as part of Themis’ MV Platform. The patents from TH5 will have a maximum term until between 22 December 2026 and 2 December 2029, respectively.

Details for patents granted for EP/US:

**EP1** (EP1939214) from TH5 (validated and presently in force for AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, TR) claims specific cells necessary for the production of a Measles Schwarz Virus –potentially carrying an additional product insert – of the Vector Technology.

**EP2** (EP2091962) from TH5 (validated and presently in force for AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR) is also directed to recombinant cells and expression vectors (Measles and retrovirus) and also comprises methods claims directed to the production of an intact and functional recombinant virus.

**US1** (US8586364) from TH5 claims specific production methods for recovering functional infectious Measles (Schwarz) Viruses.

**US2** (US9499799) from TH5 claims methods related to the Vector Technology to produce an infectious non-segmented virus, e.g. Measles Schwarz Virus, optionally carrying a heterologous insert sequence.

#### *Patent family TH6*

The licensed-in patent family for “chimeric polypeptides and their therapeutic application against a *flaviviridae* infection” (**TH6**) relates to DENVnew and West-Nile virus vaccine products and further comprise IP rights protecting chimeric *Flaviviridae* constructs. The patents from this family have maximum terms between until 2026 and 2028, respectively.

Details for patents granted for EP/US:

**EP** (EP1893228) from TH 6 (validated and presently in force for AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, TR) is directed to product inserts, more particularly product inserts from a protein E of a flavivirus, additionally comprising a moiety of a protein M – thus creating a “fusion” called chimeric polypeptide. Therefore, a potential product claimed in a broad manner (flavivirus as superordinated genus term comprising different viruses like Dengue, Yellow

Fever, West-Nile). **US1** (US8337857) from TH 6 is also directed to very specific chimeric flavivirus derived polypeptides and immunogenic compositions based in these products.

**US2** (US8853379) from TH 6 claims specific chimeric polypeptides in the context of Dengue virus and associated methods of treatment and immunogenic compositions.

**US3** (US9579375) from TH 6 focuses on methods of inducing an immune response based on a backbone vehicle – being the Measles virus – and an insert being selected from a West-Nile virus, a Japanese encephalitis virus and a Yellow Fever virus derived insert as immunologically relevant product/insert.

#### *Patent family TH7*

The co-owned patent family for “recombinant measles virus expressing Chikungunya virus polypeptides and their applications” (**TH7**) relates to Chikungunya virus sequences and Chikungunya virus-based vaccines, respectively. TH7 is particularly relevant for the protection of MV-CHIK, presently representing the most advanced product candidate of Themis. Patents from TH7, for which a patent term extension can be expected upon timely achieving marketing authorizations for relevant jurisdictions, will have a term at least until 26 September 2033. In view of the specific subject-matter eligible for medicinal marketing authorizations, a prolongation of term for already granted US/EP patents of this family is obtainable provided that marketing authorization/approval can be timely obtained. As procedures for regulatory approval, in particular for the EU, are already ongoing and even prioritized (EMA prime designation), the option for a prolongation of term for the granted EP patent is increased.

Details for patents granted for EP/US:

EP (EP2900687) from TH 7 (validated and presently in force for AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR) is directed to C-E3-E2-6K-E1 structural proteins of a Chikungunya virus, said polynucleotide being operably linked, in particular cloned into a cDNA molecule which encodes the nucleotide sequence of the full-length, infectious antigenomic (+) RNA strand of a measles virus and associated cells, compositions and processes. EP is thus a core patent protecting the MV-CHIK product in a broad manner.

US (US9655961) from TH 7 was granted with a comparable scope as **EP** from TH7. Notably, both patents do not comprise a restriction to a specific Chikungunya virus, but rather provide for the immunologically relevant architecture of the product insert in combination with the Measles (Schwarz) Virus.

#### *Patent family TH8*

The licensed-in patent family for “a Dengue virus chimeric polyepitope composed of fragments of non-structural proteins and its use in an immunogenic composition against Dengue virus infection” (**TH8**) relates to DENVnew and West-Nile virus vaccine products and further comprise IP rights protecting chimeric *Flaviviridae* constructs. TH8 includes a restriction to the Schwarz Measles Virus vectors as protected. The patents from TH8 will have a maximum term at least until 2035.

#### *Patent family TH9*

The patent family for “chromatography-based purification strategies for measles scaffold based viruses” (**TH9**) is owned by Themis and relates to the Manufacturing Technology. TH9 aims to strengthen cross-licensing capacity based on the flanking protection of upstream and downstream methods for producing and purifying various the Schwarz Measles Virus backbones in high purity levels. As the Schwarz Measles Virus represents a large and pleomorphic virus, conventional Schwarz Measles Virus based vaccines still comprise high amounts of product- and/or process related impurities. Further, TH9 will also have an impact in emerging applications in the field of immuno-oncology, where controlled cGMP processes guaranteeing reliable yields and product purity levels are of outstanding importance. Therefore, TH9 is not solely intended to confer exclusivity, but also was filed as cross- and/or out-licensing asset in view of the growing interest in the Schwarz Measles Virus as oncolytic virus suitable for cancer indications. Patents from TH9 will have a term until at least 23 December 2036.

#### *Patent family TH10*

The patent family for “recombinant Zika vaccines” (**TH10**) is owned by Themis. TH10 represents the central family in the context of a recombinant Zika vaccine. With TH10, Themis could secure a rather early claimed effective date for an application disclosing a Zika vaccine in an enabling manner at a time when Zika virus infection just started to become epidemic in late 2015, early 2016. TH10, therefore, can have a certain impact in increasing Themis’ competitive

advantage due to its cross-licensing potential – provided that a specific and sufficiently broad scope of protection can be obtained for relevant patents of TH10. Possible patents from TH10 will have a term at least until 23 December 2036. In view of the specific subject-matter eligible for medicinal marketing authorizations, a prolongation of term for patents resulting from this family is obtainable provided that marketing authorizations can be timely obtained. TH10 is a rather young patent family. Therefore, facing the usual timelines for the examination of biotech-related applications, there is no granted patent within this family yet. Themis presently intends to maintain the EP basic application which has been docketed into accelerated search/examination to rapidly obtain a granted EP patent for subject-matter directed to the core constructs of immunological relevance. The EP application stemming from the later filed WO application (and thus having a longer possible term and a more profound disclosure content) will then be used to optimize the scope of protection.

#### *Patent family TH11*

The patent family for “integrated manufacturing and chromatographic system for virus production” (**TH11**) is owned by Themis and relates to the Manufacturing Technology. TH11 aims to strengthen cross-licensing capacity based on the flanking protection of upstream and downstream methods for producing and purifying various the Schwarz Measles Virus backbones in high purity levels. As the Schwarz Measles Virus represents a large and pleomorphic virus, conventional Schwarz Measles Virus based vaccines still comprise high amounts of product- and/or process related impurities. Further, TH11 will also have an impact in emerging applications in the field of immuno-oncology, where controlled cGMP processes guaranteeing reliable yields and product purity levels are of outstanding importance. Therefore, TH11 is not solely intended to confer exclusivity, but also was filed as cross- and/or out-licensing asset in view of the growing interest in the Schwarz Measles Virus as oncolytic virus suitable for cancer indications. Patents from TH11 will have a term until at least until 15 June 2038 (15 June 2039 for potential further applications yet to be filed within the priority year).

#### *Patent family TH12*

In addition to Themis expertise in the field of Measles Schwarz Virus, Themis strives for further technological solutions to enter into the oncolytic field to treat cancer in addition to the vaccine sector. A license agreement (exclusive, world-wide) with the Max-Planck Innovation GmbH was signed on 28 September 2018 by Themis Bioscience GmbH. This family provides access to IP according to **TH12** for an “oncolytic virus”. Again, this virus is based on Measles Schwarz Virus. Still, it includes an additional insert (a so-called “suicide gene”) making the virus more suitable for the field of oncolytics. Furthermore, the virus backbone and certain details.

Details for patents granted for EP/US:

**EP** (EP2605783) from TH12 (validated and presently in force for **AL, CH, DE, ES, FR, GB, IT, LI**) is directed to recombinant measles virus based on measles vaccine strain Schwarz encoding a suicide gene comprising a fusion of a cytosine deaminase and a uracil phosphoribosyltransferase. Further disclosed and claimed are pharmaceutical compositions relating to this virus, kits comprising the same and methods for the production of said virus.

**US1** (US9272008) from TH12 is likewise directed to pharmaceutical compositions, kits and methods for generating an oncolytic virus with the above-identified characteristics.

**US2** (US9795643) from TH12 is likewise directed to pharmaceutical compositions, kits and methods for generating an oncolytic virus with the above-identified characteristics.

The difference between **US1** and **US2** is the fact that both patents claim different structures of the respective virus of interest, as TH12 as a whole provides support for more than one specifically modified oncolytic measles virus.

#### *IP Protection and Manufacturing Know-How*

In the context of the Manufacturing Technology, Themis uses the particular knowledge on the Schwarz Measles Virus upstream and downstream processing which is constantly developed further. Besides the fully owned families TH9 and TH11, this knowledge and represent a highly relevant know-how going beyond patent right protection. Due to the complexity of the Schwarz Measles Virus handling in a laboratory, in particular in a cGMP setting, Themis’ established know-how will not automatically be open to copyist action upon expiry of the relevant IP rights from TH1, TH2 and TH5.

The lapse of certain IP rights covering the “empty” Schwarz Measles Virus backbone or the production process of any one of from TH1, TH2 and TH5 will not represent an immediate threat for Themis as long as relevant products belonging to the Vector Technology as well as activities in the context of the Manufacturing Technology are covered by

new, and advantageously fully owned, IP rights. In contrast, lapse of said licensed-in families can contribute to increasing IP independence provided that new activities are vigorously protected by Themis as applicant.

### *Timing of Patent Filings*

Regarding the timing of patent filings in the relevant technical field inherently demanding an intensive research and development phase, it is crucial for Themis to secure an early filing date for IP rights. Overhasty patent filings at a stage, where the core technology is not yet sufficiently developed and can in turn not be disclosed in an enabling manner in a patent application, however, should be avoided to reduce the risk of "burning ground" for later, enabling product candidates and to reasonably invest IP accruals.

In the field of biotechnology/immunology, it is usually not possible to file an IP right with sufficient disclosure to obtain a broad scope of protection upon grant of a patent at a stage of development, when no biological or immunological data are available. Therefore, Themis files relevant applications not "prophylactically", but only at the moment when first – but reliable – *in vitro* and/or *in vivo* data could be obtained for a new product according to the Vector Technology.

### *Term of Patents*

The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which Themis or licensors filed patent applications, the patent term is 20 years from the earliest date of filing a non-provisional patent application, such as an international patent application.

The patent term of families protecting vaccine products combining the Schwarz Measles Virus backbone and a specific insert can be prolonged if marketing authorizations for relevant medicinal products protected by a patent of any of these families can be timely obtained. In turn, this can imply a patent term extension in case a supplementary protection certificate (*SPC*), or a comparable patent term extension can be obtained. For relevant jurisdictions in the EU, this will imply a maximum of a five-year patent term extension (Regulation 469/2009/EC). Another extension of six months is theoretically available under the Pediatric Regulation. In the United States, the term of a patent covering an FDA-approved drug may be eligible for a patent term extension (*PTE*) under the Hatch-Waxman Act (1984) as compensation for the loss of patent term during the FDA regulatory review process. The basic limitations of PTE are that only one extension per product is available, there may be only one product per patent extension and there may only be one patent extension per patent. The period of extension may be up to five years beyond the expiration of the patent, but cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval. For EP and US, strict time limits after the first approval of a product have to be taken into consideration for IP related issues to profit from a possibly prolonged patent term.

Themis thus intensively reports regulatory activities regarding marketing authorizations to the firms handling IP-related issues to seek patent term extensions in any jurisdictions where they are available. There is, however, no guarantee that the applicable authorities deciding on such extensions will agree with its assessment of whether such extensions should be granted, and even if granted, the length of such extensions.

Even though relevant patents from TH1 and TH2 might thus likely expire before the market entry for relevant products, which in turn might encourage copyist actions by competitors (see Section 1 (Risk Factors)), the present patent strategy of Themis rather focusses on the future. The lapse of licensed-in families will also imply a significant degree of independence in the relationship to licensors. For Themis' specific products, the well-studied backbone technology paves the way for a comparably rapid product development in the vaccine field. Risks may materialize when the patents to specific vaccine product candidates expire, or in case no adequate scope of protection for a given vaccine product can be obtained (see Section 1 (Risk Factors)).

### *Potentially conflicting third-party IP rights*

Themis is well aware of the fact that a regular search for and a monitoring of potentially conflicting IP rights of third-parties is relevant to ensure freedom-to-operate (FTO) for any actions in the context of the Vector or the Manufacturing technology.

In 2015, when more and more exploiting the licensed-in portfolio according to TH1 to TH6 and TH8, a medium-scale FTO analysis for the vector backbone was initiated. One highly relevant patent family (*PF*) was identified at that date. Further families of potential relevance were identified and immediately docketed into a regular monitoring (e.g. comprising families around WO 2008/026225 A2 and WO 2010/062396 A2).

Meanwhile, the highly relevant “red flag” PF around US7402429B1 does no longer comprise a patent in force and, therefore, does no longer represent a threat from a FTO point of view (patent terms for US patents have been confirmed by a US attorney).

Themis follows the policy to conduct first small to medium scale pre-FTO or clearance searches before entering into a new project. This serves the purpose to obtain an overview of the respective IP-landscape and relevant prior art. Suitable actions can thus be derived for several fields: (i) for own activities in the filing of IP, (ii) for defining suitable workarounds –knowing about potentially conflicting IP rights – at an early stage of development when such re-designs are still technologically possible and economically feasible, and finally (iii) for deciding on potential licensing activities. Regarding licensing agreements, Themis does not only seek to define a commercial interaction, but rather a deeper strategic and technological partnership to obtain optimum access to know-how associated with the relevant IP to rapidly exploit and develop the respective technology further.

The results of a small to medium size FTO analysis in the context of “oncolytics”, for example, paved the way for the cooperation meanwhile initiated in the context of TH12. Further families identified as potentially relevant were immediately analysed by Themis’ technical experts to define relevant structural differences and/or to deduct the relevant actions necessary.

Finally, in view of the advanced stage of development, Themis meanwhile initiated a medium to large scale FTO analysis in the context of Chikungunya covering patent families comprising at least one EP/US/AT/DE/FR or a pending WO IP right (also taking into consideration the Asian market, yet no “CN/JP/KR only” families). The search additionally comprises a small scale (structure and keyword search based) re-evaluation for the backbone – Measles Schwarz Virus. As of the date of this prospectus, no red flag in the context of the highly relevant Chikungunya insert was identified (analysis still ongoing).

Any IP right identified as highly relevant, relevant or at least of potential interest according to any FTO analysis is intensively discussed internally and together with IP counsels to deduce the relevant actions.

#### 10.10.2 *Trade Secrets*

In addition to patent protection, Themis also relies on trade secret protection for its proprietary information that is not amenable to, or that Themis does not consider appropriate for, patent protection, including, for example, its procedures for creation of recombinant measles viruses and certain aspects of its manufacturing processes. However, trade secrets can be difficult to protect. Although Themis takes steps to protect its proprietary information, including restricting access to its premises and its confidential information, as well as entering into agreements with its employees, consultants, advisors, and potential collaborators, third parties may independently develop the same or similar proprietary information or may otherwise gain access to its proprietary information. As a result, Themis may be unable to meaningfully protect its trade secrets and proprietary information.

### 10.11 **Material Contracts**

#### 10.11.1 *Financing Agreements*

##### 2017 Investment Agreement

On 31 July 2017, Themis Bioscience GmbH, its founders and several investors entered into an investment agreement (the **2017 Investment Agreement**), pursuant to which the parties agreed upon the issuance of loan notes in an aggregate nominal amount of EUR 5,000 thousand, split into three tranches, with the loan notes being convertible into shares of Themis Bioscience GmbH. As regards the first tranche of loan notes, in an aggregate principal amount of EUR 1,500 thousand, the investors are contractually obliged to purchase them in the proportions specified in the 2017 Investment Agreement. As regards the second and third tranche of loan notes, Themis Bioscience GmbH has the right to offer the subscription of such loan notes to the investors, each of whom, in turn, has the right, but not the obligation, to subscribe for its pro rata share of the respective loan notes. The conversion of the loan notes into shares is either an obligation or a right, depending on the tranche.

In the event of a Series C financing pursuant to which a new investor agrees to invest at least EUR 3,000 thousand in exchange for Series C preferred shares, the holders of the loan notes are obliged to convert their loan notes into Series C preferred shares of Themis Bioscience GmbH, whereas in a Series C financing that does not meet such minimum amount, a majority of the holders of loan notes has the right, but not the obligation, to compel the conversion of all loan notes to Series C preferred shares of Themis Bioscience GmbH. Should an exit event occur prior to maturity of the loan notes, a conversion thereof to shares is required in the case of an IPO, while in the case of a trade sale or business sale, the majority of the holders of loan notes has the right, but not the obligation, to compel the conversion of



all loan notes to exit shares. If neither a Series C financing nor an exit occurs before 30 November 2018, the majority of the holders of loan notes has the right, by giving notice to the other parties by 31 December 2018, to compel the conversion of all loan notes to shares of Themis Bioscience GmbH. Should the loan notes not have been repaid or converted by their maturity date and a repayment of the loan notes on the maturity date is not permissible under their terms and conditions, then the investors will be obliged to convert their loan notes to shares of Themis Bioscience GmbH. In connection with the subsequent Series C financing of Themis Bioscience GmbH, EUR 1,500 thousand of loan notes were converted to Series C preferred shares (please see details below).

#### *Series C Financing*

On 21 December 2017, several investors entered into an investment and subscription agreement with Themis Bioscience GmbH (the **Series C Financing Agreement**) pursuant to which the parties agreed upon the terms of a further financing round in which an aggregate of EUR 8,500 thousand would be invested in Themis Bioscience GmbH through three separate tranches in return for Series C preferred shares in Themis Bioscience GmbH. The Series C Financing Agreement also required the parties to enter into a new shareholders' agreement, which replaced the one previously entered into by several of the parties. The first tranche consisted of both an investment of additional funds by the investors in exchange for Series C preferred shares as well as a conversion into Series C preferred shares (with a 20% discount on the share price of the Series C preferred shares) of the amount then outstanding under loan notes previously issued by Themis to some of the investors parties to the 2017 Investment Agreement and totalled EUR 3,000 thousand. The second and third tranche were investments of additional funds upon Themis reaching specified milestones in the development of MV-CHIK and were issued in July 2018. The second tranche totalled EUR 3,500 thousand and the third tranche EUR 2,000 thousand (together, the **Series C2/C3 Capital Increase**).

#### *2015 Investment and Subscription Agreement*

On 28 April 2015, Themis Bioscience GmbH, its founders and several investors entered into an investment and subscription agreement (as amended on 8 February 2016 and 11 November 2016, the **2015 Investment Agreement**), pursuant to which the parties agreed upon the terms of a further financing round (the **Series B Financing**) in which an aggregate of EUR 7,000 thousand would be invested in Themis Bioscience GmbH through two separate tranches in return for Series B preferred shares. The first tranche consisted of both an investment of additional funds by the investors in exchange for Series B preferred shares as well as a conversion into Series B preferred shares (with a 20% discount on the share price of the Series B preferred shares) of the amount then outstanding under loan notes previously issued by Themis Bioscience GmbH to some of the investors who were parties to the 2015 Investment Agreement. The second tranche was an investment of additional funds upon Themis Bioscience GmbH reaching a specified milestone (the signing of an agreement with Institute Pasteur). In addition, the parties agreed to use best joint efforts to secure within six months of the signing date an additional investor prepared to invest between EUR 2,500 thousand and EUR 3,500 thousand in two tranches subject to the same conditions applicable to the earlier investments in the Series B Financing. The 2015 Investment Agreement also required the parties to enter into a new shareholders' agreement, which replaced the one previously entered into by several of the parties. The first tranche of the Series B Financing totalled EUR 2,900 thousand and the second tranche totalled EUR 4,200 thousand and the final tranche totalled EUR 2,400 thousand.

#### *GHIF Investment Agreement*

In relation the Series C Financing Agreement, Themis Bioscience GmbH and Global Health Investment Fund I, LLC (**GHIF**) entered into an investment agreement dated 21 December 2017 (the **GHIF Investment Agreement**). GHIF is an investment fund formed for the charitable purpose of improving global health through the provision of funding, targeting neglected infectious diseases and other health conditions impacting low and middle income countries. Pursuant to the GHIF Investment Agreement, GHIF committed to purchase and subscribe for Series C preferred shares in Themis in an aggregate amount of EUR 5,500 thousand, in accordance with the terms of the Series C Financing Agreement. Themis Bioscience GmbH, on the other hand, agreed to use the investment to support its research and clinical development in MV-CHIK for the benefit of low and middle income countries. If Themis Bioscience GmbH (i) fails to comply with the provisions of the GHIF Investment Agreement for a certain period of time, (ii) assigns or transfers material intellectual property in relation to MV-CHIK or (iii) files for insolvency, ceases to conduct its business in the ordinary course or is determined to no longer be a going concern, Themis Bioscience GmbH grants GHIF a nonexclusive, irrevocable, non-terminable and royalty free license in relation to MV-CHIK and its commercialization in certain low income countries for purposes of achieving GHIF's charitable purpose.

#### **10.11.2 Grants**

##### *2018 Framework Partnering Agreement with CEPI*

On 5 March 2018, Themis entered into a framework partnering agreement with CEPI amounting up to EUR 37.5 million (the **CEPI Partnering Agreement**). CEPI is a public-private not-for-profit coalition including civil and

philanthropic organization formed to, *inter alia*, fund and support the development for new vaccines with chosen partners to prevent and contain infectious disease epidemics. Themis applied to CEPI for funding of the development of vaccines against MERS-CoV and Lassa fever using the MV Platform. In the CEPI Partnering Agreement, CEPI agreed to provide funding packages for the following anticipated development steps: (i) the pre-clinical development PoC for Lassa fever, (ii) phase 1 clinical trials for Lassa fever, (iii) phase 2 clinical trials for Lassa fever, (iv) non-clinical efficacy trials and (v) the pre-clinical development PoC for MERS-CoV. Six months prior to the completion of each phase, Themis will inform CEPI about its plans for the next phase whereupon CEPI will inform Themis whether or not it will fund such next work phase. For each phase, a certain funding budget is agreed in the CEPI Partnering Agreement, which is to be released by CEPI once a milestone for a phase is completed.

#### *2017 Agreement with Innovate UK*

On 1 September 2017, Themis (as contractor), on the one hand, and Technology Strategy Board (known by its trading name: Innovate UK) and the UK Department of Health (together, the “authority”), on the other hand, entered into an agreement pursuant to which the authority agreed to reimburse Themis up to GBP 3,000 thousand in return for Themis agreeing to undertake a specified innovation and development project related to Chikungunya and granting the authority a non-exclusive license to use certain intellectual property arising out of the project. Reimbursement is required to take place on a quarterly basis upon submission of claims along with the required supporting documentation. The project aims at developing candidate vaccines and vaccine platform technologies at the clinical stage and covers carrying out clinical development of vaccines up to and including IIb trials.

#### *2016 Agreement with Innovate UK*

On 10 August 2016, Themis (as contractor), on the one hand, and Technology Strategy Board (known by its trading name: Innovate UK) and the UK Department of Health (together, the “authority”), on the other hand, entered into an agreement pursuant to which the authority agreed to reimburse Themis up to GBP 999,180 in return for Themis agreeing to undertake a specified innovation and development project related to the Zika virus and granting the authority a non-exclusive license to use certain intellectual property arising out of the project. Reimbursement is required to take place on a quarterly basis upon submission of claims along with the required supporting documentation. The project aims at developing vaccine candidates for priority infectious diseases, vaccine platform technologies and manufacturing technologies that allow for the rapid manufacture of vaccines in low-income countries. It is particularly focused on candidate vaccines that are ready for phase 1 human trials and manufacturing technology that could potentially become commercially viable in the near future.

#### *2016 EU Grant Agreement – ZIKAVAX*

On 2 December 2016, the European Union, represented by the European Commission, on the one hand, and European Vaccine Initiative EWIV (as the coordinator and beneficiary), as well as Institut Pasteur, Themis and Commissariat À L’Energie Atomique et Aux Energies Alternatives (as the other beneficiaries), on the other hand, concluded the grant agreement number 732432 ZIKAVAX (the ***EU Grant Agreement***) in connection with the European Union’s Horizon 2020 research and innovation program. Pursuant to the EU Grant Agreement, the beneficiaries were awarded a grant for research and innovation action entitled “Fast track development of a Zika vaccine based on measles vector – ZIKAVAX”. The maximum amount of the grant is EUR 4,900 thousand. The grant reimburses 100% of the action’s eligible costs. The duration of the action is 48 months beginning as of 1 October 2016. The final grant amount depends on the actual extent to which the action is implemented in accordance with the agreement’s terms and conditions.

Pursuant to the EU Grant Agreement, the European Commission made a pre-financing payment of EUR 2,600 thousand to the beneficiaries to serve as a float. It remains the property of the European Union until the payment of the balance. The coordinator must submit to the European Commission the technical and financial reports as set out in the EU Grant Agreement, which reports should also include requests for payment based on eligible costs declared by each beneficiary in writing. The European Commission must thereupon pay interim payments on the basis of these periodic reports. Responsibilities of the individual beneficiaries are prescribed by the EU Grant Agreement and a related consortium agreement among the beneficiaries.

### **10.11.3 License Agreements**

#### *License Agreements with Institut Pasteur*

Institut Pasteur, a French foundation dedicated to research, obtained proprietary knowledge related to the measles vector that could be used to prevent or fight diseases. It licenses this patented measles vector for the development of human vaccines.

In January 2010, Themis entered into a collaboration agreement with Institut Pasteur pursuant to which Themis was granted the right to exercise options for a license of Institut Pasteur's patented measles vector for the development of new vaccines, based on such measles vector, against Chikungunya, Yellow fever, Dengue, Japanese Encephalitis and West Nile (the **Collaboration Agreement**). The Collaboration Agreement has lapsed due to expiry of the term. During the term of the Collaboration Agreement, Themis exercised two options. Themis and Institut Pasteur entered into (i) the existing license agreement dated 24 August 2012 to develop a vaccine against the Chikungunya virus and (ii) the existing license agreement dated 27 November 2012 to develop a vaccine against the Dengue virus.

In January 2015, Themis entered into an option agreement with Institut Pasteur, granting Themis the right to exercise options for a license of Institut Pasteur's patented measles vector for the development of new vaccines, based on the measles vector, against RSV, Novo virus, Yellow fever, Japanese Encephalitis and to develop a new antigen against Dengue (the **Option Agreement**). Themis then exercised an option under the Option Agreement. Themis and Institut Pasteur have entered into the existing license agreement dated 28 June 2016 to develop a vaccine against RSV, Novo virus, Parvo, CMV, Zika, Varicella, MERS and Dengue. This license agreement was amended in April 2018 to be extended to the indications covered by the CEPI Partnering Agreement.

Pursuant to the license agreements with Institut Pasteur, Themis is granted exclusive worldwide royalty-bearing licenses (including the rights to grant sublicenses). Institut Pasteur relinquishes its right to directly or indirectly commercially exploit its patents in the fields covered by the license agreements. Themis is obliged to pay certain milestone considerations to Institut Pasteur that are due when certain development stages are reached in relation to each license agreement. Furthermore, Themis is obliged to pay royalties between 2% and 6% for products developed using Institut Pasteur's measles vector.

#### *License Agreements with Max-Planck Institute*

Max-Planck-Gesellschaft zur Förderung der Wissenschaft e.V. (the **Max Planck Society**) is a German non-profit organisation focused on supporting the conducting of basic research in the natural sciences, life sciences and humanities sectors. It operates across 87 research institutions in Germany and 17 internationally, including Princeton University, University College London and the University of Tübingen on Clinical Oncology. The Max Planck Society is funded by federal and state governments with an annual budget of approximately EUR 1.8 billion in 2017 and employs over 15,000 people globally. The Max-Planck-Institute of Biochemistry is a research institute of Max Planck Society. Scientists of the Max-Planck-Institute of Biochemistry succeeded, jointly with scientists of Universität Tübingen (the **Universität Tübingen-Inventors**), in optimizing the safety and efficiency of oncolytic vectors for use in regards to liver tumours (the **Invention**). The Universität Tübingen-Inventors filed certain patent rights relating to the Invention. Max-Planck-Innovation GmbH, a 100% subsidiary of Max Planck Society and acts as its technology transfer agency, is authorized by the Universität Tübingen-Inventors to negotiate and sign commercialization agreements in Max Planck Society's name, and also with legally binding effect for the Universität Tübingen-Inventors, with respect to the related patent rights.

On 28 September 2018, Themis Bioscience GmbH entered into an exclusive license agreement with Max-Planck-Innovation GmbH (the **Exclusive License Agreement**). Pursuant to the Exclusive License Agreement, Themis Bioscience GmbH is granted exclusive worldwide royalty-bearing sub-licensable license with respect to certain patent rights in relation to the Invention to allow the development and commercialization of products based on these patent rights. Themis is obliged to pay to Max Planck Innovation GmbH milestone payments that are due upon milestone events being reached, as well as royalties of 4% on net sales of products based on these patent rights, regardless of whether the products are sold by Themis, sub-licensees or subcontractors. Milestone events are the initiation or conclusion of clinical trials phases and market approval from authorities. The amount of the milestone payments varies depending on the milestone event being reached. Although the Invention was focused on oncolytic vectors for use in liver tumours, the Exclusive License Agreement covers all oncology applications that can be developed or commercialized using the patent rights.

#### **10.11.4 Service Provider Agreement**

##### *Agreement on the technical transfer, scale up and cGMP manufacturing of MV-CHIK*

On 18 September 2018, Themis Bioscience GmbH accepted a firm offer by IDT Biologika GmbH on the technical transfer, scale up and cGMP manufacturing of MV-CHIK amounting to EUR 2.3 million (the **Firm Offer**). IDT Biologika GmbH is a global vaccines and biologics contract development and manufacturing organization registered in Germany. Pursuant to the Firm Offer, IDT Biologika GmbH undertakes to perform services for Themis in relation to the technical transfer, scale up and cGMP manufacturing of MV-CHIK (the **Project**). Themis is obliged to pay to IDT Biologika GmbH certain service fees for the services performed and for all products and deliverables provided by IDT Biologika GmbH under the different work packages as set out in the Firm Offer. The services fees comprise non-reimbursable advance fees and performance fees.

Pursuant to the Firm Offer, Themis and IDT Biologika GmbH will use good faith efforts to negotiate and sign a master services agreement no later than 31 December 2018, setting forth detailed terms and provisions for the performance by IDT Biologika GmbH of development and manufacturing services with respect to the Project (the *MSA*). In the event that Themis and IDT Biologika GmbH will not have executed the MSA on or prior to 31 December 2018, IDT Biologika GmbH shall be entitled upon written notice to Themis to cease the performance of all services until the MSA has been executed. Under the MSA additional work packages will be consented by Themis and IDT Biologika GmbH setting forth additional services to be performed by IDT Biologika GmbH in connection with the Project. On the effective date of the MSA, the Firm Offer will terminate and the work packages under the Firm Offer and the services to be performed by IDT Biologika GmbH thereunder will be incorporated in and made an integral part of the MSA. Further, if required in connection with the performance of services by IDT Biologika GmbH, Themis and IDT Biologika GmbH will negotiate and execute a quality agreement which solely sets forth quality assurance practice matters.

#### **10.12 Facilities**

Themis' principal facilities and corporate headquarters consist of approximately 650 square meters of laboratory and office space in Vienna, Austria. Its lease agreement governs Themis' offices and parking spaces and has a term until 31 December 2028 and can be terminated for good cause. Themis believes that its existing facilities are adequate to meet its current needs, and that suitable additional space will be available in the future on commercially reasonable terms.

#### **10.13 Employees**

As of 30 June 2018, Themis had 12 employees, (based on full-time equivalent). Themis' employees in Austria are subject to collective bargaining agreement of the chemical industry. This is an annual agreement between the employer representatives and the trade union of an industry. It defines conditions of employment, such as minimum wages, working hours and conditions, overtime payments, vacations and other matters.

Themis considers its relationships with its employees to be good.

#### **10.14 Legal Proceedings**

At any given time, the Company or Themis may become involved in litigation arising from claims against it or brought by it against others to enforce the Company's or Themis' rights or be subject to non-litigated claims arising out of its normal operations of its business.

Neither the Company nor Themis is, or during the twelve months preceding the date of this Prospectus has been, involved in any governmental, legal or arbitration proceedings which have had or which may have a material effect on the financial position or profitability of the Company and/or Themis, nor is the Company or Themis aware that any such proceedings are pending or threatened.

Neither the Company nor Themis is involved in opposition proceedings regarding the registration of its patents, patent applications, or trademarks. There are no current material claims or litigation against the Company and/or Themis. However, due to the inherent nature of intellectual property rights, there remains the possibility of un-asserted claims related to intellectual property that the Company or Themis is not yet aware of.

## 11. Regulation

Government authorities in Europe and in other parts of the world extensively regulate, among other things, the manufacturing, research and clinical development, marketing, labelling and packaging, storage, distribution, post approval monitoring and reporting, advertising and promotion, pricing, and export and import of pharmaceutical products, such as those Themis is developing. The process of obtaining regulatory approvals and the subsequent compliance with appropriate regulations require the expenditure of substantial time and financial resources.

All countries or regions have their own governing bodies, requirements, and processes with respect to medicinal products. If Themis fails to comply with applicable regulatory requirements, it may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

### 11.1 European Union Regulations

In Europe, Themis will be subject to a variety of regulations governing, among other things, clinical trials and any commercial sales and distribution of products. The cost of establishing a regulatory compliance system for the conduct of clinical studies and commercial sales in Europe can be very significant.

Themis must obtain the requisite approvals from regulatory authorities in the different European member states prior to the commencement of clinical trials in those member states or from national Competent Authorities or the European Commission prior to marketing of the product.

In order to conduct a clinical trial in any member state of the European Union a clinical trial application (*CTA*) must be submitted for each clinical protocol to the respective country's Competent Authority and an independent ethics committee, respectively. Once the CTA is accepted in accordance with a country's requirements, the clinical trial may proceed. As a general principle, clinical trials must be conducted in accordance with GCP, the applicable regulatory requirements, and the ethical principles that have their origin in the Declaration of Helsinki.

To obtain regulatory approval for commercial use of a new medicinal product under European Union regulatory systems, Themis must submit a marketing authorization application.

General requirements for the development of medicinal products in the EU include amongst others:

- manufacture of the active substance as well as the medicinal product in accordance with cGMP, regulations;
- completion of extensive preclinical laboratory tests and preclinical animal studies, all performed in accordance with good laboratory practices regulations; and
- performance of adequate and well-controlled human clinical trials to establish the safety and efficacy of the product candidate for each proposed indication.

The preclinical and clinical testing and approval process requires substantial time, effort, and financial resources, and Themis cannot be certain that any approvals for its product candidates will be granted on a timely basis, if at all.

#### 11.1.1 *Approval Procedures for Clinical Trials in the European Union: CTAs*

Clinical trials involve the administration of the investigational new drug to human subjects under the supervision of qualified investigators in accordance with GCP, which include the requirement that all research subjects provide their informed consent for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the study, the parameters to be used in monitoring safety, and the efficacy criteria to be evaluated.

The clinical investigation of a medicinal product is generally divided into three or four phases. Although the phases are usually conducted sequentially, they may overlap or be combined:

- Phase 1 - The product candidate is initially administered to healthy human subjects or patients with the target disease or condition. These studies are designed to evaluate the safety, tolerability, pharmacokinetic properties/ metabolism and pharmacologic actions of the investigational medicinal product in humans, the side effects associated with increasing doses, and if possible, to gain early evidence on effectiveness. The

general probability of a successful transition from phase 1 to 2 has been described to be approximately 60% (*Source: DiMasi 2014*).

- Phase 2 - The product candidate is administered to a limited patient population to generate the clinical proof-of-concept, evaluate tolerability and optimal dosage, identify possible adverse side effects and safety risks, and preliminarily evaluate efficacy. Companies often refer to the first set of exposure response trials in patients as phase 2a clinical trials and patient dose-ranging trials as phase 2b clinical trials. The general probability of a successful transition from phase 2 to 3 has been described to be approximately 36% (*Source: DiMasi 2014*).
- Phase 3 - The drug is administered to an expanded patient population, generally at geographically dispersed clinical trial sites to generate enough data to statistically evaluate dosage, clinical effectiveness and safety, to establish the overall benefit-risk relationship of the investigational medicinal product, and to provide an adequate basis for product approval. The overall success rate from phase 1 to product approval has been described to be approximately 12% (*Source: DiMasi 2014*).
- Phase 4 - In some cases, the Competent Authorities may require the sponsor to conduct additional clinical trials after approval. In other cases, a sponsor may voluntarily conduct additional clinical trials after approval to gain more information about the medicinal product. Such post-approval studies are typically referred to as phase 4 clinical trials.
- “Phase 1/2” or “phase 2/3” studies combine the features of a phase 1 and a phase 2 study or a phase 2 and phase 3 study, respectively, each as described above.

An individual phase of clinical development is usually considered to be finished when the relevant data with respect to the stated objectives are available. The data with respect to the most important outcome parameters in a given trial are usually referred to as “top line data”, which are usually the first data to be analysed and are thus available before the full analysis of all study data is available. The follow-up phase in a clinical trial is usually the treatment-free period after cessation of the study’s drug administration, where patients are monitored with respect to pre-defined parameters for, for example, safety and efficacy. In some cases, data from a follow-up phase may constitute top line data; for example, when the continued drug effect after cessation of treatment is considered an important outcome.

It is important to note that any event that may prevent successful or timely completion of clinical development applies to all the phases discussed above. Approval to conduct a clinical trial in all development stages must be obtained in each country in which the trial is being conducted. There is no formal need to conduct a given clinical trial in study centres outside of Europe, but such trials may also include US centres to enable timely recruitment of patients and to include the key specialist hospitals and clinical opinion leaders.

Sponsors must also report to the Competent Authorities, within certain timeframes, serious and unexpected adverse reactions, any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator’s brochure, or any findings from other studies or animal or *in vitro* testing that suggest a significant risk in humans exposed to the product candidate. A clinical trial may be suspended or terminated at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk.

Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether or not a trial may move forward at designated check points based on access to certain data from the trial. They may also suspend or terminate a clinical trial based on evolving business objectives and/or competitive climate.

The clinical trial process can take three to ten years or more to complete depending on the intended target indication and the prevalence of the target indication. For example, the mean duration of clinical trials with antiviral drugs for treatment of AIDS was approximately five years on the low end and was approximately eight years for cancer drugs (*Source: Kaitin 2010*). The mean duration of individual clinical study phases for cancer treatment has been reported to be 1.8 years for phase 1, 2.5 years for phase 2, and 4.0 years for phase 3 - thus 8.3 years in total (*Source: Abrantes-Metz et al., 2004*). There can be no assurance that the data collected will support approval of the product. Results from one trial are not necessarily predictive of results from later trials.

A CTA is an application to conduct a specific clinical study with an investigational medicinal product. Pursuant to the directive 2001/20/EC (the ***Clinical Trials Directive***), as amended, a system for the approval of clinical trial applications in the European Union has been implemented through national legislation of the member states. Under this system, sponsors must seek approval from the competent national authority of any European Union member state in which a study is planned to be conducted. A multi-national setting is typical for such trials to enable timely recruitment

of patients and to include the key specialist hospitals and clinical opinion leaders. To this end, a CTA is submitted, which must be supported by an investigational medicinal product dossier (*IMPD*), the clinical trial protocol, and further supporting information prescribed by the Clinical Trials Directive and other applicable guidance documents. The IMPD includes results of animal and in vitro studies assessing the toxicology, pharmacokinetics, pharmacology, and pharmacodynamic characteristics of the product; chemistry, manufacturing, and controls information; and any available human data or literature to support the use of the investigational medicinal product. Furthermore, a clinical trial may only be started after a competent ethics committee has issued a favourable opinion on the clinical trial application in that country.

There are also requirements governing the reporting of ongoing clinical trials and clinical trial results to public registries.

#### 11.1.2 *Marketing Authorization Applications (MAA)*

An MAA must include all relevant data available from pertinent preclinical studies and clinical trials, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product's chemistry, manufacturing, controls, and proposed labelling, among other things. Data can come from company-sponsored clinical trials intended to test the safety and effectiveness of a use of a product, or from a number of alternative sources, including trials initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and effectiveness of the new medicinal product to the satisfaction of the Competent Authorities.

*Centralized authorization procedure.* The centralized authorization procedure provides for the grant of a single marketing authorization that is valid for all 28 European Union member states, plus by extension the European Economic Area member states, Norway, Iceland, and Liechtenstein. This procedure results in a single Authorization to market a medicinal product in the European Union proceeds under one of four procedures: a centralized authorization procedure, a mutual recognition procedure, a decentralized procedure or a national procedure.

- *Marketing authorization procedure.* Marketing authorization issued by the European Commission that is valid across the European Economic Area (the *EEA*). The centralized procedure is mandatory for human medicines that are: derived from biotechnology processes, such as genetic engineering, contain a new active substance indicated for the treatment of certain diseases, such as HIV/AIDS, cancer, diabetes, neurodegenerative disorders or autoimmune diseases and other immune dysfunctions, and officially designated orphan medicines. The centralized procedure is optional for those products that are highly innovative or for which a centralized process is in the interest of patients.
- *Other authorization procedures.* In general, if the centralized procedure is not followed, there are three alternative routes to authorize medicinal products in the European Union:
- *Decentralized procedure.* Using the decentralized procedure, an applicant may apply for simultaneous authorization in more than one European Union country of medicinal products that have not yet been authorized in any European Union country and that do not fall within the mandatory scope of the centralized procedure. The Competent Authority of the reference member state will lead in the assessment of the application. After a decentralized procedure, the medicinal product will be approved in those Member States of the European Union, which were involved in the procedure.
- *Mutual recognition procedure.* In the mutual recognition procedure, a medicine is first authorized in one European Union Member State, in accordance with the national procedures of that country. Following this, further marketing authorizations can be sought from other European Union countries in a procedure whereby the countries concerned agree to recognize the validity of the original, national marketing authorization. As for the decentralized procedure, the medicinal product will be approved in those Member States of the European Union, which were involved in the procedure.
- *National procedure.* Applicants following the national procedure will be granted a marketing authorization that is valid only in a single member state, only. This procedure is not available for applicants seeking approval in more than one member state.

In the European Union, approved drugs are subject to continuing regulation by the regulatory authorities. The European agencies as well as the FDA will do a completely independent review of a marketing authorization application regarding a BLA. There are examples of medicinal products which were approved in the United States based on the respective data package, but were not approved in the European Union and vice versa. As such, no indication can be provided on the chances that a product approved in the European Union will be approved in the United States.

### 11.1.3 *Pediatric Investigation Plan*

In order to ensure that adequate clinical studies will be conducted in the pediatric population, a Pediatric Investigation Plan (**PIP**) describing details of the clinical studies planned to be conducted in the pediatric population as well as further non-clinical or pharmaceutical work required to enable safe administration of the medicinal product to the pediatric population will need to be provided to the Agency for approval. In case it can be reasonably justified that the disease does not exist in the pediatric population and that treatment with the medicinal product is likely to be ineffective or unsafe for pediatric patients or does not present a significant therapeutic benefit to pediatric patients, a waiver might be approved for the PIP. Furthermore, a deferral, defining that some or all of the agreed pediatric studies might be conducted after filing of the Marketing Authorization Application for adults. Any final decision on the PIP as well as results of any studies agreed in the PIP and not deferred are required prior to submitting a marketing authorization application.

### 11.1.4 *Exceptional Circumstances/Conditional Approval*

Orphan drugs or drugs with unmet medical needs may be eligible for EU approval under exceptional circumstances or for conditional approval.

Approval under exceptional circumstances is used when an applicant is unable to provide comprehensive data on the efficacy and safety under normal conditions of use because the indication for which the product is intended is encountered so rarely that the applicant cannot reasonably be expected to provide comprehensive evidence, when the present state of scientific knowledge does not allow comprehensive information to be provided, or when it is medically unethical to collect such information. An approval under exceptional circumstances must be subject to post-authorization controls or conditions, such as an obligation to conduct further studies, restrictions on supply, use or prescription or special labelling. An approval under exceptional circumstances is based on the assumption that the company will never be able to generate a complete comprehensive data package to support full approval. A marketing authorization under exceptional circumstances is subject to an annual reassessment of the condition.

A conditional marketing authorization may be applicable to orphan medicinal products, medicinal products for seriously debilitating or life-threatening diseases, or medicinal products to be used in emergency situations in response to recognized public threats. Conditional marketing authorization can be granted on the basis of less complete data than is normally required for a marketing authorization in order to meet unmet medical needs and in the interest of public health, provided the risk-benefit balance is positive at the time of granting a conditional authorization, it is likely that the applicant will be able to provide the comprehensive clinical data post-approval, and unmet medical needs will be fulfilled. Conditional marketing authorization is subject to certain specific obligations, usually including the obligation to generate and submit additional clinical data, and must be renewed annually until the obligations have been completed and the authorities have reviewed the new data and confirmed full approvability of the product.

### 11.1.5 *Accelerated Assessment*

Under the centralized procedure in the European Union, the maximum timeframe for the evaluation of a marketing authorization application is 210 days (excluding clock stops, when additional written or oral information is to be provided by the applicant in response to questions asked by the EMA's Committee for Medicinal Products for Human Use, or **CHMP**). Accelerated evaluation might be granted by the CHMP in exceptional cases, when a medicinal product is expected to be of a major public health interest, particularly from the point of view of therapeutic innovation. In this circumstance, EMA ensures that the opinion of the CHMP is given within 150 days, excluding clock tops.

### 11.1.6 *Regulatory Data Protection*

In the European Union, some marketing authorizations benefit from an "8+2(+1)" period of regulatory data protection. This regime consists of a regulatory data protection period of eight years plus a concurrent market exclusivity of ten years. The overall ten-year period will be extended to a maximum of eleven years if, during the first eight years of those ten years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. This data exclusivity prevents a third party from referencing the innovator's data for eight years, after which generic manufacturers may submit marketing authorization applications referencing the innovator's data, but the third party cannot market a generic version until the ten (or eleven) year period has elapsed.

Depending upon the timing and duration of the EU marketing authorization process, products may be eligible for up to five years' supplementary protection certification (**SPC**), pursuant to Regulation (EC) No. 469/2009. Such SPCs extend the rights under the basic patent for the drug.



#### 11.1.7 *Orphan Designation and Exclusivity*

In the European Union, the EMA's Committee for Orphan Medicinal Products (**COMP**), grants orphan drug designations to promote the development of products that are intended for the diagnosis, prevention or treatment of life-threatening or chronically debilitating conditions that affect not more than 5 in 10,000 persons in the European Union, or when, without incentives, it is unlikely that sales of such products in the European Union would be sufficient to justify the necessary investment in developing the products. Orphan drug designation is only available where no satisfactory method of diagnosis, prevention, or treatment of the condition has been authorized (or the product would provide a significant benefit over existing therapies).

In the European Union, orphan drug designation entitles a party to financial incentives such as reduction of fees or fee waivers and 10 years of market exclusivity following grant of the medicinal product approval. This period may be reduced to six years if the orphan drug designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity. Two years additional orphan exclusivity protection can be applied for when an applicant has complied with all requirements as set forth in an approved PIP. Market exclusivity would not prevent the approval of a similar drug that is shown to be safer, more effective or otherwise clinically superior.

Companies that classify as small or medium-sized enterprises benefit from further incentives, including administrative and procedural assistance from the EMA's office for small or medium-sized enterprises and fee reductions.

An orphan drug designation must be requested before submitting an application for marketing approval. An orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

#### 11.1.8 *Supplementary Protection Certificate*

In the European Economic Area, a SPC is a *sui generis* intellectual property right that extends the duration of certain rights associated with a patent for a medicinal product. It enters into force after expiry of a patent upon which it is based. This type of right is meant to compensate for the long time needed to obtain a marketing authorization for a medicinal product after granting the patent.

A SPC comes into force only after the corresponding general patent expires. It normally has a maximum lifetime of 5 years and the total combined duration of market exclusivity of a general patent and SPC cannot normally exceed 15 years.

The duration of the SPC can, however, be extended by additional 6 months when the SPC relates to a human medicinal product for which data from non-clinical and/or clinical trials conducted in accordance with an agreed PIP have been submitted to the agency and are reflected in the product information. The extension can be granted irrespective of the studies' outcome.

#### 11.1.9 *Pharmaceutical Coverage, Pricing and Reimbursement*

Significant uncertainty exists as to the coverage and reimbursement status of any products for which Themis obtains regulatory approval. In the European Union, there is no central reimbursement policy. Governments of individual European Union member states influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national health care systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed to by the government. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost-effectiveness of a particular product candidate to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on health care costs in general, particularly prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country.

### 11.2 **US Government Regulations and Regulations in Other Jurisdictions**

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act and its implementing regulations. FDA approval is required before any new unapproved drug, including a new use of a previously approved drug, can be marketed in the United States. Drugs are also subject to other federal, state, and local

statutes and regulations. If Themis fails to comply with applicable FDA or other requirements at any time during the product development process, clinical testing, the approval process or after approval, Themis may become subject to administrative or judicial sanctions. These sanctions could include the FDA's refusal to approve pending applications, withdrawal of an approval, untitled or warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties or criminal prosecution. Any FDA enforcement action could have a material adverse effect on Themis.

The process required by the FDA before product candidates may be marketed in the United States generally involves the following:

- submission to the FDA of an investigational BLA (*IND*), which must become effective before human clinical trials may begin and must be updated annually;
- approval by an independent institutional review board (*IRB*) or ethics committee representing each clinical site before each clinical trial may be initiated;
- preparation of and submission to the FDA of a BLA, after completion of all pivotal clinical trials;
- potential review of the product application by an FDA advisory committee, where appropriate and if applicable;
- a determination by the FDA within 60 days of its receipt of a BLA to file the application for review;
- satisfactory completion of an FDA pre-approval inspection of the manufacturing facilities where the proposed product is produced to assess compliance with current cGMP; and
- FDA review and approval of a BLA prior to any commercial marketing or sale of the product in the United States.

The approval process for the conduct of clinical trials or commercial sales and distribution of new medicinal products outside the European Union and the United States varies between countries and jurisdictions and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries and jurisdictions might differ from and be longer than that required to obtain approval in the European Union or the United States. Regulatory approval in one country or jurisdiction does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country or jurisdiction may negatively impact the regulatory process in others.

For other countries outside of the European Union, such as countries in Eastern Europe, Latin America or Asia, also the requirements governing product licensing, pricing, and reimbursement vary from country to country.

#### **11.2.1 *Clinical trials***

An IND is a request for authorization from the FDA to administer an investigational new drug product to humans in clinical trials. The central focus of an IND submission is on the general investigational plan and the protocol(s) for human trials. As the IMPD the IND includes results of animal and in vitro studies assessing the toxicology, pharmacokinetics, pharmacology, and pharmacodynamic characteristics of the product; chemistry, manufacturing, and controls information; and any available human data or literature to support the use of the investigational new drug. An IND must become effective before human clinical trials may begin. An IND will automatically become effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to the proposed clinical trials. In such a case, the IND may be placed on clinical hold and the IND sponsor and the FDA must resolve any outstanding concerns or questions before clinical trials can begin. Accordingly, submission of an IND may or may not result in the FDA allowing clinical trials to commence.

A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND. Additionally, approval must also be obtained from each clinical trial site's institutional review board, or IRB, comparable to the European IECs, before the trials may be initiated, and the IRB must monitor the trial until completed.

#### **11.2.2 *Submission of a BLA to the FDA***

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, detailed investigational new drug product information is submitted to the FDA in the form of a BLA requesting approval to market the product for one or more indications. Under federal law, the submission of most BLAs

is subject to an application user fee, which are typically significant and which typically increase annually. Applications for orphan drug products are exempted from the BLA user fees and may be exempted from product and establishment user fees, unless the application includes an indication for other than a rare disease or condition.

Once a BLA has been submitted, the FDA's goal is to review the application within ten months after it accepts the application for filing, or, if the application relates to an unmet medical need in a serious or life-threatening indication, six months after the FDA accepts the application for filing. The review process is often significantly extended by the FDA's requests for additional information or clarification.

Before approving a BLA, the FDA typically will inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving a BLA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP.

The FDA is required to refer an application for a novel drug to an advisory committee or explain why such referral was not made. Typically, an advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

### **11.2.3 *The FDA's Decision on a BLA***

After the FDA evaluates the BLA and conducts inspections of manufacturing facilities where the product will be produced, it may issue an approval letter or a complete response letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. A complete response letter indicates that the review cycle of the application is complete and the application is not ready for approval. A complete response letter may require additional clinical data and/or an additional pivotal phase 3 clinical trial(s), and/or other significant, expensive and time-consuming requirements related to clinical trials, preclinical studies or manufacturing.

Even if such additional information is submitted, the FDA may ultimately decide that the BLA does not satisfy the criteria for approval. The FDA could also approve the BLA with a risk evaluation and mitigation strategy (**REMS**), plan to mitigate risks, which could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. The FDA also may condition approval on, among other things, changes to proposed labelling, development of adequate controls and specifications, or a commitment to conduct one or more post-market studies or clinical trials. Such post-market testing may include phase 4 clinical trials and surveillance to further assess and monitor the product's safety and effectiveness after commercialization. Also, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of Themis' products under development.

### **11.2.4 *Expedited Review and Accelerated Approval Programs***

A sponsor may seek approval of its product candidate under programs designed to accelerate FDA's review and approval of BLAs. For example, Fast Track Designation may be granted to a drug intended for treatment of a serious or life-threatening disease or condition that has potential to address unmet medical needs for the disease or condition. The key benefits of fast track designation are more frequent interactions with the FDA during development and testing, the eligibility for priority review, and rolling review, which is submission of portions of an application before the complete BLA is submitted. Based on results of the phase 3 clinical trial(s) submitted in a BLA, upon the request of an applicant, the FDA may grant the BLA a priority review designation, which sets the target date for FDA action on the application at six months after the FDA accepts the application for filing. Priority review is granted where there is evidence that the proposed product would be a significant improvement in the safety or effectiveness of the treatment, diagnosis, or prevention of a serious condition. If criteria are not met for priority review, the application is subject to the standard FDA review period of ten months after FDA accepts the application for filing. Priority review designation does not change the scientific/medical standard for approval or the quality of evidence necessary to support approval.

Under the accelerated approval program, the FDA may approve a BLA on the basis of either a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. Post-marketing trials or completion of ongoing trials after marketing approval are generally required to verify the drug's clinical benefit in relationship to the surrogate endpoint or ultimate outcome in relationship to the clinical benefit.

In addition, the Food and Drug Administration Safety and Innovation Act, which was enacted and signed into law in 2012, established the new Breakthrough Therapy designation. A sponsor may seek FDA designation of its product candidate as a breakthrough therapy if the drug is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development.

Furthermore, the FDA has established a priority review voucher program designed to encourage development of new drug and biological products to prevent or treat certain tropical diseases specified by the FDA for which there are no significant markets in developed nations and that disproportionately affect poor and marginalized populations. Applicants who submit applications for drug or biological products to prevent or treat these diseases may qualify for a tropical disease priority review voucher. A tropical disease priority review voucher can also be used to obtain priority review of a subsequent drug application that does not itself qualify for priority review.

#### **11.2.5 *Post-Approval Requirements***

Drugs manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping, periodic reporting, product sampling and distribution, advertising and promotion and reporting of adverse experiences with the product. After approval, most changes to the approved product, such as adding new indications or other labelling claims, are subject to prior FDA review and approval. There also are continuing, annual user fee requirements for any marketed products and the establishments at which such products are manufactured, as well as new application fees for supplemental applications with clinical data.

Drug manufacturers are subject to periodic unannounced inspections by the FDA and state agencies for compliance with current cGMP requirements. Changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon Themis and any third-party manufacturers that Themis may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

Themis relies, and expects to continue to rely, on third parties for the production of clinical quantities of its product candidates, and expect to rely in the future on third parties for the production of commercial quantities. Future FDA and state inspections may identify compliance issues at Themis' facilities or at the facilities of contract manufacturers that may disrupt production or distribution, or require substantial resources to correct. In addition, discovery of previously unknown problems with a product or the failure to comply with applicable requirements may result in restrictions on a product, manufacturer or holder of an approved BLA, including withdrawal or recall of the product from the market or other voluntary, FDA-initiated or judicial action that could delay or prohibit further marketing. Also, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of products under development.

The FDA may withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labelling to add new safety information; imposition of post-market studies or clinical trials to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;
- fines, untitled or warning letters or holds on post-approval clinical trials;
- refusal of the FDA to approve pending BLAs or supplements to approved BLAs;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labelling, advertising, and promotion of products that are placed on the market. Drugs may be promoted only for the approved indications and in accordance with the provisions of the approved

label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability.

#### **11.2.6 *Orphan Designation and Exclusivity***

The FDA may grant orphan drug designation to drugs intended to treat a rare disease or condition that affects fewer than 200,000 individuals in the United States, or if it affects more than 200,000 individuals in the United States, there is no reasonable expectation that the cost of developing and making the drug for this type of disease or condition will be recovered from sales in the United States.

Orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages, and user-fee waivers. In addition, if a product receives FDA approval for the indication for which it has orphan designation, the product is entitled to orphan drug exclusivity, which means the FDA may not approve any other application to market the same drug for the same indication for a period of seven years, except in limited circumstances, such as a showing of clinical superiority over the product with orphan exclusivity.

#### **11.2.7 *Pediatric Trials and Exclusivity***

BLAs must contain data, or a proposal for post-marketing activity, to assess the safety and effectiveness of an investigational new drug product for the claimed indications in all relevant pediatric populations in order to support dosing and administration for each pediatric subpopulation for which the drug is safe and effective. The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults or full or partial waivers if certain criteria are met. The requirements for pediatric data do not apply to any drug for an indication for which orphan designation has been granted.

Pediatric exclusivity is another type of non-patent exclusivity in the United States and, if granted, provides for the attachment of an additional six months of marketing protection to the term of any existing regulatory exclusivity, including the five-year and three-year non-patent exclusivity and orphan exclusivity.

#### **11.2.8 *Patent Term Restoration***

Depending upon the timing, duration, and specifics of the FDA approval of the use of product candidates, some US patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one-half the time between the effective date of an IND and the submission date of a BLA, plus the time between the submission date and the approval of the BLA. Only one patent applicable to an approved product is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent and within 60 days of the product's approval. The US Patent and Trademark Office, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, Themis may apply for restoration of patent term for one of Themis' currently owned or licensed patents to add patent life beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant BLA.

#### **11.2.9 *Pharmaceutical Coverage, Pricing and Reimbursement***

In the United States and markets in other countries, sales of any products for which Themis receives regulatory approval for commercial sale will depend in part on the availability of coverage and reimbursement from third-party payers. Third-party payers include government authorities, managed care providers, private health insurers and other organizations. The process for determining whether a payer will provide coverage for a product may be separate from the process for setting the reimbursement rate that the payer will pay for the product. Third-party payers may limit coverage to specific products on an approved list, or formulary, which might not include all of the FDA approved products for a particular indication. Moreover, a payer's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable Themis to maintain price levels sufficient to realize an appropriate return on investment in product development.

Third-party payers are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. In order to obtain coverage and reimbursement for any product that might be approved for sale, Themis may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of products, in addition to the costs required to obtain regulatory approvals. Themis' product candidates may not be considered medically

necessary or cost-effective. If third-party payers do not consider a product to be cost-effective compared to other available therapies, they may not cover the product after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow a company to sell its products at a profit.

The US government, state legislatures and foreign governments have shown significant interest in implementing cost containment programs to limit the growth of government-paid health care costs, including price controls, restrictions on reimbursement and requirements for substitution of generic products for branded prescription drugs. By way of example, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, collectively, the Healthcare Reform Law, contains provisions that may reduce the profitability of drug products, including, for example, increased rebates for drugs sold to Medicaid programs, extension of Medicaid rebates to Medicaid managed care plans, mandatory discounts for certain Medicare Part D beneficiaries and annual fees based on pharmaceutical companies' share of sales to federal health care programs. Adoption of government controls and measures, and tightening of restrictive policies in jurisdictions with existing controls and measures, could limit payments for pharmaceuticals.

The marketability of any products for which Themis receives regulatory approval for commercial sale may suffer if the government and third-party payers fail to provide adequate coverage and reimbursement. In addition, an increasing emphasis on cost containment measures in the United States and other countries has increased and Themis expects that it will continue to increase the pressure on pharmaceutical pricing. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which Themis receives regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

#### **11.2.10 *Other Healthcare Laws and Compliance Requirements***

If Themis obtains regulatory approval for any of its product candidates, it may be subject to various United States federal and state laws targeting fraud and abuse in the healthcare industry, as well as foreign law equivalents.

These laws may impact, among other things, the proposed sales, marketing and education programs. In addition, Themis may be subject to privacy regulation governing health data or the personal data of patients or physicians more generally by both the federal government and the states or other foreign countries in which Themis conducts its business. The laws that may affect Themis' ability to operate include:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, to induce, or in return for, the purchase or recommendation of an item or service reimbursable under a federal healthcare program, such as the Medicare and Medicaid programs;
- federal civil and criminal false claims laws and civil monetary penalty laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payers that are false or fraudulent;
- the federal Health Insurance Portability and Accountability Act of 1996 (*HIPAA*), which created new federal criminal statutes that prohibit executing a scheme to defraud any healthcare benefit program and making false statements relating to healthcare matters;
- the federal transparency laws, including the federal Physician Payment Sunshine Act, that requires drug manufacturers to disclose payments and other transfers of value provided to physicians and teaching hospitals;
- HIPAA, as amended by the Health Information Technology and Clinical Health Act and its implementing regulations, which imposes certain requirements relating to the privacy, security and transmission of individually identifiable health information;
- state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws that may apply to items or services reimbursed by any third-party payer, including commercial insurers, and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts; and
- equivalents of the above laws in jurisdictions outside the US, including, without limitation, regulations and self-regulatory industry codes relating to pharmaceutical advertising, undue incentives, anti-kickback, fraud

and transparency, interactions with physicians and the privacy and security of health information and other personal data. Such laws and regulations may differ on a country-by-country basis, which significantly complicates compliance.

The Healthcare Reform Law broadened the reach of the fraud and abuse laws by, among other things, amending the intent requirement of the federal Anti-Kickback Statute and the applicable criminal healthcare fraud statutes contained within 42 USC. § 1320a-7b, effective March 23, 2010. Pursuant to the statutory amendment, a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. In addition, the Healthcare Reform Law provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act or the civil monetary penalties statute. Many states have adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare items or services reimbursed by any source, not only the Medicare and Medicaid programs.

Themis is also subject to the Foreign Corrupt Practices Act (*FCPA*), which prohibits improper payments or offers of payments to foreign governments and their officials for the purpose of obtaining or retaining business.

Safeguards that Themis implements to discourage improper payments or offers of payments by its employees, consultants, and others may be ineffective, and violations of the FCPA and similar laws may result in severe criminal or civil sanctions, or other liabilities or proceedings against Themis, any of which would likely harm Themis' reputation, business, financial condition and result of operations.

If Themis' operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to Themis, Themis may be subject to penalties, including civil and criminal penalties, exclusion from participation in government healthcare programs, such as Medicare and Medicaid and imprisonment, damages, fines and the curtailment or restructuring of Themis' operations, any of which could adversely affect its ability to operate the business and results of operations.

## 12. Management, Supervisory Board and Employees

### 12.1 General

Set out below is a summary of relevant information concerning the Management Board, the Supervisory Board and Themis' employees and a brief summary of certain provisions of Dutch law, the Articles of Association and the Management Board Rules and Supervisory Board Rules in respect of the Management Board and the Supervisory Board, in each case as it will be constituted and in force prior to and following Settlement.

This summary does not purport to give a complete overview and is qualified in its entirety by Dutch law as in force on the date of this Prospectus, the Articles of Association and the Management Board Rules and the Supervisory Board Rules as they will be in effect ultimately on the Settlement Date. This summary does not constitute legal advice regarding those matters and should not be regarded as such. The full text of the Articles of Association is incorporated by reference in this Prospectus and will be available free of charge in the governing Dutch language and an unofficial English translation thereof at the offices of the Company during business hours and in electronic form on the Company's website ([www.themisbio.com/investors](http://www.themisbio.com/investors)). The full text of the Management Board Rules and the Supervisory Board Rules in the English language will be available in electronic form on the Company's website ([www.themisbio.com/investors](http://www.themisbio.com/investors)).

### 12.2 Management Structure

The Company has a two-tier board structure comprising of the Management Board (*bestuur*) and the Supervisory Board (*raad van commissarissen*).

The Management Board is collectively responsible for the Company's general affairs and is in charge of the day-to-day management, formulating strategies and policies, and setting and achieving the Company's objectives. The Supervisory Board supervises the Management Board and the general affairs in the Company and the business connected with it and provides the Management Board with advice.

### 12.3 Management Board

#### 12.3.1 Powers, Responsibility and Function

The Management Board is the executive body of the Company, collectively responsible for, among other things, defining and attaining the Company's objectives, determining the Company's strategy and risk management policy, the day-to-day management, the Company's general affairs and the Company's representation, subject to the supervision of the Supervisory Board. The Management Board may perform all acts necessary or useful for achieving the Company's objectives, with the exception of those acts that are prohibited by law or by the Articles of Association. The Management Board may allocate its responsibilities and powers to its individual members. All Managing Directors remain collectively responsible for proper management regardless of the allocation of tasks. In performing their duties, the Managing Directors must carefully consider and shall act in accordance with the interests of the Company and the business connected with it, taking into consideration the interests of all corporate stakeholders, such as shareholders, creditors, employees, customers, patient populations and suppliers.

The Management Board shall provide the Supervisory Board in a timely fashion with all information necessary for the performance of the duties the Supervisory Board. The Management Board is required to notify the Supervisory Board in writing of the main features of the Company's strategic policy, general and financial risks and management and control systems, at least once per year. The Management Board must submit certain important decisions to the Supervisory Board and/or the General Meeting for approval, as more fully described below.

Subject to certain statutory exceptions, the Management Board as a whole is authorized to represent the Company. In addition, should the Management Board be comprised of two or more members, two Managing Directors acting jointly, and the Managing Director with the title of chief executive officer acting solely, are also authorized to represent the Company. Furthermore, pursuant to the Articles of Association, the Management Board is authorized to appoint one or more proxy holders who are authorized to represent the Company within the limits of the proxy specifying provided to them.

#### 12.3.2 Management Board Rules

Prior to Settlement, and pursuant to the Articles of Association, the Management Board will adopt rules governing its principles and best practices and further procedures of holding meetings, decision making and functioning of the Management Board.



### **12.3.3 *Composition, Appointment, Term of Appointment and Dismissal of the Management Board***

The Articles of Association, as to be amended by the Deed of Conversion and Amendment prior to Settlement, provide that the Management Board shall consist of one or more members and that the Supervisory Board determines the exact number of Managing Directors after consultation with the Management Board. As of the date of this Prospectus, the Management Board consists of one Managing Director.

The Managing Directors are appointed by the General Meeting upon a binding nomination by the Supervisory Board. The nomination must be included in the notice of the General Meeting at which the appointment will be considered. If no nomination has been made, which is also considered to be the case if there is a tie in the votes of the Supervisory Board on the nomination, this must be stated in the notice. The General Meeting may at all times take away such nomination of its binding character by a resolution passed with a two-third majority representing more than half of the Company's issued capital, following which the Supervisory Board shall draw up a new binding nomination.

A nomination for appointment of a Managing Director must state the candidate's age and the positions he or she holds, or has held, insofar as these are relevant for the performance of the duties of a Managing Director. The nomination must state the reasons for the nomination of the relevant person.

A Managing Director will serve for a maximum term of four years. A Managing Director may be reappointed for a term of not more than four years at a time. (Management, Supervisory Board and Employees—Management Board—Composition of the Management Board).

The Supervisory Board may designate one of the Managing Directors as CEO. In addition, the Supervisory Board may grant other titles to the other Managing Directors.

The General Meeting and the Supervisory Board may suspend Managing Directors at any time, and the General Meeting may remove Managing Directors at any time. A resolution of the General Meeting to remove a Managing Director may be passed by a simple majority of the votes cast, provided that the resolution is based on a proposal by the Supervisory Board. A resolution of the General Meeting to remove a Managing Director other than upon proposal of the Supervisory Board shall require a two-third majority representing more than one-half of the Company's issued share capital. A suspension of a Managing Director may be discontinued by the General Meeting at any time. A General Meeting must be held within three months after a suspension of a Managing Director has taken effect, in which meeting a resolution must be adopted to either terminate or extend the suspension, provided that in the case that such suspension is not terminated, the suspension does not last longer than three months in aggregate. The suspended Managing Director must be given the opportunity to account for his or her actions at that meeting. If neither such resolution is adopted nor the General Meeting has resolved to dismiss the Managing Director, the suspension will cease after the period of suspension has expired.

### **12.3.4 *Decision-making and Approvals of the Management Board***

The Management Board shall in principle meet once per month or more often as deemed desirable or required for a proper functioning of the Management Board by one or more Managing Directors.

In a meeting of the Management Board, each Managing Director is entitled to cast one vote. A Managing Director may grant a written proxy to another Managing Director (if in office) to represent him at a meeting. A Managing Director may not act as proxy for more than one Managing Director. The Managing Directors shall endeavour to achieve that resolutions are as much as possible adopted unanimously. Where unanimity cannot be reached, all resolutions by the Management Board are adopted by the favorable vote of a majority of the Managing Directors present or represented at the meeting (and in respect of whom no conflict of interest exists) unless the Management Board Rules or the Articles of Association provide otherwise. In case of a tie of votes, the proposal is rejected. The Management Board may also adopt resolutions outside a meeting, in writing or otherwise, provided that the proposal concerned is submitted to all Managing Directors then in office (and in respect of whom no conflict of interest exists) and provided that none of them objects to such decision-making process. Adoption of resolutions in writing shall be effected by written statements from all relevant Managing Directors then in office in respect of whom no conflict of interest exists.

### **12.3.5 *Management Board Resolutions Requiring Prior Approval***

#### ***Prior Approval of the General Meeting***

Resolutions of the Management Board concerning a material change in the identity or character of the Company or its business are subject to the approval of the General Meeting. Such changes include in any event:

- a transfer of all or substantially all of the Company's business to a third party;
- the entry into or termination of a long-term cooperation of the Company or of a subsidiary either with another entity or company, or as a fully liable partner in a limited partnership or a general partnership, if such cooperation or termination thereof is of material significance to the Company; and
- the acquisition or disposition of an interest in the capital of a company by the Company or by a subsidiary of the Company with a value of at least one-third of the sum of the assets of the Company, according to the Company's consolidated balance sheet with explanatory notes with explanatory notes in the Company's most recently adopted annual accounts.

The absence of approval of the General Meeting does not affect the authority of the Management Board or the Managing Directors to represent the Company in dealings with third parties.

*Prior Approval of the Supervisory Board*

The following decisions of the Management Board can only be taken with the prior approval of the Supervisory Board:

- any proposal of the Management Board to the General Meeting with respect to the matters set-out in article 16, paragraph 1 of the Articles of Association;
- any proposal of the Management Board to the General Meeting with respect to the dissolution, liquidation or winding up of the Company;
- any proposal of the Management Board to the General Meeting with respect to the entering into of a statutory merger or statutory demerger of the Company;
- any proposal of the Management Board to the General Meeting with respect to the instruction of the Management Board to apply for the Company's bankruptcy;
- any proposal of the Management Board to the General Meeting with respect to an amendment of the Articles of Association;
- any proposal of the Management Board to the General Meeting with respect to an issue of Shares in the Company or to grant rights to subscribe for Shares in the Company or to designate the Management Board as the corporate body authorized to do so as well as a resolution of the Management Board to issue Shares or to grant rights to subscribe for Shares;
- any proposal of the Management Board to the General Meeting with respect to the exclusion or restrictions of pre-emptive rights to subscribe for Shares or to rights to subscribe for Shares or to designate the Management Board as the corporate body authorized to do so as well as a resolution of the Management Board to restrict or exclude pre-emptive rights;
- any proposal of the Management Board to the General Meeting with respect to a reduction of the share capital;
- any acquisition of own Shares for nil consideration as well as any proposal of the Management Board to the General Meeting with respect to an acquisition of own Shares other than for nil consideration including the determination of the value of a non-cash consideration for such an acquisition;
- adoption of as well as any changes to the Company's reserves and dividends policy, the determination of the amount of profit to be reserved in any financial year as referred to in the first sentence of article 27, paragraph 4 of the Articles of Association, as well as any proposal of the Management Board to the General Meeting for the payment of any dividends, including an interim distribution as referred to in the first sentence of article 27, paragraph 5 of the Articles of Association, or any distribution out of the reserves of the Company;
- any distributions to be paid on Shares against the Company's reserves;
- the drawing up or amendment of the Management Board Rules;

- the determination of the Company's strategy, including those resolutions that may have a material impact on the Company's strategy;
- the adoption of the Company's business plan or budget, as well as any material amendment to or material deviation from the prevailing business plan or budget;
- the application for quotation, or withdrawal of quotation, of the Shares or debt on any stock exchange;
- the issuance and acquisition of Shares and of debentures chargeable against the Company or chargeable against a limited partnership (*commanditaire vennootschap*), or a general partnership (*vennootschap onder firma*) of which the Company is fully liable partner;
- the Company's entry into or termination of any long-term, material cooperation by the Company or by a subsidiary with another legal entity or partnership;
- the Company's investment in the capital of another company in an amount equal to at least one-fourth of the Company's issued capital plus reserves, as reflected on the Company's most recent balance sheet, as well as a material change to such investment;
- the termination of a significant number of the Company's employees simultaneously or within a short period of time;
- a significant change in the employment conditions of the Company's employees; and
- adoption and amendment of an employee stock option plan as well as the increase of the number of Shares, or to whom stock options can be granted and the conditions of the stock options under any existing employee stock incentive plan.

The Supervisory Board may also require that other resolutions of the Management Board, than those listed above, require the prior approval of the Supervisory Board. Such resolutions must be clearly specified and laid down in writing. The absence of approval of the Supervisory Board does not affect the authority of the Management Board or the Managing Directors to represent the Company in dealings with third parties.

#### 12.3.6 *Composition of the Management Board*

At the date of this Prospectus, the Management Board is comprised of the following Managing Director, who has been appointed for an indefinite term.

<b>Name</b>	<b>Age</b>	<b>Position</b>	<b>Member Since</b>	<b>Term</b>
Dr. Erich Tauber.....	46	managing director	2018	indefinite

Upon completion of the Corporate Reorganization, the Management Board will be comprised of the following Managing Directors, with a term that will end at the annual General Meeting to be held in 2023, which is the first annual General Meeting to be held after four full years have lapsed since the Settlement Date.

<b>Name</b>	<b>Age</b>	<b>Position</b>	<b>Member Since</b>	<b>Term</b>
Dr. Erich Tauber.....	46	Chief Executive Officer	2018	4 years
David Albert Maier, Ph.D.....	47	Chief Financial Officer	2018	4 years
Katrin Ramsauer, Ph.D.....	41	Chief Scientific Officer	2018	4 years

#### 12.3.7 *Biographical Details of the Managing Director*

Dr. Erich Tauber is the Company's Chief Executive Officer. He co-founded Themis Bioscience GmbH in 2009 and acted as managing director and Chief Executive Officer of Themis Bioscience GmbH since its foundation. Erich also served as Medical Director of Nycomed, where he headed the Respiratory Portfolio. Erich worked at Intercell AG from 2003 to 2009, where he first served as Head of Product Development & Medical Affairs, leading the development and commercialization of the first Japanese Encephalitis Vaccine. In 2005, Erich became Vice President for Product

Development & Medical Affairs and from 2007 to 2009 acted as Vice President for Clinical Development & Medical Officer of Intercell AG. After finishing his medical doctorate degree and his medical training, Erich had worked in Clinical Development at AstraZeneca from 2000 to 2002 and at Baxter BioScience from 2002 to 2003. Erich is Senior Lecturer at the Medical University of Vienna and the University of Applied Sciences and a participant in the WHO Steering Committee for Dengue and other Flavivirus Vaccines. Erich has co-registered two patents for HCV vaccines and published more than twenty articles in scientific journals.

David Albert Maier, Ph.D. is the Company's Chief Financial Officer and joined Themis in 2015 as Senior Vice President Finance of Themis Bioscience GmbH, where he became Chief Financial Officer in 2018. David is a seasoned finance professional with over fifteen years' experience and specializes in finance operations and company valuation. Prior to joining Themis, in 2015, David founded a controlling and reporting services company. David started his career at Deloitte and worked in investment banking and private equity from 2004 to 2011, first with Capital Bank GRAWE Gruppe AG and from 2006 to 2011 as Senior Investment Manager of a Private Equity Fund. David acts as lecturer at the University of Applied Sciences in Vienna and at IMC Krems and a Certified Appraiser.

Katrin Ramsauer, Ph.D. is the Company's Chief Scientific Officer and joined Themis in 2010 as Senior Scientist in vaccine development. At Themis she coordinates key regulatory activities, including FDA/EMA interactions. Katrin brings over thirteen years' of experience in vaccine development and diagnostics to Themis. Prior to joining Themis, Katrin served as Post-Doctoral Scientist for Novartis Vaccines and Diagnostics Inc. from 2009 to 2010. Before that Katrin worked as Hertha Firnberg Research Fellow from 2006 to 2008 at the Clinical Institute of Virology of the Medical University of Vienna where she was awarded with the peer reviewed Hertha Firnberg Research Fellowship to support women in science. From 2005 to 2006 she worked as a Post-Doctoral Scientist at the Max F. Perutz Laboratories at the University of Vienna. She is the author of numerous scientific and other publications and has registered two patents.

### 12.3.8 *Further Information Relating to the Managing Directors*

At the date of this Prospectus, the Managing Directors (which for the avoidance of doubt includes any Managing Directors to be appointed upon completion of the Corporate Reorganization) have not, in the previous five years:

- been convicted of any fraudulent offenses;
- as a member of the administrative, management or supervisory body at any company, or as partner, founder or senior manager at any company, been associated with any bankruptcy, receivership or liquidation of such company;
- been subject to any official public incriminations and/or sanctions by any statutory or regulatory authority (including any designated professional body); or

been disqualified by a court from acting as a member of the administrative, management or supervisory bodies of an issuer or from acting in the management or conduct of the affairs of any issuer.

## 12.4 **Supervisory Board**

The role of the Supervisory Board is to supervise the conduct and policies of the Management Board and the general affairs in the Company and the business connected with it as well as to provide the Management Board with advice. The Supervisory Directors are not authorized to represent the Company.

In performing their duties, the members of the Supervisory Board (the *Supervisory Directors*) are required to be guided by the interests of the Company and the business connected with it, and shall take into account the interests of the Company's stakeholders, which include but are not limited to the Shareholders, the Company's creditors, employees, customers, patient populations and suppliers. The Supervisory Board shall also have due regard for corporate social responsibility issues that are relevant to the business of the Company. The Supervisory Board is responsible for the quality of its own performance and will therefore request any information from the Management Board, the internal audit function and/or the external auditor it deems necessary. The Supervisory Board may, at the Company's expense, seek the advice which it deems desirable for the correct performance of its duties.

The Supervisory Board will draw up a profile (*profilschets*) for its size and composition taking into account the nature of the Company's business, the Supervisory Board's activities and the desired expertise and background of the Supervisory Directors. The Supervisory Board must discuss the profile at the occasion of its adoption and review it annually and each amendment of the profile must be discussed in the General Meeting.

#### **12.4.1 *Supervisory Board Rules***

Prior to Settlement and pursuant to the Articles of Association, the Supervisory Board is to adopt rules governing its principles and best practices and further procedures of its duties and tasks, procedures of holding meetings, procedures of decision making and operating of the Supervisory Board.

#### **12.4.2 *Composition, Appointment, Term of Appointment and Dismissal of the Supervisory Board***

The Supervisory Board shall consist of at least three members, with the exact number to be determined by the Supervisory Board. Upon completion of the Corporate Reorganization, the Supervisory Board will consist of seven members. Only natural persons (i.e. no legal entities) may be appointed as Supervisory Directors.

The Supervisory Directors are appointed by the General Meeting upon a binding nomination by the Supervisory Board. The nomination must be included in the notice of the General Meeting at which the appointment will be considered. If no nomination has been made, which is also considered to be the case if there is a tie in the votes of the Supervisory Board on the nomination, this must be stated in the notice. The General Meeting may at all times take away such nomination of its the binding character by a resolution passed with a two-third majority of the votes cast representing more than one-half of the Company's issued capital, following which the Supervisory Board shall draw up a new binding nomination. The Supervisory Board shall designate one of its members as the chairperson of the Supervisory Board and one of its other members as the vice-chairperson of the Supervisory Board.

A nomination for appointment of a Supervisory Director must state the candidate's age, his or her profession, the number of shares he or she holds and the positions he or she holds, or has held, insofar as these are relevant for the performance of the duties of a Supervisory Director. Furthermore, the names of the legal entities of which he or she is already a supervisory board member or a non-executive member of the board shall be indicated; if those include legal entities which belong to the same group, a reference to that group will be sufficient. The nomination must state the reasons for the nomination of the relevant person.

A Supervisory Director will serve for a maximum term of four years. A Supervisory Director shall retire not later than on the day on which the first General Meeting is held following lapse of four years since his or her appointment. Supervisory Directors may be re-appointed once for another term of four years, which appointment may be extended twice by at most two years each. In the event of a re-appointment after an eight-year period, reasons should be given in the report of the Supervisory Board. The Supervisory Board will draw up a retirement schedule in respect of the periodical resignation of the Supervisory Directors in order to ensure a continuing composition of the Supervisory Board.

The General Meeting may suspend and remove Supervisory Directors at any time. A resolution of the General Meeting to remove a Supervisory Director may be passed by a simple majority of the votes cast representing, provided that the resolution is based on a proposal by the Supervisory Board. A resolution of the General Meeting to remove a Supervisory Director other than upon proposal of the Supervisory Board shall require a two-third majority of the votes cast representing at least one-half of the Company's issued share capital. A suspension of a Supervisory Director may be discontinued by the General Meeting at any time. A General Meeting must be held within three months after a suspension of a Supervisory Director has taken effect, in which meeting a resolution must be adopted to either terminate or extend the suspension for a maximum period of another three months. The suspended Supervisory Director must be given the opportunity to account for his or her actions at that meeting. If neither such resolution is adopted nor has the General Meeting resolved to dismiss the Supervisory Director, the suspension will cease after the period of suspension has expired.

#### **12.4.3 *Decision-making and Approvals of the Supervisory Board***

The Supervisory Board shall in principle meet four times a year or more often as deemed desirable or required for a proper functioning of the Supervisory Board by one or more Supervisory Director(s).

In a meeting of the Supervisory Board, each Supervisory Director is entitled to cast one vote. A Supervisory Director may grant a written proxy to another Supervisory Director (if in office) to represent him at a meeting. A Supervisory Director may not act as proxy for more than one Supervisory Director. All resolutions by the Supervisory Board are adopted by the favorable vote of a majority of the Supervisory Directors present or represented at the meeting (and in respect of whom no conflict of interest exists) unless the Supervisory Board Rules or the Articles of Association provide otherwise. In case of a tie in any vote of the Supervisory Board, the chairperson of the Supervisory Board shall have the casting vote. The Supervisory Board may also adopt resolutions outside a meeting, in writing or otherwise, provided that the proposal concerned is submitted to all Supervisory Directors then in office (and in respect of whom no conflict of interest exists) and provided that none of them objects to such decision-making process. Adoption of resolutions in writing shall be effected by written statements from all relevant Supervisory Directors then in office in respect of whom no conflict of interest exists.

#### 12.4.4 *Composition of the Supervisory Board*

Upon completion of the Corporate Reorganization, the Supervisory Board is comprised of the following seven Supervisory Directors:

<b>Name</b>	<b>Age</b>	<b>Position</b>	<b>Member Since</b>	<b>Independent/Non-independent</b>	<b>Term</b>
Dr. Gerd Zettlmeissl .....	63	Chairperson	2018	independent	4 years
Harry Welten, MBA .....	53	Member	2018	non-independent	4 years
Jean-Paul Prieels.....	72	Member	2018	independent	4 years
Glenn Rockman .....	37	Member	2018	non-independent	4 years
Dr. Regina Hodits .....	49	Member	2018	non-independent	4 years
Dr. Mounia Chaoui-Roulleau .....	47	Member	2018	non-independent	4 years
Dr. Philippe Dro	56	Member	2018	independent	4 years

The business address of each member of the Supervisory Board will be the registered office of the Company, Muthgasse 19, A-1190 Vienna, Austria.

Glenn Rockman, Dr. Regina Hodits and Dr. Mounia Chaoui-Roulleau are representatives of Global Health Investment Fund I, LLC, Wellington Partners Nominee Limited and FPCI Ventech Capital III, respectively, which or which affiliates are among the principal Shareholders. See Section 13.2 (Corporate Reorganization, Existing Shareholders and Related Party Transactions—Existing Shareholders). They currently serve also as members of the supervisory board of Themis Bioscience GmbH.

#### 12.4.5 *Biographical Details of the Supervisory Directors*

##### *Dr. Gerd Zettlmeissl*

Dr. Gerd Zettlmeissl currently serves as chairman of the supervisory boards at MSD Wellcome Trust Hilleman Laboratories (New Delhi, India), Themis Bioscience GmbH (Vienna, Austria) and ASIT biotech (Brussels, Belgium). Further, he serves as a member of the strategic and scientific advisory board at Biological E (Hyderabad, India) as well as a member of the supervisory board of Aeras (Rockville, USA) and of Medigene (Munich, Germany). Additionally he is member of the scientific advisory boards at Aeras and CureVac (Tuebingen, Germany). Furthermore he is a member of the WHO technical advisory group “Technology Transfer Influenza”. Dr. Gerd Zettlmeister has gained experience, *inter alia*, as a chairman of the supervisory board at GlycoVaxyn AG, (Schlieren, Switzerland), as a chief executive officer and chief operating officer of Intercell AG (Austria, UK and USA) as well as global head of Technical Operations Vaccines at Chiron Corp. (Emeryville, USA). He holds a doctorate in biochemistry from University of Regensburg (Germany), received the Award of Vaccine Biotech CEO of the year 2010 at World Vaccine Congress and is author of numerous publications and patents.

##### *Harry Welten, MBA*

Harry Welten currently provides consultancy services to Themis, which services will be terminated as per Settlement. Furthermore, Harry Welten, MBA currently serves as chairman of the board of directors at Novaremed AG (Basel, Switzerland), BiognoSYS AG (Zurich, Switzerland), as a vice chairman of the board of directors at Proteomedix AG (Schlieren, Switzerland) and as a non-executive member of the board of directors at ASIT Biotech SA (Brussels, Belgium), Topadur AG (Schlieren, Switzerland), Virometix AG (Schlieren, Switzerland), Kanyos Bio Inc. (Boston, USA) and Horizon Pharma GmbH (Reinach, Switzerland). Over many years, he was the chief financial officer and executive vice president of Kuros Biosciences AG (Schlieren, Switzerland), chief financial officer and senior vice president of Horizon Pharma AG, chief financial officer and senior vice president of Arpida AG (Basel, Switzerland) and director of UBS AG (formerly UBS Warburg), (New York, USA). He has been a key player in one of the largest biotech IPO's in Europe as well as in numerous industry shaping deals such as M&A as well as spin-offs / raised more than CHF 320 mln through Venture Capital rounds/M&A/IPO/capital markets in Europe and the US. Additionally he managed transition from a private equity financed business into a SIX Swiss Exchange main segment listed company including private and public fund raising as well as merger & acquisitions. He holds an MBA from Columbia Business School, where he graduated with Honors, as well as a degree in banking and finance from KV Zurich Business School and a degree from Kaderschule Zurich. Additionally he is a graduate of the UBS Group Corporate and Institutional Finance Program.

##### *Jean-Paul Prieels, PhD*

Jean-Paul Prieels currently serves as a member of the supervisory board at Themis Bioscience GmbH, Vaximm (Switzerland), Bone Therapeutics (Belgium), NCardia (Belgium), Leukocare (Germany), Nouscom (Switzerland), PDC

line Pharma (Belgium) and Masthercell (Belgium). He is a member of the European Vaccine Initiative Board of Stakeholders and a board member at DBALytics (Belgium). In addition, Jean-Paul Prieels is a member of the scientific advisory board at the Singapore Bioprocessing Technology Institute, Abivax (France) and Curevac (Germany). He holds a Ph.D. degree in Biochemistry from the Free University of Brussels, Belgium.

*Glenn Rockman*

Glenn Rockman is an investment professional with 15 years of experience raising and deploying capital for organizations with "double-bottom-line" objectives, working for or supporting a diverse group of blue-chip stakeholders such as J.P. Morgan, the Bill & Melinda Gates Foundation, Harvard University, the International Finance Corporation, AXA Investment Managers, the Pfizer Foundation, Merck, GlaxoSmithKline, the Swedish International Development Cooperation Agency, KfW Development Bank (Germany), and a number of family offices. For the past eight years, Glenn Rockman has exclusively focused on life sciences investments with the potential to deliver differentiated, outperforming financial returns alongside meaningful, measurable improvements in global public health. He currently works as a partner at Global health Investment Fund, as a director at RIGHT Fund, as a director of Univercells, as a director of IanTECH as well as a director of TFC. Glenn Rockman holds a BA in public and international affairs from Princeton University.

*Dr. Regina Hodits*

Dr. Regina Hodits currently serves as a member of the board of directors at Atopix Limited (Oxford, UK), at Middle Peak Medical GmbH (Palo Alto, USA/ Munich, Germany), at Rigontec GmbH (Munich, Germany) and Themis Bioscience GmbH (Vienna, Austria). She also serves as a supervisory board member at Ayoxxa Biosystems GmbH (Cologne, Germany/ Singapore), of G- Therapeutics SA (Lausanne, Switzerland) and Charisma Therapeutics (Philadelphia, USA). Besides Dr. Hodits is also working as a managing partner at Wellington Partners (Munich, Germany) and as a spokesperson of the BVK board at BVK Bundesverband Deutscher Kapitalbeteiligungsgesellschaften (Berlin, Germany). Dr. Regina Hodits worked, *inter alia*, as a member of the board of directors at Sapien Steering Brain Stimulation (Munich, Germany/ Eindhoven, Netherlands), as an external director of the Respiratory Area Board at GSK GlaxoSmithKline (London, UK) and as partner at Atlas Ventures (London, UK). Her extensive research experience is based on her post- doctoral research at the Medical Research Council (Cambridge, UK) and her work as a scientific team leader and University Lecturer at the University of Vienna Institute of Biochemistry. She holds a doctorate of science in biochemistry from Technical University Vienna and an executive MBA from McKinsey & Company Clearwater (USA).

*Dr. Mounia Chaoui-Roulleau*

Dr. Mounia Chaoui-Roulleau currently serves as a general partner at Turenne Capital (Paris, France) as well as a chief executive officer at Finbiomed (Paris, France). Her previous work experience is based on various positions within companies in the segment of pharma and science. Dr. Mounia Chaoui-Roulleau worked as an analyst at Atlas Venture, as a junior consultant at Telesis, as a project managing consultant at Altran Technologies, as a general partner at Ventech and as managing partner at Inserm Transfert Initiative (Paris, France), where her work was focused on seeding funds in healthcare and biotechnology companies. Dr. Mounia Chaoui-Roulleau studied engineering at the Ecole centrale in Paris, France.

*Dr. Philippe Dro*

Dr. Philippe Dro is currently chairman, chief executive officer and director of the board at Luciole Medical (Zürich, Switzerland), member of the board at Themis Bioscience GmbH, (Austria) as well as Omics SA Bioinformatics (France), which is a company specialized in search tools. He has gained previous board experience (*inter alia*, as a director of the board) at Glycovaxyn AG (Schlieren, Switzerland), Aleva Therapeutics SA (Switzerland), Spinevision SA (France), Antares Pharma Ltd (USA), and SkyePharma Ltd (USA). Additionally Dr. Philippe Dro served as a chairman and chief executive officer at ENDOART SA (Lausanne, Switzerland) as a chief financial officer/chief operating officer at Axovan AG (Basel, Switzerland), and president & chief operating officer of Permatec Group. Dr. Philippe Dro has been involved in building as well as developing start-ups in biotech and medtech i.e. IPO of 400 million on the London stock market and reverse merger of a Swiss entity into a NASDAQ company. He has gained a “Docteur en Pharmacie Option Industrie” from the Industrial Pharmacy Institute of Lyon (IPIL, France) and a MBA both from Ecole Supérieure de Commerce de Lyon (France) and Cranfield School of Management (UK).

#### **12.4.6 Further Information Relating to the Supervisory Board**

At the date of this Prospectus, none of the Supervisory Directors which are to be appointed upon completion of the Corporate Reorganization has, in the previous five years:

- been convicted of any fraudulent offenses;
- as a member of the administrative, management or supervisory body at any company, or as partner, founder or senior manager at any company, been associated with any bankruptcy, receivership or liquidation of such company;
- been subject to any official public incriminations and/or sanctions by any statutory or regulatory authority (including any designated professional body); or
- been disqualified by a court from acting as a member of the administrative, management or supervisory bodies of an issuer or from acting in the management or conduct of the affairs of any issuer.

## 12.5 Supervisory Board Committees

The Supervisory Board has established an audit committee (the ***Audit Committee***) and a remuneration and nomination committee (the ***Remuneration and Nomination Committee***). Each of the committees has a preparatory and/or advisory role to the Supervisory Board. In accordance with the Supervisory Board Rules, the Supervisory Board will draw up rules on each committee's role, responsibilities and functioning. The committees consist of Supervisory Directors. They report their findings to the Supervisory Board, which is ultimately responsible for all decision-making.

### 12.5.1 *Audit Committee*

The duties of the Audit Committee include the supervision and monitoring as well as advising the Management Board and each Managing Director regarding the operation of the Company's internal risk management and control systems. The Audit Committee advises the Supervisory Board on the exercise of certain of its duties and prepares nominations and reviews for the Supervisory Board in this regard. The Audit Committee also supervises the submission of financial information by the Company, the compliance with recommendations of internal and external accountants, the Company's policy on tax planning, the Company's financing arrangements, assists the Supervisory Board with the Company's information and communications technology. It furthermore maintains regular contact with and supervises the external accountant and it prepares the nomination of an external accountant for appointment by the General Meeting. The Audit Committee also issues preliminary advice to the Supervisory Board regarding the approval of the annual accounts and the annual budget and major capital expenditures.

Prior to completion of the Offering, the Supervisory Board will adopt a charter for the functioning of the Audit Committee. Besides setting out the tasks and duties of the Audit Committee as described above, the charter provides, *inter alia* that

- the Audit Committee will meet as often as is required for its proper functioning, but at least four times each year to coincide with key dates in the financial reporting and audit cycle;
- the Audit Committee will consist of at least three members, all of which to be financially literate and with at least one member of the Audit Committee to be a financial expert with relevant knowledge and experience of financial administration and accounting for listed companies or other large legal entities;
- all members of the Audit Committee must be independent within the meaning of the Dutch Corporate Governance Code, with the exception of no more than one member; and
- the Audit Committee may not be chaired by the chairman of the Supervisory Board or by a former member of the Management Board.

The Audit Committee consists of Harry Welten (chairman), Glenn Rockman and Dr. Mounia Chaoui-Roulleau. All members are non-independent in the meaning of the Dutch Corporate Governance Code, but otherwise all members meet the requirements of members of the Audit Committee pursuant to its charter as further described above. Harry Welten meets the requirements of financial expert pursuant to the charter of the Audit Committee.

### 12.5.2 *Remuneration and Nomination Committee*

The Remuneration and Nomination Committee advises the Supervisory Board on the exercise of its duties regarding the remuneration policy of the Managing Directors within Themis, including analysing developments of the Dutch Corporate Governance Code, and preparing proposals for the Supervisory Board on these subjects. The duties of the Remuneration and Nomination Committee include the preparation of proposals of the Supervisory Board on the remuneration policy for the Managing Directors to be adopted by the General Meeting, and on the remuneration of the



individual Managing Directors to be determined by the Supervisory Board. The Remuneration and Nomination Committee also prepares a remuneration report on the execution of the remuneration policy for the Management Board during the respective year to be adopted by the Supervisory Board. Additionally, the Remuneration and Nomination Committee advises the Supervisory Board on its duties regarding the selection and appointment of Managing Directors and Supervisory Directors. The duties of the Remuneration and Nomination Committee related to this function include preparing the selection criteria and appointment procedures for Managing Directors and Supervisory Directors, and proposing the profile for the Supervisory Board. It also periodically assesses the scope and composition of the Management Board and the Supervisory Board, and the functioning of the individual directors. The Remuneration and Nomination Committee also proposes on appointments and reappointments. It supervises the Management Board's policy on selection criteria and appointment procedures for the Management Board.

Prior to completion of the Offering, the Supervisory Board will adopt a charter for the functioning of the Remuneration and Nomination Committee. Besides setting out the tasks and duties of the Remuneration and Nomination Committee as described above, the charter provides, *inter alia* that

- the Remuneration and Nomination Committee will meet as often as is required for its proper functioning, but at least two times each year;
- the Remuneration and Nomination Committee will consist of at least three members;
- all members of the Remuneration and Nomination Committee must be independent within the meaning of the Dutch Corporate Governance Code, with the exception of no more than one member; and
- the Remuneration and Nomination Committee may not be chaired by the chairman of the Supervisory Board or by a former member of the Management Board.

The Remuneration and Nomination Committee consists of Dr. Philippe Dro (chairman), Dr. Gerd Zettlmeissl and Dr. Regina Hodits. Except for Regina Hodits, all members of the Remuneration and Nomination Committee are independent in the meaning of the Dutch Corporate Governance Code.

## 12.6 Scientific Advisory Board

The Scientific Advisory Board is not formally part of the Company's corporate governance and advises Themis on the development of its product candidates, in particular its lead product candidate MV-CHIK. The advice from the Scientific Advisory Board is non-binding.

The Scientific Advisory Board consists of Dr. Christian Mandl, Dr. W Paul Duprex, Dr. Stephen Thomas and Dr. Nadia Tornieporth.

## 12.7 Equity Holdings

As at the date of this Prospectus, the number of shares held by the Managing Directors and the Supervisory Directors in Themis Bioscience GmbH are as follows:

	<b>Number of shares in Themis Bioscience GmbH as of the date of this Prospectus*</b>
Dr. Erich Tauber .....	13,581
Dr. Gerd Zettlmeissl.....	294
<b>Total .....</b>	<b>13,875</b>

\*As at the date of this Prospectus, the Managing Directors and the Supervisory Directors hold shares in Themis Bioscience GmbH and they do not hold any Shares. However, pursuant to the Corporate Reorganization, each of Dr. Erich Tauber and Dr. Gerd Zettlmeissl will contribute all shares they hold in the share capital of Themis Bioscience GmbH into the Company by way of a contribution in kind against newly issued Shares. For each Themis Bioscience GmbH share of EUR 1 contributed, the Company will issue 50 new Shares, such that Dr Erich Tauber will hold 679,050 Shares and Dr. Gerd Zettlmeissl will hold 14,700 Shares following the Corporate Reorganization.

As at the date of this Prospectus, the number of options held by the Managing Directors, the Supervisory Directors and other individuals under the EBPP are as follows:

	<b>Number of options relating to Themis Bioscience GmbH as of the date of this Prospectus</b>
Dr. Erich Tauber .....	1,513
Dr. Gerd Zettlmeissl.....	1,418

Dr. Philippe Dro.....	1,418
Katrin Ramsauer .....	505
Matthias Müllner.....	505
David A. Maier .....	505
Christian Mandl .....	311
Alexander Kort.....	140
Angelika Irmeler .....	36
Johanna Geistlinger.....	36
Sabrina Schrauf .....	36
Patrik Csar.....	36
Mariami Chelidze.....	35
Martina Steindl.....	35
Raimund Vielnascher .....	35
Andrea Pfeiffer.....	35
Harry Welten.....	235
Lee Smith.....	50
<b>Total .....</b>	<b>6,884</b>

Please also see Section 12.9.2 (Management, Supervisory Board and Employees—Summary of Equity Incentive Plan—2016 Exit Bonus Participation Program of Themis Bioscience GmbH)

## 12.8 Remuneration

### 12.8.1 *Management Board Remuneration*

Prior to completion of the Offering, the General Meeting will adopt a policy governing the remuneration of the Management Board. The policy governing the remuneration of the Management Board is aimed to attract, reward and retain highly qualified Managing Directors and to provide and motivate the members of the Management Board with a balanced and competitive remuneration that is focused on sustainable results and is aligned with the long-term strategy of the Company.

The Supervisory Board then determines the remuneration of the Managing Directors, at the recommendation of the Remuneration and Nomination Committee, with due observation of the remuneration policy adopted by the General Meeting. Prior to completion of the Offering, it is expected that the General Meeting will also adopt an equity incentive plan by which it will authorize the granting of stock options (see Section 12.9 (*Summary of Equity Incentive Plan*)).

### 12.8.2 *Remuneration components for the Managing Directors*

Pursuant to the remuneration policy, the remuneration of the Managing Directors will consist of the following fixed and variable components:

- a fixed base salary;
- a variable annual cash bonus (short-term annual cash incentive);
- a long-term variable incentive plan, in the form of stock options; and
- pension and fringe benefits.

At the date of this Prospectus, the members of the Management Board are employed by Themis Bioscience GmbH, other than David Maier who is a consultant to Themis Bioscience GmbH at the date of this Prospectus. Prior to completion of the Offering, the three members of the Management Board are expected to enter into a service agreement in relation to their role as member of the Management Board with the Company following Settlement. The terms and conditions of each of these service agreements will be aligned with the provisions in the Dutch Corporate Governance Code and the applicable Remuneration Policy. The agreements will be entered into for an initial term of a maximum four years.

There are no contractual severance arrangements agreed upon.

### 12.8.3 *Fixed base salary*

Dr. Erich Tauber (CEO) will receive a fixed annual remuneration of EUR 250,000. David A. Maier, Ph.D. (CFO) and Katrin Ramsauer, Ph.D. (CSO) shall receive a fixed annual remuneration of EUR 180,000. This fixed base salary is subject to the condition that the IPO raise will be at least EUR 35 million. If not, the fixed base salary will be decreased to EUR 225,000 for Dr. Erich Tauber (CEO) and EUR 165,000 for David A. Maier, Ph.D. (CFO) and Katrin Ramsauer, Ph.D. (CSO).

### 12.8.4 *Variable annual cash bonus*

The members of the Management board are entitled to receive a cash bonus of up to 30% of the annual salary to be determined by the Remuneration and Nomination Committee in its discretion and in line with key performance measures the Remuneration and Nomination Committee considers relevant.

### 12.8.5 *Long-term variable incentive plan*

To incentivize the Managing Directors on the long-term, Managing Directors are eligible to be granted stock options on recommendation of the Remuneration and Nomination Committee and subject to the terms of the Equity Incentive Plan (see Section 12.9 (*Summary of Equity Incentive Plan*)).

### 12.8.6 *Pension and fringe benefits*

The Managing Directors are entitled to a pension insurance allowance as well as a company car.

### 12.8.7 *IPO success bonus – Managing Directors*

Assuming a successful offer, the Supervisory Board may decide that an IPO success bonus will be paid to the following individuals:

- Dr. Erich Tauber: EUR 150,000;
- David A. Maier, Ph.D: EUR 100,000; and
- Katrin Ramsauer Ph.D. and Alexander Kort each EUR 50,000.

The IPO bonus can be increased by up to 40% at the discretion of the Supervisory Board.

### 12.8.8 *Management Board Remuneration for the financial year ended 31 December 2017*

Since the Company has been established in 2018, the compensation described below relate to the individual's service as member of the management board or the supervisory board of Themis Bioscience GmbH. The remuneration for the first level of management of Themis Bioscience GmbH for the financial year ended 31 December 2017 was as follows:

	Base salary	Cash bonus	Pension contributions (in EUR thousands)	Fringe benefits	Total
Dr. Erich Tauber	187	50	12	1	249
David Albert Maier <sup>(1)</sup>	56	0	0	0	56
Katrin Ramsauer <sup>(2)</sup>	47	30	0	1	78

(1) Employed on part time basis.

(2) Employed on part time basis.

The remuneration of the Managing Directors for the period following the date of this Prospectus is expected to change and to be set by the Supervisory Board in accordance with the remuneration policy. In connection therewith, the remuneration at the level of Themis Bioscience GmbH is expected to be adjusted adequately for the Managing Directors.

#### **12.8.9 *Supervisory Board Remuneration***

Prior to completion of the Offering, the General Meeting will adopt a policy governing the remuneration of the Supervisory Board. The policy governing the remuneration of the Supervisory Board is aimed to attract, reward and retain highly qualified Supervisory Directors and to provide and motivate the members of the Supervisory Board with a balanced and competitive remuneration that is focused on sustainable results and is aligned with the long-term strategy of the Company.

The General Meeting then determines the remuneration of the Supervisory Directors, with due observation of the remuneration policy adopted by the General Meeting.

No Supervisory Director has an employment contract with the Company.

#### **12.8.10 *Remuneration Components for the Supervisory Directors***

In order to motivate the right balance of short-term and long-term practices and pursuant to the remuneration policy, the remuneration of the Supervisory Directors will consist of the following fixed and variable components:

- a fixed annual cash compensation;
- an additional cash compensation for Audit Committee members and Remuneration and Nomination Committee members; and
- a long-term incentive plan in the form of stock options.

#### **12.8.11 *Fixed Annual Compensation***

Supervisory Directors will each be entitled to an annual cash compensation retainer of EUR 30,000.

The Chairman of the Supervisory Board shall receive an annual compensation of EUR 45,000.

#### **12.8.12 *Committee Members Compensation***

Committee members will be entitled to additional cash compensation as follows:

- Audit Committee members shall each receive an annual compensation of EUR 2,500; and
- Remuneration and Nomination Committee members shall each receive an annual compensation of EUR 2,500.

#### **12.8.13 *Long-term incentive plan***

To incentivize the Supervisory Directors on the long-term, Supervisory Directors are eligible to be granted stock options on recommendation of the Remuneration and Nomination Committee and subject to the terms of the Equity Incentive Plan (see Section 12.9 (*Summary of Equity Incentive Plan*)).

#### **12.8.14 *IPO success bonus – Dr Dro***

Dr. Philippe Dro may be entitled to receive an IPO success of EUR 50,000, at the discretion of the Supervisory Board.

#### **12.8.15 *Adjustments to variable remuneration***

Pursuant to Dutch law and the Dutch Corporate Governance Code the remuneration of Managing Directors may be reduced or Managing Directors may be obliged to repay (part of) their variable remuneration to the Company if certain circumstances apply.

Pursuant to the Dutch Corporate Governance Code, any variable remuneration component conditionally awarded to a Management Board Director in a previous financial year which would, in the opinion of the Supervisory Board, produce an unfair result due to extraordinary circumstances during the period in which the predetermined performance criteria have been or should have been applied, the Supervisory Board will have the power to adjust the value downwards or upwards. In addition, the Supervisory Board will have the authority under the Dutch Corporate

Governance Code and Dutch law to recover from a Management Board Director any variable remuneration awarded on the basis of incorrect financial or other data (claw back).

Pursuant to Dutch law, the Supervisory Board may furthermore adjust the variable remuneration (to the extent that it is subject to reaching certain targets and the occurrence of certain events) to an appropriate level if payment of the variable remuneration were to be unacceptable according to requirements of reasonableness and fairness. In addition, Dutch law prescribes that, in case the value of the Shares or rights to subscribe for such Shares granted by the Company to the respective Managing Directors as part of their remuneration increases during a period in which a public takeover bid is made for the Shares, the remuneration of that respective Managing Director will be reduced by the amount by which the value of the Shares or rights to subscribe for such Shares so granted by the Company to such member has increased. To the extent the increase in value exceeds the remuneration of the respective Managing Director, the Company shall have a claim against the respective Managing Director for such excess. Similar provisions apply in the situation of an intended legal merger or demerger, or if the Company intendeds to enter into certain transactions that are of such significance to the Company that the Management Board requires the approval of the General Meeting pursuant to Dutch law (i.e. transactions that fall within the scope of Section 2:107a Dutch Civil Code).

## **12.9 Summary of Equity Incentive Plan**

### **12.9.1 2018 Themis Bioscience N.V. Stock Option Plan**

In order to enhance Themis' ability to continuously attract, retain and motivate those individuals who are expected to make important contributions to Themis going forward, and by providing such persons with equity ownership opportunities that are intended to better align the interests of such persons with those of the Company and the Shareholders, the Company has established its 2018 Themis Bioscience N.V. Stock Option Plan. This plan has an initial term of five years.

The Company requires that participants in the stock option plan are continuously employed or in service in good standing and may attach other individual, corporate and/or non-financial performance conditions to the grant and/or exercise of the options as it deems appropriate.

Under the plan, employees, consultants, and Managing Directors and Supervisory Directors may be offered options to purchase Shares whereby each (vested) option grants the right to acquire one Share. Granted options expire after nine years, unless otherwise approved by the Management Board or the Supervisory Board.

The plan allows the Management Board to select eligible participants and to administer the plan, provided that the Supervisory Board shall decide on the number of options to be granted to the members of the Management Board and that the Supervisory Board will approve all options grants made by the Management Board.

Options may be granted and Shares may be issued upon exercise of the Options to participants under the plan in recognition of past services and for other valid considerations after the end of a particular performance period and subject to achievement of certain performance conditions to be determined by the Management Board (or the Supervisory Board where it concerns a member of the Management Board).

Any determination of the Supervisory Board and the Management Board shall be made in accordance with their judgment as to the best interests of the Company and its stakeholders and in accordance with the purpose and rules of the plan.

The option exercise price shall be the closing sales price at which Shares are traded on the day prior to the day the option is granted. Vesting of the options may take place on one date or in part over time. Pursuant to the plan, 25% of the options granted on a specific date vest and will be exercisable on each of the four anniversaries of the date of grant. In case of a change of control in relation to the Company and/or Themis Bioscience GmbH, all options immediately become fully vested and exercisable. The plan contains 'good leaver/bad leaver' provisions whereby a good leaver shall remain entitled to vested options with the non-vested options lapsing and vested options to be exercised within one year. A bad leaver leaving for cause shall lose all options, whether vested or not. A bad leaver not leaving for cause may exercise vested options until the terminate date of his or her contract.

The Management Board, and the Supervisory Board where it regards option grants made to the Management Board, have the discretionary power to decide that part or all of the options will be settled in cash as well as to waive and/or amend part or all of the conditions attached to the grant and/or exercise of the options. The determinations of the Management Board or the Supervisory Board as the case may be shall be made in accordance with their judgment as to the best interests of the Company and its stakeholders and in accordance with the purpose of the plan.

Pursuant to the plan, up to a maximum of 12% of the Shares will be made available for the option pool. There will be no options granted under the new plan before the completion of the Offering.

### 12.9.2 2016 Exit Bonus Participation Program of Themis Bioscience GmbH

As part of the Corporate Reorganization (as defined in paragraph 13.1), the 2016 Exit Bonus Participation Program of Themis Bioscience GmbH (**EBPP**) will be terminated. Each existing option right pursuant to the EBPP to acquire shares in the share capital of Themis Bioscience GmbH will be cancelled in consideration for the granting of 50 options to acquire Shares in the share capital of the Company.

At completion of the Offering, the total number of options held by employees, consultants, Managing Directors and Supervisory Directors, senior management, and other (former) employees under the terminated EBPP will be 352,150. There will be no new options granted under the terminated EBPP after completion of the Offering. Pursuant to the terms of the options replacing the old EBPP options, the option exercise price shall be EUR 0.02, equaling the nominal value per Shares in line with the provision under the EBPP which provided that the exercise price was equal to the nominal value of a Themis Bioscience GmbH share. Pursuant to the terms of the options replacing the old EBPP options, all options shall vest and will be exercisable on the day that is twelve months after the day of completion of the Offering. Under the terms of the options, each (vested) option will grant the right to acquire one Share in the Company. The terms of the options replacing the old EBPP options do not contain ‘good leaver / bad leaver’ provisions.

	<b>Number of options as of the date of completion of the Offering</b>
Dr. Erich Tauber .....	75,650
Dr. Gerd Zettlmeissl.....	70,900
Dr. Philippe Dro.....	70,900
Katrin Ramsauer <sup>1</sup> .....	25,750
Matthias Müllner <sup>1</sup> .....	25,750
David A. Maier <sup>1</sup> .....	25,700
Christian Mandl <sup>1</sup> .....	15,550
Alexander Kort <sup>1</sup> .....	8,000
Angelika Irmeler .....	1,800
Johanna Geistlinger .....	1,800
Sabrina Schrauf .....	1,800
Patrik Csar.....	1,800
Mariami Chelidze.....	1,750
Martina Steindl.....	1,750
Raimund Vielnascher .....	1,750
Andrea Pfeiffer.....	1,750
Harry Welten.....	11,750
Lee Smith .....	2,500
Other employees <sup>1</sup> .....	5,500
<b>Total</b> .....	<b>352,150</b>

<sup>1</sup> Current and newly hired employees have been allocated option rights in connection with the termination of the EBPP, whereby none of the “other employees” holds more than 500 option rights relating to Shares.

### 12.10 Board Liability, Insurance and Indemnity

Managing Directors and Supervisory Directors may be liable, under Dutch law, to the Company for damages in the event of improper or negligent performance of their duties. They may be jointly and severally liable for damages to the Company and to third parties for infringement of the Dutch law or the Articles of Association. In addition, they may be liable towards third parties for infringement of certain provisions of the Dutch Civil Code. In certain circumstances, they may also incur additional specific civil and criminal liabilities. Furthermore, the Articles of Association provide that the Company will indemnify any and all Managing Directors and Supervisory Directors, senior management, former Managing Directors and Supervisory Directors and former senior managers against any and all liabilities, claims, judgments, fines and penalties incurred by them as a result of any threatened, pending or completed action, investigations or other proceedings, whether civil, criminal, or administrative brought by any party other than itself, in relation to acts or omissions in or related to his or her capacity as a Managing Director or Supervisory Director or senior manager of the Company, in each case to the fullest extent permitted by applicable law. No indemnification shall be given to an indemnified person (a) if that person has been adjudged to be liable for wilful misconduct or intentional recklessness and (b) in relation to claims insofar as they relate to the gaining in fact of personal profits, advantages or remuneration to which the relevant person was not legally entitled. The indemnification shall not be deemed exclusive of any other rights to which those indemnified may be entitled otherwise.

Managing Directors and Supervisory Directors and certain other members of the Company's senior management, to the extent they carry out responsibilities of the Management Board, are insured under a director's and officer's liability insurance with coverage and terms customary for a publicly listed company of the size of the Company.

#### **12.11 Conflicts of Interest**

A Managing Director or Supervisory Director shall not participate in any discussions and decision-making process if he or she has a direct or indirect personal interest conflicting with the interests of the Company. Such a conflict of interest only exists if in the situation at hand the Managing Director or the Supervisory Director is deemed to be unable to serve the Company's interest and its connected business with the required level of integrity and objectivity. If for this reason no resolution can be taken by the Managing Directors, the Supervisory Board will resolve on the matter. If for this reason no resolution can be taken by the Supervisory Directors, the Supervisory Board will resolve on the matter as if there were no conflict of interest by unanimous vote in a meeting in which all Supervisory Directors in office are present in person or represented.

The Managing Directors and the Supervisory Directors shall immediately report any (potential) direct or indirect personal interest in a matter which is conflicting with the interests of the Company and the business connected with it to the chairperson of the Supervisory Board and shall provide all relevant information, including information concerning his spouse, registered partner or other partner, foster child and relatives by blood or marriage up to the second degree as defined under Dutch law.

The chairperson of the Supervisory Board shall immediately report any (potential) direct or indirect personal interest in a matter which is conflicting with the interests of the Company and the business connected with it to the other members of the Supervisory Board and shall provide all relevant information, including information concerning his spouse, registered partner or other partner, foster child and relatives by blood or marriage up to the second degree as defined under Dutch law.

The chairperson of the Supervisory Board shall decide whether there is a conflict of interest. In case of a (potential) direct or indirect personal interest in relation to the chairperson of the Supervisory Board, the other members of the Supervisory Board shall decide whether there is a conflict of interest. A conflict of interest in relation to such director in any event exists, if the Company intends to enter into a transaction with a legal entity (i) in which such director personally has a material financial interest, (ii) which has an executive director or a member of the management board who is related under family law to such director of the Company, or (iii) in which such director has an executive or non-executive position.

All transactions in which there are conflicts of interest with Managing Directors and/or Supervisory Directors shall be agreed on terms that are customary in the sector concerned. Decisions to enter into transactions in which there are conflicts of interest with Managing Directors and/or Supervisory Directors that are of material significance to the Company and/or to the relevant Managing Director and/or Supervisory Director require the approval of the Supervisory Board. Such transactions should be published in the management report of the Management Board.

All transactions between the Company and legal or natural persons who hold at least 10% of the Shares shall be agreed on terms that are customary in the sector in which the Company and its combined businesses are active. The Supervisory Board is required to approve such transactions that are of a material significance to the Company and/or to such persons. Such transactions should be published in the management report of the Management Board.

The Company should not grant Managing Directors and Supervisory Directors any personal loans, guarantees or the unlike unless in the normal course of business and on terms applicable to the personnel as a whole, and after approval of the Supervisory Board. No emission of loans should be granted.

#### **12.12 Potential Conflicts of Interest**

At the date of this Prospectus, four of the individuals who have been appointed as Supervisory Directors do not meet the independence criteria contained in the Dutch Corporate Governance Code. Further, Harry Welten is a member of the board of directors of Virometix AG, a Swiss company researching vaccines and immunotherapeutic drugs for the prevention and treatment of infectious diseases and cancer; depending on the direction and success of Virometix' research and development, Virometix might become a direct competitor of Themis. Other than that, no Managing Director or any member to be appointed to the Supervisory Board has a conflict of interest (actual or potential) between his or her duties to the Company and his or her private interests and/or other duties.

## 12.13 Limitation and Diversity of Supervisory Positions

Under Dutch law, a member of the management board of a "large company" may not hold more than two supervisory positions at another large Dutch company, and may not concurrently serve as chairman of the supervisory board or of a one tier board of a large Dutch company. A "supervisory position" is a position of membership on a supervisory board, non-executive director in a one-tier board structure or member of a supervisory body. Under Dutch law, a large company is a Dutch public limited liability company (*naamloze vennootschap*), a private limited liability company (*besloten vennootschap met beperkte aansprakelijkheid*) or a foundation (*stichting*) that fulfils at least two out of the following three criteria on two successive balance sheet dates: (i) the value of the assets according to the balance sheet with explanatory notes is, on the basis of the purchase price and manufacturing costs, more than EUR 20,000 thousand; (ii) the net turnover is more than EUR 40,000 thousand; and (iii) the average number of employees is 250 or more. Supervisory positions in group companies, Dutch legal entities other than large public and private limited liability companies, and foundations and foreign legal entities do not count toward the maximum number of supervisory positions permitted. Furthermore, under Dutch law, members of the supervisory board or non-executive directors of a large Dutch company may not hold five or more supervisory positions at another large Dutch company, whereby the chairmanship is counted twice.

An appointment in violation of these restrictions will result in that last appointment being void. Earlier appointments at other entities are not affected. The fact that an appointment is thus void does not affect the validity of decision-making.

As the Company does not qualify as a "large company" within the meaning of Dutch legislation requiring large Dutch companies to pursue a policy of having at least 30% of the seats on both the management board and the supervisory board to be held by men and at least 30% to be held by women, these requirements do not apply to the Company. For the same reason, the Dutch legislation limiting the number of supervisory positions to be occupied by managing directors or supervisory directors is not applicable to the Company.

Although the requirements of Dutch legislation limiting the number of supervisory positions to be occupied by male Supervisory Directors are not applicable on the Company, the Dutch Corporate Governance Code provides that the boards shall aim for a diverse composition of its positions, including in terms of nationality, work background, gender and age. In the recruitment procedure for possible future appointments of Managing and Supervisory Directors, sincere efforts will be made to find candidates which are suitable according to the Company's diversity policy and are best qualified for the position at that time.



## 13. Corporate Reorganization, Existing Shareholders and Related Party Transactions

### 13.1 Corporate Reorganization

The Company is a holding company without material direct business operations. The Company was founded by Themis Bioscience GmbH as sole founder and shareholder and incorporated on 14 September 2018 as a private company with limited liability (*besloten vennootschap met beperkte aansprakelijkheid*) under Dutch law. Themis Bioscience GmbH, in turn, was founded by Mr. Erich Tauber, Mr. Mansour Yaich, Mr. Katharina Wieser and Mr. Andre Habel.

Immediately after the determination of the Offer Price, a corporate reorganization (the **Corporate Reorganization**) will be effected whereby the current shareholders of Themis Bioscience GmbH will contribute all shares they hold in the share capital of Themis Bioscience GmbH into the Company by way of a contribution in kind against newly issued Shares. For each Themis Bioscience GmbH share of EUR 1 contributed, the Company will issue 50 new Shares to the existing shareholders of Themis Bioscience GmbH. Prior to the determination of the Offer Price, Themis Bioscience GmbH, at that time still the Company's sole shareholder, will initiate a capital reduction process with a view of having the sole class B share, with a nominal value of EUR 0.02, in the capital of the Company that was issued to it at the incorporation of the Company (the **Class B Share**) be cancelled against repayment of the nominal value of EUR 0.02, which cancellation will become effective immediately after the issuance of the new Shares to the existing shareholders of Themis Bioscience GmbH. After the contribution, the Company will therefore be the parent company with Themis Bioscience GmbH as its wholly-owned subsidiary. After the contribution and cancellation, the Company will be converted into a public company with limited liability (*naamloze vennootschap*) by way of the Deed of Conversion and Amendment. Themis Bioscience GmbH conducted and conducts all business operations presented in this Prospectus.

As part of the Corporate Reorganization, the EBPP will be terminated. Each existing option right pursuant to the EBPP to acquire shares in the share capital of Themis Bioscience GmbH will be cancelled in consideration for the granting of 50 options to acquire Shares in the share capital of the Company, as further described in paragraph 12.9.2.

The following table sets forth the shareholders of the Company (**Shareholders**) which, to the Company's knowledge, will directly or indirectly have a notifiable interest in the Company's capital and voting rights within the meaning of the DFSA following the Corporate Reorganization and: (i) prior to the issuance of the Offer Shares and (ii) immediately following the issuance of the Offer Shares assuming the maximum number of Offer Shares are subscribed for, (a) without the Increase Option or the Over-Allotment Option being exercised, (b) with full exercise of the Increase Option only, (c) with full exercise of the Over-Allotment Option only and (d) with full exercise of both the Increase Option and the Over-Allotment Option.

	Shares owned prior to the issuance of the Offer Shares		Shares owned immediately following the issuance of the Offer Shares assuming the maximum number of Offer Shares are subscribed for*							
			Without exercise of the Increase Option or the Over-Allotment Option**		With full exercise of the Increase Option only		With full exercise of the Over-Allotment Option only		With full exercise of the Increase Option and the Over-Allotment Option	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Erich Tauber.....	679,050	7.7%	679,050	5.5%	679,050	5.2%	679,050	5.2%	679,050	5.0%
Mansour Yaich.....	583,700	6.6%	583,700	4.7%	583,700	4.5%	583,700	4.5%	583,700	4.3%
Katharina Wieser...	498,600	5.7%	498,600	4.0%	498,600	3.8%	498,600	3.8%	498,600	3.7%
FPCI Ventech Capital III.....	1,784,850	20.3%	1,953,864	15.7%	1,953,864	15.1%	1,953,864	15.1%	1,953,864	14.4%
Omnes Capital <sup>(1)</sup> ....	1,726,050	19.6%	1,726,050	13.9%	1,726,050	13.3%	1,726,050	13.3%	1,726,050	12.7%
WELLINGTON Partners										
Nominee Ltd. ....	1,738,750	19.7%	1,973,492	15.9%	1,973,492	15.2%	1,973,492	15.2%	1,973,492	14.5%
aws										
Gründerfonds Beteiligungs GmbH & Co KG ...	430,100	4.9%	500,523	4.0%	500,523	3.9%	500,523	3.9%	500,523	3.7%
aws										
Gründerfonds Equity Invest GmbH & Co KG ...	58,550	0.7%	58,550	0.5%	58,550	0.5%	58,550	0.5%	58,550	0.4%
Global Health Investment Fund I, LLC .....	1,195,700	13.6%	1,524,338	12.3%	1,524,338	11.8%	1,524,338	11.8%	1,524,338	11.2%

\*Shares owned immediately following the issuance of the Offer Shares include the pre-commitments by Committing Shareholders calculated in share amount based on the mid-point of the Offer Price Range.

\*\*The shareholdings disclosed in this column do not include any rights under the previous equity incentive plan (see Section 12.9 (*Summary of Equity Incentive Plan*) for an overview of those rights).

<sup>(1)</sup> Omnes Capital controls various funds that own Shares. The amounts held by Omnes Capital shown in this table do not reflect the Omnes Funds Shares.

## 13.2 Existing Shareholders

### 13.2.1 *Holdings prior to and after the Offering*

Assuming the Corporate Reorganization has been completed, the Company is not directly or indirectly owned or controlled by any Shareholder, whether individually or acting in concert. The Company does not know of any arrangement that may, following completion of the Corporate Reorganization, result in a change of control of the Company.

### 13.2.2 *Capital Reorganization and Shareholders' Agreement*

On 28 April 2015, Themis Bioscience GmbH and the majority of its shareholders entered into a shareholders agreement, as amended thereafter from time to time (the ***Shareholders Agreement***). Pursuant to the Shareholders Agreement, among other things, the shareholders of Themis Bioscience GmbH are obliged to approve certain restructuring transactions where such are required to effect an initial public offering of Themis Bioscience GmbH or a prospective holding company of Themis Bioscience GmbH (such as the Corporate Reorganization) and to support all transactions to effect such restructuring (provided that the Offering and the Corporate Reorganization is approved by an investor majority of 60%). Upon completion of the Corporate Restructuring, when all shareholders of Themis Bioscience GmbH will have become Shareholders of the Company, the Shareholders Agreement will terminate.

## 13.3 Related Party Transactions

Themis Bioscience GmbH has concluded individual consulting contracts with several members of the Supervisory Board. Further Themis Bioscience GmbH made regular payments to a defined contribution plan, where the beneficiary of this pension plan is the managing director. Further remunerations for work as a member of the Supervisory Board are not granted by Themis Bioscience GmbH.

Fees charged by members of Themis Bioscience GmbH's Supervisory Board for consultancy services amounted to EUR 122 thousand in the financial year ended 31 December 2017 and EUR 59 thousand in the financial year ended 31 December 2016. In the six months ended 30 June 2018 fees charged by members of Themis Bioscience GmbH's Supervisory Board for consultancy services amounted to EUR 44 thousand.

## 14. Description of Share Capital and Corporate Governance

The following paragraphs summarize certain information concerning the Company on the Euronext and certain material provisions of the Articles of Association and applicable laws of the Netherlands.

This summary does not purport to give a complete overview and should be read in conjunction with, and is qualified in its entirety by reference to the relevant provisions of Dutch law as in effect on the date of this Prospectus, the Articles of Association, the Management Board Rules and the Supervisory Board Rules, in each case as they will be in effect ultimately on the Settlement Date. The Articles of Association in the governing Dutch language and in an unofficial English translation thereof as well as the Management Board Rules and the Supervisory Board Rules in the English language are available on the Company's website ([www.themisbio.com/investors](http://www.themisbio.com/investors)). See also Section 12 (Management, Supervisory Board and Employees) for a summary of certain material provisions of the Articles of Association, Management Board Rules, Supervisory Board Rules and the laws of the Netherlands relating to the Management Board and the Supervisory Board.

### 14.1 General

The Company was incorporated in the Netherlands on 14 September 2018 by a notarial deed of incorporation as a private company with limited liability (*besloten vennootschap met beperkte aansprakelijkheid*). Shortly after the determination of the Offer Price, the Company will be converted into a public company with limited liability (*naamloze vennootschap*). The Company's statutory seat (*statutaire zetel*) is in Amsterdam, the Netherlands, and its registered office address at Muthgasse 11/2, 1190 Vienna, Austria. The Company is registered with the trade register of the Dutch Chamber of Commerce under number 72587121. The Company's telephone number is +43 1 2367151. The Company is subject to, and operates under, the laws of the Netherlands.

### 14.2 Corporate Objects

The Company's corporate objectives included in article 3 of the Articles of Association are:

The objects of the Company are to perform holding and financing activities, in the broadest meaning, and in relation thereto to acquire, to hold, to encumber and to alienate any type of asset (including registered property), liabilities and property rights for its own account, and for the benefit of group entities and third parties. The activities include borrowing, lending funds, issuing bonds, promissory notes and other letters of credit as well as rendering guarantees, providing security and otherwise binding itself for the obligations of others.

### 14.3 Authorized, Issued and Outstanding Share Capital

Under Dutch law, a company's authorized share capital sets out the maximum amount and number of shares that it may issue without amending its articles of association.

The Articles of Association provide for an authorized share capital in an amount of EUR 850,000, divided into 42,500,000 Shares with a nominal value of EUR 0.02 each.

The Shares, including the Offer Shares, are subject to, and have been created under, the laws of the Netherlands.

As of the date of this Prospectus, the sole Class B Share in the Company's issued capital is fully paid up and held by Themis Bioscience GmbH. The table below shows the number of issued and outstanding Shares following the Corporate Reorganization and: (i) prior to the issuance of the Offer Shares and (ii) immediately following the issuance of the Offer Shares assuming the maximum number of Offer Shares are subscribed for, (a) without the Increase Option or the Over-Allotment Option being exercised, (b) with full exercise of the Increase Option only, (c) with full exercise of the Over-Allotment Option only and (d) with full exercise of both the Increase Option and the Over-Allotment Option.

	Shares as at the date of this Prospectus	Number of Shares immediately following the Corporate Reorganization and prior to the issuance of the Offer Shares	Number of Shares immediately following the issuance of the Offer Shares assuming the maximum number of Offer Shares are subscribed for			
			Without exercise of the Increase Option and the Over-Allotment Option	With exercise of the Increase Option in full	With of the Over-Allotment Option in full	With exercise of the Increase Option and the Over-Allotment Option in full
<b>Shares</b>	1 Class B Share	8,804,500	12,412,747	12,953,984	12,953,984	13,576,406

At the date of this Prospectus the Company holds no Shares as treasury shares.

#### 14.4 History of Share Capital

Other than the Class B Share issued upon the Company's incorporation, which is held by Themis Bioscience GmbH, the Company has not issued any Shares prior to the date of this Prospectus.

#### 14.5 Form and Transfer of Shares

The Company's share capital is divided into Shares. All Shares are in registered form (*op naam*) and are only available in the form of an entry in the Company's shareholders' register. No certificates (*aandeelbewijzen*) will be issued. The Shares are subject to the laws of the Netherlands.

All Shares will be delivered in book-entry form only and will be credited on or about the Settlement Date to the securities accounts of the investors via Euroclear Nederland, the Dutch central securities depository with registered office at Herengracht 459-469, 1017 BS Amsterdam, the Netherlands.

Shares traded on Euronext will be transferred through book-entry on the accounts of investors with intermediaries that are participants in Euroclear Nederland or intermediaries that hold, directly or indirectly, accounts with participants in Euroclear Nederland.

#### 14.6 The Company's Shareholders' Register

Subject to Dutch law and the Articles of Association, the Company must keep a shareholders' register. The Company's shareholders' register must be kept accurate and up-to-date and records the names and addresses of all holders of Shares, showing the date on which the Shares were acquired, the date of the acknowledgement by or notification of the Company as well as the amount paid on each Share. The register also includes the names and addresses of those with a right of usufruct (*vruchtgebruik*) or a pledge (*pandrecht*) in respect of such Shares.

All Shares belong to a collection deposit or giro deposit as referred to in the Dutch Securities Giro Transfer Act as set out above, the name and address of the intermediary or the central institute shall be entered in the Shareholders' register, stating the date on which those Shares became part of a collective deposit or the giro deposit, the date of acknowledgement or service as well as the paid-up amount on each Shares.

#### 14.7 Issue of Shares and Pre-emptive Rights

The General Meeting is authorized to issue Shares or to grant rights to subscribe for Shares and to restrict and/or exclude statutory pre-emptive rights in relation to the issuance of Shares or the granting of rights to subscribe for Shares. The General Meeting may designate another body of the Company, such as the Management Board, competent to issue Shares (or grant rights to subscribe for Shares) and to determine the issue price and other conditions of the issue for a specified period not exceeding five years (which period can be extended from time to time for further periods not exceeding five years) so long as the maximum number of Shares which may be issued is specified. A resolution of the General Meeting to issue Shares or to designate another body of the Company, such as the Management Board, competent to do so, can only be adopted at the proposal of the Management Board, which proposal requires the prior approval of the Supervisory Board. Shares may not be issued at less than their nominal value and must be fully paid-up upon issue. A resolution by the General Meeting to issue Shares (or grant rights to subscribe for Shares) or to designate the Management Board as the competent corporate body requires an absolute majority of the votes cast. A resolution of the Management Board to issue Shares (or grant rights to subscribe for Shares) can only be taken with the prior approval of the Supervisory Board.

Designation by resolution of the General Meeting cannot be withdrawn unless determined otherwise at the time of designation. No resolution is required for the issue of Shares pursuant to the exercise of a previously-granted right to subscribe for Shares. The Company may not subscribe for its own Shares on issue.

Prior to completion of the Offering, the General Meeting will adopt a resolution pursuant to which the Management Board is designated as the corporate body authorized to, subject to approval of the Supervisory Board, resolve to issue Shares, to grant rights to subscribe for Shares and to restrict and/or exclude statutory pre-emptive rights of Shareholders in relation to the issuances of Shares or the granting of rights to subscribe for such Shares for a period of 18 months from the Settlement Date. Issuances of Shares and grants of rights to subscribe for Shares under this authorization can occur for general purposes, which includes, without limitation, mergers, demergers, acquisitions and other strategic transactions and alliances. Such designation of the Management Board under this resolution is limited to up to 50% of the total number of Shares issued and outstanding immediately following the Settlement Date. Such authorization may from time to time be extended by a resolution of the General Meeting, subject to the limitations set out above.

Under Dutch law and the Articles of Association, each Shareholder has a pre-emptive right in proportion to the aggregate nominal value of their shareholding upon the issue of Shares (or the granting of rights to subscribe for Shares). Exceptions to this pre-emptive right include the issue of Shares (or the granting of rights to subscribe for Shares): (i) to employees of the Company or another member of its Group; (ii) against payment in kind (contribution other than in cash) and (iii) to persons exercising a previously-granted right to subscribe for Shares.

The pre-emptive rights in respect of newly issued Shares or the granting of rights to subscribe for Shares may be restricted or excluded by a resolution of the General Meeting at the proposal of the Management Board, which is subject to the approval of the Supervisory Board. The General Meeting may designate the Management Board as the corporate body competent to resolve upon the restriction or exclusion of the pre-emptive rights if the Management Board has also been or is designated as the competent body to resolve upon the issue of Shares for a specified period not exceeding five years (which period can be extended from time to time for further periods not exceeding five years).

A resolution of the General Meeting to restrict or exclude the pre-emptive rights or to designate the Management Board as the authorized body to do so, may only be adopted on the proposal of the Management Board with the prior approval of the Supervisory Board. A resolution of the General Meeting to exclude or restrict pre-emptive rights, or to authorize the Management Board to exclude or restrict pre-emptive rights, requires a majority of at least two-thirds of the votes cast, if less than half of the issued share capital of the Company is present or represented at the General Meeting. A resolution designating the Management Board as the competent corporate body to resolve upon the restriction or exclusion of the pre-emptive rights cannot be withdrawn unless provided otherwise in such resolution.

Prior to completion of the Offering, the General Meeting will adopt a resolution pursuant to which the Management Board is designated as the corporate body authorized to, subject to approval of the Supervisory Board, resolve to issue Shares, to grant rights to subscribe for Shares and to restrict and/or exclude statutory pre-emptive rights of Shareholders in relation to the issuances of Shares or the granting of rights to subscribe for such Shares for a period of 18 months from the Settlement Date. Issuances of Shares and grants of rights to subscribe for Shares under this authorization can occur for general purposes, which includes, without limitation, mergers, demergers, acquisitions and other strategic transactions and alliances. Such designation of the Management Board under this resolution is limited to up to 50% of the total number of Shares issued and outstanding immediately following the Settlement Date.

Such authorization may from time to time be extended by a resolution of the General Meeting, subject to the limitations set out above.

#### **14.8 Acquisition of Own Shares**

The Company cannot subscribe for Shares in its own capital at the time Shares are issued. Subject to the certain provisions of the Articles of Association, the Company may acquire fully paid-up Shares provided no consideration is given or provided, (i) its shareholders' equity less the payment required to make the acquisition, does not fall below the sum of called-up and paid-in share capital and any reserves to be maintained by Dutch law and/or the Articles of Association, (ii) the Company and its subsidiaries would thereafter not hold Shares or hold a pledge over Shares with an aggregate nominal value exceeding 50% of the Company's issued share capital and (iii) the Management Board has been authorized thereto by the General Meeting. Any acquisition by the Company of Shares that are not fully paid-up shall be null and void.

The General Meeting's authorization to the Management Board to acquire own Shares is valid for a maximum of 18 months. As part of the authorization, the General Meeting must specify the number of Shares that may be repurchased, the manner in which the Shares may be acquired and the price range within which the Shares may be acquired. A resolution of the Management Board to repurchase fully paid-up Shares can only be adopted with the prior

approval of the Supervisory Board. The authorization is not required for the acquisition of Shares for employees of the Company or another member of Themis, under a scheme applicable to such employees.

Shares held by the Company in its own share capital do not carry a right to any distribution. Furthermore, no voting rights may be exercised for any of the Shares held by the Company or its subsidiaries unless such Shares are subject to the right of usufruct or to a pledge in favour of a person other than the Company or its subsidiaries and the voting rights were vested in the pledgee or usufructuary before the Company or its subsidiaries acquired such Shares. The Company or its subsidiaries may not exercise voting rights in respect of Shares for which the Company or its subsidiaries have a right of usufruct or a pledge.

#### **14.9 Transfer of Shares**

A transfer of a Share or a restricted right thereto (*beperkt recht*) requires a deed of transfer and the acknowledgment by the Company of the transfer in writing. Such acknowledgement is not required if the Company itself is a party to the transfer.

A Share becomes a deposit share by transfer or issuance to Euroclear Nederland or to an intermediary, recording in writing that it is a deposit share. The deposit share shall be recorded in the Company's shareholders register in the name of Euroclear Nederland or the relevant intermediary, stating in writing that it is a deposit share. Deposit Shareholders are not recorded in the Company's shareholders register. Deposit shares can only be delivered from a collective depot or giro depot with due observance of the related provisions of the Dutch Securities Giro Transfers Act and with the approval of the Management Board. The transfer by a deposit shareholder of its book-entry rights representing deposit shares shall be effected in accordance with the provisions of the Dutch Securities Giro Transfers Act. The same applies to the establishment of a right of pledge and the establishment or transfer of a usufruct on these book-entry rights.

#### **14.10 Reduction of Share Capital**

The General Meeting may, upon a proposal of the Management Board with the prior approval of the Supervisory Board, resolve to reduce the issued share capital by (i) cancelling Shares or (ii) amending the Articles of Association to reduce the nominal value of the Shares. In either case, this reduction would be subject to provisions of Dutch law and the Articles of Association. Only Shares held by the Company or Shares for which it holds the depositary receipts may be cancelled. Under Dutch law, a resolution of the General Meeting to reduce the number of Shares must designate the Shares to which the resolution applies and must lay down rules for the implementation of the resolution. A resolution to reduce the issued share capital requires a majority of at least two-thirds of the votes cast, if less than half of the issued capital of the Company is present or represented at the General Meeting.

Pursuant to Dutch law, a reduction of the nominal value of the shares without repayment and without release from the obligation to pay up the shares must be effectuated proportionally on shares of the same class (unless all shareholders concerned agree to a disproportionate reduction). A resolution that would result in a reduction of capital requires approval of the meeting of each group of holders of shares of the same class whose rights are prejudiced by the reduction. In addition, a reduction of share capital involves a two month waiting period during which creditors have the right to object to a reduction of share capital under specified circumstances. Certain aspects of taxation of a reduction of share capital are described in Section 18 (Taxation) of this Prospectus.

#### **14.11 Annual Accounts and Semi-Annual Accounts**

The financial year of the Company coincides with the calendar year. Annually within four months after the end of the financial year, the Management Board prepares the annual accounts. The annual accounts must be accompanied by an independent auditors' report, an annual report, a report by the Management Board and a report by the Supervisory Board and certain other information required under Dutch law and the Dutch Corporate Governance Code. All Managing Directors and all Supervisory Directors sign the annual accounts and if one of them does not so sign, the reason for this omission must be stated. The Management Board must make the annual accounts, the annual report and other information required under Dutch law available for inspection by the Shareholders and other persons entitled to attend and address the General Meetings at the offices of the Company from the day of the notice convening the annual General Meeting. The annual accounts must be adopted by the General Meeting at the annual General Meeting, in which meeting also the release of liability of the members of the Management Board and the Supervisory Board shall be discussed and usually resolved upon.

The annual accounts, the annual report, the management report and other information required under Dutch law must be filed with the AFM within five days following adoption.

Within three months after the end of the first six months of each financial year, the Management Board must prepare semi-annual financial statements and make them publicly available. If the semi-annual financial statements are audited or reviewed, the independent auditor's report must be made publicly available together with the semi-annual financial statements.

## **14.12 Dividend and Other Distributions**

### **14.12.1 General**

Distribution of profits only takes place following the adoption of the annual accounts from which it appears that the distribution is allowed. The Company may only make distributions, whether a distribution of profits or of freely distributable reserves, to its Shareholders if its shareholders' equity exceeds the sum of the paid-up and called-up share capital plus the reserves required to be maintained by the Articles of Association or Dutch law. See Section 5 (Dividend Policy) for a more detailed description regarding dividends.

### **14.12.2 Right to reserve**

The Management Board, subject to the prior approval of the Supervisory Board, may resolve to reserve the profits or a part of the profits.

## **14.13 Exchange Controls and other Provisions relating to non-Dutch Shareholders**

Under the Dutch law, subject to the 1977 Sanction Act (*Sanctiewet 1977*) or otherwise by international sanctions, there are no exchange control restrictions on investments in, or payments on, Shares (except as to cash amounts). There are no special restrictions in the Articles of Association or Dutch law that limit the right of Shareholders who are not citizens or residents of the Netherlands to hold or vote Shares.

## **14.14 The General Meeting**

### **14.14.1 Annual General Meetings**

The annual General Meeting must be held within six months from the end of the preceding financial year of the Company. The purpose of the annual General Meeting is to discuss, amongst other things, the annual report, the adoption of the annual accounts, allocation of profits (including the proposal to distribute dividends), release of the Managing Directors from liability for their management and the Supervisory Directors from liability for their supervision thereon, filling of any vacancies and other proposals brought up for discussion by the Management Board and the Supervisory Board.

### **14.14.2 Extraordinary General Meetings**

Extraordinary General Meetings may be held as often as the Management Board or the Supervisory Board deems such necessary. In addition, Shareholders representing alone or in aggregate at least 10% of the issued and outstanding share capital of the Company may request that a General Meeting be convened, the request setting out in detail matters to be considered. If no General Meeting has been held within 42 days of the Shareholder(s) making such request, that/those Shareholder(s) will be authorized to request in summary proceedings a Dutch District Court to convene a General Meeting. In any event, a General Meeting will be held to discuss any requisite measures within three months of it becoming apparent to the Management Board that the shareholders' equity of the Company has decreased to an amount equal to or lower than one-half of the issued and paid-up part of the capital.

### **14.14.3 Place General Meetings**

General Meetings will be held in Amsterdam or at Schiphol Airport, municipality of Haarlemmermeer, the Netherlands.

### **14.14.4 Convocation Notice and Agenda**

A General Meeting can be convened by the Management Board or the Supervisory Board by a convening notice, which must be given no later than the 42nd day before the date of the General Meeting. Such notice must include the location and the time of the meeting, an agenda indicating the items for discussion and any proposals for resolutions, the admission, participation and voting procedure, the record date and the address of the Company's website. All convocations, announcements, notifications and communications to Shareholders have to be made in accordance with the relevant provisions of Dutch law and the convocation and other notices may also occur by means of sending an

electronically transmitted legible and reproducible message to the address of those Shareholders which consented to this method of convocation.

The agenda for the annual General Meeting must contain certain subjects, including, among other things, the adoption of the Company's annual accounts, the discussion of any substantial change in the Company's corporate governance structure and the allocation of the profit, insofar as this is at the disposal of the General Meeting. In addition, the agenda shall include such items as have been included therein by the Management Board, the Supervisory Board or Shareholders (with due observance of the laws of the Netherlands as described below). If the agenda of the General Meeting contains the item of granting discharge to the Managing Directors and Supervisory Directors concerning the performance of their duties in the financial year in question, the matter of the discharge shall be mentioned on the agenda as separate items for the Management Board and the Supervisory Board, respectively.

Under the Articles and Dutch law, one or more Shareholders representing solely or jointly at least 3% of the Company's issued and outstanding share capital in value are entitled to request the Management Board to include items on the agenda of the General Meeting. The Management Board must agree to such requests, provided that (a) the request was made in writing motivated and (b) was received no later than the 60th calendar day before the date of the General Meeting. In accordance with the Dutch Corporate Governance Code, a Shareholder is expected to exercise the right of putting an item on the agenda only after consulting the Management Board in that respect. If one or more Shareholders intend to request that an item be put on the agenda that may result in a change in the Company's strategy, the Management Board may invoke a response time of a maximum of 180 days from the moment the Management Board is informed of the request. No resolutions will be adopted on items other than those which have been included in the agenda unless the resolution is adopted unanimously during a meeting where the entire issued capital of the Company is present or represented.

Shareholders who individually or with other Shareholders, hold Shares that represent at least 1% of the issued and outstanding share capital or a market value of at least EUR 250,000, may request the Company to disseminate information that is prepared by them in connection with an agenda item for a General Meeting. The Company can only refuse disseminating such information, if received less than seven business days prior to the General Meeting, if the information gives or could give an incorrect or misleading signal or if, in light of the nature of the information, the Company cannot reasonably be required to disseminate it.

#### **14.14.5 Admission and Registration**

The General Meeting is chaired by the chairman of the Supervisory Board. Managing Directors and Supervisory Directors may attend a General Meeting. In these General Meetings, they have an advisory vote. The chairman of the General Meeting may decide at his or her discretion to admit other persons to the General Meeting. Minutes of the meetings shall be prepared.

All Shareholders, and each usufructuary and pledgee to whom the right to vote on Shares accrues, are entitled, in person or represented by a proxy authorized in writing, to attend and address the General Meeting and exercise voting rights *pro rata* to their shareholding. Shareholders may exercise their rights, if they are the holders of Shares on the record date, which currently is the 28th day before the day of the General Meeting, and they or their proxy have notified the Company of their intention to attend the General Meeting in writing at the address and by the date specified in the notice of the meeting. The convocation notice must then state the record date and the manner in which the persons entitled to attend the General Meeting may register and exercise their rights.

#### **14.14.6 Voting Rights**

Each Share confers the right on the holder to cast one vote at the General Meeting. The chairman of the General Meeting shall determine the manner of voting and whether voting may take place by acclamation, subject to certain restrictions under the Articles of Association. Shares in respect of which the law determines that no votes may be cast shall be disregarded for the purposes of determining the part of the issued share capital that is present or represented at a General Meeting. Pursuant to Dutch law, no votes may be cast at a General Meeting in respect of Shares which are held by the Company.

Resolutions are passed by an absolute majority of the votes cast, unless Dutch law or the Articles of Association prescribe a larger majority. Under Dutch law, no votes may be cast at a General Meeting in respect of Shares which are held by the Company. In accordance with Dutch law, the Articles of Association do not provide quorum requirements generally applicable to General Meetings.

The determination made by the chairman of the General Meeting with regard to the results of a vote at a General Meeting shall be decisive. However, where the accuracy of the chairman's determination is contested immediately after it has been made, a new vote shall take place if the majority of the General Meeting so requires or, where the original vote did



not take place by response to a roll call or in writing, if any party with voting rights present at the General Meeting so requires.

The Management Board will keep a record of the resolutions passed at each General Meeting. The record shall be available at the offices of the Company for inspection by any person entitled to attend General Meetings and upon request a copy of or extract from the record will be provided to such person at no more than the cost price.

#### **14.15 Identity of Shareholders**

For the purpose of identifying the Shareholders, the Company may in accordance with Chapter 3A of the Dutch Securities Giro Transfers Act request from Euroclear Nederland, admitted institutions, intermediaries, institutions abroad, and managers of investment institutions, to provide under the conditions provided for by applicable laws and regulations, the identification of the Shareholders that have an immediate or future right to vote at the General Meetings as well as the number of Shares held by each of the Shareholders and any restrictions applicable thereto. Such request may only be made during a period of 60 days up to the day on which the General Meeting will be held. No information will be given on Shareholders with an interest of less than 0.5% of the issued share capital. A Shareholder who, individually or together with other Shareholders, holds an interest of at least 10% of the issued share capital may request the Company to establish the identity of the Shareholders. This request may only be made during a period of 60 days until (and not including) the 42nd day before the day on which the General Meeting will be held.

#### **14.16 Dissolution and Liquidation**

The General Meeting may resolve to dissolve the Company, upon a proposal of the Management Board thereto with the prior approval of the Supervisory Board, passed by a simple majority of the votes cast, unless less than half of the Company's issued and outstanding share capital is present or represented at the meeting, in which case a majority of at least two-thirds of the votes cast shall be required. If a resolution to dissolve the Company is to be put to the General Meeting, this must in all cases be stated in the notice convening the General Meeting. If the General Meeting has resolved to dissolve the Company, the Managing Directors will be charged with the liquidation of the business of the Company in accordance with Dutch law and the Articles of Association under supervision of the Supervisory Board, unless the General Meeting has designated other liquidators. During liquidation, the provisions of the Articles of Association will remain in force as far as possible.

Any surplus remaining after settlement of all debts and liquidation costs will be distributed to the Shareholders in proportion to the nominal value of their shareholdings.

#### **14.17 Amendment of Articles of Association**

The General Meeting may only resolve to amend the Articles of Association upon a proposal made by the Management Board, which proposal requires the prior approval of the Supervisory Board. A proposal to amend the Articles of Association must be included in the notice convening the General Meeting. A copy of the proposal containing the verbatim text of the proposed amendment must be available at the Company for inspection by every Shareholder and every holder of meeting rights until the end of the General Meeting.

A resolution adopted by the General Meeting to amend the Articles of Association requires an absolute majority of the votes cast, unless less than half of the Company's issued and outstanding share capital is present or represented at the meeting, in which case a majority of at least two-thirds of the votes cast shall be required. Changing the rights of the Shareholders will require the Articles of Association to be amended.

#### **14.18 Dutch Corporate Governance Code**

The Dutch Corporate Governance Code applies to all companies which have their statutory seat in the Netherlands and which shares are listed on a regulated market (such as Euronext), a multilateral trading facility or a comparable system in a non-EEA member state.

The Dutch Corporate Governance Code contains principles and best practice provisions for the Management Board, the Supervisory Board, the Shareholders and General Meeting, financial reporting, auditors, disclosure, compliance and enforcement standards, and is based on a "comply or explain" principle. Accordingly, the Company will be required to disclose in its annual reports whether or not it is in compliance with the various principles and provisions of the Dutch Corporate Governance Code and, in the event that the Company does not apply a certain provision, to explain the reason why. A copy of the Dutch Corporate Governance Code can be found on [www.corpgov.nl](http://www.corpgov.nl).

On 8 December 2016, the monitoring committee for the Dutch Corporate Governance Code has published the revised Dutch Corporate Governance Code, which is in force as of 1 January 2017 and replaces the Dutch Corporate Governance Code dated 10 December 2008. The revised Dutch Corporate Governance Code is codified in Dutch law by the Dutch legislator on 1 January 2018.

The Company acknowledges the importance of good corporate governance. The Company fully endorses the underlying principles of the Dutch Corporate Governance Code and applies the Dutch Corporate Governance Code as the guiding principles for its corporate governance policy. The Company complies with relevant best practice provisions of the Dutch Corporate Governance Code. The deviations from the Dutch Corporate Governance Code are noted below (or in the case of any future deviation, subject to explanation thereof at the relevant time):

- The Company does not comply with *Best practice provision 2.1.7* of the Dutch Corporate Governance Code, which requires that not more than half of the total number of supervisory board members is considered non-independent in the meaning of the Dutch Corporate Governance Code. The Supervisory Board is composed of seven members, four of which do not meet the independency requirements. The Company deviates from this best practice provision, as it has considered that the expertise of members proposed to serve on the Supervisory Board is considered important and appropriate to enable the Supervisory Board to perform its duties. If the composition of the Supervisory Board changes, the Company will strive to meet the independency requirements for the Audit Committee in future.
- At completion of the Offering, the Company will not comply with *Best practice provision 2.2.4*, which requires that the Supervisory Board will draw up a retirement schedule in order to avoid, as much as possible, supervisory board members retiring simultaneously. Following completion of the Offering, the Supervisory Board will adopt such retirement schedule which will be made generally available and shall be posted on the Company's website ([www.themisbio.com/investors](http://www.themisbio.com/investors)).
- The Company does not comply with *Best practice provision 2.3.4* of the Dutch Corporate Governance Code, which requires that more than half of the members of the committees of the Supervisory Board should be independent in the meaning of the Dutch Corporate Governance Code. The Audit Committee is composed of three members, all of which do not meet the independency requirements. The Company deviates from this best practice provision, as it has considered that the Supervisory Directors proposed to serve on the Audit Committee, are considered to have the most appropriate expertise from among the Supervisory Directors. If the composition of the Supervisory Board changes, the Company will strive to meet the independency requirements for the Audit Committee in future.
- The Company does not under all circumstances fully comply with *Best practice provision 3.1.2v* of the Dutch Corporate Governance Code, which requires that variable remuneration is linked to predetermined and measurable performance criteria which will mainly have a long term character. The Company requires that participants in the equity incentive plans are continuously employed or in service in good standing and may attach other individual, corporate and/or non-financial performance conditions to the grant and/or exercise of the options as it deems appropriate. Given the type of business most financial targets (such as EBITDA based ones) are not appropriate, and in terms of hiring and retaining qualified staff Themis is operating in a highly competitive market. The Company as well as the Remuneration Committee will in each individual case consider which targets will be used and will assess how these targets can best contribute to the long term value creation of the Company.
- The Company does not comply with *Best practice provision 3.1.2.vii* of the Dutch Corporate Governance Code, which states that options are not to be exercised within the first three years after the date of granting. Pursuant to the Company's new stock option plan, 25% of the options granted on a specific date vest and will be exercisable on each of the four anniversaries of the date of grant. The Management Board, with the approval of the Supervisory Board, can alter the applicable vesting period if the circumstances require so. In addition, if a change of control occurs, all of the unvested options shall vest immediately and become exercisable. The Company deviates from this Best practice provision to allow for a more flexible and hence more competitive option plan. In order to contribute to the long term value creation of the Company, options have a four year pro rated vesting period and hence 75% of any option package granted can be fully exercised within a three-year term. Under the termination of the legacy equity incentive plan (EBPP), in terms of which each existing option right pursuant to the EBPP to acquire shares in the share capital of Themis Bioscience GmbH will be cancelled in consideration for the granting of 50 options to acquire Shares in the share capital of the Company, options can be exercised by the participants in the EBPP as from twelve months after the completion of the Offering.

- The Company does not comply with *Best practice provision 3.3.2* of the Dutch Corporate Governance Code, which requires that Supervisory Directors will not be granted any shares or rights to acquire shares as remuneration. In accordance with the Remuneration Policy of the Company, certain Supervisory Directors may be granted options by way of remuneration, e.g. in recognition of the substantial industry expertise they bring to Themis.
- The Company does not comply with *Best practice provision 4.3.3* of the Dutch Corporate Governance Code, which states that the General Meeting may adopt a resolution to cancel the binding nature of a nomination for the appointment of a member of the Management Board or the Supervisory Board or a resolution to dismiss such member by an absolute majority of the votes cast. It may be provided that such majority should represent a given proportion of the issued capital, but this proportion may not exceed one third. In addition, *Best practice provision 4.3.3* provides that if such proportion of the share capital is not represented at the meeting, but an absolute majority of the votes cast is in favour of a resolution to cancel the binding nature of the nomination, a new General Meeting will be convened where the resolution may be adopted by absolute majority, regardless of the proportion of the share capital represented at the meeting. The Articles of Association will provide that these resolutions can only be adopted with at least a two-third majority which must represent more than half of the Company's issued capital, following which a new nomination will be drawn up by the Supervisory Board, because the Company believes that the decision to overrule a nomination for the appointment or dismissal of a member of the Management Board or the Supervisory Board must be widely supported by the Shareholders.

## 14.19 Obligations of Shareholders to Make a Public Offer and Squeeze Out Proceedings

### 14.19.1 *Public Offer*

Pursuant to Section 5:70 of the DFSA, and in accordance with European Directive 2004/25/EC (the Takeover Directive), any party, acting alone or in concert with others, that, directly or indirectly, acquires 30% or more of the Company's voting rights at the General Meeting will be obliged to launch a public takeover bid for all outstanding Shares. Under the DFSA, "persons with whom a party is acting in concert" has been defined as natural persons, legal persons or companies collaborating under a contract with the aim to acquire predominant control in a Dutch listed company or, if the target company is one of the collaborators, to frustrate the success of an announced public takeover bid for that company. The following categories of natural persons, legal persons or companies are deemed in any case to act in concert: (i) legal persons or companies which together form part of a group as referred to in Section 2:24b of the Dutch Civil Code; and (ii) natural persons, legal persons or companies and the undertakings controlled by these persons or companies.

Exceptions are made for, amongst others, Shareholders who, whether alone or acting in concert with others (i) have an interest of at least 30% of the Company's voting rights before the Shares are first admitted to trading on Euronext and who still have such an interest after such first admittance to trading, and (ii) reduce their holding to below 30% of the voting rights within 30 days of the acquisition of the controlling interest provided that (a) the reduction of their holding was not effected by a transfer of Shares to an exempted party and (b) during such period such Shareholders or group of Shareholders did not exercise their voting rights.

In addition, it is prohibited to launch a public takeover bid for shares of a listed company, such as the Offer Shares, unless an offer document has been approved by the AFM. A public takeover bid may only be launched by way of publication of an approved offer document unless a company makes an offer for its shares. The public takeover bid rules are intended to ensure that in the event of a public takeover bid, among others, sufficient information will be made available to the holders of the shares, the holders of the shares will be treated equally, that there will be no abuse of inside information and that there will be a proper and timely offer period.

### 14.19.2 *Squeeze out*

Pursuant to Section 2:92a of the Dutch Civil Code, a Shareholder that, for its own account, holds at least 95% of the issued share capital of the Company may institute proceedings against the other Shareholders jointly for the transfer of their Shares to it. The proceedings are held before the Enterprise Chamber of the Court of Appeal of Amsterdam (the *Enterprise Chamber*) and can be instituted by means of a writ of summons served upon each of the minority Shareholders in accordance with the provisions of the Dutch Code of Civil Procedure (*Wetboek van Burgerlijke Rechtsvordering*). The Enterprise Chamber may grant the claim for the squeeze out in relation to all minority Shareholders and will determine the price to be paid for the Shares, if necessary after appointment of one or three experts who will offer an opinion to the Enterprise Chamber on the value to be paid for the Shares of the minority Shareholders. Once the order to transfer becomes final before the Enterprise Chamber, the person acquiring the Shares must give written notice of the date and place of payment and the price to the holders of the Shares to be acquired whose addresses

are known to it. Unless the addresses of all of them are known to it, it must also publish the same in a Dutch daily newspaper with a national circulation.

In addition, pursuant to Section 2:359c of the Dutch Civil Code, following a public offer, a holder of at least 95% of the issued share capital and voting rights of the Company has the right to require the minority Shareholders to sell their Shares to it. Conversely, pursuant to Section 2:359d of the Dutch Civil Code, each minority Shareholder has the right to require the holder of at least 95% of the issued share capital and voting rights of the Company to purchase its Shares in such case. Any such request must be filed with the Enterprise Chamber within three months after the end of the acceptance period of the public offer. The Enterprise Chamber may grant the claim for the squeeze out in relation to all minority Shareholders and will determine the price to be paid for the Shares, if necessary after appointment of one or three experts who will offer an opinion to the Enterprise Chamber on the value to be paid for the Shares of the minority Shareholders. In principle, the offer price is considered reasonable if at least 90% of the shares to which the offer related were acquired by the offeror.

## **14.20 Obligations of Shareholders, the Company and Managing Directors and Supervisory Directors to Notify Holdings of Shares and Voting Rights**

### **14.20.1 Shareholders**

Shareholders are advised to consult with their own legal advisors to determine whether the notification obligations apply to them.

Pursuant to chapter 5.3 of the DFSA, any person who, directly or indirectly, acquires or disposes of an actual or potential capital interest and/or voting rights in the Company must immediately give written notice to the AFM of such acquisition or disposal if, as a result of such acquisition or disposal, the percentage of capital interest and/or voting rights held by such person reaches, exceeds or falls below the following thresholds: 3%, 5%, 10%, 15%, 20%, 25%, 30%, 40%, 50%, 60%, 75% and 95%.

For the purpose of calculating the percentage of capital interest or voting rights, the following interests must, *inter alia*, be taken into account: (i) Shares and/or voting rights directly held (or acquired or disposed of) by any person; (ii) Shares and/or voting rights held (or acquired or disposed of) by such person's controlled entities or by a third party for such person's account; (iii) voting rights held (or acquired or disposed of) by a third party with whom such person has concluded an oral or written voting agreement; (iv) voting rights acquired pursuant to an agreement providing for a temporary transfer of voting rights in consideration for a payment; (v) Shares which such person (directly or indirectly), or any controlled entity or third party referred to above, may acquire pursuant to any option or other right to acquire Shares; (vi) Shares which determine the value of certain cash settled financial instruments such as contracts for difference and total return swaps; (vii) Shares that must be acquired upon exercise of a put option by a counterparty; and (viii) Shares which are the subject of another contract creating an economic position similar to a direct or indirect holding in those Shares.

Controlled entities ("*gecontroleerde ondernemingen*" within the meaning of the DFSA) do not themselves have notification obligations under the DFSA as their direct and indirect interests are attributed to their (ultimate) parent. Any person may qualify as a parent for purposes of the DFSA, including an individual. If a person who has a 3% or larger interest in the Company's share capital or voting rights ceases to be a controlled entity it must immediately notify the AFM and all notification obligations under the DFSA will become applicable to such former controlled entity.

Special attribution rules apply to the attribution of Shares and/or voting rights which are part of the property of a partnership or other form of joint ownership. A holder of a pledge or right of usufruct in respect of Shares can also be subject to notification obligations, if such person has, or can acquire, the right to vote on the Shares. The acquisition of (conditional) voting rights by a pledgee or beneficial owner may also trigger notification obligations as if the pledgee or beneficial owner were the legal holder of the Shares and/or voting rights.

Furthermore, when calculating the percentage of capital interest a person is also considered to be in possession of Shares if (i) such person holds a financial instrument the value of which is (in part) determined by the value of the Shares or any distributions associated therewith and which does not entitle such person to acquire any Shares, (ii) such person may be obliged to purchase Shares on the basis of an option, or (iii) such person has concluded another contract whereby such person acquires an economic interest comparable to that of holding a Shares.

If a person's capital interest and/or voting rights reaches, exceeds or falls below the above-mentioned thresholds as a result of a change in the Company's issued and outstanding share capital or voting rights, such person is required to make a notification not later than on the fourth trading day after the AFM has published the Company's notification in relation to the Company's issued and outstanding share capital or voting rights.

Every holder of 3% or more of the Company's share capital or voting rights whose interest changes in respect of the previous notification to the AFM by reaching or crossing any of the abovementioned thresholds as a consequence of a different composition by means of an exchange or conversion into shares or the exercise of rights pursuant to an agreement to acquire voting rights, shall notify the AFM at the latest within four trading days after the date on which the holder knows or should have known that his interest reaches, exceeds or falls below a threshold.

#### 14.20.2 *The Company*

Under the DFSA, the Company is required to notify the AFM promptly after Settlement of the Company's issued and outstanding share capital and voting rights. Thereafter the Company is required to notify the AFM promptly of any change of 1% or more in the Company's issued and outstanding share capital or voting rights since the previous notification. Other changes in the Company's issued and outstanding share capital or voting rights must be notified to the AFM within eight days after the end of the quarter in which the change occurred.

#### 14.20.3 *Managing Directors and Supervisory Directors*

Furthermore, pursuant to Section 5:48 DFSA, each Managing Director and each Supervisory Director must notify the AFM (a) immediately after Settlement the number of Shares he or she holds and the number of votes he or she is entitled to cast in respect of the Company's issued and outstanding share capital, and (b) subsequently of each change in the number of Shares he or she holds and of each change in the number of votes he or she is entitled to cast in respect of the Company's issued and outstanding share capital, immediately after the relevant change.

If a Managing Director or Supervisory Director has notified a transaction to the AFM under the Dutch Financial Markets Supervision Act as described under “— *Shareholders*”, such notification is sufficient for purposes of the DFSA as described in this paragraph.

Furthermore, pursuant to the Market Abuse Regulation ((EU) No. 596/2014) (the ***Market Abuse Regulation*** or ***MAR***), persons discharging managerial responsibilities must notify the AFM and the Company of any transactions conducted for his or her own account relating to Shares or any debt instruments of the Company or to derivatives or other financial instruments linked thereto. Persons discharging managerial responsibilities within the meaning of the Market Abuse Regulation include: (a) Managing Directors and Supervisory Directors; or (b) members of the senior management who have regular access to inside information relating directly or indirectly to that entity and the authority to take managerial decisions affecting the future developments and business prospects of the Company.

In addition, pursuant to the Market Abuse Regulation and the regulations promulgated thereunder, certain persons who are closely associated with persons discharging managerial responsibilities, are also required to notify the AFM and the Company of any transactions conducted for their own account relating to Shares or any debt instruments of the Company or to derivatives or other financial instruments linked thereto. The Market Abuse Regulation and the regulations promulgated thereunder cover, *inter alia*, the following categories of persons: (i) the spouse or any partner considered by national law as equivalent to the spouse; (ii) dependent children; (iii) other relatives who have shared the same household for at least one year at the relevant transaction date; and (iv) any legal person, trust or partnership, the managerial responsibilities of which are discharged by a person discharging managerial responsibilities or by a person referred to under (i), (ii) or (iii) above, which is directly or indirectly controlled by such a person, which is set up for the benefit of such a person, or the economic interest of which are substantially equivalent to those of such a person.

These notification obligations under the Market Abuse Regulation apply when the total amount of the transactions conducted by a person discharging managerial responsibilities or a person closely associated to a person discharging managerial responsibilities reaches or exceeds the threshold of EUR 5,000 within a calendar year (calculated without netting). When calculating whether the threshold is reached or exceeded, persons discharging managerial responsibilities must add any transactions conducted by persons closely associated with them to their own transactions and vice versa. The first transaction reaching or exceeding the threshold must be notified as set forth above. The notifications pursuant to the Market Abuse Regulation described above must be made to the AFM and the Company no later than the third business day following the relevant transaction date.

#### 14.20.4 *Public registry*

The AFM does not issue separate public announcements of the notifications. It does, however, keep a public register of and publishes all notifications made pursuant to the DFSA at its website ([www.afm.nl](http://www.afm.nl)). Third parties can request to be notified automatically by email of changes to the public register in relation to a particular company's shares or a particular notifying party.

## **14.21 Short Positions**

### **14.21.1 *Net Short Position***

Pursuant to Regulation (EU) No 236/2012, each person holding a net short position attaining 0.2% of the issued share capital of the Company must report it to the AFM. Each subsequent increase of this position by 0.1% above 0.2% will also have to be reported. Each net short position equal to 0.5% of the issued share capital of the Company and any subsequent increase of that position by 0.1% will be made public via the AFM short selling register. To calculate whether a natural person or legal person has a net short position, their short positions and long positions must be set off. A short transaction in a share can only be contracted if a reasonable case can be made that the shares sold can actually be delivered, which requires confirmation of a third party that the shares have been located. The notification shall be made no later than 15:30 CET on the following trading day.

### **14.21.2 *Gross Short Position***

Furthermore, each person holding a gross short position in relation to the issued share capital of the Company that reaches, exceeds or falls below one of the following thresholds: 3%, 5%, 10%, 15%, 20%, 25%, 30%, 40%, 50%, 60%, 75% and 95%, must immediately give written notice to the AFM.

If a person's gross short position reaches, exceeds or falls below one of the above-mentioned thresholds as a result of a change in the Company's issued share capital, such person is required to make a notification not later than on the fourth trading day after the AFM has published the Company's notification in the public register of the AFM.

The AFM keeps a public register of the short selling notifications. Shareholders are advised to consult with their own legal advisors to determine whether any of the above short selling notification obligations apply to them.

### **14.21.3 *Non-compliance with disclosure obligations***

Non-compliance with these notification obligations is an economic offence (*economisch delict*) and may lead to criminal prosecution. The AFM may impose administrative sanctions for non-compliance, and the publication thereof. If criminal charges are pressed, the AFM is no longer allowed to impose administrative penalties and vice versa, the AFM is no longer allowed to seek criminal prosecution if administrative penalties have been imposed.

In addition, a civil court can impose measures against any person who fails to notify or incorrectly notifies the AFM of matters required to be notified. A claim requiring that such measures be imposed may be instituted by the Company, or by one or more Shareholders who alone or together with others represent at least 3% of the issued and outstanding share capital of the Company or voting rights. The measures that the civil court may impose include:

- an order requiring the person with a duty to disclose to make the appropriate disclosure;
- suspension of the right to exercise the voting rights by the person with a duty to disclose for a period of up to three years as determined by the court;
- voiding a resolution adopted by the General Meeting, if the court determines that the resolution would not have been adopted but for the exercise of the voting rights of the person with a duty to disclose, or suspension of a resolution adopted by the General Meeting until the court makes a decision about such voiding; and
- an order to the person with a duty to disclose to refrain, during a period of up to five years as determined by the court, from acquiring Shares or voting rights in the Company.

## **14.22 Market Abuse Rules**

Pursuant to the Market Abuse Regulation, the Company, the Managing Directors and the Supervisory Directors, other insiders and persons performing or conducting transactions in the Company's financial instruments, as applicable, will be subject to the insider trading prohibition, the prohibition on divulging insider information and tipping, and the prohibition on market manipulation. In certain circumstances, the Company's investors may also be subject to market abuse rules.

Inside information is any information of a precise nature relating (directly or indirectly) to the Company, or to the Shares in the Company or other financial instruments, which information has not been made public and which, if it

were made public, would be likely to have an effect on the price of the Shares or the other financial instruments or on the price of related derivative financial instruments.

Pursuant to the Market Abuse Regulation, a person that possesses inside information is prohibited to use that information by acquiring or disposing of, for its own account or for the account of a third party, directly or indirectly, Shares and other financial instruments of the Company. The use of inside information by cancelling or amending an order concerning Shares or other financial instruments of the Company where the order was placed before the person concerned possessed the inside information, is also prohibited. In addition, a person is also prohibited to recommend another person to engage in insider dealing, or induce another person to engage in insider dealing, which arises where the person possesses inside information and (a) recommends, on the basis of that information, that another person acquire or dispose of Shares or other financial instruments in the Company, or induces that person to make such an acquisition or disposal or (b) recommends, on the basis of that information, that another person cancel or amend an order concerning Shares or other financial instruments of the Company, or induces that person to make such a cancellation or amendment. Furthermore, it is prohibited for any person to manipulate the market, for instance by conducting transactions which could lead to an incorrect or misleading signal of the supply of, the demand for, or the price of the Shares.

The Company will be under an obligation to make any inside information immediately public. However, the Company may defer the publication of inside information if it can guarantee the confidentiality of the information. Such deferral is only possible if the publication thereof could damage the Company's legitimate interests and if the deferral does not risk misleading the market. If the Company makes use of this deferral right, it needs to inform the AFM thereof as soon as that information is made public.

#### **14.23 Transparency Directive**

The Netherlands is the Company's home member state for the purposes of Directive 2004/109/EC (as amended by Directive 2013/50/EU) as a consequence of which the Company will be subject to the DFSA in respect of certain on-going transparency and disclosure obligations.

## 15. The Offering

### 15.1 Introduction

The Company is offering up to 3,608,247 Offer Shares (excluding the Increase Option and the Over-Allotment Option). Assuming no exercise of the Increase Option and the Over-Allotment Option, the Offer Shares will constitute not more than approximately 41% of the issued Shares. Assuming that the Increase Option and the Over-Allotment Option are fully exercised, the Offer Shares will constitute not more than approximately 54% of the issued Shares. The Offering consists of (i) a public offering to retail and institutional investors in the Netherlands and (ii) a private placement to certain institutional investors in various other jurisdictions. The Offer Shares are being offered (i) within the United States to QIBs as defined in Rule 144A in reliance on Rule 144A or pursuant to another exemption from, or in a transaction not subject to, the registration requirements of the US Securities Act, and (ii) outside the United States in offshore transactions in reliance on Regulation S under the US Securities Act. The Offer Shares are being offered only in those jurisdictions in which, and only to those persons to whom, offers of Shares may lawfully be made.

### 15.2 Increase Option and Over-Allotment Option

The Company reserves the right to, after consultation with the Joint Global Coordinators, increase the total number of Offer Shares by up to 15%, up to a maximum of 541,237 Offer Shares. In the event that the Increase Option is exercised in full, the maximum number of Offer Shares amounts to 4,149,484, representing approximately 47% of the issued Shares. Any decision to exercise the Increase Option will be announced at the latest on the date the Offer Price is announced, which is currently expected to be on or about 8 November 2018.

The Company has granted the Joint Global Coordinators, on behalf of the Underwriters, the Over-Allotment Option, exercisable within 30 calendar days after the First Trading Date, pursuant to which the Joint Global Coordinators, on behalf of the Underwriters, may require the Company to issue at the Offer Price up to 541,237 Additional Shares (or up to 622,422 Additional Shares in the event that the Increase Option is exercised in full), comprising up to 15% of the total number of Offer Shares sold in the Offering, to cover over-allotments or short positions (if any) in connection with the Offering.

### 15.3 Expected Timetable

Subject to acceleration or extension of the timetable for, or withdrawal of, the Offering, the timetable below sets forth certain expected key dates for the Offering. See Section 15.5 (The Offering—Acceleration or Extension).

<b>Event</b>	<b>Time (CET) and date</b>
Commencement of the Offering Period	9:00 – 29 October 2018
End of the Offering Period for retail offering	12:00 (noon) – 8 November 2018
End of the Offering Period for institutional offering	16:00 – 8 November 2018
Pricing and Allocation	8 November 2018
Commencement of trading on an ‘as-if-and-when-issued’ basis on Euronext	9 November 2018
Settlement (payment and delivery)	12 November 2018

The Company together with Joint Global Coordinators may adjust the dates, times and periods given in the timetable and throughout this Prospectus.

### 15.4 Offering Period

The Offering Period will begin on 29 October 2018 at 9:00 CET and is expected to end at 16:00 CET on 8 November 2018, subject to acceleration or extension of the timetable for the Offering and subject as set out below for retail investors. On the final day of the Offering Period, subject to acceleration and extension of the timetable for the Offering and barring unforeseen circumstances, prospective retail investors may submit offers to subscribe for shares until 8 November 2018, 12:00 (noon) CET, and institutional investors may subscribe for Offer Shares until 8 November 2018, 16:00 CET. In the event of an acceleration or extension of the Offering Period, pricing, allotment, admission and first trading of the Offer Shares, as well as payment (in euro) for and delivery of the Offer Shares may be advanced or extended accordingly.

If a significant new factor, material mistake or inaccuracy relating to the information included in this Prospectus that is capable of affecting the assessment of the Offer Shares arises or is noted between the date of this Prospectus and the end of the Offering Period, a supplement to this Prospectus will be published, the Offering Period will be extended, if so required by the Prospectus Directive, the DFSA or the rules promulgated thereunder, and investors who have already



agreed to subscribe for Offer Shares may withdraw their subscriptions within two Business Days following the publication of the supplement, provided that the significant new factor, material mistake or inaccuracy arose or was noted before the end of the Offering Period. A supplement to this Prospectus shall be subject to approval by the AFM.

### **15.5 Acceleration or Extension**

The Company, together with the Joint Global Coordinators, may adjust the dates, times and periods given in the timetable and throughout this Prospectus. If so decided, the Company will make this public through a press release, which will also be posted on the Company's website. Any other material alterations will also be published through a press release that will be posted on the Company's website and (if required) in a supplement to this Prospectus that is subject to the approval of the AFM. Any extension of the timetable for the Offering will be published in a press release at least three hours before the end of the original Offering Period, provided that any extension will be for a minimum of one full day. Any acceleration of the timetable for the Offering will be published in a press release at least three hours before the proposed end of the accelerated Offering Period. In any event, the Offering Period will be at least six Business Days.

### **15.6 Offer Price and Number of Offer Shares**

The Offer Price Range is expected to be in the range of EUR 9.70 to EUR 11.60 (inclusive) per Offer Share. The Offer Price and the exact number of Offer Shares will be determined on the basis of a book building process. In addition, the Company reserves the right to, after consultation with the Joint Global Coordinators, increase the total number of Offer Shares by up to 15%, up to a total number of 541,237 Offer Shares, pursuant to the Increase Option. The Offer Price may be set within, above or below the Offer Price Range. The Offer Price Range is an indicative price range. The Offer Price and the exact number of Offer Shares offered will be determined by the Company, after consultation with the Joint Global Coordinators prior to Allocation, subject to any acceleration or extension, on the basis of the book building process and taking into account economic and market conditions, a qualitative and quantitative assessment of demand for the Offer Shares, and other factors deemed appropriate.

The Offer Price, the exact number of Offer Shares to be sold (including any exercise of the Increase Option) and the maximum number of Additional Shares will be stated in the Pricing Statement that will be published through a press release that will also be posted on the Company's website and filed with the AFM.

### **15.7 Change of the Offer Price Range or Number of Offer Shares**

The Offer Price Range is an indicative price range. The Company, after consultation with the Joint Global Coordinators, reserves the right to change the Offer Price Range, to decrease the total number of Offer Shares, or to increase the total number of Offer Shares pursuant to the Increase Option prior to Allocation. Any such change will be announced in a press release (that will also be posted on the Company's website). Upon a change of the number of Offer Shares, references to Offer Shares in this Prospectus should be read as referring to the amended number of Offer Shares and references to Additional Shares should be read as referring to the amended number of Additional Shares. Any increase in the top end of the Offer Price Range on the last day of the Offering Period or the determination of an Offer Price above the Offer Price Range will result in the Offering Period being extended by at least two Business Days; any increase in the top end of the Offer Price Range on the day prior to the last day of the Offering Period will result in the Offering Period being extended by at least one Business Day.

In these cases, if the Offering Period for Dutch Retail Investors will already have closed, this Offering Period for Dutch Retail Investors would be reopened. Accordingly, all investors, including Dutch Retail Investors, will have at least two Business Days to reconsider their subscriptions.

### **15.8 Subscription and Allocation**

Subscriptions by Dutch Retail Investors can only be made on a market order (*bestens*). As a consequence, Dutch Retail Investors that subscribed for the Offer Shares in the Offering, shall be obliged to subscribe for and pay for the number of Offer Shares in their share application, to the extent allocated to them, at the Offer Price, even if the Offer Price is above the upper end of the Offer Price Range (if applicable, as amended). Dutch Retail Investors can submit their subscriptions through their own financial intermediary. The financial intermediary will be responsible for collecting subscriptions from Dutch Retail Investors and for submitting their subscriptions to NIBC as the retail coordinator (the **Retail Coordinator**). The Retail Coordinator will consolidate all subscriptions submitted by Dutch Retail Investors to financial intermediaries and inform the Joint Global Coordinators and the Company. Dutch Retail Investors are entitled to cancel or amend their application, at the financial intermediary where their original application was submitted, at any time prior to the end of the Offering Period (if applicable, as accelerated or extended). Such cancellations or amendments may be subject to the terms of the financial intermediary involved. All questions concerning the timeliness, validity and form of instructions to a financial intermediary in relation to the subscription for Offer Shares will be determined by the financial intermediaries in accordance with their usual procedures or as otherwise notified to the eligible retail investors.

The Company and the Retail Coordinator are not liable for any action or failure to act by a financial intermediary in connection with any subscription, or purported subscription, for Offer Shares.

Allocation is expected to take place after the end of the Offering Period on or about 8 November 2018, subject to acceleration or extension of the timetable for the Offering.

Allocation to investors who applied to subscribe for Offer Shares will be made by the Underwriters, after consultation with the Company, and full discretion will be exercised as to whether or not and how to allot the Offer Shares subscribed for. There is no maximum or minimum number of Offer Shares for which prospective investors may subscribe and multiple (applications for) subscriptions are permitted. In the event that the Offering is oversubscribed, investors may receive fewer Offer Shares than they applied to subscribe for. The Company and the Joint Global Coordinators may, at their own discretion and without stating the grounds therefor, reject any subscriptions wholly or partly. Any monies received in respect of subscriptions which are not accepted in whole or in part will be returned to the investors without interest and at the investors' risk. On the day that Allocation occurs, the Joint Global Coordinators will, on behalf of the Underwriters, notify institutional investors or the relevant financial intermediary of any Allocation made to them.

Each investor participating in the Offering will be deemed to have made certain representations and statements to the Underwriters as described in Section 17 (Selling and Transfer Restrictions). Furthermore, each investor is expected to have read, and complied with, certain selling and transfer restrictions described in Section 17 (Selling and Transfer Restrictions). Each prospective investor should seek advice from its own advisors in relation to the legal, tax, business, financial and other aspects of participating in the Offering.

### **15.9 Listing and Trading**

Prior to the Offering, there has been no public market for the Shares. Application has been made to list and admit all the Shares to trading on Euronext under the symbol "THISR". The ISIN is NL0013089170 and the legal entity identifier is 724500HI5W5FYK0R3975.

Subject to acceleration or extension of the timetable for the Offering, trading in the Offer Shares on Euronext is expected to commence on the First Trading Date. Trading in the Offer Shares before Settlement will take place on an 'as-if-and-when-issued' basis.

### **15.10 Payment**

Payment (in euro) for, and delivery of, the Offer Shares will take place on the Settlement Date. Taxes and expenses, if any, must be borne by the investor (for more information see Section 18 (Taxation). Dutch Retail Investors may be charged expenses by their financial intermediary. Investors must pay the Offer Price in immediately available funds in full in euro on or before the Settlement Date (or earlier in the case of an early closing of the Offering Period and consequent acceleration of pricing, Allocation, commencement of trading and Settlement).

### **15.11 Delivery, Clearing and Settlement**

The Offer Shares will be delivered in book-entry form through the facilities of Euroclear Nederland. Application has been made for the Shares to be accepted for clearance through the book-entry facilities of Euroclear Nederland. Euroclear Nederland has its offices at Herengracht 459-469, 1017 BS Amsterdam, the Netherlands.

Delivery of the Offer Shares will take place on the Settlement Date, through the book-entry facilities of Euroclear Nederland, in accordance with its normal settlement procedures applicable to equity securities and against payment (in euro) for the Offer Shares in immediately available funds.

The closing of the Offering may not take place on the Settlement Date or at all if certain conditions or events referred to in the Underwriting Agreement are not satisfied or waived or occur on or prior to such date. See Section 16 (Plan of Distribution).

If Settlement does not take place on the Settlement Date as planned or at all, the Offering may be withdrawn, in which case all subscriptions for Offer Shares will be disregarded, any allotments made will be deemed not to have been made and any subscription payments made will be returned without interest or other compensation. Any transactions in Shares prior to Settlement are at the sole risk of the parties concerned. Neither the Company, the Underwriters, the Listing and Paying Agent nor Euronext Amsterdam N.V. accept any responsibility or liability for any loss incurred by any person as a result of a withdrawal of the Offering or the related annulment of any transactions in Shares on Euronext.

## **15.12 Dilution**

The voting interest of the existing Shareholders will be diluted as a result of the issuance of the Offer Shares. The maximum dilution for the existing Shareholders not participating in the Offering pursuant to the issuance of the Offer Shares would be (i) 29%, assuming the issuance of the maximum number of Offer Shares and no exercise of the Increase Option and the Over-Allotment Option, (ii) 32%, assuming the issuance of the maximum number of Offer Shares and the full exercise of the Increase Option only, (iii) 32%, assuming the issuance of the maximum number of Offer Shares and the full exercise of the Over-Allotment Option only and (iv) 35%, assuming the issuance of the maximum number of Offer Shares and the full exercise of the Increase Option and the Over-Allotment Option.

## **15.13 Voting Rights**

Each Share confers the right to cast one vote in the General Meeting, see Section 14.14.6. All Shareholders have the same voting rights pro rata the number of Shares they hold. Major Shareholders do not have different voting rights.

## **15.14 Ranking and Dividends**

The Offer Shares will upon issue, rank *pari passu* in all respects with the, at that time, outstanding Shares. The Offer Shares will carry dividend rights as of the date of issue. See Section 5 (Dividend Policy).

## **15.15 Listing and Paying Agent**

NIBC is the Listing and Paying Agent with respect to the Shares on Euronext.

## **15.16 Retail Coordinator**

NIBC is the Retail Coordinator with respect to the Shares on Euronext.

## **15.17 Stabilization Manager**

NIBC is the stabilization manager (the *Stabilization Manager*) with respect to the Shares on Euronext.

## **15.18 Expenses charged to investors**

No expenses or fees will be charged by the Company or the Underwriters to investors in relation to the Offering.

## 16. Plan of Distribution

### 16.1 Commitment of Committing Shareholders

Pursuant to the Commitment Letters, each of the Committing Shareholders, severally and not jointly, has irrevocably committed to subscribe for Offer Shares in the Offering in the maximum amount set forth opposite its respective name in the table below. The number of Offer Shares each Committing Shareholder has agreed to subscribe for will be determined by dividing the commitment amount of each Committing Shareholder by the Offer Price, rounded down to the nearest full number of Offer Shares. The Company has agreed to issue and allot the Offer Shares to the Committing Shareholders in accordance with their commitments subject to the terms and conditions set out in this Prospectus.

The aggregate commitments of all Committing Shareholders pursuant to the Commitment Letters amount to EUR 8,600,000.

<b>Committing Shareholder</b>	<b>Committed Amounts (in EUR)</b>
Global Health Investment Fund I, LLC .....	EUR 3,500,000
WELLINGTON Partners Nominee Ltd.....	EUR 2,500,000
aws Gründerfonds Beteiligungs GmbH & Co KG.....	EUR 750,000
FPCI Ventech Capital III .....	EUR 1,800,000
Werner Lanthaler .....	EUR 50,000
<b>Total .....</b>	<b>EUR 8,600,000</b>

The commitments of the Committing Shareholders are unconditional and irrevocable and terminate only in the event that (i) the Underwriting Agreement is terminated, (ii) the Settlement Date not having occurred before 31 December 2018 or (iii) the Joint Global Coordinators on the one hand, or the Company on the other hand, informing the other, prior to the execution of the Underwriting Agreement, that it has elected or determined not to proceed with the Offering.

The Committing Shareholders will subscribe for the Offer Shares pursuant to, and as part of the Offering. The Shares to be subscribed for by the Committing Shareholders will be Offer Shares and will rank *pari passu* with the other Shares. The Committing Shareholders shall not receive any fee or other compensation for their commitment. In addition, no special rights have been granted to any of the Committing Shareholders as part of its commitment to subscribe for the Offer Shares pursuant to the Commitment Letters.

For information on the Arrangements and the Omnes Funds Shares, see Section 20 (*Recent Developments*). The Omnes Funds Shares are not Offer Shares or part of the Offering.

### 16.2 Underwriting Agreement

The Company and the Underwriters entered into the Underwriting Agreement on 29 October 2018 with respect to the offer and sale of the Offer Shares in connection with the Offering.

After the entering into of the pricing agreement between the Company and the Underwriters (the **Pricing Agreement**), which is a condition for the obligations of the Underwriters under the Underwriting Agreement, and the terms of and subject to the conditions set forth in the Underwriting Agreement, the Company will agree to issue and sell the Offer Shares at the Offer Price to subscribers procured by the Underwriters or, failing subscription by the procured subscribers, to the Underwriters themselves, and each of the Underwriters will, severally but not jointly, agree to procure subscribers for the Offer Shares or, failing subscription by the procured subscribers, to subscribe for the Offer Shares themselves at the Offer Price.

Subject to the satisfaction of conditions precedent, the proportion of total Offer Shares which each Underwriter may severally but not jointly be required to subscribe for and/or purchase is indicated below.

<b>Underwriters</b>	<b>Underwriting commitment of Offer Shares</b>
NIBC Bank N.V. ....	43.75%
Stifel Nicolaus Europe Limited .....	43.75%
Erste Group Bank AG.....	12.50%
<b>Total .....</b>	<b>100%</b>

In the Underwriting Agreement, the Company has made certain representations and warranties and given certain undertakings. In addition, the Company has agreed to indemnify the Underwriters against certain liabilities in connection with the Offering.

The Underwriting Agreement provides that the obligations of the Underwriters to procure subscribers for the Offer Shares or, failing subscription by the procured subscribers, to subscribe for the Offer Shares themselves are subject to, among other things, the following conditions precedent:

- (i) the approval of this Prospectus by the AFM being in full force and effect,
- (ii) receipt at closing of the Offer of opinions on certain legal matters from counsel,
- (iii) the execution of documents relating to the Offering and such documents being in full force and effect,
- (iv) the entering into of the Pricing Agreement, and thereby the determination of the Offer Price and the exact number of the Offer Shares (i.e. underwriting of settlement risk only),
- (v) the admission of the Shares to listing and trading on Euronext Amsterdam occurring no later than 9:00 a.m. CET on the Settlement Date,
- (vi) the Company not having published an amendment or supplement to this Prospectus in order to ensure that it reflects an important new event or does not contain an untrue statement of, or omits to state, a material fact;
- (vii) the completion of the Corporate Reorganization, and
- (viii) certain other customary conditions, including in respect of the accuracy of representations and warranties by the Company and the Company and having complied with the terms of the Underwriting Agreement.

Upon the occurrence of certain specified events, such as the occurrence of (i) a material adverse change in the business, financial position, results of operations or prospects of Themis taken as a whole since the date of the Underwriting Agreement, (ii) a breach of any representation, warranty or undertaking or otherwise of the Underwriting Agreement or (iii) a statement in this Prospectus, the Pricing Statement or any amendment or supplement to this Prospectus being untrue, inaccurate or misleading or a new matter having arisen that constitutes a material omission from this Prospectus, the Underwriters may elect to terminate the Underwriting Agreement at any time prior to the Settlement Date (or thereafter, in respect of the Over-Allotment Option only).

In consideration of the agreement by the Underwriters to procure subscribers for or, failing subscription by the procured subscribers, to subscribe for themselves, the Offer Shares at the Offer Price and subject to the Offer Shares being sold as provided for in the Underwriting Agreement, the Company has agreed to pay the Joint Global Coordinators (on behalf of the Underwriters) an aggregate commission of 5.5%, or where it concerns Shares allotted to existing Shareholders and certain limited others a commission of 4.4%, of the gross proceeds of the Offering (including, if applicable, any gross proceeds from the exercise of the Increase Option and/or the Over-Allotment Option, as applicable). In addition, the Company may pay the Joint Global Coordinators (on behalf of the Underwriters) a discretionary commission of up to 1% of the gross proceeds of the Offering (including, if applicable, any gross proceeds from the exercise of the Increase Option and/or the Over-Allotment Option, as applicable). The fees due to and certain expenses incurred by the Underwriters in connection with the Offering will be borne by the Company.

The Offer Shares have not been and will not be registered under the US Securities Act and, subject to certain exceptions, may not be offered or sold within the United States. The Offer Shares are being offered and sold outside the United States in reliance on Regulation S and within the United States to QIBs pursuant to Rule 144A or another exemption from, or in a transaction not subject to, the registration requirements of the US Securities Act and applicable state securities laws. Any offer or sale of Offer Shares in the United States will be made by the Underwriters, their affiliates or agents, who are registered US broker-dealers, pursuant to applicable US securities laws. NIBC will not, directly or indirectly through affiliates or otherwise, be offering any Offer Shares in the United States.

### **16.3 Potential Conflicts of Interests**

The Underwriters are acting exclusively for the Company and for no one else and will not regard any other person (whether or not a recipient of this Prospectus) as their respective clients in relation to the Offering and will not be responsible to anyone other than the Company for providing the protections afforded to clients, giving advice in relation to the Offering and for the listing and trading of the Shares and/or any other transaction or arrangement referred to in this Prospectus.

Certain of the Underwriters and/or their respective affiliates have from time to time been engaged, and may in the future engage, in commercial banking, investment banking and financial advisory and ancillary activities in the ordinary course of their business with the Company (or any parties related to the Company) for which they have received or may in the future receive customary compensation, fees and/or commission.

In connection with the Offering, each of the Underwriters and any of their respective affiliates may take up Offer Shares in the Offering as a principal position and in that capacity may retain, purchase or sell for its own account such securities and any Offer Shares or related investments and may offer or sell such Offer Shares or other investments otherwise than in connection with the Offering. Accordingly, references in this Prospectus to Offer Shares being offered or placed should be read as including any offering or placement of Offer Shares to any of the Underwriters or any of their respective affiliates acting in such capacity. In addition, certain of the Underwriters or their affiliates may enter into financing arrangements (including swaps or contracts for difference) with investors in connection with which such Underwriters (or their affiliates) may from time to time acquire, hold or dispose of Shares. None of the Underwriters intends to disclose the extent of any such investment or transactions otherwise than pursuant to any legal or regulatory obligation to do so.

As a result of acting in the capacities described above, the Underwriters may have interests that may not be aligned, or could potentially conflict, with investors' and/or the Company's interests.

## **16.4 Lock-up Arrangements**

The Joint Global Coordinators (acting on behalf of the Underwriters) may, in their sole discretion and at any time without prior public notice, waive the restrictions, including those on sales, issues or transfers of Shares, described below. If the consent of the Joint Global Coordinators (acting on behalf of the Underwriters) in respect of a lock-up arrangement is requested as described below, full discretion can be exercised by the Joint Global Coordinators as to whether or not such consent will be granted.

### **16.4.1 *Company lock-up***

Pursuant to the Underwriting Agreement, the Company has agreed with the Underwriters that, for a period from the date of the Underwriting Agreement until 365 days from the Settlement Date, it will not, except as set forth below, without the prior written consent of the Joint Global Coordinators (acting on behalf of the Underwriters), (i) directly or indirectly, issue, offer, pledge, sell, contract to sell, sell or grant any option, right, warrant or contract to purchase, exercise any option to sell, purchase any option or contract to sell, or lend or otherwise transfer or dispose of, directly or indirectly, any Ordinary Shares or other shares of the Company or any securities convertible into or exercisable or exchangeable for, or substantially similar to, Ordinary Shares or other shares of the Company or file any registration statement under the US Securities Act or any similar document with any other securities regulator, stock exchange or listing authority with respect to any of the foregoing; (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of any Ordinary Shares or other shares of the Company or otherwise has the same economic effect as (i), whether in the case of (i) and (ii) any such transaction is to be settled by delivery of Ordinary Shares or such other securities, in cash or otherwise; (iii) publicly announce such an intention to effect any such transaction; or (iv) submit to its Shareholders or any other body of the Company a proposal to effect any of the foregoing.

The foregoing restrictions shall not apply to (i) the issue and offer by the Company of the Offer Shares, (ii) the granting of awards in options or Ordinary Shares by the Company or the issuance of Ordinary Shares upon exercise of options granted by the Company in each case pursuant to employee incentive schemes as disclosed or described as being proposed or contemplated in the Prospectus or (iii) the issue of Ordinary Shares to Shareholders in connection with the Corporate Reorganization.

### **16.4.2 *Shareholders lock-up***

Each of the existing Shareholders (other than Managing Directors) has entered into a lock-up agreement with the Joint Global Coordinators (acting on behalf of the Underwriters) on 29 October 2018. Pursuant to this lock-up agreement, each of the existing Shareholders (other than Managing Directors) has agreed with the Joint Global Coordinators (on behalf of the Underwriters) that, for a period from the date of the Underwriting Agreement until 365 calendar days from the Settlement Date, it will not, except as set forth below, without the prior written consent of the Joint Global Coordinators (acting on behalf of the Underwriters): (i) directly or indirectly, offer, pledge, sell, contract to sell, sell or grant any option, right, warrant or contract to purchase, exercise any option to sell, purchase any option or contract to sell, or lend or otherwise transfer or dispose of, directly or indirectly, any Shares or other shares of the Company or any securities convertible into or exercisable or exchangeable for, or substantially similar to, Shares or other shares of the Company or request or demand that the Company file any registration statement under the US Securities Act of 1933, as amended, or submits any prospectus for approval under the DFSA or any similar document with any other securities

regulator, stock exchange or listing authority with respect to any of the foregoing; (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of any Shares or other shares of the Company or otherwise has the same economic effect as (i), whether any such transaction in the case of (i) and (ii) is to be settled by delivery of Shares or such other securities, in cash or otherwise; (iii) cause or approve, directly or indirectly, any announcement, execution or implementation of a direct or indirect placement of Shares or any other securities of the Company or any public announcement of such an intention to effect any such transaction; or (iv) the submission to the General Meeting or any other body of the Company, or vote in favour of, a proposal to effect any of the foregoing.

The foregoing restrictions shall not apply to: (i) any Shares acquired by such Shareholder in the Offering or on Euronext Amsterdam on or after the First Trading Date; (ii) any transfer, subscription or exchange in connection with the Corporate Reorganization; (iii) an acceptance of a general offer for the ordinary share capital of the Company made in accordance with the DFSA or the provision of an irrevocable undertaking to accept such an offer, provided that the Joint Global Coordinators are notified in writing two Business Days in advance; (iv) any transfer as a result of the legal merger or demerger of the Company; (v) the lending of Shares to the Stabilization Manager (acting on behalf of the Underwriters) pursuant to the stock lending agreement dated 29 October 2018; and (vi) any transfer of Shares by any existing Shareholder to any of (A) its subsidiaries or subsidiary undertakings, or to any subsidiary or subsidiary undertaking of its ultimate holding company, or (B) to any investment fund or other entity controlled or managed by the relevant Shareholder or any of the entities referred to in (A), provided that prior to the transfer it shall have entered into a lock-up agreement or assumed all rights and obligations of the relevant transferring Shareholder under the lock-up agreement for the remainder of the lock-up period.

#### **16.4.3 *Management and employee lock-up***

Each Managing Director and certain employees of the Company have entered into a lock-up agreement with the Joint Global Coordinators (acting on behalf of the Underwriters) on 29 October 2018. Pursuant to this lock-up agreement, each such person has agreed with the Joint Global Coordinators (on behalf of the Underwriters) that, for a period from the date of the Underwriting Agreement until 365 calendar days from the Settlement Date, it will not, except as set forth below, without the prior written consent of the Joint Global Coordinators (acting on behalf of the Underwriters): (i) directly or indirectly, offer, pledge, sell, contract to sell, sell or grant any option, right, warrant or contract to purchase, exercise any option to sell, purchase any option or contract to sell, or lend or otherwise transfer or dispose of, directly or indirectly, any Shares or other shares of the Company or any securities convertible into or exercisable or exchangeable for, or substantially similar to, Shares or other shares of the Company or request or demand that the Company file any registration statement under the US Securities Act or submits any prospectus for approval under the DFSA or any similar document with any other securities regulator, stock exchange or listing authority with respect to any of the foregoing; (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of any Shares or other shares of the Company or otherwise has the same economic effect as (i), whether any such transaction in the case of (i) and (ii) is to be settled by delivery of Shares or such other securities, in cash or otherwise; (iii) cause, directly or indirectly, any announcement, execution or implementation of a direct or indirect placement of Shares or any other securities of the Company or any public announcement of such an intention to effect any such transaction; or (iv) the submission to the General Meeting or any other body of the Company, or vote in favour of, a proposal to effect any of the foregoing.

The foregoing restrictions shall not apply to: (i) any transfer, subscription or exchange in connection with the Corporate Reorganization; (ii) an acceptance of a general offer for the ordinary share capital of the Company made in accordance with the DFSA or the provision of an irrevocable undertaking to accept such an offer, provided that the Joint Global Coordinators are notified in writing two Business Days in advance; (iii) any transfer as a result of the legal merger or demerger of the Company; (iv) the exercise of options for Shares under awards granted under the Company's existing stock option plan as described in the Prospectus but not any sale of Shares obtained as a result; and (v) any transfer or disposal of Shares to family members of the relevant person, provided that prior to the transfer he or she shall have assumed all rights and obligations of the relevant transferring or disposing person under the lock-up agreement for the remainder of the lock-up period.

#### **16.5 *Over-allotment and Stabilization***

In connection with the Offering, NIBC, the Stabilization Manager (or any of its agents), on behalf of the Underwriters, may (but will be under no obligation to), to the extent permitted by applicable law, over-allot Shares or effect other transactions with the view to supporting the market price of the Shares at a level higher than that which might otherwise prevail in the open market. The Stabilization Manager will not be required to enter into such transactions and such transactions may be effected on any securities market, over-the-counter market, stock exchange (including Euronext Amsterdam N.V.) or otherwise and may be undertaken at any time during the period commencing on the First Trading Date and ending no later than 30 calendar days thereafter. The Stabilization Manager or any of its agents will not be obligated to effect stabilizing transactions, and there will be no assurance that stabilizing transactions will be undertaken.

Such stabilizing transactions, if commenced, may be discontinued at any time without prior notice. Save as required by law or regulation, neither the Stabilization Manager nor any of its agents intends to disclose the extent of any over-allotments made and/or stabilization transactions under the Offering. The Underwriting Agreement provides that the Stabilization Manager may, for purposes of stabilizing transactions, over-allot Shares up to a maximum of 15% of the total number of Offer Shares sold in the Offering, or up to 541,237 Additional Shares (or up to 622,422 Additional Shares in the event that the Increase Option is exercised in full) assuming the maximum number of Offer Shares is offered and sold in the Offering.

None of the Company or any of the Underwriters makes any representation or prediction as to the direction or the magnitude of any effect that the transactions described above may have on the price of the Shares or any other securities of the Company. In addition, none of the Company or any of the Underwriters makes any representation that the Stabilization Manager will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.



## **17. Selling and Transfer Restrictions**

### **17.1 General**

In making an investment decision, prospective investors must rely on their own examination of the Company and the terms of the Offering, including the merits and risks involved. Any decision to subscribe for Offer Shares should be based solely on this Prospectus.

The Offering to persons resident in, or who are citizens of, a particular jurisdiction may be affected by the laws of that jurisdiction. Investors should consult their professional adviser as to whether they require any governmental or any other consent or need to observe any other formalities to enable the investor to accept, sell or purchase Offer Shares.

No action has been or will be taken by the Company or the Underwriters to permit a public offering of the Offer Shares in any jurisdiction outside the Netherlands or possession or distribution of this Prospectus or any other offering material in any jurisdiction where action for that purpose is required. Receipt of this Prospectus will not constitute an offer in those jurisdictions in which it would be illegal to make an offer and, in those circumstances, this Prospectus will be sent for informational purposes only and should not be copied or redistributed.

If an investor receives a copy of this Prospectus in any territory other than the Netherlands, the investor may not treat this Prospectus as constituting an invitation or offer to the investor of the Offer Shares, unless, in the relevant jurisdiction, such an offer could lawfully be made to the investor, or the Offer Shares could lawfully be dealt in without contravention of any unfulfilled registration or other legal requirements. Accordingly, if the investor receives a copy of this Prospectus or any other offering materials or advertisements, the investor should not distribute the same to any person in or into any jurisdiction where to do so would or may contravene local securities laws or regulations.

If an investor forwards this Prospectus or any other offering materials or advertisements into any such territories (whether under a contractual or legal obligation or otherwise) the investor should draw the recipient's attention to the contents of this Section 17 (Selling and Transfer Restrictions).

Subject to the specific restrictions described below, if investors (including, without limitation, any investor's nominees and trustees) are outside the Netherlands and wish to accept, sell or purchase Offer Shares, they must satisfy themselves as to full observance of the applicable laws of any relevant territory including obtaining any requisite governmental or other consents, observing any other requisite formalities and paying any issue, transfer or other taxes due in such territories.

The information set out in this Section 17 (Selling and Transfer Restrictions) is intended as a general guideline only. Investors that are in any doubt as to whether they are eligible to subscribe for Offer Shares should consult their professional advisor without delay.

### **17.2 Selling and Transfer Restrictions**

#### **17.2.1 *Notice to Investors in the United States***

Because of the following restrictions, prospective investors are advised to consult legal counsel prior to making any offer, resale, pledge or other transfer of the Offer Shares:

The Offer Shares have not been and will not be registered under the US Securities Act or with any securities regulatory authority or any state or other jurisdiction in the United States, and may not be offered, sold, pledged or otherwise transferred within the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the US Securities Act and in compliance with any applicable state securities laws. Accordingly, the Offer Shares will not be offered or sold in the Offering within the United States and are being offered and sold in the Offering outside the United States pursuant to Regulation S under the US Securities Act.

In addition, until the end of the 40th calendar day after commencement of the Offering, an offering or sale of Offer Shares within the United States by a dealer (whether or not participating in the Offering) may violate the registration requirements of the US Securities Act if such offer or sale is made otherwise than in accordance with Rule 144A.

### *Subscribers in the United States*

Each subscriber for the Offer Shares within the United States will be deemed to have represented and agreed that it has received a copy of this Prospectus and such other information as it deems necessary to make an informed investment decision and that:

- the subscriber acknowledges that the Offer Shares have not been and will not be registered under the US Securities Act or with any securities regulatory authority of any state of the United States and are subject to significant restrictions on transfer;
- the subscriber (i) is a QIB (as defined in Rule 144A), (ii) is aware that the sale to it is being made in reliance on Rule 144A or another exemption from, or in a transaction not subject to, the registration requirements of the US Securities Act and (iii) is acquiring such Offer Shares for its own account or for the account of a QIB;
- the subscriber is aware that the Offer Shares are being offered in the United States in a transaction not involving any public offering in the United States within the meaning of the US Securities Act;
- if, in the future, the subscriber decides to offer, resell, pledge or otherwise transfer such Offer Shares, such Offer Shares may be offered, sold, pledged or otherwise transferred only (i) to a person whom the beneficial owner and/or any person acting on its behalf reasonably believes is a QIB in a transaction meeting the requirements of Rule 144A, (ii) in accordance with Regulation S, or (iii) in accordance with Rule 144 (if available), in each case in accordance with any applicable securities laws of any state of the United States or any other jurisdiction;
- the Offer Shares are “restricted securities” within the meaning of Rule 144(a)(3) and no representation is made as to the availability of the exemption provided by Rule 144 for resales of any such Offer Shares;
- the subscriber will not deposit or cause to be deposited such Offer Shares into any depository receipt facility established or maintained by a depository bank other than a Rule 144A restricted depository receipt facility, so long as such Offer Shares are “restricted securities” within the meaning of Rule 144(a)(3);
- it understands that such Offer Shares (to the extent they are in certificated form), unless otherwise determined by the Company in accordance with applicable law, will bear a legend substantially to the following effect:

THIS SECURITY HAS NOT BEEN AND WILL NOT BE REGISTERED UNDER THE US SECURITIES ACT OF 1933, AS AMENDED (THE **US SECURITIES ACT**) OR WITH ANY SECURITIES REGULATORY AUTHORITY OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT (1) IN ACCORDANCE WITH RULE 144A UNDER THE US SECURITIES ACT (**RULE 144A**) TO A PERSON THAT THE HOLDER AND ANY PERSON ACTING ON ITS BEHALF REASONABLY BELIEVE IS A QUALIFIED INSTITUTIONAL BUYER WITHIN THE MEANING OF RULE 144A PURCHASING FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER, (2) IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH RULE 903 OR RULE 904 OF REGULATION S UNDER THE US SECURITIES ACT OR (3) PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE US SECURITIES ACT PROVIDED BY RULE 144 THEREUNDER (IF AVAILABLE), IN EACH CASE IN ACCORDANCE WITH ANY APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES. NO REPRESENTATION CAN BE MADE AS TO THE AVAILABILITY OF THE EXEMPTION PROVIDED BY RULE 144 UNDER THE US SECURITIES ACT FOR REALES OF THIS SECURITY;

- the Company, the Underwriters and their affiliates, and others will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements. If it is acquiring any Offer Shares for the account of one or more QIBs, it represents that it has sole investment discretion with respect to each such account and that it has full power to make the foregoing acknowledgements, representations and agreements on behalf of each such account; and
- the Company shall not recognize any offer, sale, pledge or other transfer of the Offer Shares made other than in compliance with the above-stated restrictions.

### *Purchasers outside the United States*

Each purchaser of the Offer Shares outside the United States will, pursuant to Regulation S, be deemed to have represented and agreed that it has received a copy of this Prospectus and such other information as it deems necessary to make an informed investment decision and that:

- the purchaser acknowledges that the Offer Shares have not been and will not be registered under the US Securities Act, or with any securities regulatory authority of any state of the United States, and are subject to significant restrictions on transfer;
- the purchaser and the person, if any, for whose account or benefit the purchaser is acquiring the Offer Shares, were located outside the United States at the time the buy order for such Shares was originated and continue to be located outside the United States and has not purchased the Offer Shares for the benefit of any person in the United States or entered into any arrangement for the transfer of the Offer Shares to any person in the United States;
- the purchaser is aware of the restrictions on the offer and sale of the Offer Shares pursuant to Regulation S as described in this Prospectus;
- the Offer Shares have not been offered to it by means of any “directed selling efforts” as defined in Regulation S;
- the purchaser acknowledges that the Company, the Underwriters and their respective affiliates will rely upon the truth and accuracy of the acknowledgements, representations and agreements in the foregoing paragraphs; and
- the Company shall not recognize any offer, sale, pledge or other transfer of the Offer Shares made other than in compliance with the above-stated restrictions.

#### **17.2.2 Notice to Investors in the European Economic Area**

In relation to each Member State of the European Economic Area, other than in the Netherlands, (each, a **Relevant Member State**) no Offer Shares have been offered or will be offered pursuant to the Offering to the public in that Relevant Member State, except that offers of Offer Shares may be made to the public in that Relevant Member State at any time under the following exemptions from the Prospectus Directive, if they have been implemented in that Relevant Member State:

- to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive) per Relevant Member State, subject to obtaining prior consent to the Joint Global Coordinators for any such offer; or
- in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of Offer Shares shall result in a requirement for the Company or the Underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement to a prospectus pursuant to Article 16 of the Prospectus Directive.

For the purposes of this provision, the expression an “**offer to the public**” in relation to any Offer Shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the Offering and any Offer Shares to be offered so as to enable an investor to decide to subscribe for any Offer Shares, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State and the expression “**Prospectus Directive**” means Directive 2003/71/EC, as amended, including Directive 2010/73/EU and includes any relevant implementing measure in each Relevant Member State.

Each person in a Relevant Member State, other than persons receiving offers contemplated in this Prospectus in the Netherlands, who receives any communication in respect of, or who acquires any Offer Shares under, the offers contemplated hereby will be deemed to have represented, warranted and agreed to and with the Underwriters and the Company that:

- (i) it is a qualified investor within the meaning of the law in that Relevant Member State implementing Article 2(1)e of the Prospectus Directive; and
- (ii) in the case of any Offer Shares acquired by it as a financial intermediary, as that term is used in Article 3(2) of the Prospectus Directive, (i) the Offer Shares acquired by it in the Offering have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Relevant Member State other than qualified investors, as that term is defined in the Prospectus Directive, or have been acquired in other circumstances falling within Article 3(2) of the Prospectus Directive and the prior consent of the Joint Global Coordinators has been given to the offer or resale; or (ii) where the Offer Shares have been acquired by it on behalf of persons in any Relevant Member State other than qualified investors, the offer of those Offer Shares to it is not treated under the Prospectus Directive as having been made to such persons.

The Company, the Underwriters and their affiliates, and others will rely upon the truth and accuracy of the foregoing representation, acknowledgement and agreement. Notwithstanding the above, a person who is not a qualified investor and who has notified the Joint Global Coordinators of such fact in writing may, with the prior consent of the Joint Global Coordinators, be permitted to acquire Offer Shares in the Offering.

### 17.2.3 *Notice to Investors in the United Kingdom*

This Prospectus and any other material in relation to the Offer Shares described herein is directed at and for distribution in the United Kingdom only to persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospective Directive (***Qualified Investors***) that are also (i) persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000, as amended (the ***FSMA***) (Financial Promotion) Order 2005 (the ***Order***), or (ii) high net worth entities falling within Article 49(2)(a) to (d) of the Order (all such persons being together referred to as “relevant persons”). The Offer Shares are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such Offer Shares will be engaged in only with, relevant persons. Any person in the United Kingdom who is not a relevant person should not act or rely on this Prospectus or any of its contents. Any investment or investment activity to which this Prospectus relates is available only to relevant persons and will be engaged in only with relevant persons. This Prospectus and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other person in the United Kingdom.

Furthermore, the Underwriters have warranted that it (i) has only invited or will only invite participation in investment activities in connection with the offering or the sale of the Offer Shares within the meaning of Section 21 of the FSMA, and has only initiated or will only initiate such investment activities to the extent that Section 21(1) of the FSMA does not apply to the Company; and (ii) has complied and will comply with all applicable provisions of FSMA with respect to all activities already undertaken by each of them or will undertake in the future in relation to the Offer Shares in, from, or otherwise involving the United Kingdom.

## 18. Taxation

### 18.1 Dutch taxation

The following summary outlines certain Dutch tax consequences in connection with the acquisition, ownership and disposal of the Shares. All references in this summary to the Netherlands and Dutch law are to the European part of the Kingdom of the Netherlands and its law, respectively, only. The summary does not purport to present any comprehensive or complete picture of all Dutch tax aspects that could be of relevance to the acquisition, ownership and disposal of Shares by a (prospective) holder of Shares who may be subject to special tax treatment under applicable law. The summary is based on the tax laws and practice of the Netherlands as in effect on the date of this Prospectus, which are subject to changes that could prospectively or retrospectively affect the Dutch tax consequences.

For purposes of Dutch income and corporate income tax, Shares legally owned by a third party such as a trustee, foundation or similar entity or arrangement (a **Third Party**), may under certain circumstances have to be allocated to the (deemed) settlor, grantor or similar originator (the **Settlor**) or, upon the death of the Settlor, his/her beneficiaries (the **Beneficiaries**) in proportion to their entitlement to the estate of the Settlor of such trust or similar arrangement (the **Separated Private Assets**).

The summary does not address the tax consequences of a holder of Shares who is an individual and who has a substantial interest in the Company. Generally, a holder of Shares will have a substantial interest in the Company if such holder of Shares, whether alone or together with his spouse or partner and/or certain other close relatives, holds directly or indirectly, or as Settlor or Beneficiary of Separated Private Assets (x) the ownership of, (y) certain other rights, such as usufruct, over, or (z) rights to acquire (whether or not already issued), Shares representing 5% or more of the total issued and outstanding capital (or the issued and outstanding capital of any class of Shares) of the Company.

In addition, a holder of Shares has a substantial interest in the Company if he, whether alone or together with his spouse or partner and/or certain other close relatives, has the ownership of, or other rights over, shares in, or profit certificates issued by, the Company that represent less than 5% of the relevant aggregate that either (a) qualified as part of a substantial interest as set forth above and where shares, profit certificates and/or rights there over have been, or are deemed to have been, partially disposed of, or (b) have been acquired as part of a transaction that qualified for non-recognition of gain treatment.

This summary does not address the tax consequences of a holder of Shares who:

- (a) receives income or realises capital gains in connection with his or her employment activities or in his/her capacity as (former) Managing Director and/or (former) Supervisory Directors; or
- (b) is a resident of any non-European part of the Kingdom of the Netherlands.

Prospective holders of Shares should consult their own professional adviser with respect to the tax consequences of any acquisition, ownership or disposal of the Shares in their individual circumstances.

#### ***Dividend Withholding Tax***

##### *General*

The Company is generally required to withhold dividend withholding tax imposed by the Netherlands at a rate of 15% on dividends distributed by the Company in respect of the Shares, on the basis that the Company is incorporated under Dutch law. As an exception to this rule, the Company is not required to withhold Dutch dividend withholding tax if, as it intends, it is considered to be a resident of Austria in accordance with the domestic tax residency provisions applied by Austria and the double tax treaty between the Netherlands and Austria attributes the tax residency exclusively to Austria.

The aforementioned exception does not apply to dividends distributed by the Company to a holder of Shares that is resident or deemed to be resident in the Netherlands or that has an enterprise or an interest in an enterprise that is, in whole or in part, carried on through a permanent establishment (*vaste inrichting*) or a permanent representative (*vaste vertegenwoordiger*) in the Netherlands and to which enterprise or part of an enterprise, as the case may be, the Shares are attributable.

Accordingly, even if the Company is considered exclusively as a resident of Austria for purposes the double tax treaty between the Netherlands and Austria, the Company could still be required to withhold dividend withholding tax imposed by the Netherlands at a rate of 15% on dividends distributed by the Company in respect of Shares in the

situation described below under “Holders of Shares Resident in the Netherlands”. The expression “dividends distributed by the company” as used herein includes, but is not limited to:

- (a) distributions in cash or in kind, deemed and constructive distributions and repayments of paid-in capital (“*gestort kapitaal*”) not recognised for Dutch dividend withholding tax purposes;
- (b) liquidation proceeds, proceeds of redemption of Shares or, as a rule, consideration for the repurchase of Shares by the Company in excess of the average paid-in capital recognised for Dutch dividend withholding tax purposes;
- (c) the par value of Shares issued to a holder of Shares or an increase of the par value of Shares, to the extent that no contribution, recognised for Dutch dividend withholding tax purposes, has been made or will be made; and
- (d) partial repayment of paid-in capital, recognised for Dutch dividend withholding tax purposes, if and to the extent that there are net profits (*zuivere winst*), unless (i) the general meeting of the shareholders has resolved in advance to make such repayment and (ii) the par value of the Shares concerned has been reduced by an equal amount by way of an amendment of the Articles of Association.

#### *Holders of Shares Resident in the Netherlands*

Dividends paid by the Company to holders of Shares that are resident or deemed to be resident in the Netherlands or that have an enterprise or an interest in an enterprise that is, in whole or in part, carried on through a permanent establishment (*vaste inrichting*) or a permanent representative (*vaste vertegenwoordiger*) in the Netherlands and to which enterprise or part of an enterprise, as the case may be, the Shares are attributable, will be subject to Dutch dividend withholding tax.

A holder of Shares that is resident or deemed to be resident in the Netherlands is generally entitled, subject to the anti-dividend stripping rules described below, to a full credit against its (corporate) income tax liability, or a full refund, of the Netherlands dividend withholding tax. The same generally applies to holders of Shares that are neither resident nor deemed to be resident in the Netherlands if the Shares are attributable to a permanent establishment (*vaste inrichting*) or a permanent representative (*vaste vertegenwoordiger*) in the Netherlands of such non-resident holder.

According to the anti-dividend stripping rules, no exemption, reduction, credit or refund of Dutch dividend withholding tax will be granted if the recipient of the dividend paid by the Company is not considered the beneficial owner (*uiteindelijk gerechtigde*) of the dividend as defined in these rules. A recipient of a dividend is not considered the beneficial owner of the dividend if, as a consequence of a combination of transactions, (i) a person (other than the holder of the dividend coupon), directly or indirectly, partly or wholly benefits from the dividend, (ii) such person directly or indirectly retains or acquires a comparable interest in the Shares, and (iii) such person is entitled to a less favourable exemption, refund or credit of dividend withholding tax than the recipient of the dividend distribution. The term “combination of transactions” includes transactions that have been entered into in the anonymity of a regulated stock market, the sole acquisition of one or more dividend coupons and the establishment of short-term rights or enjoyment on the Shares (e.g. usufruct).

#### *Holders of Shares Resident Outside the Netherlands*

A holder of Shares, who is an individual or that is a legal entity, another entity with a capital divided into shares, an association, a foundation or a fund or trust, not resident or deemed to be resident in the Netherlands for (corporate) income tax purposes, will not be subject to any Dutch dividend withholding tax on distributions made on the Shares, provided that the Company is exclusively considered as a resident of Austria for purposes the double tax treaty between the Netherlands and Austria.

#### ***Taxes on income and capital gains***

##### *Holders of Shares resident in the Netherlands: individuals*

A holder of Shares, who is an individual resident or deemed to be resident in the Netherlands will be subject to regular Dutch income tax on the income derived from the Shares and the gains realised upon the acquisition, redemption and/or disposal of the Shares by the holder thereof, if:

- (a) such holder of Shares has an enterprise or an interest in an enterprise, to which enterprise the Shares are attributable; and/or

- (b) such income or capital gain forms “a benefit from miscellaneous activities” (“*resultaat uit overige werkzaamheden*”) which, for instance, would be the case if the activities with respect to the Shares exceed “normal active asset management” (“*normaal, actief vermogensbeheer*”) or if income and gains are derived from the holding, whether directly or indirectly, of (a combination of) shares, debt claims or other rights (together, a “lucrative interest” (“*lucratief belang*”)) that the holder thereof has acquired under such circumstances that such income and gains are intended to be remuneration for work or services performed by such holder (or a related person), whether within or outside an employment relation, where such lucrative interest provides the holder thereof, economically speaking, with certain benefits that have a relation to the relevant work or services.

If either of the abovementioned conditions (a) or (b) applies, income derived from the Shares and the gains realised upon the acquisition, redemption and/or disposal of the Shares will in general be subject to Dutch income tax at the progressive rates up to 51.95%.

If the abovementioned conditions (a) and (b) do not apply, a holder of Shares who is an individual, resident or deemed to be resident in the Netherlands will not be subject to taxes on actual income and capital gains in the Netherlands. Instead, such individual is generally taxed at a flat rate of 30% on deemed income from “savings and investments” (“*sparen en beleggen*”), which deemed income is determined on the basis of the amount included in the individual’s “yield basis” (“*rendementsgrondslag*”) at the beginning of the calendar year (minus a tax-free threshold). For 2018, the deemed income derived from savings and investments will amount to 2.02% of the individual’s yield basis up to EUR 70,800, 4.33% of the individual’s yield basis exceeding EUR 70,800 up to and including EUR 978,000 and 5.38% of the individual’s yield basis in excess of EUR 978,000. The percentages to determine the deemed income are reassessed every year. The tax-free threshold for 2018 is EUR 30,000.

#### Holders of Shares resident in the Netherlands: corporate entities

A holder of Shares that is resident or deemed to be resident in the Netherlands for corporate income tax purposes, and that is:

- a corporation;
- another entity with a capital divided into shares;
- a cooperative (association); or
- another legal entity that has an enterprise or an interest in an enterprise to which the Shares are attributable,

but which is not:

- a qualifying pension fund;
- a qualifying investment fund (*fiscale beleggingsinstelling*) or a qualifying exempt investment institution (*vrijgestelde beleggingsinstelling*); or
- another entity exempt from corporate income tax,

will in general be subject to regular corporate income tax, levied at a rate of 25% (20% over profits up to EUR 200,000) over income derived from the Shares and the gains realised upon the acquisition, redemption and/or disposal of the Shares, unless, and to the extent that, the participation exemption (*deelnemingsvrijstelling*) applies.

#### Holders of Shares resident outside the Netherlands: individuals

A holder of Shares who is an individual, not resident or deemed to be resident in the Netherlands will not be subject to any Dutch taxes on income derived from the Shares and the gains realised upon the acquisition, redemption and/or disposal of the Shares (other than the dividend withholding tax described above), unless:

- (a) such holder has an enterprise or an interest in an enterprise that is, in whole or in part, carried on through a permanent establishment (*vaste inrichting*) or a permanent representative (*vaste vertegenwoordiger*) in the Netherlands and to which enterprise or part of an enterprise, as the case may be, the Shares are attributable; or

- (b) such income or capital gain forms a “benefit from miscellaneous activities in the Netherlands” (“*resultaat uit overige werkzaamheden in Nederland*”) which would for instance be the case if the activities in the Netherlands with respect to the Shares exceed “normal active asset management” (“*normaal, actief vermogensbeheer*” or if such income and gains are derived from the holding, whether directly or indirectly, of (a combination of) shares, debt claims or other rights (together, a “lucrative interest” (“*lucratief belang*”) that the holder thereof has acquired under such circumstances that such income and gains are intended to be remuneration for work or services performed by such holder (or a related person), in whole or in part, in the Netherlands, whether within or outside an employment relation, where such lucrative interest provides the holder thereof, economically speaking, with certain benefits that have a relation to the relevant work or services.

If either of the abovementioned conditions (a) or (b) applies, income or capital gains in respect of dividends distributed by the Company or in respect of any gains realised upon the acquisition, redemption and/or disposal of the Shares will in general be subject to Dutch income tax at the progressive rates up to 51.95%.

*Holders of Shares resident outside the Netherlands: legal and other entities*

A holder of Shares, that is a legal entity, another entity with a capital divided into shares, an association, a foundation or a fund or trust, not resident or deemed to be resident in the Netherlands for corporate income tax purposes, will not be subject to any Dutch taxes on income derived from the Shares and the gains realised upon the acquisition, redemption and/or disposal of the Shares (other than the dividend withholding tax described above), unless:

- (a) such holder has an enterprise or an interest in an enterprise that is, in whole or in part, carried on through a permanent establishment (*vaste inrichting*) or a permanent representative (*vaste vertegenwoordiger*) in the Netherlands and to which enterprise or part of an enterprise, as the case may be, the Shares are attributable; or
- (b) such holder has a substantial interest in the Company, that (i) is held with the avoidance of Dutch income tax of another person as (one of) the main purpose(s) and (ii) forms part of an artificial structure or series of structures (such as structures which are not put into place for valid business reasons reflecting economic reality).

If one of the abovementioned conditions applies, income derived from the Shares and the gains realised upon the acquisition, redemption and/or disposal of the Shares will, in general, be subject to regular corporate income tax, levied at a rate of 25% (20% over profits up to EUR 200,000), unless, and to the extent that, with respect to a holder as described under (a), the participation exemption (*deelnemingsvrijstelling*) applies.

***Gift, Estate and Inheritance Taxes***

*Holders of Shares resident in the Netherlands*

Gift tax may be due in the Netherlands with respect to an acquisition of Shares by way of a gift by a holder of Shares who is resident or deemed to be resident of the Netherlands.

Inheritance tax may be due in the Netherlands with respect to an acquisition or deemed acquisition of Shares by way of an inheritance or bequest on the death of a holder of Shares who is resident or deemed to be resident of the Netherlands, or by way of a gift within 180 days before his death by an individual who is resident or deemed to be resident in the Netherlands at the time of his death.

For purposes of Dutch gift and inheritance tax, an individual with Dutch nationality will be deemed to be resident in the Netherlands if he has been resident in the Netherlands at any time during the ten years preceding the date of the gift or his death. For purposes of Dutch gift tax, an individual not holding Dutch nationality will be deemed to be resident of the Netherlands if he has been resident in the Netherlands at any time during the twelve months preceding the date of the gift.

*Holders of Shares resident outside the Netherlands*

No gift, estate or inheritance taxes will arise in the Netherlands with respect to an acquisition of Shares by way of a gift by, or on the death of, a holder of Shares who is neither resident nor deemed to be resident of the Netherlands, unless, in the case of a gift of Shares by an individual who at the date of the gift was neither resident nor deemed to be resident in the Netherlands, such individual dies within 180 days after the date of the gift, while being resident or deemed to be resident in the Netherlands.



### *Certain special situations*

For purposes of Dutch gift, estate and inheritance tax, (i) a gift by a Third Party will be construed as a gift by the Settlor, and (ii) upon the death of the Settlor, as a rule his/her Beneficiaries will be deemed to have inherited directly from the Settlor. Subsequently, such Beneficiaries will be deemed the settlor, grantor or similar originator of the Separated Private Assets for purposes of Dutch gift, estate and inheritance tax in case of subsequent gifts or inheritances.

For the purposes of Dutch gift and inheritance tax, a gift that is made under a condition precedent is deemed to have been made at the moment such condition precedent is satisfied. If the condition precedent is fulfilled after the death of the donor, the gift is deemed to be made upon the death of the donor.

### ***Value Added Tax***

No Dutch value added tax will arise in respect of or in connection with the subscription, issue, placement, allotment or delivery of the Shares.

### ***Other Taxes and Duties***

No Dutch registration tax, capital tax, customs duty, transfer tax, stamp duty or any other similar documentary tax or duty, other than court fees, will be payable in the Netherlands in respect of or in connection with the subscription, issue, placement, allotment or delivery of the Shares.

## **18.2 US Taxation**

The following discussion is a general summary based on present law of certain US federal income tax consequences to US Holders, as defined below, of owning and disposing of Offer Shares acquired in the Offering. The summary is not a complete description of all tax considerations that may be relevant to a prospective investor; it is not a substitute for tax advice. It applies only to US Holders (as defined below) that purchase the Offer Shares in the Offering, will hold the Offer Shares as capital assets and use the US dollar as their functional currency. In addition, it does not describe all of the tax consequences that may be relevant in light of the US Holder's particular circumstances, including tax consequences applicable to US Holders subject to special rules, such as banks or other financial institutions, insurance companies, tax-exempt entities, dealers, traders in securities that elect to mark-to-market, regulated investment companies, real estate investment trusts, US expatriates, persons that directly, indirectly or constructively own 10% or more of the total combined voting power of the Company's voting stock or of the total value of the Company's shares, investors that will hold Offer Shares in connection with a permanent establishment or fixed base outside the United States, or investors that will hold Offer Shares as part of a hedge, straddle, conversion, constructive sale or other integrated financial transaction. This summary also does not address US federal taxes other than the income tax (such as estate or gift taxes) or US state and local, or non-US tax laws or considerations.

A "**US Holder**" is a beneficial owner of Offer Shares that is, for US federal income tax purposes: (i) a citizen or individual resident of the United States, (ii) a corporation, or other entity taxable as a corporation, created or organized in or under the laws of the United States, any state thereof or the District of Columbia, (iii) a trust subject to the control of one or more US persons and the primary supervision of a US court; or (iv) an estate the income of which is subject to US federal income taxation regardless of its source.

The US federal income tax treatment of a partner in a partnership (or other entity or arrangement treated as a partnership for US federal income tax purposes) that holds Offer Shares generally will depend on the status of the partner and the activities of the partnership. Prospective purchasers that are partnerships should consult their own tax advisors regarding the specific US federal income tax consequences to their partners of the partnership's acquisition, ownership and disposition of Offer Shares.

### ***Dividends***

Subject to the discussion below under "Passive Foreign Investment Company Rules", the gross amount of any distribution of cash or property with respect to the Offer Shares, including Netherlands tax withheld therefrom, if any, will be included in a US Holder's gross income as ordinary income from foreign sources when received. The dividends will not be eligible for the dividends-received deduction generally available to US corporations.

Dividends received by eligible non-corporate US Holders that satisfy a minimum holding period and certain other requirements should be taxed at the preferential rate applicable to qualified dividend income if the Company qualifies for the benefits of the income tax treaty between the United States and the Netherlands (the ***US-Netherlands Treaty***) and the Company is not a passive foreign investment company (***PFIC***) as to the US Holder in the year of

distribution or the preceding year. Assuming that Offer Shares are traded on the Euronext Amsterdam exchange in sufficient volume and the Company has a substantial presence in the Netherlands for purposes of the US-Netherlands Treaty, the Company believes it will qualify for benefits under the US-Netherlands Treaty.

Dividends paid in a currency other than US dollars will be included in income in a US dollar amount based on the exchange rate in effect on the date of receipt, whether or not the currency is converted into US dollars at that time. A US Holder's tax basis in the non-US currency will equal the US dollar amount included in income. Any gain or loss on a subsequent conversion or other disposition of the non-US currency for a different US dollar amount generally will be US source ordinary income or loss. If dividends paid in a currency other than US dollars are converted into US dollars on the day they are received, the US Holder generally will not be required to recognise foreign currency gain or loss in respect of the dividend income.

A US Holder that is eligible for benefits under the US-Netherlands Treaty may be able to claim a reduced rate of Netherlands withholding tax on dividends received on the Offer Shares. Each US Holder should consult its own tax advisor about its eligibility for reduction of Netherlands withholding tax. Subject to generally applicable limitations, a US Holder may claim a deduction or a foreign tax credit only for Netherlands tax withheld at the appropriate rate. However, a US Holder will not be allowed a foreign tax credit for withholding tax it could have reasonably avoided by claiming benefits under the US-Netherlands Treaty through appropriate procedures. In computing foreign tax credit limitations, non-corporate US Holders eligible for the preferential tax rate applicable to qualified dividend income may take into account only the portion of the dividend effectively taxed at the highest applicable marginal rate. For purposes of the US foreign tax credit limitation, dividends received with respect to the Offer Shares should generally constitute "passive category income." The rules governing foreign tax credits or deductions are complex and each prospective investor is urged to consult its own tax advisor regarding the availability of foreign tax credits or deductions under its particular circumstances.

Dividends received by certain non-corporate US Holders will generally be includible in "net investment income" for purposes of the Medicare contribution tax.

### ***Dispositions***

Subject to the discussion below under "– Passive Foreign Investment Company Rules," a US Holder generally will recognise capital gain or loss on the sale or other disposition of Offer Shares equal to the difference between the US dollar value of the amount realised and the US Holder's adjusted tax basis in the Offer Shares. Any gain or loss generally will be treated as arising from US sources and will be long-term capital gain or loss if the US Holder's holding period exceeds one year. Deductions for capital loss are subject to significant limitations.

The initial tax basis of a US Holder's Offer Shares generally will be the US dollar value of the foreign currency denominated purchase price paid in the Offering determined on the date of purchase. If the Offer Shares are treated as traded on an "established securities market" at the time of the Offering, a cash basis US Holder (or, if it elects, an accrual basis US Holder) will determine the US dollar value of the cost of such Offer Shares by translating the amount paid at the spot rate of exchange on the settlement date of the purchase. A US Holder that receives a currency other than US dollars on the sale or other disposition of the Offer Shares will realize an amount equal to the US dollar value of the currency received at the spot rate on the date of sale or other disposition (or, if the Offer Shares are traded on an "established securities market" at the time of disposition, in the case of cash basis and electing accrual basis US Holders, the settlement date). A US Holder that does not determine the amount realized using the spot rate on the settlement date will recognise currency gain or loss if the US dollar value of the currency received at the spot rate on the settlement date differs from the amount realised. A US Holder will have a tax basis in the currency received equal to its US dollar value at the spot rate on the settlement date. Any currency gain or loss realised on the settlement date or on a subsequent conversion of the non-US currency for a different US dollar amount generally will be US source ordinary income or loss.

US Holders that are eligible for the benefits of the US-Netherlands Treaty should not be subject to any Netherlands tax imposed on capital gains on the sale or other disposition of Offer Shares. Subject to applicable limitations, any Netherlands tax imposed on capital gains in respect of the sale or other disposition of Offer Shares by a US Holder that is not eligible for the benefits of the US-Netherlands Treaty will be creditable against such US Holder's federal income tax liability. However, since such capital gains will generally be income or loss from sources within the United States for foreign tax credit limitation purposes, a US Holder may not be able to credit all or a part of such tax against its federal income tax liability.

Capital gains from the sale or other disposition of the Offer Shares received by certain non-corporate US Holders will generally be includible in "net investment income" for purposes of the Medicare contribution tax.

### ***Passive Foreign Investment Company Rules***

The Company does not believe that it was classified as a PFIC for US federal income tax purposes for its most recent taxable year ending 31 December 2017 and, based on all information available to the Company, the composition of the Company's current gross assets and income (including the income and assets of the group) and the manner in which the Company expects the group to operate its business, the Company believes that it should not be classified as a PFIC for US federal income tax purposes for the Company's current taxable year. In general, a non-US corporation will be a PFIC for any taxable year in which, taking into account the income and assets of 25% or more owned subsidiaries, (1) 75% or more of its gross income consists of passive income, or (2) 50% or more of the average quarterly value of its assets consists of assets that produce, or are held for the production of, passive income or which do not produce income. For this purpose, passive income generally includes, among other things, dividends, interest, rents, royalties and gains from the disposition of passive assets (subject to various exceptions). For purposes of the PFIC tests, the Company believes the grants it receives from national and international institutions should be considered as active income and that the Company's intangible assets, including goodwill, should be treated as active assets. The value of the Company's intangible assets will depend in large part on the market value of the Company's securities, including the Offer Shares, from time to time. Whether the Company is a PFIC is a factual determination made annually, and the Company's status could change depending upon, among other things, changes in the composition and relative value of its gross receipts and assets (including goodwill), which may be dependent on the market value of the Offer Shares, and the manner in which the Company otherwise conducts its business. Accordingly, no assurance can be given that the Company is not currently or will not become a PFIC in the current or any future taxable year.

If the Company were a PFIC for any taxable year during which a US Holder held the Offer Shares (whether or not the Company continued to be a PFIC), gain recognised by a US Holder on a sale or other taxable disposition (including certain pledges) of the Offer Shares would generally be allocated rateably over the US Holder's holding period for the Offer Shares. The amounts allocated to the taxable year of the sale or other taxable disposition and to any year before the Company became a PFIC would be taxed as ordinary income. The amount allocated to each other taxable year would be subject to tax at the highest rate in effect for individuals or corporations for that year, as appropriate, and an interest charge would be imposed. Further, to the extent that any distribution received by a US Holder on its Offer Shares exceeds 125% of the average of the annual distributions on the Offer Shares received during the preceding three years or the US Holder's holding period, whichever is shorter, that distribution would be subject to taxation in the same manner as gain, as described immediately above. In addition, if the Company were a PFIC for any taxable year and any subsidiaries of the Company were also a PFIC (any such entity, a ***Lower-tier PFIC***), US Holders would be deemed to own a proportionate amount (by value) of the shares of each Lower-tier PFIC and would be subject to US federal income tax according to the rules just described on (i) certain distributions by a Lower-tier PFIC and (ii) dispositions of shares of Lower-tier PFICs, in each case, as if the US Holders held such shares directly.

A US Holder may be able to avoid some of the adverse impacts of the PFIC rules described above by electing to mark the Offer Shares to market annually. The election is available only if the Offer Shares are considered "marketable stock," which generally includes stock that is regularly traded in more than de minimis quantities on a qualifying exchange. If a US Holder makes the mark-to-market election, any gain from marking the Offer Shares to market or from disposing of them would be ordinary income. Any loss from marking the Offer Shares to market would be recognised only to the extent of unreversed gains previously included in income. Loss from marking the Offer Shares to market would be ordinary, but loss on disposing of them would be capital loss except to the extent of mark-to-market gains previously included in income. No assurance can be given that the Offer Shares will be traded in sufficient frequency and quantity to be considered "marketable stock" or whether the Euronext Amsterdam exchange is or will continue to be considered a qualifying exchange for purposes of the PFIC mark-to-market election. A valid mark-to-market election cannot be revoked without the consent of the US Internal Revenue Service (***IRS***) unless the Offer Shares cease to be marketable stock. US Holders will not be able to make mark-to-market elections with respect to Lower-tier PFICs.

A US Holder would not be able to avoid the tax consequences described above by electing to treat the Company as a qualified electing fund (***QEF***) because the Company does not intend to provide US Holders with the information that would be necessary to make a QEF election with respect to the Offer Shares.

US Holders should consult their own tax advisors concerning the Company's possible PFIC status and the consequences to them if the Company were classified as a PFIC for any taxable year.

### ***Information Reporting and Backup Withholding***

Dividends on Offer Shares and proceeds from the sale or other disposition of Offer Shares may be reported to the IRS unless the holder establishes a basis for exemption. Backup withholding may apply to amounts subject to reporting. Any amount withheld may be credited against the holder's US federal income tax liability subject to certain rules and limitations. Prospective holders are urged to consult with their own tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

Certain non-corporate US Holders are required to report information with respect to investments in Offer Shares not held through an account with a financial institution. US Holders that fail to report required information could become subject to substantial penalties. Potential investors are encouraged to consult with their own tax advisors about these and any other reporting obligations arising from their investment in Offer Shares.

THE DISCUSSION ABOVE IS A GENERAL SUMMARY. IT DOES NOT COVER ALL TAX MATTERS THAT MAY BE OF IMPORTANCE TO A PARTICULAR INVESTOR. EACH PROSPECTIVE INVESTOR IS URGED TO CONSULT ITS OWN TAX ADVISOR ABOUT THE TAX CONSEQUENCES TO IT OF AN INVESTMENT IN OFFER SHARES IN LIGHT OF THE INVESTOR'S OWN CIRCUMSTANCES.

## 19. General Information on the Company and Themis

### 19.1 Independent Auditors

The audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016, prepared in accordance with IFRS, have been audited by EY, independent auditor in accordance with Austrian Standards on Auditing, which require to comply with International Standards on Auditing (ISA). EY issued an unqualified auditor's report on the audited financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016, which contains the following emphasis of matter paragraph with respect to material uncertainty regarding going concern:

"We draw attention to Note 2.1 Basis of preparation – Going Concern in the financial statements, which indicates that Themis Bioscience GmbH's management has prepared the financial statements as of December 31, 2017 and December 31, 2016 and for the years then ended according to the principle of going concern, although ongoing losses have occurred. In this context we refer to the management's explanations in the notes to the financial statements (Note 2.1 Basis of preparation – Going Concern, Note 23.4 Liquidity risk, Note 24 Post balance sheet events), whereas according to the current forecast, financing of Themis Bioscience GmbH until the end of the third quarter 2019 is based on the assumption of additional capital by both, investors and subsidies. In addition, management is in ongoing negotiations with existing and potential new investors as well as pharmaceutical companies with the objective to secure funding for the long term development of Themis Bioscience GmbH. With regards to the positive research results for the clinical phase 2 for the Chikungunya vaccine and the status of the current financing negotiations, the management follows the going concern principle of Themis Bioscience GmbH. In case Themis Bioscience GmbH will not succeed in timely providing an adequate funding of future cash needs, considerable doubt on Themis Bioscience GmbH's ability to act as a going concern would be raised and the entity would possibly not be in the position to realize its assets and pay its liabilities, as disclosed in the financial statements as of December 31, 2017 and December 31, 2016 in its normal course of business. Our opinion is not modified in respect of this matter."

EY with its address at Wagramer Strasse 19, 1220 Vienna, Austria, which audited the financial statements of Themis Bioscience GmbH as of and for the financial years ended 31 December 2017 and 2016, is a member of the Austrian Chamber of Certified Public Accountants (*Kammer der Wirtschaftstreuhänder*).

The Company will appoint Ernst & Young Accountants LLP, the Netherlands as its statutory auditor starting with its financial statements as of and for the financial year ending 31 December 2018.

### 19.2 Significant Change since 30 June 2018

As at the date of the Prospectus, there have been no significant changes in Themis' financial or trading position since 30 June 2018, other than those described below.

Themis Bioscience GmbH signed on 21 July 2018 the contracts for the second and third tranche of the Series C financing round after fulfilment of defined milestones. The capital increase was registered in the commercial register on 11 August 2018 and amounted to EUR 5,500 thousand before deduction of equity transaction costs, which improved Themis Bioscience GmbH's cash position substantially and provides the necessary cash funds to initiate preparation of phase 3 clinical studies for Chikungunya, in particular by preparing (i) the phase 3 clinical trial design including scientific advice and aligning with EMA and FDA, (ii) the manufacturing strategy, (iii) efficacy studies in animal models as well as (iv) the toxicology program. Themis Bioscience GmbH received the funding from the Series C financing round in July/August 2018. For further information, please read Section 10.11.1 (*Business Description – Material Contracts – Financing Agreements*).

In the context of the continued preparation of the clinical phase 3, on 18 September 2018 Themis has accepted a firm offer for the start of the manufacturing process with a German contract manufacturers for an amount of EUR 2.3 million. For further information, please also read Section 10.11.4 (Business Description—Material Contracts—Service Provider Agreement). To account for the increased research and development activities and number of employees, Themis has enlarged its laboratory and office space by approximately 400 square meter at the current site and has signed an additional lease contract in September 2018 with its lessor. As a result of the further expansion Themis has hired five additional employees since 30 June 2018 and employs at the date of the Prospectus 23 people compared to 18 people (12 employees based on full-time equivalent) as of 30 June 2018. Regarding higher research and development activities related to the CEPI project and phase 3 preparation for MV-CHIK as well as the IPO preparation operating expenses have increased.

Themis Bioscience GmbH and Themis Bioscience B.V. will enter into the Arrangements with the Omnes Funds to facilitate an investment of the Omnes Funds in Themis. Under the Arrangements, Themis Bioscience GmbH will issue the Loan Notes in the principal amount of EUR 1,400,000 to the Omnes Funds prior to the determination of the Offer

Price. Under the Arrangements, the Company will exercise its right to purchase the Loan Notes from the Omnes Funds and the Omnes Funds will receive the Omnes Funds Shares, the number of the Omnes Funds Shares being equal to the principal amount of the Loan Notes divided by the Offer Price at Settlement or, if Settlement does not take place, the Arrangements will be cancelled against repayment of the principal amount of the Loan Notes by Themis Bioscience GmbH. As a result, upon Settlement occurring, the holdings of the Omnes Funds will increase correspondingly and the Company receive a EUR 1,400,000 investment from the Omnes Funds. The Omnes Funds Shares are not Offer Shares. The Omnes Funds Shares shall carry the same rights as the other Shares and will be admitted to trading on Euronext Amsterdam.

### **19.3 Corporate Resolutions**

The Company will prior to Settlement obtain all necessary consents, approvals and authorisation in the Netherlands in connection with the issue of the Offer Shares and the Omnes Funds Shares. As part of the Corporate Reorganization, the current sole shareholder of the Company, Themis Bioscience GmbH, is expected to adopt a resolution for the issuance of the Offer Shares.

### **19.4 Availability of Documents and Available Information**

Copies of the Articles of Association, in Dutch and an English translation, are available and can be obtained free of charge from the Company's website ([www.themisbio.com/investors](http://www.themisbio.com/investors)).

Subject to any applicable selling and transfer restrictions (see Section 17 (Selling and Transfer Restrictions)), copies of this Prospectus and any supplement to this Prospectus may be obtained free of charge from the Company's website ([www.themisbio.com/investors](http://www.themisbio.com/investors)) for a period of 12 months following the date of this Prospectus. This Prospectus will also be made available to investors free of charge at the Company's registered office address at Muthgasse 11/2, 1190 Vienna, Austria and can be obtained by eligible retail investors upon request addressed to the Company.

The posting of this Prospectus on the internet does not constitute an offer to sell or a solicitation of an offer to buy any of the Offer Shares to or from any person in any jurisdiction in which it is unlawful to make such offer or solicitation to such person. The electronic version may not be copied, made available or printed for distribution.

## 20. Recent Developments

On 21 July 2018, Themis Bioscience GmbH signed the contracts for the second and third tranche of the Series C financing round after fulfilment of defined milestones. This capital increase was registered in the Austrian commercial register on 11 August 2018 and amounted to EUR 5,500 thousand before deduction of equity transaction costs and provides the necessary cash funds to initiate preparation of phase 3 clinical studies for Chikungunya.

In addition, on 28 September 2018, Themis Bioscience GmbH entered into an exclusive license agreement with Max-Planck-Innovation GmbH pursuant to which Themis Bioscience GmbH is granted an exclusive worldwide royalty-bearing sub-licensable license with respect to certain patent rights in relation to an invention regarding certain oncolytic vectors in order to allow the development and commercialization of products based on these patent rights.

Furthermore, Themis is preparing to publish positive final results of its phase 2 clinical trial for its lead product candidate, MV-CHIK in a leading peer-reviewed scientific journal (the manuscript has been approved for publication by the journal and is awaiting publication). The results demonstrate the safety, tolerability and immunogenicity of MV-CHIK. The positive results provide an important clinical proof of concept for MV-CHIK and constitute an important prerequisite for the initiation of phase 3 clinical trials relating to MV-CHIK. In the context of the continued preparation of the clinical phase 3, on 18 September 2018, Themis has accepted a firm offer for the start of the manufacturing process with a German contract manufacturers for an amount of EUR 2.3 million.

To account for the increased research and development activities and number of employees, Themis has enlarged its laboratory and office space by approximately 400 square meter at the current site and has signed an additional lease contract in September 2018 with its lessor. As a result of the further expansion Themis has hired five additional employees since 30 June 2018 and employs at the date of this Prospectus 23 people compared to 18 employees as of 30 June 2018. Regarding higher research and development activities related to the CEPI project and phase 3 preparation for MV-CHIK as well as the IPO preparation operating expenses have increased.

Themis Bioscience GmbH and Themis Bioscience B.V. will enter into the Arrangements with the Omnes Funds to facilitate an investment of the Omnes Funds in Themis. Under the Arrangements, Themis Bioscience GmbH will issue the Loan Notes in the principal amount of EUR 1,400,000 to the Omnes Funds prior to the determination of the Offer Price. Under the Arrangements, the Company will exercise its right to purchase the Loan Notes from the Omnes Funds and the Omnes Funds will receive the Omnes Funds Shares, the number of the Omnes Funds Shares being equal to the principal amount of the Loan Notes divided by the Offer Price at Settlement or, if Settlement does not take place, the Arrangements will be cancelled against repayment of the principal amount of the Loan Notes by Themis Bioscience GmbH. As a result, upon Settlement occurring, the holdings of the Omnes Funds will increase correspondingly and the Company receive a EUR 1,400,000 investment from the Omnes Funds. The Omnes Funds Shares are not Offer Shares. The Omnes Funds Shares shall carry the same rights as the other Shares and will be admitted to trading on Euronext Amsterdam.

## 21. Definitions and Glossary

The following definitions apply throughout this Prospectus unless the context requires otherwise:

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<b>2015 Investment Agreement</b>	100
<i>2017 Investment Agreement</i>	99
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<i>5-FU</i>	84
<i>Additional Shares</i>	ii
<i>AFM</i>	i
<i>Allocation</i>	ii
<i>Arrangements</i>	ii
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<i>Audit Committee</i>	123
<i>AWS</i>	54
<i>BDS</i>	90
<i>Beneficiaries</i>	160
<i>BLA</i>	82
<i>Business Day</i>	i
<i>CEPI</i>	2
<i>CEPI Partnering Agreement</i>	100
<i>CET</i>	i
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# **Unaudited Condensed Interim IFRS Financial Statements**

**of Themis Bioscience GmbH**

**as of and for the six month period ended June 30, 2018**

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# Statement of Comprehensive Income

for the six months ended June 30, 2018

in EUR



		for the six months ended June 30,	
	Note	2018	2017
Other operating income	7	2,716,552	1,048,569
Research and development expenses	8	-3,541,113	-2,708,141
Administrative expenses	9	-701,988	-445,532
Other operating expenses		-22,473	-25,068
<b><u>Operating loss</u></b>		<b>-1,549,022</b>	<b>-2,130,172</b>
Financial income		0	801
Financial expense		-10,370	-9,158
<b><u>Financial result</u></b>		<b>-10,370</b>	<b>-8,357</b>
<b><u>Loss before income tax</u></b>		<b>-1,559,392</b>	<b>-2,138,529</b>
Income tax		-874	-874
<b><u>Loss and total comprehensive loss for the period</u></b>		<b>-1,560,266</b>	<b>-2,139,403</b>

The notes are an integral part of these condensed interim financial statements.



# Statement of Financial Position

as of June 30, 2018

in EUR

	Note	June 30, 2018	December 31, 2017
<b>ASSETS</b>			
<b>Non-current assets</b>			
Intangible assets	11	23,984	11,635
Property, plant and equipment	11	195,070	39,715
		<u>219,054</u>	<u>51,350</u>
<b>Current assets</b>			
Other receivables	12	1,496,969	1,427,324
Income tax receivables		1,021	1,021
Other assets		354,059	307,677
Other financial assets		42,634	42,634
Cash and cash equivalents	13	5,178,475	3,671,974
		<u>7,073,158</u>	<u>5,450,630</u>
<b>Total assets</b>		<u><b>7,292,212</b></u>	<u><b>5,501,980</b></u>
<b>EQUITY AND LIABILITIES</b>			
<b>Negative Equity</b>			
	14		
Nominal capital		152,177	130,371
Capital reserves		20,059,957	15,196,196
Contributions made for a resolved capital increase		0	4,455,374
Retained earnings		-21,688,742	-20,128,477
<b>Total equity</b>		<u><b>-1,476,608</b></u>	<u><b>-346,536</b></u>
<b>Liabilities</b>			
<b>Non-current liabilities</b>			
Financial liabilities	15	1,149,335	1,604,272
Other non-current liabilities		57,364	70,922
		<u>1,206,699</u>	<u>1,675,194</u>
<b>Current liabilities</b>			
Financial liabilities	15	794,583	326,583
Trade payables and other current liabilities	16	6,767,538	3,846,739
		<u>7,562,121</u>	<u>4,173,322</u>
<b>Total liabilities</b>		<u><b>8,768,820</b></u>	<u><b>5,848,516</b></u>
<b>Total equity and liabilities</b>		<u><b>7,292,212</b></u>	<u><b>5,501,980</b></u>

The notes are an integral part of these condensed interim financial statements.

# Cash Flow Statement

for the six months ended June 30, 2018

in EUR

		for the six months ended June 30,	
	Note	2018	2017
<b>Cash flow from operating activities</b>			
Loss before income tax		-1,559,392	-2,138,529
Adjustments for:			
Financial income recognised in profit or loss		0	-801
Financial expense recognised in profit or loss		10,370	9,158
Depreciation and amortisation expense		20,709	10,203
Net book value of disposals of assets		169	0
Valuation share-based payments	10	-115,497	180,966
Changes in other receivables		-116,027	-147,361
Changes in trade and other liabilities		3,109,387	81,312
Interest paid		-80	-9,158
Interest received		0	4,298
Income taxes paid		-874	-1,895
<b>Cash flow from operating activities</b>		<b>1,348,765</b>	<b>-2,011,807</b>
Purchase of plant and equipment and intangible assets	11	-188,582	-5,073
<b>Cash flow utilized by investing activities</b>		<b>-188,582</b>	<b>-5,073</b>
Proceeds from shareholders	14	450,193	0
Equity transaction costs		-103,875	0
<b>Cash flow from financing activities</b>		<b>346,318</b>	<b>0</b>
<b>Net cash flow</b>		<b>1,506,501</b>	<b>-2,016,880</b>
Cash and cash equivalents at beginning of period	13	3,671,974	3,127,381
Cash and cash equivalents at end of period	13	5,178,475	1,110,501

The notes are an integral part of these condensed interim financial statements.

# Statement of Changes in Equity

for the six months ended June 30, 2018

in EUR

	Nominal capital	Capital reserve	Contributions made for a resolved capital increase	Accumulated losses	Total negative equity/equity
	14	14	14		
<b>January 1, 2017</b>	<b>130,371</b>	<b>15,196,196</b>	<b>0</b>	<b>-15,263,774</b>	<b>62,793</b>
Loss for the period	0	0	0	-2,139,403	-2,139,403
<b>June 30, 2017</b>	<b>130,371</b>	<b>15,196,196</b>	<b>0</b>	<b>-17,403,177</b>	<b>-2,076,610</b>
<b>January 1, 2018</b>	<b>130,371</b>	<b>15,196,196</b>	<b>4,455,374</b>	<b>-20,128,477</b>	<b>-346,536</b>
Equity transaction costs	0	-129,553	109,553	0	-20,000
Capital increase	21,806	3,036,738	-2,608,351	0	450,193
Conversion of convertible loans	0	1,956,576	-1,956,576	0	0
Loss for the period	0	0	0	-1,560,265	-1,560,265
<b>June 30, 2018</b>	<b>152,177</b>	<b>20,059,957</b>	<b>0</b>	<b>-21,688,742</b>	<b>-1,476,608</b>

The notes are an integral part of these condensed interim financial statements.

# Notes to the Condensed Interim Financial Statements

as of and for the six months ended June 30, 2018

## 1 General information

Themis Bioscience GmbH is a private limited company incorporated and domiciled in Austria with registered number FN333359i. The Company's registered office is 1190 Vienna, Muthgasse 11.

The principal activity of the Company is developing prophylactic vaccines from preclinical to early clinical phase. The company focuses on emerging tropical infectious diseases. First vaccine candidates are currently being developed against dengue and chikungunya fever. The company's proprietary Themaxyn technology platform, in-licensed from Paris-based Institute Pasteur, forms the basis of all of the company's vaccine candidates. This platform is highly innovative and fully covered by patents. The company does not have a subsidiary, therefore these IFRS Financial Statements show the figures of Themis Bioscience GmbH on a stand alone basis.

The Condensed Interim Financial Statements as of and for the six months ended June 30, 2018 were authorized for issue on October 5, 2018.

## 2 Significant changes and developments in the current reporting period

In December 2017 a Series C financing round totalling EUR 10 million has been closed. In January 2018 the capital increase resulting from the first tranche of this financing has been registered with the commercial register and amounts not paid-in in December have been paid to the Company. Global Health Investment Fund (GHIF), a New York-based impact investment firm focused on medical innovations for major public health challenges, led the financing as a new investor in the company, together with a number of current investors, including aws Gruenderfonds, Omnes Capital, Ventech and Wellington Partners Life Sciences. Glenn Rockman, Partner at GHIF, will join Themis' Supervisory Board. The Series C proceeds will be used to advance Themis' clinical and pre-clinical vaccine development programs, including its most advanced vaccine against chikungunya virus, on which the company recently reported positive Phase 2 results.

In March 2018 Themis signed an agreement with the Coalition for Epidemic Preparedness Innovations (CEPI) to develop a vaccine against the LASSA and MERS virus. The investment of up to USD 37.5 million is based on milestones payment depending on the achievement of pre-defined goals. The agreement will enable funding for Themis' development efforts over a five-year period. In connection with the contract with CEPI Themis increased its workforce substantially to work on these development programs and achieve the defined milestones.

In June 2018 the European Medicines Agency (EMA) has granted PRiority MEdicines (PRIME) designation to its most advanced program in development, a vaccine to prevent chikungunya fever. The PRIME scheme is designed to provide enhanced regulatory support for the development of medicines that target an unmet medical need. PRIME offers enhanced support to medicine developers to strengthen clinical trial designs, facilitate the generation of high-quality data and enable accelerated assessment of medicine applications.

## 3 Summary of Significant Accounting Policies

The principal accounting policies applied in the preparation of these condensed interim financial statements are set out below. These policies have been consistently applied to all the periods presented, unless otherwise noted.

### 3.1 Basis of Preparation

The condensed interim financial statements of the Company have been prepared in accordance with the International Accounting Standard, or IAS, 34 “Interim Financial Reporting”. Certain information and disclosures normally included in financial statements prepared in accordance with the International Financial Reporting Standards, or IFRSs, as adopted by the EU, have been condensed or omitted. Accordingly, these condensed interim financial statements should be read in conjunction with the annual financial statements for the year ended December 31, 2017, which have been prepared in accordance with IFRS as adopted by the EU.

The preparation of financial statements in conformity with IFRS as adopted by the EU requires the use of certain critical accounting estimates. It requires management to exercise its judgment in the process of applying the Company's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements, are disclosed in Note 5. In the opinion of management, the condensed interim financial statements contain all adjustments that are necessary to state fairly the Company's financial position as of June 30, 2018 and comprehensive income (loss) and cash flows for the six months ended June 30, 2018 and June 30, 2017.

#### Going concern

Despite continuing losses due to high research and development costs the condensed interim financial statements have been prepared on a going concern basis that contemplates that the Company will continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities in the normal course of operations.

The condensed interim financial statements show a negative equity of EUR -1,476,608 (December 31, 2017: EUR -346,536). Regarding going concern risk the managing director gives the following opinion: As Themis Bioscience GmbH is a biotech company in the start-up phase, the losses are not unexpected, but according to plan. The business model of the Company foresees a phase of research and development over several years before gaining own relevant income. This type of business model is common in the biotech industry, notwithstanding afflicted with high risk (in particular in the field of research and development as well as in providing liquidity and funding). As the company does not gain relevant income at the moment, the financing of the expenses for R&D and all other costs depends on external financing, which is not guaranteed until own relevant income will be realized. Therefore the company's financing strategy plans to gain subsidies and equity by private and institutional investors respectively strategic equity partners. According to plan these funds will be allocated in the course of several financing rounds.

As of June 30, 2018 management has received EUR 20,212,134 venture capital (= share capital + capital reserves). The Series C financing round concluded on December 21, 2017 provided the company with additional capital for the implementation of the clinical phases and the further development of the patented platform. As of September 2018 these EUR 10 million have already been added to the company.

In March 2018 Themis Bioscience GmbH and CEPI (the Coalition for Epidemic Preparedness Innovations) have signed a partnership agreement under which Themis will provide advanced vaccine development and manufacturing for Lassa fever and MERS. The investment from CEPI of up to USD 37.5 million will enable funding for the company's development costs for Lassa fever and MERS over a five-year period. The amounts paid by CEPI depending on defined milestones and achievement of predefined goals. A first payment from CEPI amounting to EUR 5.1 million has already been received in May 2018.

According to the current forecast, financing of the company until the end of the third quarter 2019 is based on the assumption of additional capital by both investors and subsidies. Moreover, management is in ongoing negotiations with existing and potential new investors as well as pharmaceutical companies with the objective to secure funding for the long-term development of the company. With regards to the positive research results for the clinical phase 2 for the Chikungunya vaccine and the current financing negotiations, the management follows the going concern principle of the Company. In case the Company will not succeed in timely providing an adequate funding of future cash needs or the clinical data are not according to plan, considerable doubt on the company's ability to act as a going concern would be raised and the entity would possibly not be in the position to realize its assets and pay its liabilities, as disclosed in the condensed interim financial statements as of June 30, 2018, in its normal course of operations.

### **3.2 Application of International Financial Reporting Standards (IFRSs)**

The accounting policies adopted are consistent with those of the previously completed financial year. A number of new or amended standards became applicable for the current reporting period, the most prominent being IFRS 9 Financial Instruments and IFRS 15 Revenue from Contracts with Customers. The application of new standards or amendments to existing standards that are required to be applied for the first time from January 1, 2018 did not have a material impact on the Company's financial statements.

### **3.3 Segment Reporting**

The Company operates in only one reportable segment. This relates to the development of prophylactic vaccinations, which covers everything from the pre-clinical to the early clinical phase. The company focusses on emerging tropical infectious diseases.

The management team is the chief operating decision maker, and he reviews the operating results regularly to make decisions about the allocation of the Company's resources and to assess overall performance.

### **3.4 Income Taxes**

Taxes on income in the interim periods are accrued using the tax rate that would be applicable to expected total annual profit or loss.

## **4 Financial Risk Management**

The Company's activities expose it to a variety of financial risks: market risk (including currency risk, fair value interest rate risk and price risk), credit risk and liquidity risk. The Company's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on financial performance. The Company does not use derivatives or other hedging instruments to mitigate these risk factors.

The condensed interim financial statements do not include all financial risk management information and disclosures required in the annual financial statements; they should be read in conjunction with the Company's financial statements for the year ended December 31, 2017.

There have been no changes in the Company's finance department, which is responsible for financial risk management, or in the Company's financial risk management policies since December 31, 2017.

## **5 Critical Accounting Estimates and Judgements**

The preparation of the Condensed Interim Financial Statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the company's accounting policies that affect the reported amounts of assets and liabilities as well as the disclosure of contingent assets and liabilities at the date of the interim financial statements and the reported amounts of income and expenses during the reporting period. Actual results may differ from those estimates.

In preparing these condensed consolidated interim financial statements, the significant judgments made by management in applying the Company's accounting policies and the key sources of estimation uncertainty were generally the same as those that applied to the financial statements for the year ended December 31, 2017.

For share-based payment expenses please refer to Note 10.

## 6 Seasonality of Operations

Due to the fact that research and development activities (specifically with regard to clinical, pre-clinical and other studies) as well as related expenses are not spread evenly throughout the year, the Company's financial results have varied substantially, and are expected to continue to vary, from quarter to quarter. The Company therefore believes that period-to-period comparisons should not be relied upon as indicative of future financial results.

## 7 Other operating income

The company works in the field of research and development. No sales revenue was generated in 2018 or the preceding years.

Other operating income is sub-divided as follows:

Other operating income		in EUR
for the six months ended June 30		
	2018	2017
Public grants	2,340,592	640,848
Austrian research premium	366,259	378,334
Others	9,701	29,387
<b>Total</b>	<b>2,716,552</b>	<b>1,048,569</b>

Other operating income comprises funds from the EU research funding program H2020, the British research funding program "SBRI" and the research premium paid out in cash by the Austrian fiscal authorities. Public grants increased from EUR 641 thousand in the first six month ended June 30, 2017 to EUR 2,341 thousand in the first six month ended June 30, 2018. The increase mainly results from grants received from CEPI (Coalition of Epidemic Preparedness Innovation, see Note 2) amounting to EUR 1,057 thousand. Additionally the SBRI CHIK funding program results in an increase of other operating income of EUR 594 thousand in the first half year of 2018. Due to the higher research and development expenses the research premium increased accordingly.

## 8 Research and development expenses

Research and development expenses are sub-divided as follows:

Research and development expenditure		in EUR
for the six months ended June 30		
	2018	2017
Personnel expense	-595,032	-487,669
Cost of materials	-31,005	-20,140
Clinical Phase I and II Studies	-2,506,000	-1,906,352
Depreciation expense	-18,192	-3,982
Others	-390,884	-289,998
<b>Total</b>	<b>-3,541,113</b>	<b>-2,708,141</b>

The increase in research and development expenses results mainly from the increased operating activities, especially the finalization of clinical phase 2 for the chikungunya vaccine and preparation of the LASSA project relating to the CEPI funding. The higher personnel expenses reflects the increase in the workforce needed for the LASSA project.

Other research and development expenses consist of:

<b>for the six months ended June 30</b>	<b>2018</b>	<b>2017</b>
Infrastructure expenses	-54,195	-45,160
Advisory and external consultancy expenses	-182,423	-63,599
Travel expenses	-133,740	-72,501
Share based payments	36,502	-57,229
Other expenses	-57,028	-51,509
<b>Total</b>	<b>-390,884</b>	<b>-289,998</b>

## 9 Administrative expenses

Administrative expenses are sub-divided as follows:

<b>Administrative expenses</b>	<b>in EUR</b>	
<b>for the six months ended June 30</b>	<b>2018</b>	<b>2017</b>
Personnel expense	-69,283	-72,766
Depreciation expense	-2,518	-6,221
Others	-630,187	-366,545
<b>Total</b>	<b>-701,988</b>	<b>-445,532</b>

The position others increased in the first year primarily due to higher travel and consulting expenses related to the increased research and development activities.

Other administrative expenses include the following:

<b>for the six months ended June 30</b>	<b>2018</b>	<b>2017</b>
Infrastructure expenses	-8,348	-9,808
Advisory and external consultancy expenses	-340,112	-200,561
Travel expenses	-33,435	-18,125
Legal expenses	-153,878	-4,885
Share based payments	39,543	-61,998
Advertising	0	-11,688
Others	-133,957	-59,480
<b>Total</b>	<b>-630,187</b>	<b>-366,545</b>

## 10 Share-based payments

The condensed interim financial statements do not include all disclosures for share-based payments that are required in the annual financial statements and should be read in conjunction with the Company's annual financial statements for the year ended December 31, 2017.

During the six months ended June 30, 2018, the Company recognized a reduction of the share-based payment liability (i.e. income) resulting from the Exit Bonus Participation Program (EBPP) in an amount of EUR 115,497 (six months ended December 31, 2017: expense EUR 180,966). The reduction results from the fact, that the probability of occurrence of an exit event was estimated with 20% (2017: 35%), resulting in a liability for vested EBPP rights of EUR 214,275 (December 31, 2017: EUR 329,773).



The following table provides information on the sensitivity of a 5% increase or 5% decrease in the probability of occurrence of an exit event and the resulting increase/decrease of the respective liability and effect on profit or loss (a positive number indicates an increase in profit or loss, a negative number indicates a decrease in profit or loss):

Sensitivity analysis - probability of an exit event		in EUR	
	Assumption	+5%	-5%
Probability of an exit event	20%	25%	15%
Share-based payment liability	214,275	267,844	160,706
Effect on profit or loss		-53,569	+53,569

## 11 Intangible assets and Property, plant and equipment

The increase in property, plant and equipment from December 31, 2017 to June 30, 2018 was mainly the result of the acquisition of laboratory equipment (bioreactor). As a result, total non-current assets increased from EUR 52 thousand as of December 31, 2017 to EUR 219 thousand as of June 30, 2018.

## 12 Other receivables

Other receivables are sub-divided as follows:

Other current receivables		in EUR	
	June 30, 2018	December 31, 2017	
Receivables from VAT refund	9,107	203,391	
Receivables from other public grants ("SBRI")	566,542	637,523	
Receivables from research premium	919,827	553,568	
Others	1,493	32,842	
<b>Total</b>	<b>1,496,969</b>	<b>1,427,324</b>	

Other receivables comprise mainly the receivables from funding institutions (SBRI, UK) and the Austrian financial authorities (research premium). The increase mainly results from the increase in research and development activities.

## 13 Cash and cash equivalents

As of June 30, 2018 the Company has all liquid funds on daily EUR or GBP accounts.

Cash and cash equivalents		in EUR	
	June 30, 2018	December 31, 2017	
EUR current accounts	5,171,978	3,411,515	
GBP current accounts	6,497	260,459	
<b>Total</b>	<b>5,178,475</b>	<b>3,671,974</b>	

## 14 Negative Equity

As of June 30, 2018 the issued share capital (nominal capital) amounts to EUR 152,177 (December 31, 2017: EUR 130,371) and is fully paid up in cash. Capital reserves in the amount of EUR 20,059,957 (December 31, 2017: EUR 15,196,196) result from additionally paid-in capital in the course of past capital increases. The development of capital and reserves is presented in the statement of changes in equity.

In December 2017 a Series C financing round totalling EUR 10 million has been signed. In January 2018 the first tranche of the Series C financing round has been registered with the commercial register resulting in an increase of share capital from EUR 130,371 to EUR 152,177. Amounts already paid in December 2017 as well as amounts resulting from the conversion of the convertible bond, that have been stated under "Contributions made for a resolved capital increase" within equity as of December 31, 2017, have been reclassified to share capital and capital reserves in 2018 accordingly. Additionally an amount of EUR 450,193 has been paid-in in January 2018.

The total amount of increase in share capital and capital reserves of EUR 4,885,567 results from paid-in cash contributions amounting to EUR 3,058,544 and the conversion of the convertible bond with an amount of EUR 1,956,576, less equity transactions costs of EUR 129,553.

## 15 Financial liabilities

Financial liabilities are sub-divided as follows:

Financial liabilities		in EUR
	June 30, 2018	December 31, 2017
<b>Non-current Financial liabilities</b>		
FFG loans	1,149,335	1,604,272
<b>Total</b>	<b>1,149,335</b>	<b>1,604,272</b>
<b>Current Financial liabilities</b>		
FFG loans	794,583	326,583
<b>Total</b>	<b>794,583</b>	<b>326,583</b>

The Company has taken out various loans („FFG loans”) from FFG (Austrian Research Promotion Agency) in the total nominal amount of EUR 2,028,367 (2017: EUR 2,028,367).

The following table shows a comparison by class of the carrying amounts and fair values of the Company's borrowings:

		in EUR
	June 30, 2018	December 31, 2017
<b>Carrying amount</b>		
FFG loans	1,943,918	1,930,854
<b>Total</b>	<b>1,943,918</b>	<b>1,930,854</b>
<b>Fair Value</b>		
FFG loans	1,902,006	1,869,806
<b>Total</b>	<b>1,902,006</b>	<b>1,869,806</b>

The fair values of current and non-current borrowings stated above are based on discounted cash flows using an interest rate of 4.5%, which was considered to be the best estimate for a market interest rate for the Company based on an offer received by an external financial institution at the time of the fair value calculation.

## 16 Trade payables and other current liabilities

Trade payables and other liabilities are sub-divided as follows:

Trade payables and other current liabilities		in EUR
	June 30, 2018	December 31, 2017
Trade payables	1,375,428	2,290,792
Liability for cash-settled share-based payments (EBPP)	214,275	329,773
Unconsumed vacation	52,526	24,530
Employee bonuses	75,000	161,388
License Fees	245,000	75,000
Accounting, consulting, legal and audit services	232,500	52,850
Deferred Income from government grants	4,452,990	816,489
Liabilities employees	0	30,154
Other liabilities	119,819	65,763
<b>Total</b>	<b>6,767,538</b>	<b>3,846,739</b>

## 17 Related party disclosures

During the six month periods ended June 30, 2017 and 2018, the Management Board was paid regular salaries and short term benefits. Further the company made regular payments to a defined contribution plan, where the beneficiary of this pension plan is the managing director.

There are individual consulting contracts with individual members of the Supervisory Board. During the six month periods ended June 30, 2018 fees charged by members of the Supervisory Board for consultancy services amounted to EUR 44,274 (six months ended June 30, 2017: EUR 24,346). Further remunerations for work as a member of the Supervisory Board are not granted.

The condensed interim financial statements do not include all disclosures for related-party transactions that are required in the annual financial statements, and should be read in conjunction with the company's annual financial statements for the year ended December 31, 2017.

## 18 Number of employees

The average number of employees as of the periods ended June 30 is as follows (based on full-time equivalent):

Number of employees		
	2018	2017
Employees	12	9
<b>Total</b>	<b>12</b>	<b>9</b>

The increase in full-time equivalents mainly reflects the increasing activities on research and development programs, especially in regard with the LASSA/MERS research program funded by CEPI.

## **19 Post balance sheet events**

After achieving the defined milestones in the first six month in 2018, Themis has called the second and third tranche of the Series C financing round, which was signed in December 2017. The two tranches amounting to EUR 5.5 million in total have been paid-in in July/August 2018 and will be used to finance the pre-clinical and clinical programs.

In preparation of the initial public offering, Themis Bioscience GmbH has founded a 100 % subsidiary with a nominal value of 0.01 EUR as of September 14, 2018.

Regarding the ongoing preparation of the clinical phase 3 and the start of the manufacturing process, Themis has concluded a contract for the start of the tech transfer with a German CMO (clinical manufacturer organisation) with a value of EUR 2.3 million on September 18, 2018.

To account for the increased R&D activities and number of employees, the company will enlarge its laboratory and office space by approx. 400 sqm at the current site (Muthgasse 11, 1190 Wien) and has signed an additional lease contract in September 2018 with its lessor.

On September 28, 2018 Themis has signed a licence agreement with the Max-Planck-Innovation GmbH for exclusive rights to an oncolytic measles virus technology. Under the terms of the agreement, Themis has been granted an exclusive worldwide license to develop, manufacture and commercialize products based on the licensed technology.

Vienna, on October 5, 2018

Themis Bioscience GmbH  
The management

Dr. Erich Tauber

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# **IFRS Financial Statements**

**of Themis Bioscience GmbH**

**as of and for the years ended December 31, 2017 and December 31, 2016**

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# AUDITOR'S REPORT

## Report on the Financial Statements

### Audit Opinion

We have audited the financial statements of

**Themis Bioscience GmbH, Vienna.**

These financial statements comprise the statements of financial positions as of December 31, 2017 and December 31, 2016, the statements of comprehensive income, the statements of changes in equity and the statements of cash flows for the years then ended and the notes to the financial statements.

Based on our audit the accompanying financial statements were prepared in accordance with the legal regulations and present fairly, in all material respects, the assets and the financial positions of the Company as of December 31, 2017 and December 31, 2016 and its financial performances for the years then ended in accordance with the International Financial Reporting Standards (IFRSs) as adopted by EU.

### Basis for Opinion

We conducted our audit in accordance with Austrian Standards on Auditing. Those standards require that we comply with International Standards on Auditing (ISA). Our responsibilities under those regulations and standards are further described in the "Auditor's Responsibilities for the Audit of the Financial Statements" section of our report. We are independent of the Company in accordance with the Austrian General Accepted Accounting Principles and professional requirements and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibility and liability as auditor is guided by Section 275 par. 2 Austrian Company Code UGB (liability regulations for the audit of small and medium-sized companies) and is limited to a total of 2 million Euros towards the Company and towards third parties.

### Material uncertainty related to Going Concern

We draw attention to Note 2.1 Basis of preparation – Going Concern in the financial statements, which indicates that Themis Bioscience GmbH's management has prepared the financial statements as of December 31, 2017 and December 31, 2016 and for the years then ended according to the principle of going concern, although ongoing losses have occurred. In this context we refer to the management's explanations in the notes to the financial statements (Note 2.1 Basis of preparation – Going Concern, Note 23.4 Liquidity risk, Note 24 Post balance sheet events), whereas according to the current forecast, financing of Themis Bioscience GmbH until the end of the third quarter 2019 is based on the assumption of additional capital by both, investors and subsidies. In addition, management is in ongoing negotiations with existing and potential new investors as well as

pharmaceutical companies with the objective to secure funding for the long term development of Themis Bioscience GmbH. With regards to the positive research results for the clinical phase 2 for the Chikungunya vaccine and the status of the current financing negotiations, the management follows the going concern principle of Themis Bioscience GmbH. In case Themis Bioscience GmbH will not succeed in timely providing an adequate funding of future cash needs, considerable doubt on Themis Bioscience GmbH's ability to act as a going concern would be raised and the entity would possibly not be in the position to realize its assets and pay its liabilities, as disclosed in the financial statements as of December 31, 2017 and December 31, 2016 in its normal course of business. Our opinion is not modified in respect of this matter.

### **Responsibilities of Management and of the Supervisory Board for the Financial Statements**

Management is responsible for the preparation of the financial statements in accordance with IFRS as adopted by the EU for them to present a true and fair view of the assets, the financial position and the financial performance of the Company and for such internal controls as management determines are necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

The Supervisory Board is responsible for overseeing the Company's financial reporting process.

### **Auditor's Responsibilities for the Audit of the Financial Statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Austrian Standards on Auditing, which require the application of ISA, always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Austrian Standards on Auditing, which require the application of ISA, we exercise professional judgment and maintain professional scepticism throughout the audit.

We also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the Supervisory Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

### **Comments on the Management Report**

Pursuant to Section 243 (4) UGB the audited company did not prepare a management report.

Vienna, October 5, 2018

Ernst & Young  
Wirtschaftsprüfungsgesellschaft m.b.H.

Mag. Erich Lehner  
Wirtschaftsprüfer / Certified Public Accountant

ppa Mag. Gerald Steckbauer  
Wirtschaftsprüfer / Certified Public Accountant



# Statements of Comprehensive Income

for the years ended December 31, 2017 and 2016

in EUR

	Note	2017	2016
Other operating income	5	2,566,791	1,775,166
Research and development expenses	6	-5,906,760	-5,201,600
Administrative expenses	7	-991,881	-581,431
Other operating expenses		-80,775	-55,626
<b><u>Operating loss</u></b>		<b>-4,412,625</b>	<b>-4,063,491</b>
Financial income	8	800	4,158
Financial expense	9	-451,128	-18,758
<b><u>Financial result</u></b>	10	<b>-450,328</b>	<b>-14,600</b>
<b><u>Loss before income tax</u></b>		<b>-4,862,953</b>	<b>-4,078,091</b>
Income tax	11	-1,750	-1,915
<b><u>Loss and total comprehensive loss for the year</u></b>		<b>-4,864,703</b>	<b>-4,080,006</b>

The notes are an integral part of these financial statements.

# Statements of Financial Position

as of December 31, 2017 and 2016

in EUR

	Note	December 31, 2017	December 31, 2016
<b>ASSETS</b>			
<b>Non-current assets</b>			
Intangible assets	13	11,635	15,089
Property, plant and equipment	13	39,715	41,758
		<b>51,350</b>	<b>56,847</b>
<b>Current assets</b>			
Other receivables	14	1,427,324	741,157
Income tax receivables		1,021	0
Other assets	15	307,677	73,008
Other financial assets	16	42,634	170,724
Cash and cash equivalents	17	3,671,974	3,127,381
		<b>5,450,630</b>	<b>4,112,270</b>
<b>Total assets</b>		<b>5,501,980</b>	<b>4,169,117</b>
<b>EQUITY AND LIABILITIES</b>			
<b>Negative Equity/Equity</b>			
Nominal capital	18	130,371	130,371
Capital reserves	18	15,196,196	15,196,196
Contributions made for a resolved capital increase	18	4,455,374	0
Retained earnings		-20,128,477	-15,263,774
<b>Total equity</b>		<b>-346,536</b>	<b>62,793</b>
<b>Liabilities</b>			
<b>Non-current liabilities</b>			
Financial liabilities	19	1,604,272	1,651,409
Other non-current liabilities		70,922	60,945
		<b>1,675,194</b>	<b>1,712,354</b>
<b>Current liabilities</b>			
Financial liabilities	19	326,583	0
Trade payables and other current liabilities	20	3,846,739	2,393,970
		<b>4,173,322</b>	<b>2,393,970</b>
<b>Total liabilities</b>		<b>5,848,516</b>	<b>4,106,324</b>
<b>Total equity and liabilities</b>		<b>5,501,980</b>	<b>4,169,117</b>

The notes are an integral part of these financial statements.

# Cash Flow Statements

for the years ended December 31, 2017 and 2016

in EUR

	Note	2017	2016
<b>Cash flow from operating activities</b>			
Loss before income tax		-4,862,953	-4,078,091
Adjustments for:			
Financial income recognised in profit or loss		-800	-4,158
Financial expense recognised in profit or loss		451,128	18,758
Depreciation and amortisation expense		20,269	14,197
Net book value of disposals of assets		792	182
Valuation share-based payments		329,772	0
Non-cash-income from remission of a debt		0	-1,000,000
Changes in other receivables		-796,243	-562,186
Changes in trade and other liabilities		1,008,544	1,412,874
Interest paid		-19,582	-18,758
Interest received		4,298	661
Income taxes paid		-2,771	-1,915
<b>Cash flow from operating activities</b>	12	<b>-3,867,546</b>	<b>-4,218,436</b>
Purchase of plant and equipment and intangible assets	12	-15,564	-44,033
<b>Cash flow utilized by investing activities</b>	12	<b>-15,564</b>	<b>-44,033</b>
Proceeds from shareholders		2,608,351	6,674,880
Proceeds from long-term borrowings		300,000	500,000
Proceeds from convertible loans		1,525,030	0
Repayments of long-term borrowings		0	-140,466
Equity transaction costs		-5,678	-69,873
<b>Cash flow from financing activities</b>	12	<b>4,427,703</b>	<b>6,964,541</b>
<b>Net cash flow</b>		<b>544,593</b>	<b>2,702,072</b>
Cash and cash equivalents at beginning of period	17	3,127,381	425,309
Cash and cash equivalents at end of period	17	3,671,974	3,127,381

The notes are an integral part of these financial statements.

# Statements of Changes in Equity

for the years ended December 31, 2017 and 2016

in EUR

	Nominal capital	Capital reserve	Contributions made for a resolved capital increase	Accumulated losses	Total negative equity/equity
Note	18	18	18		
<b>December 31, 2015</b>	<b>91,107</b>	<b>8,630,453</b>	<b>0</b>	<b>-11,183,768</b>	<b>-2,462,207</b>
Capital increase	39,264	6,635,616	0	0	6,674,880
Equity transaction costs	0	-69,873	0	0	-69,873
Loss for the year	0	0	0	-4,080,006	-4,080,006
<b>December 31, 2016</b>	<b>130,371</b>	<b>15,196,196</b>	<b>0</b>	<b>-15,263,774</b>	<b>62,793</b>
Equity transaction costs	0	0	-109,553	0	-109,553
Capital increase	0	0	2,608,351	0	2,608,351
Conversion of convertible loans	0	0	1,956,576	0	1,956,576
Loss for the year	0	0	0	-4,864,703	-4,864,703
<b>December 31, 2017</b>	<b>130,371</b>	<b>15,196,196</b>	<b>4,455,374</b>	<b>-20,128,477</b>	<b>-346,536</b>

The notes are an integral part of these financial statements.

# Notes to the Financial Statements

for the years ended December 31, 2017 and 2016

## 1 General information

Themis Bioscience GmbH is a private limited liability company incorporated and domiciled in Austria with registered number FN333359i. The Company's registered office is 1190 Vienna, Muthgasse 11. The principal activity of the Company is developing prophylactic vaccines from preclinical to early clinical phase. The company focuses on emerging tropical infectious diseases. First vaccine candidates are currently being developed against dengue and chikungunya fever. The company's proprietary Themaxyn technology platform, in-licensed from Paris-based Institute Pasteur, forms the basis of all of the company's vaccine candidates. This platform is highly innovative and fully covered by patents. The company does not have a subsidiary, therefore these IFRS Financial Statements show the figures of Themis Bioscience GmbH on a stand alone basis.

The Financial Statements as of and for the years ended December 31, 2017 and December 31, 2016 were authorized for issue on October 5, 2018.

## 2 Summary of Significant Accounting Policies

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise noted.

### 2.1 Basis of preparation

The Financial Statements for the financial years 2017 and 2016 have been prepared in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), London, and the Interpretations of the International Financial Reporting Standards Interpretations Committee (IFRS IC) as of 31 December 2017, as they are adopted by the European Union (EU).

The Financial Statements present the net assets, financial position and results of operations of the last two financial years ended December 31, 2017 and December 31, 2016. All amounts are presented in euros and all values are rounded to one euro, except when otherwise indicated.

The Financial Statements have been prepared on a historical cost basis, except for certain financial instruments (i.e. convertible bonds) that have been measured at fair value. A corresponding explanation is given in the context of the respective accounting and valuation policies.

Historical cost is generally based on the fair value of the consideration paid in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. This applies regardless of whether the price was directly observable or estimated using a valuation method.

The significant accounting policies listed below have been consistently applied to all periods. The preparation of these Financial Statements in accordance with IFRS as adopted by the EU requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the company's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the Financial Statements are set out later in these notes.

## Going concern

Despite continuing losses due to high research and development costs the Financial Statements have been prepared on a going concern basis that contemplates that the Company will continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities in the normal course of operations.

The Financial Statements show a negative equity of EUR -346,536 as of December 31, 2017 and a positive equity of EUR 62,793 as of December 31, 2016. Regarding going concern risk the managing director gives the following opinion: As Themis Bioscience GmbH is a biotech company in the start-up phase, the losses are not unexpected, but according to plan. The business model of the Company foresees a phase of research and development over several years before gaining own relevant income. This type of business model is common in the biotech industry, notwithstanding afflicted with high risk (in particular in the field of research and development as well as in providing liquidity and funding). As the company does not gain relevant income at the moment, the financing of the expenses for R&D and all other costs depends on external financing, which is not guaranteed until own relevant income will be realized. Therefore the company's financing strategy plans to gain subsidies and equity by private and institutional investors respectively strategic equity partners. According to plan these funds will be allocated in the course of several financing rounds.

As of December 31, 2017 management has received EUR 19,781,941 venture capital (= share capital + capital reserves + contributions made for a resolved capital increase). As of December 21, 2017, management of the company has closed an additional Series C financing round totalling EUR 10 million to finalize the clinical phase II for the Chikungunya vaccine and to foster the development of the patented platform technology. As of September 2018 these EUR 10 million have already been added to the company.

In March 2018 Themis Bioscience GmbH and CEPI (the Coalition for Epidemic Preparedness Innovations) have signed a partnership agreement under which Themis will provide advanced vaccine development and manufacturing for Lassa fever and MERS. The investment from CEPI of up to USD 37.5 million will enable funding for the company's development costs for Lassa fever and MERS over a five-year period. The amounts paid by CEPI depend on defined milestones and achievement of predefined goals. A first payment from CEPI amounting to EUR 5.1 million has already been received in May 2018.

According to the current forecast, financing of the company until the end of the third quarter 2019 is based on the assumption of additional capital by both investors and subsidies. Moreover, management is in ongoing negotiations with existing and potential new investors as well as pharmaceutical companies with the objective to secure funding for the long-term development of the company. With regards to the positive research results for the clinical phase 2 for the Chikungunya vaccine and the current financing negotiations, the management follows the going concern principle of the Company. In case the Company will not succeed in timely providing an adequate funding of future cash needs or the clinical data are not according to plan, considerable doubt on the company's ability to act as a going concern would be raised and the entity would possibly not be in the position to realize its assets and pay its liabilities, as disclosed in the financial statements as of December 31, 2017 and 2016, in its normal course of operations.

## **2.2 Application of New and Revised International Financial Reporting Standards (IFRSs)**

### **New standards, amendments or interpretations adopted for the first time by the company**

In the current year, the Company has applied the following amendments to IFRSs issued by the International Accounting Standards Board (IASB) that are mandatorily effective for an accounting period that begins on or after January 1, 2017:

- Amendments to IAS 7 – Disclosure Initiative: The Company has applied these amendments for the first time in the current year. The amendments require an entity to provide disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both cash and non-cash changes.

The Company's liabilities arising from financing activities consist of borrowings and certain other financial liabilities. A reconciliation between the opening and closing balances of these items is provided in Note 12. Consistent with the transition provisions of the amendments, the Company has not disclosed comparative information for the prior period. Apart from the additional disclosure in Note 12, the application of these amendments has had no impact on the Company's financial statements.

Amendments to other IFRSs that are mandatorily effective for an accounting period that begins on or after 1 January 2017 did not have any impact on the Company's financial statements.

### **New standards, amendments and interpretations, which are not yet adopted by the EU or which are already adopted by the EU but not yet mandatorily applicable**

Certain new accounting standards and interpretations have been published that are not mandatory for December 31, 2017 reporting periods and have not been adopted early by the Company. The Company's assessment of the impact of these new standards and interpretations is set out below:

- IFRS 9 Financial Instruments (applicable to financial years beginning on or after January 1, 2018; EU endorsement: November 22, 2016): IFRS 9 addresses the classification, measurement and derecognition of financial assets and financial liabilities, introduces new rules for hedge accounting and a new impairment model for financial assets.

IFRS 9 retains but simplifies the mixed measurement model and establishes three primary measurement categories for financial assets: amortized cost, fair value through OCI and fair value through profit and loss. The basis of classification depends on the entity's business model and the contractual cash flow characteristics of the financial asset. Investments in equity instruments are required to be measured at fair value through profit or loss with the irrevocable option at inception to present changes in fair value in OCI not reclassified. There is now a new expected credit losses model that replaces the incurred loss impairment model used in IAS 39. For financial liabilities there were no changes to classification and measurement except for the recognition of changes in own credit risk in other comprehensive income, for liabilities designated at fair value through profit or loss.

The Company has reviewed its financial assets and liabilities and is expecting no material impact from the adoption of the new standard on January 1, 2018. Financial assets only consist of loans and receivables currently measured at amortized cost under IAS 39, that will be measured on the same bases under IFRS 9. Further, there will be no impact on the Company's accounting for financial liabilities, as the new requirements only affect the accounting for financial liabilities that are designated at fair value through profit or loss and the Company does not have any such liabilities as of December 31, 2017. Also the new rules for hedge accounting are currently not relevant for the Company.

- IFRS 15 Revenue from contracts with customers (applicable to financial years beginning on or after January 1, 2018; EU endorsement: September 22, 2016): IFRS 15 deals with revenue recognition and establishes principles for reporting useful information to users of financial statements about the nature, amount, timing and uncertainty of revenue and cash flows arising from an entity's contracts with customers. Revenue is recognized when a customer obtains control of a good or service and thus has the ability to direct the use and obtain the benefits from the good or service. The standard replaces IAS 18 "Revenue" and IAS 11 "Construction contracts" and related interpretations. The Company currently does not have revenue from contracts with customers. Accordingly the new standard will not have any impact on the Company's financial statements.
- IFRS 16 Leases (applicable to financial years beginning on or after January 1, 2019; EU endorsement: October 31, 2017): IFRS 16 specifies how an entity will recognize, measure, present and disclose leases. The standard provides a single lessee accounting model, requiring lessees to recognize assets (the right to use the leased item) and financial liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a low value. Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset.

Lessees will be also required to remeasure the lease liability upon the occurrence of certain events (e.g., a change in the lease term, a change in future lease payments resulting from a change in an index or rate used to determine those payments). The lessee will generally recognise the amount of the remeasurement of the lease liability as an adjustment to the right-of-use asset.

Lessors continue to classify leases as operating or finance, with IFRS 16's approach to lessor accounting substantially unchanged from its predecessor, IAS 17.

The Company is in the process of assessing the impact of IFRS 16. The most relevant lease agreement currently relates to the renting of the office and laboratory space, which will lead to the recognition of a right-of-use asset and a lease liability accordingly.

There are no other IFRSs or IFRIC interpretations that are not yet effective that would be expected to have a material impact on the Company in the current or future reporting periods and on foreseeable future transactions.

## 2.3 Foreign currency translation

The Financial Statements are presented in Euro, which is the company's functional and presentation currency.

In preparing the financial statements of the Company, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the exchange rates prevailing at the dates of the transactions. Foreign currency exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the statement of comprehensive income (loss).



## **2.4 Intangible assets**

Acquired computer software licenses are capitalised on the basis of the costs incurred to acquire the software and bring it into use. These costs are amortized on a straight-line basis over their estimated useful lives (2.5-4 years).

## **2.5 Property, plant and equipment**

Property, plant and equipment are measured at historical cost less accumulated depreciation and amortization. Historical costs include the acquisition price, ancillary costs and subsequent acquisition costs less any discounts received on the acquisition price.

Subsequent costs are included in the asset's carrying amount or recognized as a separate asset where appropriate, but only when it is probable that future economic benefits associated with the item will accrue to the Company and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. All other repair and maintenance costs are charged to the statement of profit and loss and other comprehensive income (loss) during the financial period in which they are incurred.

Depreciation on assets is calculated using the straight-line method over the estimated useful lives of the assets. In calculating the estimated useful life, the economic and technical life expectancy has been taken into consideration. The estimated useful lives of property, plant and equipment range between 3-15 years. The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each reporting date. When assets are sold, closed down or scrapped, the difference between the net proceeds and the net carrying amount of the asset is recognized as a gain or a loss in other operating income or expenses.

## **2.6 Cash and cash equivalents**

Cash and cash equivalents are classified as cash on hand and deposits held with banks and may include other short-term highly liquid investments with original maturities of less than three months and bank overdrafts. They are recorded at their principal amount.

## **2.7 Equity instrument**

An equity instrument is any contract that evidences a residual interest in the assets of the company after deducting all of its liabilities. Equity instruments issued by the company are recorded at the proceeds received, net of direct transaction costs.

## **2.8 Financial instruments**

Financial assets and financial liabilities are recognised when the company becomes a party to the contractual provisions of the instrument.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in profit or loss in profit or loss as financial income or financial expense.

The Company classifies its financial assets into the following categories: (a) Loans and receivables, (b) Held-to-maturity financial assets and (c) Available-for-sale financial assets. The classification of the financial instruments depends on the purpose for which the financial instruments were acquired. Management determines the classification of its financial instruments at the time of initial recognition, and reviews the classification at each reporting date.

Loans and receivables are non-derivative financial instruments with fixed or determinable payments that are not quoted in an active market. They are included in current assets, except for items with maturities greater than 12 months after the end of the reporting period, which are classified as non-current assets. Loans and receivables are classified as long-term or current receivables in the statement of financial position. Loans and receivables are carried at amortized cost.

The Company currently does not have any held-to-maturity financial assets and/or available-for-sale financial assets.

Financial liabilities are classified as either liabilities “at fair value through profit or loss”, FVTPL, or “other financial liabilities” and include the convertible bonds, borrowings, trade payables and other financial liabilities as described in more detail below.

## **2.9 Convertible bond (FVTPL)**

In 2017 Themis entered into a convertible bond agreement with a principal amount of EUR 1,525,030.00, made available to the Company by some of its shareholders. For the convertible bond interest of 8% per annum accrued from the disbursement date until repayment (or conversion). Additionally a redemption premium equal to 50% of the principal amount was agreed, which, however, only becomes relevant in case of a conversion of the convertible bond at the maturity date (or in case of the occurrence of an event of default).

Depending on the occurrence of specified future events the lenders have the right or obligation to convert their claim for repayment of the bond into interests in the company. The conversion price, both in the case of a conversion right and a conversion obligation, is derived from an estimated future value of an interest in the Company, which can be assumed to correspond to the fair value at the respective time.

The convertible bond represents a compound financial instrument containing an interest bearing loan and embedded derivative instruments (e.g. in form of equity conversion rights/obligations for the holders of the instrument). Due to the fact that the conversion price is dependent on future developments not fully within the control of the company, the whole instrument is considered a financial liability in accordance with IAS 32.

The convertible bond has been designated as “at fair value through profit or loss” (FVTPL); thus embedded derivatives have not been separated from the host contract, but the whole instrument has been accounted for as compound financial instrument measured at fair value at inception and in subsequent periods, with any gains or losses arising on remeasurement recognized in profit or loss under financial income/expense.

Upon conversion of the convertible bond in December 2017, the fair value of the liability has been reclassified into equity. The respective amount is presented under position “Contributions made for a resolved capital increase” in the statement of financial position as the capital increase had not yet been registered at the commercial register and therefore was not legally effective as of the balance sheet date.

## **2.10 Other Financial liabilities**

Other financial liabilities (including borrowings and trade and other payables) are subsequently measured at amortized cost using the effective interest rate method. The effective interest method is a method of calculating the amortized cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash flows through the expected life of the financial instrument, or, where appropriate, to the net carrying amount on initial recognition.

The Company has obtained loans from various governmental agencies for certain research and development projects. These loans bear an interest rate below the market interest rate. According to IAS 20.10A the benefit of a government loan at a below-market rate of interest is treated as a government grant. The benefit due to the difference between the market rate of interest and the rate of interest charged by the governmental organization is measured as the difference between the initial carrying value of the loan determined in accordance with IAS 39 and the proceeds received. This benefit is deferred (recorded in the line item other non-current/current liabilities in the statement of financial position), and recognized through profit and loss over the term of the corresponding financial liabilities in accordance with IAS 20.10A. The loan is recognized and measured in accordance with IAS 39.

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Trade payables are classified as current liabilities if payment is due within one year or less. If not, they are presented as non-current liabilities. Trade payables are recognised initially at fair value and subsequently measured at amortised cost.

## 2.11 Grant Income

Grant income comprises (a) grants received from the EU research funding program ("Horizon 2020") and the British research funding program ("SBRI") and (b) the research premium from the Austrian government.

The grants were provided to support specific research projects and are recognized according to the progress of the respective project. The research premium is calculated as 12% of a specified research and development cost base. It is recognized as other receivable and other operating income to the extent the research and development expenses have been incurred. All grants are non-refundable as long as the conditions of the grant are met. The Company is and has been in full compliance with the conditions of the grants and all related regulations. If, in the future, compliance with all obligations cannot be fully assured, any related contingent liability will be treated in accordance with IAS 37.

## 2.12 Research and Development Expenses (IAS 38)

Research expenses are defined as costs incurred for current or planned activities undertaken with the prospect of gaining new scientific or technical knowledge and understanding. Development expenses are defined as costs incurred for the application of research findings or specialist knowledge to production, production methods, services or goods prior to the commencement of commercial production or use. All research costs are expensed as incurred. Development expenditures on an individual project are recognized as an intangible asset when the Company can demonstrate the following:

- It is technically feasible to complete the intangible asset so that it will be available for use or sale;
- Management intends to complete the intangible asset and to utilize or sell it;
- There is an ability to utilize or sell the intangible asset;
- It can be demonstrated how the intangible asset will generate probable future economic benefits;
- Adequate technical, financial and/or other resources to complete the development and to utilize or sell the intangible asset are available; and
- The expenditure attributable to the intangible asset during its development can be reliably measured.

The Company's projects are currently in the research and development phase and marketing approval by European and foreign regulatory authorities is not, nor will be, available for any product in the near future. Therefore, expenditure on research and development is not capitalized as an intangible asset, but is recognized as an expense in the period in which it is incurred.

## 2.13 Employee Benefits

The Company is legally required to make monthly contributions to a state plan classified as a defined contribution plan. These contributions are recognized under personnel expenses in the Statement of Comprehensive Income in the year to which they relate.

The Company makes further payments to defined contribution personal pension schemes. The assets of the schemes are held separately from the company in independently administered funds. Contributions made by the company are charged to the Statement of Comprehensive Income in the year to which they relate.

## 2.14 Share-based payments

The Company operates a share-based compensation plan in form of an exit bonus participation program ("EBPP") entitling the beneficiaries to a bonus payment in the event of specific exit events. Depending on the exit event and further conditions, the exit bonus may be settled in cash or shares (equity instruments) of the company.

The fair value of such share-based compensation is recognized as an expense for the employee services received in exchange for the grant of the bonus. Share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date (if equity-settled) or at the balance sheet date (if cash-settled) and recognized as an expense over the respective vesting period.

## **2.15 Current and deferred income tax**

Income tax on the result for the year comprises current and deferred tax. Income tax is recognised in the Statement of Comprehensive Income except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.

Current tax is the expected tax payable or receivable on the taxable income for the year, using tax rates enacted or substantively enacted at the balance sheet date, and any adjustment to tax payable in respect of previous years.

Deferred tax is provided using the balance sheet liability method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the balance sheet date. The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered. Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the company intends to settle its current tax assets and liabilities on a net basis. Deferred tax assets have not been recognized up to the end of the reporting period, as it is not foreseeable, when future taxable profits will be available against which the temporary differences can be utilized.

## **2.16 Operating leases**

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to the statement of comprehensive income on a straight-line basis over the period of the lease. Benefits received and receivable as an incentive to sign an operating lease are recognised on a straight-line basis over the period of the lease.

## **3 Critical Accounting Estimates and Judgements**

The preparation of the Financial Statements in conformity with IFRS as endorsed by the EU requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the company's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the Financial Statements related to convertible instruments are as follows:

### **3.1 Exit Bonus Participation Program**

In November 2016 the company's shareholders agreed to establish an exit bonus participation program ("EBPP") for the benefit of employees, the managing director, selected members of the supervisory board and further participants entitling such beneficiaries to a bonus payment in the event of specific exit events. The exit bonus will be calculated based on the exit proceeds (and therefore on the company value). Depending on the exit event, the exit bonus may be settled in cash or shares (equity instruments) of the company. By way of individual grant letter with each beneficiary, the EBPP became effective on April 4, 2017.

An exit event is defined as either (a) a sale or other transfer of more than 75% of the issued nominal capital of the company to a third party, or (b) a transfer or license of all, or substantially all, of the assets of the company, or (c) a liquidation of the company (except in connection with insolvency proceedings) or (d) an initial public listing on a recognized stock exchange in an OECD member state (IPO) under certain circumstances.

The maximum number of EBPP rights to be granted corresponds to a 4% stake in the company's nominal capital. The exit participation right vests over four years following the start of vesting date, with 1/4 of the exit participation right vesting after the first year and 1/8 vesting upon the last day of each 6 month period

following the start of vesting date. In the event of an exit prior to full vesting, the exit participation rights are deemed vested in full immediately prior to completion of such exit event.

For all exit events except for an initial public listing on a recognized stock exchange the exit bonus will be settled in cash. In the event of an IPO the shareholders may decide at their discretion (simple majority of the votes cast), whether (i) the IPO is treated as an Exit and (a) the beneficiaries receive cash payments or (b) the Beneficiaries receive shares (equity instruments) instead of a cash payment, or (ii) the EBPP is not treated as an Exit and the EBPP is continued and adjusted adequately or replaced with a similar program (e.g. a share option plan). However, due to the fact that the discretionary power of the majority of shareholders relating to the treatment of an IPO as an exit event and the possibility of an equity settlement is considered vague and broad, possible rights of beneficiaries resulting from an IPO scenario are considered nonbinding as of the date of the EBPP agreement and, thus, in fact no concrete commitment has been made at grant date. Such commitment will only be taken into account after the majority of shareholders decided on this. Such a decision of the majority of shareholders will then have to be treated as a modification of the plan and accounted for accordingly. Until such a decision, however, the EBPP plan is accounted for without the IPO scenario. Accordingly, the accounting of the EBPP follows the accounting for a cash-settled share-based payment plan in full and a liability is recognized based on the expected probability of the respective exit events.

As of December 31, 2017 the probability of occurrence of an exit event was estimated with 35%, resulting in a liability for vested EBPP rights of EUR 329,773. Share based compensation expense under the EBPP was EUR 329,773 for the years ended December 31, 2017 accordingly.

The following table provides information on the sensitivity of a 5% increase or 5% decrease in the probability of occurrence of an exit event and the resulting increase/decrease of the respective liability and effect on profit or loss (a positive number indicates an increase in profit or loss, a negative number indicates a decrease in profit or loss):

Sensitivity analysis - probability of an exit event		in EUR	
	Assumption	+5%	-5%
Probability of an exit event	35%	40%	30%
<b>Share-based payment liability</b>	<b>329,773</b>	<b>376,883</b>	<b>282,662</b>
<b>Effect on profit or loss</b>		<b>-47,110</b>	<b>+47,111</b>

Movements in the number of EBPP rights outstanding are as follows:

Number of EBPP rights outstanding		
	2017	2016
Outstanding as of January 1	0	0
Granted	5,058	0
Exercised	0	0
Forfeited	0	0
<b>Outstanding as of December 31</b>	<b>5,058</b>	<b>0</b>
<b>Thereof vested as of December 31</b>	<b>3,087</b>	<b>0</b>

EBPP rights outstanding and vested were valued based on the fair value of shares of the company as of 31 December 2017, which was estimated with EUR 230 per share (corresponding to the agreed share price for the capital increase in December 2017).

### 3.2 Grant income

As stated under Note 2.11 grant income is recognized according to the progress of the respective project and to the extent the research and development expenses have been incurred. The company has to report its research and development expenses relating to each grant on a regular basis to the respective research funding institution. Based on this report, certain expenses may not be accepted and excluded from the funding basis accordingly. When recognizing grant income the company therefore takes into account its previous experience and assumptions on the amount of cost reimbursements (grants) accepted by the research funding institutions as well as on the compliance with the conditions of the grants and all related regulations.

### 3.3 Fair value estimation of convertible bond

As described in Note 2.9 the convertible bond has been designated as “at fair value through profit or loss” (FVTPL); thus the instrument has been accounted for at fair value at inception and in subsequent periods with any gains or losses arising on remeasurement recognized in profit or loss under financial income/expense.

Fair value has been determined by discounting expected future cashflows using an interest rate of 32%, which was considered as best estimate for a market interest rate of a comparable instrument for the Company. At the time of conversion, the fair value has been determined based on the fair value of the price for an interest in the company agreed for the 2017 capital increase.

The following table shows the development and movements of fair value of the convertible bond from inception to de-recognition (upon conversion into equity) in 2017:

Development of convertible bond	in EUR
	<b>2017</b>
Proceeds of issue	1,525,030
Nominal interest accrued	46,883
Fair value adjustment	384,663
De-recognition/Settlement by issued equity instruments	-1,956,576
<b>Fair Value as of December 31, 2017</b>	<b>0</b>

## 4 Segmental reporting

IFRS 8 defines operating segments as those activities of an entity about which separate financial information is available and which are evaluated by the Chief Operating Decision Maker to assess performance and determine the allocation of resources. The Chief Operating Decision Maker has been identified as the Board of Directors.

The Directors are of the opinion that under IFRS 8 the company has only one operating segment under IFRS 8. This relates to the development of prophylactic vaccinations, which covers everything from the pre-clinical to the early clinical phase. The company focusses on emerging tropical infectious diseases. The chief operating decision maker reviews the operating results regularly to make decisions about the allocation of the Company's resources and to assess overall performance.

## 5 Other operating income

The company works in the field of research and development. No sales revenue was generated in 2017 and 2016 or the preceding years as the Company is a biotech company in the start-up phase whose business concept is the implementation of multi-year research and development programs prior to obtaining the first significant income.

The other operating income is composed as follows:

Other operating income		in EUR
	2017	2016
Public grants	1,885,793	274,924
Austrian research premium	647,971	500,242
Income from mezzanine capital	0	1,000,000
Others	33,027	0
<b>Total</b>	<b>2,566,791</b>	<b>1,775,166</b>

Public grants were received from the EU research funding program ("Horizon 2020") and the British research funding program ("SBRI"). These grants are non-refundable, except in the case of non-compliance with the agencies' rules and regulations or in the case of misuse of the funds. The Company is and has been in full compliance with the conditions of the grants and all related regulations.

The research premium is an Austrian R&D premium of 12% on research and development expenditures, and which is paid out in cash by the Austrian fiscal authorities.

In 2010 the Company took out a loan ("AWS Seed loan") from the Austria Wirtschaftsservice GmbH ("AWS") in the total amount of EUR 1,000,000. The AWS Seed loan is generally granted for supporting start-up companies. In case of the Company, AWS granted the loan for the purpose of supporting the buildup of a company structure and enhancing the research activities against infectious diseases.

The loan has a term of 5 years starting with June 30, 2011 (date on which the last tranche has been received from AWS). Yearly repayments are to be based on annual profits made by the Company. In case of a profit generated by the Company, 45% of the profit before tax (adjusted for certain items) has to be used to repay the loan until the outstanding amount is paid off. In case that the Company does not make any profits in any given year, no repayments shall be made in that year. Amounts still outstanding at the end of the term are no longer repayable and are waived to the Company and therefore recognized as other income.

After the conditions for repayment have not been met until June 30, 2016, the outstanding loan was recognized as income from mezzanine capital in 2016.

## 6 Research and development expenses

These expenses increased significantly due to the execution of the clinical study for phase 2 of the chikungunya vaccine, the execution of toxicological studies, the execution of studies for phase 1 for the ZIKA vaccine and the GMP production of the chikungunya vaccine for other future clinical phases.

The research and development expenses are sub-divided as follows:

<b>Research and development expenses</b>		<b>in EUR</b>
	<b>2017</b>	<b>2016</b>
Personnel expense	-986,607	-645,971
Cost of materials	-46,099	-43,501
Clinical phase I and II studies	-4,315,667	-3,980,612
Depreciation expense	-8,427	-5,346
Others	-549,960	-526,170
<b>Total</b>	<b>-5,906,760</b>	<b>-5,201,600</b>

Other research and development expenses consist of:

	<b>2017</b>	<b>2016</b>
Infrastructure expenses	-92,361	-83,892
Advisory and external consultancy expenses	-110,905	-247,565
Travel expenses	-142,831	-115,654
Share based payments	-103,390	0
Other expenses	-100,473	-79,059
<b>Total</b>	<b>-549,960</b>	<b>-526,170</b>

## **7 Administrative expenses**

The administrative expenses of the years 2016 and 2017 are sub-divided as follows:

<b>Administrative expenses</b>		<b>in EUR</b>
	<b>2017</b>	<b>2016</b>
Personnel expense	-147,280	-109,358
Depreciation expense	-11,842	-8,851
Others	-832,759	-463,222
<b>Total</b>	<b>-991,881</b>	<b>-581,431</b>

Other administrative expenses include the following:

	<b>2017</b>	<b>2016</b>
Infrastructure expenses	-20,066	-17,494
Advisory and external consultancy expenses	-491,252	-277,039
Travel expenses	-35,708	-28,914
Legal expenses	-90,588	-85,968
Share based payments	-112,006	0
Advertising	-24,284	-22,368
Others	-58,855	-31,439
<b>Total</b>	<b>-832,759</b>	<b>-463,222</b>



## 8 Financial income

All profits from financial assets are shown in the financial result under the position financial income. In the years 2017 and 2016 there is only financial income from interests of bank deposits.

## 9 Financial expense

Interest expenses consist of interest payable on borrowings of all kinds (e.g. bank and other loans) and are expensed as incurred. There was no capitalization of borrowing costs in the reporting years presented.

The financial expenses are sub-divided as follows:

Finance expense		
	2017	2016
Fair value adjustments of convertible bond	-431,546	0
Interest for bank loans	-1	-8
Interest for FFG loans	-40,325	-33,024
Grant income (interest advantage) acc. to IAS 20.10A	20,744	14,274
<b>Total</b>	<b>-451,128</b>	<b>-18,758</b>

Fair value adjustments of convertible bond relate to the convertible bond issued in 2017 which has been designated as "at fair value through profit or loss" (FVTPL). The amount represents the total difference between the cash received at inception and the fair value at the time of conversion, which has been determined based on the fair value of the share price agreed in the 2017 capital increase.

Interest expenses consist of interest payable on bank loans (overdrafts) and R&D support loans (see below).

In recent years the company was granted several R&D support loans from the Austrian Research Promotion Agency (Österreichisches Forschungsförderungsgesellschaft, or FFG) and the Austria Wirtschaftsservice (AWS). According to IAS 20.10A (and IFRS1.B10), the differences between the nominal interest rates of the R&D support loans granted after the date of transition and the market rate of interest, estimated at 4.5%, are treated as a government grant and recognized over the term of the corresponding financial liabilities.

## 10 Financial result

As required by IFRS 7.20, interest and net gains/losses on financial instruments are classified as follows:

### Financial result 2017 in EUR

		Net Result according to IFRS 7 from		
		FVTPL	Loans and Receivables	Financial Liabilities at amortized cost
Other income from interests	800		800	
<b>Financial income</b>	<b>800</b>	<b>0</b>	<b>800</b>	<b>0</b>
Remeasurement of convertible bond	-431,546	-431,546		
thereof nominal interest accrued	-46,883	-46,883		
Interest for bank loans	-1			-1
Interest for FFG loans (net of grant income)	-19,581			-19,581
<b>Financial expenses</b>	<b>-451,128</b>	<b>0</b>	<b>0</b>	<b>-19,582</b>
<b>Financial result</b>	<b>-450,328</b>	<b>-431,546</b>	<b>800</b>	<b>-19,582</b>

### Financial result 2016 in EUR

		Net Result according to IFRS 7 from		
		FVTPL	Loans and Receivables	Financial Liabilities at amortized cost
Other income from interests	4,158		4,158	
<b>Financial income</b>	<b>4,158</b>	<b>0</b>	<b>4,158</b>	<b>0</b>
Interest for bank loans	-8			-8
Interest for FFG loans (net of grant income)	-18,750			-18,750
<b>Financial expenses</b>	<b>-18,758</b>	<b>0</b>	<b>0</b>	<b>-18,758</b>
<b>Financial result</b>	<b>-14,600</b>	<b>0</b>	<b>4,158</b>	<b>-18,758</b>

## 11 Income tax

Taxes on income are calculated using the current corporate income tax rate of 25%. Under the Austrian Corporate Income Tax Act (KStG) a minimum amount of EUR 1,750 corporate income tax is levied even if there is a tax loss.

The tax expense resulting from the application of the Austrian corporation tax rate of 25% can be reconciled to the actual tax expense as follows:

Tax reconciliation		in EUR
	2017	2016
Loss before income tax	-4,862,953	-4,078,091
Tax income (expense) at 25%	1,215,738	1,019,523
Expenses not deductible for tax purposes	-114,795	-1,968
Income not subject to tax	161,993	375,060
Effect of equity transaction costs deductible for tax purposes	26,404	17,468
Effect of deferred tax asset not recognized	-1,289,340	-1,410,083
Minimum corporate income tax	1,750	1,750
<b>Tax expenses (before loss carry forwards)</b>	<b>1,750</b>	<b>1,750</b>
Other tax adjustments	0	165
<b>Total income tax expense</b>	<b>1,750</b>	<b>1,915</b>

Income tax expenses do not contain deferred taxes and relate to the respective reporting year. Deferred tax assets (mainly resulting from tax loss carryforwards) were only recognized in the amount of the deferred tax liability, as it is not foreseeable for the excess amount of deferred tax assets, when future taxable profits will be available against which the deductible temporary differences and unused tax losses can be utilized.

Tax loss carryforwards in the amount of EUR 22,259,042 as of December 31, 2017 and EUR 17,241,590 as of December 31, 2016 for which no deferred taxes were recognized are not subject to an expiry date.

## 12 Notes to the Statement of Cash Flows

The statement of cash flows has been prepared using the indirect method. It shows the changes in cash and cash equivalents (see Note 2.6) resulting from the inflow and outflow of funds during the reporting period and differentiates between cash flows from operating activities, investing activities and financing activities. Cash and cash equivalents reported in the statement of cash flows equal cash and cash equivalents presented in the statement of financial position.

### Cash flow utilized by investing activities

The cash flow from investing activities consists mainly of outflows of funds for the acquisition of tangible and intangible assets.

### Cash flow generated from financing activities

The cash flow from financing activities consists of proceeds from shareholders of EUR 2,608,351 in 2017 and EUR 6,674,880 in 2016 for of a capital increase less equity transaction costs in the amount of EUR 5,678 in 2017 and EUR 69,873 in 2016 respectively, proceeds from long term borrowings of EUR 300,000 in 2017 and EUR 500,000 in 2016 and proceeds from convertible loans of EUR 1,525,030 in 2017.

### Reconciliation of liabilities arising from financing activities

The table below details in the Company's liabilities arising from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flows were, or future cash flows will be, classified in the Company's statement of cash flows as cash flows from financing activities.

	Convertible bond	FFG loans
Carrying amount as of January 1, 2017	0	1,651,409
Proceeds from convertible loans	1,525,030	0
Proceeds from long-term borrowings	0	300,000
Fair value adjustments	384,663	-41,298
Effective interest accrued	46,883	40,325
Settlement by issued equity instruments	-1,956,576	0
Interest paid	0	-19,581
<b>Carrying amount as of December 31, 2017</b>	<b>0</b>	<b>1,930,855</b>

### 13 Intangible assets and property, plant and equipment

The movement on intangible assets (software) was as follows:

	2017	2016
<b>As of January 1</b>		
Acquisition costs	31,083	14,794
Accumulated amortization	-15,994	-11,301
Carrying amount	15,089	3,493
<b>Year ended December 31</b>		
Carrying amount January 1	15,089	3,493
Additions	2,760	16,289
Amortization	-6,214	-4,693
Carrying amount December 31	11,635	15,089

The movement on property, plant and equipment was as follows:

	2017	2016
<b>As of January 1</b>		
Acquisition costs	84,708	61,042
Accumulated depreciation	-42,950	-37,342
Carrying amount	41,758	23,700
<b>Year ended December 31</b>		
Carrying amount January 1	41,758	23,700
Additions	12,804	27,744
Disposals	-792	-182
Depreciation	-14,055	-9,504
Carrying amount December 31	39,715	41,758

## 14 Other receivables

The other receivables are sub-divided as follows:

Other current receivables		in EUR
	2017	2016
Receivables from VAT refund	203,391	36,261
Receivables from other public grants ("SBRI")	637,523	0
Receivables from research premium	553,568	697,038
Others	32,842	7,858
<b>Total</b>	<b>1,427,324</b>	<b>741,157</b>

The receivables from VAT refund represent mostly receivables from the Austrian tax authorities.

The receivables from public grants ("SBRI") concern committed public funding from the British research funding program "SBRI" (= Small Business Research Initiative).

The receivables from research premium refer to claimed research premium to the Austrian tax office in the amount of 12% of the favorable research expenditures.

## 15 Other assets

The other assets are sub-divided as follows:

Other assets		in EUR
	2017	2016
Research material, vouchers	20,928	16,700
Prepayments	280,111	38,291
Prepayment operating leasing	6,638	18,017
<b>Total</b>	<b>307,677</b>	<b>73,008</b>

## 16 Other financial assets

The other financial assets are sub-divided as follows:

Other assets		in EUR
	2017	2016
Security deposits	120	120
Fixed-term deposit	0	150,000
Cash (mortgaged)	42,514	20,604
<b>Total</b>	<b>42,634</b>	<b>170,724</b>

As at December 31, 2016, an amount of EUR 150,000 was tied to a euro time deposit account until March 31, 2017.

## 17 Cash and cash equivalents

As of December 31, 2017 and 2016, the Company has all liquid funds on daily Euro or GBP accounts.

Cash and cash equivalents		in EUR
	2017	2016
Euro current accounts	3,411,515	3,127,100
GBP current accounts	260,459	281
<b>Total</b>	<b>3,671,974</b>	<b>3,127,381</b>

## 18 Negative Equity/Equity

As of December 31, 2017 and 2016 the issued share capital (nominal capital) amounts to EUR 130,371 and is fully paid up in cash. Capital reserves in the amount of EUR 15,196,196 as of December 31, 2017 and 2016 result from additionally paid-in capital in the course of past capital increases. The development of capital and reserves is presented in the statement of changes in equity.

The company is established in the legal form of an Austrian limited liability company (Gesellschaft mit beschränkter Haftung, GmbH). Shareholders in an Austrian limited liability company do not hold a specific number of shares in the company represented by share certificates, but participate by holding a proportionate share interest (Geschäftsanteil) in the company which corresponds to the amount of capital paid in by each shareholder in proportion to the aggregate nominal capital of the Austrian limited liability company.

Amounts stated under "Contributions made for a resolved capital increase" within equity result from the capital increase resolved in December 2017 in the course of the Series C financing round, as the capital increase had not yet been registered at the commercial register and therefore was not legally effective as of December 31, 2017. The total amount of EUR 4,455,374 results from paid-in cash contributions amounting to EUR 2,608,351 and the conversion of the convertible bond with an amount of EUR 1,956,576, less equity transactions costs of EUR 109,553.

## 19 Financial liabilities

The financial liabilities are sub-divided as follows:

Financial liabilities		in EUR
	2017	2016
<b>Non-current Financial liabilities</b>		
FFG loans	1,604,272	1,651,409
<b>Total</b>	<b>1,604,272</b>	<b>1,651,409</b>
<b>Current Financial liabilities</b>		
FFG loans	326,583	0
<b>Total</b>	<b>326,583</b>	<b>0</b>

The Company has taken out various loans („FFG loans”) from FFG in the total nominal amount of EUR 2,028,367 as of December 31, 2017 respectively EUR 1,728,367 as of December 31, 2016. The loans carry fixed interest rates between 0.75% and 2% p.a. with maturity dates from June 30, 2018 to June 30, 2021. The weighted average effective interest rate has been calculated with 2.49% in 2017 and 2.14% in 2016 respectively. According to IAS 20.10A, the difference between the nominal interest rates of these loans and the market rate of interest, estimated at 4.5%, are treated as a government grant and recognized over the term of the corresponding financial liabilities. As the company has applied IAS 20 prospectively to government loans existing at the date of transition to IFRS, according to IFRS 1.B10, the benefit of a government loan at a below-market rate of interest has only been recognized for government loans that became effective or for which tranches have been paid out after the date of transition to IFRS (January 1, 2015).

The following table shows a comparison by class of the carrying amounts and fair values of the Company's borrowings, other than those with carrying amounts that are reasonable approximations of fair values:

in EUR		
	2017	2016
<b>Carrying amount</b>		
FFG loans	1,930,854	1,651,409
<b>Total</b>	<b>1,930,854</b>	<b>1,651,409</b>
<b>Fair Value</b>		
FFG loans	1,869,806	1,552,858
<b>Total</b>	<b>1,869,806</b>	<b>1,552,858</b>

The fair values of current and non-current borrowings stated above are based on discounted cash flows using an interest rate of 4.5%, which was considered to be the best estimate for a market interest rate for the Company based on an offer received by an external financial institution at the time of the fair value calculation.

## 20 Trade payables and other current liabilities

The trade payables and other liabilities for the years 2016 and 2017 are sub-divided as follows:

Trade payables and other current liabilities in EUR		
	2017	2016
Trade payables	2,290,792	1,306,257
Liability for cash-settled share-based payments (EBPP)	329,773	0
Unconsumed vacation	24,530	10,945
Employee bonuses	161,388	90,000
License Fees	75,000	210,000
Accounting, consulting, legal and audit services	52,850	56,093
Deferred income from government grants	816,489	665,396
Liabilities employees	30,154	0
Other liabilities	65,763	55,279
<b>Total</b>	<b>3,846,739</b>	<b>2,393,970</b>

## 21 Post employment benefits

The Company granted a pension commitment to the managing director, under which – for the period of service as a managing director and employee respectively – the company is obliged to make annual payments of EUR 12,000 to a defined contribution plan operated by an external insurance company. The managing director is the direct beneficiary of the insurance policy for the contribution plan and the Company does not have any legal or constructive obligation to cover any loss on the policy.

Pension expenses		in EUR
	2017	2016
Amount paid during the year	12,000	12,000
Amount outstanding at year end	0	0
<b>Total</b>	<b>12,000</b>	<b>12,000</b>

As required under Austrian labor law, the Company makes contributions to a state plan classified as defined contribution plan (Mitarbeitervorsorgekasse) for its employees. Monthly contributions to the plan are 1.53% of salary with respect to each employee and are recognized as expense in the period incurred. In the year ended December 31, 2017 contribution costs amounted to EUR 11,079. In the year ended December 31, 2016 contribution costs amounted to EUR 9,118.

## 22 Leases

The rental and lease payments relate to the renting of the office and laboratory space, as well as a car lease. Future minimum lease payments for the leases as at December 31 are as follows:

Leases expiring after:		in EUR
	2017	2016
One year or less	110,618	110,217
Five years or less	293,594	400,646

In the financial year 2017, lease payments, which were recognized as expenses, amounted to EUR 123,442. In the financial year 2016, lease payments, which were recognized as expenses, amounted to EUR 101,294.

For all leases, there are no options to extend the lease or purchase the leased asset after the lease has ended.



## 23 Financial risk management

The Company's activities expose it to a variety of financial risks: market risk (including currency risk, fair value interest rate risk and price risk), credit risk and liquidity risk. The company's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on financial performance. The company does not use derivative financial instruments to hedge risk exposures.

The overall objective of the Board is to set policies that seek to reduce ongoing risk as far as possible without unduly affecting the company's competitiveness and flexibility. Further details regarding these policies are set out below.

### 23.1 Principal financial instruments

The principal financial instruments used by the company, from which financial risk arises, are as follows:

Financial instruments	in EUR	
	2017	2016
<b>Current assets</b>		
Other current receivables	670,365	7,858
Other financial assets	42,634	170,724
Cash and cash equivalents	3,671,974	3,127,381
<b>Non-current liabilities</b>		
Financial liabilities	1,604,272	1,651,409
<b>Current liabilities</b>		
Financial liabilities	326,583	0
Trade payables	2,290,792	1,306,257

In the table above other current receivables are only included to the extent they are financial instruments. "Other current receivables" as shown in the statement of financial position also include other receivables, which mainly result from VAT refund and the research premium (see Note 14). Trade payables stated in the table above are included under "Trade payables and other current liabilities" in the statement of financial position (see Note 20).

## 23.2 Market risk

### Currency risk

Currency risk is the risk that the value of a financial instrument will fluctuate due to changes in foreign exchange rates. The Company operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the British pound (GBP). Foreign exchange risk arises when future commercial transactions or recognized assets or liabilities are denominated in a currency that is not the entity's functional currency.

GBP translated in EUR		
	2017	2016
Other receivables	637,522	168,712
Cash and cash equivalents	260,460	280
Trade payables	-30,796	0
<b>Total</b>	<b>867,186</b>	<b>168,992</b>

As stated in the table above, the Company is primarily exposed to changes in GBP/EUR exchange rates. The Company's sensitivity to a 10% increase/decrease in EUR against the GBP amounts to EUR 86,719 in 2017 and EUR 16,899 in 2016. The sensitivity analysis includes only outstanding GBP denominated monetary items and adjusts their translation at the period end for a 10% change in foreign currency rate. A positive number above indicates an increase in profit or loss where the EUR strengthens 10% against the GBP. For a 10% weakening of the EUR against the GBP, there would be a comparable impact on the profit or loss, and the amounts above would be negative. In any case there is no distinct effect on other comprehensive income.

In 2017 a foreign exchange loss with an amount of EUR -24,366 is included in profit or loss. In 2016 a foreign exchange gain with an amount of EUR 1,428 is included in profit or loss.

### Cash flow and fair value interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company's interest-bearing financial liabilities carry fixed interest rates. Further, the Company's operating cash flows are substantially independent of changes in market interest rates. Cash flow interest rate risk is therefore not material.

The Company's fixed rate borrowings are carried at amortised cost. They are therefore not subject to interest rate risk as defined in IFRS 7, since neither the carrying amount nor the future cash flows will fluctuate because of a change in market interest rates.

### Price Risk

Price risk is the risk that the value of a financial instrument will fluctuate due to changes in the market price.

The Company is currently not exposed to equity or debt securities price risk from investments held by the Company and classified in the statement of financial position as available-for-sale. The Company is not exposed to commodity price risk.

### 23.3 Credit risk

Credit risk is the risk that one party to a financial instrument will fail to discharge an obligation and cause the other party to incur a financial loss. The Company is exposed to credit risk from its operating activities and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments.

Since the company is currently not generating any revenues, there are still no trade receivables that would also be subject to credit risk.

The requirement for an impairment is analyzed at each reporting date on an individual basis. The maximum exposure to credit risk at the reporting date is the carrying value of each class of receivable (see Note 14).

Credit risk with regard to cash and deposits at banks and other financial institutions should be minimized by making all deposits with Austrian banks which at least have a credit rating of B.

### 23.4 Liquidity risk

Liquidity risk (funding risk) is the risk that an enterprise will encounter difficulty in raising funds to meet commitments associated with financial instruments. Prudent liquidity risk management involves maintaining sufficient cash, ensuring the availability of adequate funding in the form of various forms, including entering into collaboration or licensing agreements, seeking additional investors or obtaining further funding from existing investors through an additional funding round. Additionally delaying or reducing the scope of, eliminating or divesting clinical programs and considering other reduction activities would support the proper management of liquidity. The Company manages liquidity risk by maintaining adequate reserves, continuously monitoring forecast and actual cash flows and by matching the maturity profiles of financial assets and liabilities.

Management of the Company continuously takes appropriate measures to manage and aims to minimize liquidity risk. Accordingly, management of the company has closed a Series C financing round totalling EUR 10 million in December 2017. Moreover, in March 2018 Themis and CEPI (the Coalition for Epidemic Preparedness Innovations) have signed a partnership agreement under which Themis will provide advanced vaccine development and manufacturing for Lassa fever and MERS. The investment from CEPI of up to USD 37.5 million will enable funding for the company's development costs for Lassa fever and MERS over a five-year period. Nevertheless, uncertainty still exists and will continue to exist for the foreseeable future. Regarding the company's ability to continue as a going concern please refer to Note 2.1.

The company's principal debts are fixed-term loan liabilities, liabilities from convertible bonds, trade payables and other liabilities. All trade payables and other liabilities are due within one year (one month). The management is kept informed about cash flows as well as current cash holdings.

The following table shows the residual maturities of non-derivative financial liabilities and receivables at the end of the reporting period. The amounts disclosed are the contractual undiscounted cash flows.

As of December 31, 2017		in EUR		
		Maturity		
		Less than 1 year	Between 1 and 5 years	Over 5 years
Borrowings		343,994	1,723,097	0
Trade Payables		2,290,792	0	0
Other receivables		-30,206	0	0
<b>Total</b>		<b>2,604,580</b>	<b>1,723,097</b>	<b>0</b>

**As of December 31, 2016****in EUR**

	Maturity		
	Less than 1 year	Between 1 and 5 years	Over 5 years
Borrowings	19,581	1,759,110	0
Trade payables	1,306,257	0	0
<b>Total</b>	<b>1,325,838</b>	<b>1,759,110</b>	<b>0</b>

## 23.5 Capital risk management

The company's objectives, when managing capital are to safeguard the company's ability to continue as a going concern and to maintain an optimal capital structure. Total capital, which is the company's primary source of funding, is calculated as "Total equity" as shown in the Statement of Financial Position. In order to maintain or adjust the capital structure, the company may increase its capital or in future adjust the amount of dividends paid to shareholders or return capital to shareholders.

The company had no undrawn committed borrowing facilities available during any of the years 2017 and 2016.

## 24 Post balance sheet events

In March 2018 Themis Bioscience and CEPI – the Coalition for Epidemic Preparedness Innovations – has signed a partnership agreement under which Themis will provide advanced vaccine development and manufacturing for Lassa fever and MERS. The investment from CEPI of up to USD 37,500,000 will enable funding for the company the development costs for Lassa fever and MERS over a five-year period. The amounts paid by CEPI depending on defined milestones and achievement of predefined goals.

After announcing positive interim results for the phase 2 clinical trial in November 2017, Themis has finalized its phase 2 clinical trial in May 2018 for Chikungunya and demonstrated safety and immunogenicity of the company's live attenuated prophylactic vaccine candidate for chikungunya fever.

In December 2017 a Series C financing round totalling EUR 10 million has been signed. In January 2018 the capital increase resulting from the first tranche of this financing has been registered with the commercial register and amounts not paid-in in December have been paid to the Company. Additionally to the current investors who participated in the financing round, GHIF – the Global Health Investment Fund led the financing as new investor. The Series C proceeds will be used to advance Themis' clinical and pre-clinical vaccine development programs. The financing round was planned in three tranches and after finalizing the phase 2 clinical trial the Series C2 and C3 tranches amounting to EUR 5.5 million in total were paid as the defined milestones to the Company in July/August 2018.

In preparation of the initial public offering, Themis Bioscience GmbH has founded a 100 % subsidiary with a nominal value of 0.01 EUR as of September 14, 2018.

Regarding the ongoing preparation of the clinical phase 3 and the start of the manufacturing process, Themis has concluded a contract for the start of the tech transfer with a German CMO (clinical manufacturer organisation) with a value of EUR 2.3 million on September 18, 2018.

To account for the increased R&D activities and number of employees, the company will enlarge its laboratory and office space by approx. 400 sqm at the current site (Muthgasse 11, 1190 Wien) and has signed an additional lease contract in September 2018 with its lessor.

On September 28, 2018 Themis has signed a licence agreement with the Max-Planck-Innovation GmbH for exclusive rights to an oncolytic measles virus technology. Under the terms of the agreement, Themis has

been granted an exclusive worldwide license to develop, manufacture and commercialize products based on the licensed technology.

## 25 Related party disclosures

The Company has concluded consulting contracts with several members of the Supervisory Board. Fees charged by members of the Supervisory Board for consultancy services amounted to EUR 122,275 in 2017 and EUR 59,299 in 2016. Selected members of the Supervisory Board participate in the exit bonus participation program (EBPP, see also Note 3.1). The amount of share-based payment expenses recognized for these members amounts to EUR 172,318 in 2017. Further remunerations for work as a member of the Supervisory Board are not granted.

In 2017 Themis entered into a convertible bond agreement with some of its shareholders. For further information please refer to Note 2.9 and to Note 3.3.

The Company's share capital is held by various shareholders, none of which can exercise control over the entity.

Other relationships with related parties have not been identified.

## 26 Compensation of key management personnel

Compensation of key management personnel, including the managing director (1 person) and the second management level (2 persons), includes the following components:

Compensation of key management personnel		in EUR
	2017	2016
Short term-employee benefits	443,137	395,915
Post-employment benefits	12,000	12,000
Share-based payment expenses	103,391	0
<b>Total</b>	<b>558,528</b>	<b>407,915</b>

No other long-term employee benefits or termination benefits exist in 2016 and 2017.

The company shows a receivable vis-à-vis the managing director in the amount of EUR 2,037 as of December 31, 2017 and EUR 4,292 as of December 31, 2016 resulting from payments on account for business travels and other expenses.

## 27 Expenses for the auditors

Expenses for the auditors		in EUR
	2017	2016
Audit of the Financial Statements	8,900	8,900
Tax services	2,150	470
Other services	0	2,230
<b>Total</b>	<b>11,050</b>	<b>11,600</b>

## 28 Number of employees

The average number of employees is as follows (based on full-time equivalent):

Number of employees		
	2017	2016
Employees	9	9
<b>Total</b>	<b>9</b>	<b>9</b>

## 29 Board of Directors and members of the Supervisory board

As in the previous financial years, Dr. Erich Tauber is appointed as Managing Director.

### Supervisory board

Zettlmeissl Gerd, Dr., born 01.10.1955 (Chair)  
Fournier-Sourdille Maximilien, born 19.03.1989 (Deputy chair)  
Chaoui Mounia, Dr., born 07.11.1971  
Dro Philippe, Dr., born 08.12.1962  
Hodits Regina, Dr., born 24.12.1969  
Kunzmann Ralf, Dipl.-Bw., born 30.06.1970  
Prieels Jean-Paul, born 20.01.1946  
Rockman Glenn, born 05.05.1981

Vienna, on October 5, 2018

Themis Bioscience GmbH  
The management

Dr. Erich Tauber

**The Company**

**Themis Bioscience N.V.**

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Austria

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*as to Austrian, Dutch and US law*

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Germany

**Joint Global Coordinators and Joint Bookrunners**

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The Netherlands

**Stifel Nicolaus Europe Limited**

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United Kingdom

**Co-Bookrunner**

**Erste Group Bank AG**

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**Independent Auditor to Themis  
Bioscience GmbH**

**Ernst & Young**

**Wirtschaftsprüfungsgesellschaft  
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