

Use these links to rapidly review the document

[TABLE OF CONTENTS](#)

[TABLE OF CONTENTS](#)

[Table of Contents](#)

As filed with the Securities and Exchange Commission on December 3, 2019

Registration No. 333-

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

THERAVANCE BIOPHARMA, INC.

(Exact Name of Registrant as Specified in Its Charter)

Cayman Islands (State or Other Jurisdiction of Incorporation or Organization)	98-1226628 (I.R.S. Employer Identification Number)
--	---

**PO Box 309
Ugland House, South Church Street
George Town, Grand Cayman, Cayman Islands KY1-1104
(650) 808-6000**
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

**Andrew Hindman
Senior VP and Chief Financial Officer, Treasurer
Theravance Biopharma, Inc.
c/o Theravance Biopharma US, Inc.
901 Gateway Boulevard
South San Francisco, California 94080
(650) 808-6000**
(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

The Commission is requested to send copies of all communications to:

**Bradford J. Shafer, Esq.
Executive VP and General Counsel
Theravance Biopharma, Inc.
c/o Theravance Biopharma US, Inc.
901 Gateway Boulevard
South San Francisco, California 94080
(650) 808-6000**

**David T. Young, Esq.
Jeffrey R. Vetter, Esq.
Colin G. Conklin, Esq.
Gunderson Dettmer Stough
Villeneuve Franklin & Hachigian, LLP
550 Allerton Street
Redwood City, CA 94063
(650) 321-2400**

**Approximate date of commencement of proposed sale to the public:
From time to time after this registration statement becomes effective, as determined by market conditions and other factors.**

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities To Be Registered	Amount to be Registered / Proposed Maximum Aggregate Offering Price Per Unit/ Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Primary Offering of Securities:		
Debt Securities	(1)	
Ordinary Shares, \$0.00001 par value per share		
Purchase Contracts		
Purchase Units		
Warrants		
Primary Offering of Ordinary Shares:		
Ordinary Shares, \$0.00001 par value per share	\$150,000,000	\$19,470(2)
Total	\$150,000,000	\$19,470

(1) An indeterminate aggregate initial offering price or number of securities of each identified class is being registered as may from time to time be offered at indeterminate prices. Separate consideration may or may not be received for securities that are issuable on exercise, conversion or exchange of other securities. In accordance with Rules 456(b) and 457(r), the Registrant is deferring payment of all of the registration fee.

(2) Calculated pursuant to Rule 457(o) and Rule 457(r) under the Securities Act.

EXPLANATORY NOTE

This Registration Statement contains two prospectuses:

- A base prospectus which covers the offering, issuance and sale by us of the securities identified above from time to time in one or more offerings; and
- A sales agreement prospectus covering the offering, issuance and sale by us of up to a maximum aggregate offering price of \$150,000,000 of our ordinary shares that may be issued and sold under a sales agreement with Cowen and Company, LLC.

The base prospectus immediately follows this explanatory note. The specific terms of any other securities to be offered pursuant to the base prospectus will be specified in one or more prospectus supplements to the base prospectus. The sales agreement prospectus immediately follows the base prospectus.



THERAVANCE BIOPHARMA, INC.

**Debt Securities
Ordinary Shares
Purchase Contracts
Purchase Units
Warrants**

We or selling securityholders may, from time to time, offer and sell the securities identified above in one or more offerings. This prospectus describes the general terms of these securities and the general manner in which these securities will be offered. We will provide the specific terms of these securities in supplements to this prospectus. The prospectus supplements will also describe the manner in which these securities will be offered and may also add to, update or change information contained in this prospectus. You should read carefully this prospectus and the accompanying prospectus supplement before you invest.

We may, and any selling securityholders may, offer these securities independently or together in any combination for sale directly to investors or through underwriters, dealers or agents. If any underwriters, dealers or agents are involved in the sale of any of these securities, we will set forth their names and describe their compensation in the applicable prospectus supplement.

Our ordinary shares are traded on The Nasdaq Global Market under the symbol "TBPH." On November 27, 2019, the last reported sale price of our ordinary shares on The Nasdaq Global Market was \$21.15 per share. We urge you to read carefully this prospectus and the accompanying prospectus supplement, which will describe the specific terms of the securities being offered to you, before you make your investment decision.

Investing in our securities involves risks. See the section entitled "Risk Factors" on page 1 of this prospectus and included in or incorporated by reference into any accompanying prospectus supplement and in the documents we incorporate by reference in this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is December 3, 2019.

TABLE OF CONTENTS

	<u>Page</u>
About this Prospectus	1
Risk Factors	1
Theravance	1
Forward-Looking Statements	1
Use of Proceeds	2
Description of Debt Securities	2
Description of Share Capital	10
Description of Purchase Contracts and Purchase Units	19
Description of Warrants	19
Forms of Securities	20
Selling Securityholders	22
Plan of Distribution	22
Legal Matters	24
Experts	24
Where You Can Find More Information	24
Information Incorporated by Reference	24

We have not authorized anyone to provide any information other than that contained or incorporated by reference in this prospectus, any applicable prospectus supplement or any free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information in this prospectus and any prospectus supplement, or incorporated by reference, is accurate only as of the dates of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, using a "shelf" registration, or continuous offering, process. Under this shelf registration process, we or selling securityholders may, from time to time, offer and sell separately or together in any combination the securities described in this prospectus in one or more offerings.

This prospectus provides you with a general description of the securities we or any selling securityholder may offer. Each time we or any selling securityholder sells securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering and the offered securities. Any prospectus supplement may also add to, update or change information contained in this prospectus. Any statement that we make in this prospectus will be modified or superseded by any inconsistent statement made by us in a prospectus supplement. The registration statement we filed with the SEC includes exhibits that provide more detail of the matters discussed in this prospectus. You should read this prospectus and the related exhibits filed with the SEC and any prospectus supplement, together with additional information described under the heading "Where You Can Find More Information," before making your investment decision.

Unless the context otherwise requires, references in this prospectus to "Theravance," "we," "us" and "our" refer to Theravance Biopharma, Inc.

RISK FACTORS

Investing in our securities involves risk. The prospectus supplement relating to a particular offering will contain or incorporate by reference a discussion of risks applicable to an investment in the securities offered. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading "Risk Factors" included in or incorporated by reference into the applicable prospectus supplement together with all of the other information contained in the prospectus supplement or appearing in or incorporated by reference into this prospectus, including the risk factors incorporated by reference to our most recent Annual Reports on Form 10-K and any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities.

THERAVANCE

Theravance is a diversified biopharmaceutical company primarily focused on the discovery, development and commercialization of organ-selective medicines. Our purpose is to create transformational medicines to improve the lives of patients suffering from serious illnesses. Our research is focused in the areas of inflammation and immunology.

Theravance Biopharma was incorporated in the Cayman Islands in July 2013 under the name Theravance Biopharma, Inc. Our corporate address in the Cayman Islands and principal executive office is P.O. Box 309, Uglund House, Grand Cayman, KY1-1104, Cayman Islands and the address of our wholly-owned US operating subsidiary Theravance Biopharma US, Inc. is 901 Gateway Boulevard, South San Francisco, California 94080. While Theravance Biopharma is incorporated under Cayman Island law, the Company became an Irish tax resident effective July 1, 2015. The address of our wholly-owned Irish operating subsidiary, Theravance Biopharma Ireland Limited, is Connaught House, Burlington Road, Dublin 4, Ireland.

FORWARD-LOOKING STATEMENTS

When used in this prospectus and the documents incorporated by reference, the words "expects," "believes," "anticipates," "estimates," "may," "could," "intends," and similar expressions are intended to identify forward-looking statements. These statements are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from those projected or otherwise implied by the forward-looking statements. These forward-looking statements speak only as of the date

of this prospectus. Given these risks and uncertainties, you should not place undue reliance on these forward-looking statements. These risks and uncertainties are described in greater detail in the sections titled "Risk Factors" in the documents incorporated by reference and also in any prospectus supplement under the sections titled "Risk Factors." Additional cautionary statements or discussions of risks and uncertainties that could affect our results or the achievement of the expectations described in forward-looking statements may also be contained in the in other sections of the documents we incorporate by reference into this prospectus or in any prospectus supplement.

These forward-looking statements speak only as of the date of this prospectus. We expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in our expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based. You should, however, review additional disclosures we make in our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K filed with the SEC that are incorporated by reference.

USE OF PROCEEDS

Unless we state otherwise in the applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities offered by this prospectus for general corporate purposes, which may include, among other things, research activities, preclinical and clinical development of product candidates, manufacture of pre-clinical, clinical and commercial drug supplies, selling and marketing expenses, capital expenditures, working capital and general and administrative expenses. We may also use a portion of the net proceeds for acquisitions of technology or drug candidates for research and development and other general corporate purposes. Unless we state otherwise in the applicable prospectus supplement, pending the application of net proceeds, we expect to invest the net proceeds in investment grade, interest-bearing securities. Unless otherwise stated in the applicable prospectus supplement, we will not receive any of the proceeds from the sale of securities by any selling securityholders.

DESCRIPTION OF DEBT SECURITIES

The following is a summary of the general terms of the debt securities. We will file a prospectus supplement that will contain additional terms when we issue debt securities. The terms presented here, together with the terms in a related prospectus supplement, will be a description of the material terms of the debt securities. You should also read the indenture under which the debt securities are to be issued and the form of debt securities. Such indenture may be supplemented from time to time. We have filed a form of indenture governing different types of debt securities with the SEC as an exhibit to the registration statement of which this prospectus is a part. All capitalized terms have the meanings specified in the indenture.

We may issue, from time to time, debt securities, in one or more series. The debt securities we offer will be issued under an indenture between us, and the trustee named in the indenture. These debt securities that we may issue include senior debt securities, guarantees, senior subordinated debt securities, subordinated debt securities, convertible debt securities and exchangeable debt securities. The following is a summary of the material provisions of the form of the indenture filed as an exhibit to the registration statement of which this prospectus is a part. For each series of debt securities, the applicable prospectus supplement for the series will change and supplement the summary below.

Existing Indebtedness

On November 2, 2016, we sold \$200 million aggregate principal amount of our 3.250% convertible senior notes due 2023 (the "Notes"). We issued the Notes under an indenture dated as of November 2,

2016 (the "Base Indenture"), between us and Wells Fargo Bank, National Association, as trustee (the "Trustee"), as supplemented by the first supplemental indenture dated as of November 2, 2016, between us and the Trustee (the "Supplemental Indenture" and, together with the Base Indenture, the "Indenture").

The Notes bear interest at a rate of 3.250% per year, payable semi-annually in arrears, on November 1 and May 1 of each year, commencing on May 1, 2017. The Notes are senior unsecured obligations of the Company and rank senior in right of payment to any of our indebtedness that is expressly subordinated in right of payment to the notes; equal in right of payment to any of our indebtedness that is not so subordinated; effectively junior in right of payment to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness; and structurally junior to all indebtedness and other liabilities (including trade payables) of our subsidiaries.

The Notes will mature on November 1, 2023 (the "Maturity Date"), unless earlier redeemed or repurchased by the Company or converted. Holders of the Notes may convert their notes into Ordinary Shares at an initial conversion rate of 29.0276 shares for each \$1,000 principal amount of notes (equivalent to an initial conversion price of approximately \$34.45 per share), subject to adjustment, in certain circumstances (including upon the occurrence of a fundamental change (as defined in the Indenture)), at any time prior to the close of business on the second business day immediately preceding the Maturity Date.

Upon the occurrence of a fundamental change involving the Company, holders of the Notes may require the Company to repurchase all or a portion of their Notes for cash at a redemption price equal to 100% of the principal amount of the Notes to be redeemed, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

The Indenture contains customary terms and covenants and events of default. The Notes are not redeemable at the Company's option prior to maturity except in connection with certain changes in tax laws.

General Terms of the Indenture

The indenture does not limit the amount of debt securities that we may issue. It provides that we may issue debt securities up to the principal amount that we may authorize. Except for the limitations on consolidation, merger and sale of all or substantially all of our assets contained in the indenture, the terms of the indenture do not contain any covenants or other provisions designed to give holders of any debt securities protection against changes in our operations, financial condition or transactions involving us. For each series of debt securities, any restrictive covenants for those debt securities will be described in the applicable prospectus supplement relating to such series, including any pricing supplement or term sheet. We may issue the debt securities issued under the indenture as "discount securities," which means they may be sold at a discount below their stated principal amount. These debt securities, as well as other debt securities that are not issued at a discount, may, for United States federal income tax purposes, be treated as if they were issued with "original issue discount," or OID, because of interest payment and other characteristics. Special United States federal income tax considerations applicable to debt securities issued with original issue discount will be described in more detail in any applicable prospectus supplement.

You should refer to the prospectus supplement relating to a particular series of debt securities for a description of the following terms of the debt securities offered by that prospectus supplement and by this prospectus:

- the title and authorized denominations of those debt securities;
- the price or prices (expressed as a percentage of the principal amount) at which we will sell the debt securities;

- the aggregate principal amount of the debt securities and any limit on the aggregate principal amount of that series of debt securities;
- the date or dates on which principal and premium, if any, of the debt securities of that series is payable;
- the interest rate or rates, and the dates from which interest, if any, on the debt securities of that series will accrue, and the dates when interest is payable or the method by which such dates are to be determined;
- the right, if any, to extend the interest payment periods and the duration of the extensions;
- whether debt securities are guaranteed and the terms of such guarantees, including events of default or covenants with respect to such guarantees;
- if the amount of payments of principal or interest is to be determined by reference to an index or formula, or based on a coin or currency other than that in which the debt securities are stated to be payable, the manner in which these amounts are determined and the calculation agent, if any, with respect thereto;
- the place or places where and the manner in which principal of, premium, if any, and interest, if any, on the debt securities of that series will be payable and the place or places where those debt securities may be presented for transfer and, if applicable, conversion or exchange;
- the period or periods within which, the price or prices at which, the currency or currencies in which, and other terms and conditions upon which those debt securities may be redeemed, in whole or in part, at our option or the option of a holder of those securities, if we or a holder is to have that option;
- our obligation or right, if any, to redeem, repay or purchase those debt securities pursuant to any sinking fund or analogous provision or at the option of a holder of those securities, and the terms and conditions upon which the debt securities will be redeemed, repaid or purchased, in whole or in part, pursuant to that obligation;
- the terms, if any, on which the debt securities of that series will be subordinate in right and priority of payment to our other debt;
- the denominations in which those debt securities will be issuable;
- if other than the entire principal amount of the debt securities when issued, the portion of the principal amount payable upon acceleration of maturity as a result of a default on our obligations or how this portion will be determined;
- whether any securities of that series are to be issued in whole or in part in the form of one or more global securities and the depositary for those global securities;
- if other than United States dollars, the currency or currencies in which payment of principal of or any premium or interest on those debt securities will be payable;
- if the principal of or any premium or interest on the debt securities of that series is to be payable, or is to be payable at our election or the election of a holder of those securities, in securities or other property, the type and amount of those securities or other property, or the manner of determining that amount, and the period or periods within which, and the terms and conditions upon which, any such election may be made;
- any provisions granting special rights to the holders of debt securities upon the occurrence of specified events;

- the events of default and covenants relating to the debt securities that are in addition to, modify or delete those described in this prospectus;
- conversion or exchange provisions, if any, including conversion or exchange prices or rates and adjustments thereto;
- whether and upon what terms the debt securities may be defeased, if different from the provisions set forth in the indenture;
- the nature and terms of any security for any secured debt securities;
- the terms applicable to any debt securities issued at a discount from their stated principal amount; and
- any other specific terms of any debt securities or guarantees.

The applicable prospectus supplement will present material United States federal income tax considerations for holders of any debt securities and the securities exchange or quotation system on which any debt securities are to be listed or quoted.

Conversion or Exchange Rights

Debt securities may be convertible into or exchangeable for shares of our equity securities or other securities. The terms and conditions of conversion or exchange will be stated in the applicable prospectus supplement. The terms will include, among others, the following:

- the conversion or exchange ratio (or the calculation method);
- the conversion or exchange period (or how the period will be determined);
- provisions regarding our ability or the ability of any holder to convert or exchange the debt securities;
- events requiring adjustment to the conversion or exchange ratio; and
- provisions affecting conversion or exchange in the event of our redemption of the debt securities.

These terms may also include provisions under which the number or amount of other securities to be received by the holders of the debt securities upon conversion or exchange would be calculated according to the market price of the other securities as of a time stated in the prospectus supplement.

Consolidation, Merger or Sale

We cannot consolidate with or merge with or into, or transfer or lease all or substantially all of our assets to, any person, unless we are the continuing company or unless the successor entity or person to which our assets are transferred or leased is organized under the laws of the Cayman Islands or the United States, any state of the United States or the District of Columbia and expressly assumes by a supplemental indenture the due and punctual payment of the principal of, any premium on and any interest on, all the outstanding debt securities and the performance of every covenant and obligation in the indenture to be performed by us. In addition, we cannot complete such a transaction unless after giving effect to the transaction, no event of default under the indenture, and no event that, after notice or passage of time, would become an event of default under the indenture, has occurred and is continuing. When the successor entity or person to whom our assets are transferred or leased has assumed our obligations under the debt securities and the indenture, we will be discharged from all our obligations under the debt securities and the indenture except in limited circumstances.

This covenant would not apply to any recapitalization transaction, a change of control affecting us or a highly leveraged transaction, unless the transaction or change of control were structured to include a merger or consolidation or transfer or lease of all or substantially all of our assets.

Events of Default

The indenture provides that the following will be "events of default" with respect to any series of debt securities:

- failure to pay interest for 30 days after the date payment is due and payable; provided, however, that a valid extension of the interest payment period in accordance with the indenture will not constitute a failure to pay interest;
- failure to pay principal or premium, if any, on any debt security when due, either at maturity, upon any redemption, by declaration or otherwise;
- failure to perform other covenants contained in the indenture for the benefit of the debt securities for 75 days after notice is given by the holders of at least 25% in principal amount of the outstanding debt securities of that series to the trustee or by the trustee as specified in the indenture;
- certain events in bankruptcy, insolvency or reorganization relating to us; or
- any other event of default provided in the applicable officer's certificate, resolution of our board of directors or the supplemental indenture under which we issue a series of debt securities.

An event of default for a particular series of debt securities does not necessarily constitute an event of default for any other series of debt securities issued under the indenture. For each series of debt securities, any modifications to the above events of default will be described in the applicable prospectus supplement for those debt securities.

The indenture provides that if an event of default specified in the first, second or fourth bullets above occurs and is continuing, either the trustee by written notice to us or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series by written notice to the trustee may declare the principal amount of all those debt securities (or, in the case of discount securities or indexed securities, that portion of the principal amount as may be specified in the terms of that series) to be due and payable immediately. If an event of default specified in the third bullet above occurs and is continuing, then the principal amount of all those debt securities (or, in the case of discount securities or indexed securities, that portion of the principal amount as may be specified in the terms of that series) will be due and payable immediately, without any declaration or other act on the part of the trustee or any holder. In certain cases, holders of a majority in principal amount of the outstanding debt securities of any series may, on behalf of holders of all those debt securities, rescind and annul a declaration of acceleration.

The indenture provides that if an event of default specified in the fourth bullet above occurs and is continuing, the payment of any compensation, expenses, disbursements and advances of the trustee, its agents and counsel, and any other amounts due to the trustee pursuant to the indenture that is unpaid for any reason shall be secured by a lien on, and shall be paid out of, any and all distributions, dividends, money, liquidation or under any plan of reorganization or arrangement or otherwise. The trustee may, on behalf of the holders, vote for the election of a trustee in bankruptcy or similar official and be a member of a creditor's committee or other similar committee.

The indenture imposes limitations on suits brought by holders of debt securities against us. Except for actions for payment of overdue principal or interest, no holder of debt securities of any series may institute any action against us under the indenture unless:

- the holder has previously given to the trustee written notice of default and continuance of such default;
- the holders of at least 25% in principal amount of the outstanding debt securities of the affected series have requested that the trustee institute the action;
- the requesting holders have offered the trustee security or indemnity satisfactory to the trustee against the losses, expenses and liabilities that may be incurred by bringing the action;
- the trustee has not instituted the action within 60 days of the request and offer of security or indemnity; and
- the trustee has not received inconsistent direction during such 60-day period by the holders of a majority in principal amount of the outstanding debt securities of the affected series.

We will be required to file annually with the trustee a certificate, signed by one of our officers, stating whether or not the officer knows of any default by us in the performance, observance or fulfillment of any condition or covenant of the indenture.

Discharge, Defeasance and Covenant Defeasance

We can discharge or decrease our obligations under the indenture as stated below.

We may discharge obligations to holders of any series of debt securities that have not already been delivered to the trustee for cancellation and that have either become due and payable or are by their terms to become due and payable, or are scheduled for redemption, within one year. We may effect a discharge by irrevocably depositing with the trustee cash or government obligations denominated in the currency of the debt securities, as trust funds, in an amount certified by a nationally recognized investment bank, appraisal firm or firm of independent public accountants if government obligations are delivered to be enough to pay when due, whether at maturity, upon redemption or otherwise, the principal of, and any premium and interest on, the debt securities and any mandatory sinking fund payments.

Unless otherwise provided in the applicable prospectus supplement, we may also discharge any and all of our obligations to holders of any series of debt securities at any time, which we refer to as defeasance. We may also be released from the obligations imposed by any covenants of any outstanding series of debt securities and provisions of the indenture, and we may omit to comply with those covenants without creating an event of default under the trust declaration, which we refer to as covenant defeasance. We may effect defeasance and covenant defeasance only if, among other things:

- we irrevocably deposit with the trustee cash or government obligations denominated in the currency of the debt securities, as trust funds, in an amount certified by a nationally recognized investment bank, appraisal firm or firm of independent public accountants if government obligations are delivered to be enough to pay at maturity, or upon redemption, the principal (including any mandatory sinking fund payments) of, and any premium and interest on, all outstanding debt securities of the series; and
- we deliver to the trustee an opinion of counsel to the effect that the beneficial owners of the series of debt securities will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the defeasance or covenant defeasance and that defeasance or covenant defeasance will not otherwise alter the beneficial owners' U.S. federal income tax treatment of principal, and any premium and interest payments on, the series of debt securities.

In the case of a defeasance by us, the opinion we deliver must be based on a ruling of the Internal Revenue Service issued, or a change in U.S. federal income tax law occurring, after the date of the indenture, since such a result would not occur under the U.S. federal income tax laws in effect on that date.

Although we may discharge or decrease our obligations under the indenture as described in the two preceding paragraphs, we may not avoid, among other things, our duty to register the transfer or exchange of any series of debt securities, to replace any temporary, mutilated, destroyed, lost or stolen series of debt securities or to maintain an office or agency in respect of any series of debt securities.

Modification of the Indenture

The indenture provides that we and the trustee may enter into supplemental indentures without the consent of the holders of debt securities to, among other things:

- evidence the assumption by a successor entity of our obligations;
- add to our covenants for the benefit of the holders of debt securities, or to surrender any rights or power conferred upon us;
- add any additional events of default;
- cure any ambiguity or omission or correct any inconsistency or defect in the indenture;
- add to, change or eliminate any of the provisions of the indenture in a manner that will become effective only when there is no outstanding debt security which is entitled to the benefit of the provision as to which the modification would apply;
- add guarantees or guarantors of or secure any debt securities;
- establish the forms or terms of debt securities of any series, including the terms of any guarantee of such debt securities;
- evidence and provide for the acceptance of appointment by a successor trustee and add to or change any of the provisions of the indenture as is necessary for the administration of the trusts by more than one trustee;
- modify, eliminate or add to the provisions of the indenture as shall be necessary to effect the qualification of the indenture under the Trust Indenture Act of 1939 or under any similar federal statute later enacted, and to add to the indenture such other provisions as may be expressly required by the Trust Indenture Act; and
- make any other provisions with respect to matters or questions arising under the indenture that will not be inconsistent with any provision of the indenture as long as the new provisions do not adversely affect the interests of the holders of any outstanding debt securities of any series created prior to the modification in any material respect.

The indenture also provides that we and the trustee may, with the consent of the holders of not less than a majority in aggregate principal amount of debt securities of each series of debt securities affected by such supplemental indenture then outstanding, add any provisions to, or change in any manner, eliminate or modify in any way the provisions of, the indenture, any subsidiary guarantee or any supplemental indenture or modify in any manner the rights of the holders of the debt securities. We and the trustee may not, however, without the consent of the holder of each outstanding debt security affected thereby:

- extend the final maturity of any debt security;
- reduce the principal amount or premium, if any;

- reduce the rate or extend the time of payment of interest;
- reduce the amount of the principal of any debt security issued with an original issue discount that is payable upon acceleration;
- change the currency in which the principal, and any premium or interest, is payable;
- impair the right to institute suit for the enforcement of any payment on any debt security when due;
- change the ranking of any debt security;
- if applicable, adversely affect the right of a holder to convert or exchange a debt security; or
- reduce the percentage of holders of debt securities of any series whose consent is required for any modification of the indenture or for waivers of compliance with or defaults under the indenture with respect to debt securities of that series.

The indenture provides that the holders of not less than a majority in aggregate principal amount of the then outstanding debt securities of any series, by notice to the relevant trustee, may on behalf of the holders of the debt securities of that series waive any default and its consequences under the indenture except:

- a default in the payment of, any premium and any interest on, or principal of, any such debt security held by a nonconsenting holder; or
- a default in respect of a covenant or provision of the indenture that cannot be modified or amended without the consent of the holder of each outstanding debt security of each series affected.

Concerning the Trustee

The indenture provides that there may be more than one trustee under the indenture, each for one or more series of debt securities. If there are different trustees for different series of debt securities, each trustee will be a trustee of a trust under the indenture separate and apart from the trust administered by any other trustee under that indenture. Except as otherwise indicated in this prospectus or any prospectus supplement, any action permitted to be taken by a trustee may be taken by such trustee only on the one or more series of debt securities for which it is the trustee under the indenture. Any trustee under the indenture may resign or be removed from one or more series of debt securities. All payments of principal of, and any premium and interest on, and all registration, transfer, exchange, authentication and delivery of, the debt securities of a series will be effected by the trustee for that series at an office designated by the trustee in the continental United States.

The indenture provides that, except during the continuance of an event of default, the trustee will perform only such duties as are specifically set forth in the indenture. During the existence of an event of default, the trustee will exercise those rights and powers vested in it under the indenture and use the same degree of care and skill in its exercise as a prudent person would exercise under the circumstances in the conduct of such person's own affairs.

If the trustee becomes a creditor of ours, the indenture places limitations in the Trust Indenture Act on the right of the trustee to obtain payment of claims or to realize on property received in respect of any such claim as security or otherwise. The trustee may engage in other transactions. If it acquires any conflicting interest, as defined in the Trust Indenture Act, relating to any duties concerning the debt securities, however, it must eliminate the conflict, apply to the SEC to continue pursuant to the Trust Indenture Act or resign as trustee.

No Individual Liability of Incorporators, Shareholders, Officers or Directors

The indenture provides that no past, present or future director, officer, shareholder or employee of ours, any of our affiliates, or any successor corporation, in their capacity as such, shall have any individual liability for any of our obligations, covenants or agreements under the debt securities or the indenture.

Governing Law; Jury Trial Waiver

The indenture and the debt securities will be governed by, and construed in accordance with, the laws of the State of New York. The indenture provides that we, any guarantors and the trustee, and each holder of a debt security by its acceptance thereof, irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to the indenture, the debt security or any transaction contemplated thereby.

DESCRIPTION OF SHARE CAPITAL

The following description summarizes the most important terms of our share capital. Because it is only a summary, it does not contain all the information that may be important to you. For a complete description, you should refer to our amended and restated memorandum and articles of association, a copy of which has been filed with the SEC, and the applicable provisions of the Companies Law, 2016 Revision, as amended (the "Companies Law").

General

As of the date of this registration statement, we are authorized to issue 200,000,000 ordinary shares, par value \$0.00001 per share, and 230,000 preferred shares, par value \$0.00001 per share. As of November 12, 2019, there were 56,762,307 ordinary shares outstanding, held of record by 67 shareholders, although we believe that there may be a significantly larger number of beneficial owners of our ordinary shares.

Meetings of Shareholders

Subject to our regulatory requirements, an annual general meeting and any extraordinary general meeting shall be called by not less than ten days' nor more than 60 days' notice. Notice of every general meeting will be given to all of our shareholders, our directors and our principal external auditors. Extraordinary general meetings may be called only by the chairman of our board of directors, the chief executive officer or a majority of our board of directors, and may not be called by any other person.

Alternatively, subject to applicable regulatory requirements, a meeting will be deemed to have been duly called if it is so agreed (i) in the case of a meeting called as an annual general meeting, by all of our shareholders (or their proxies) entitled to attend and vote at the meeting, or (ii) in the case of an extraordinary meeting, by a majority in number of our shareholders (or their proxies) having a right to attend and vote at the meeting, being a majority together holding not less than 95% of the voting shares.

At any general meeting, shareholders entitled to vote and present in person or by proxy that represent not less than a majority of our issued and outstanding voting shares will constitute a quorum. No business may be transacted at any general meeting unless a quorum is present at the commencement of business.

A corporation being a shareholder shall be deemed for the purpose of our amended and restated memorandum and articles of association to be present in person if represented by its duly authorized representative being the person appointed by resolution of the directors or other governing body of

such corporation to act as its representative at the relevant general meeting or at any relevant general meeting of any class of our shareholders. Such duly authorized representative shall be entitled to exercise the same powers on behalf of the corporation which he represents as that corporation could exercise if it were an individual shareholder.

The quorum for a separate general meeting of the holders of a separate class of shares is described in "Modification of Rights" below.

Voting Rights Attaching to the Shares

Subject to any special rights or restrictions as to voting then attached to any shares, at any general meeting every shareholder who is present in person or by proxy (or, in the case of a shareholder being a corporation, by its duly authorized representative) shall have one vote per ordinary share. The holders of preferred shares shall have limited voting rights as set out in our amended and restated memorandum and articles of association.

No shareholder shall be entitled to vote or be deemed to be part of a quorum, in respect of any share, unless such shareholder is registered as our shareholder at the applicable record date for that meeting and all calls or installments due by such shareholder to us, if any, have been paid.

If a clearing house or depository (or its nominee(s)) is our shareholder, it may authorize such person or persons as it thinks fit to act as its representative(s) at any meeting or at any meeting of any class of shareholders, provided that, if more than one person is so authorized, the authorization shall specify the number and class of shares in respect of which each such person is so authorized. A person authorized pursuant to this provision is entitled to exercise the same powers on behalf of the recognized clearing house or depository (or its nominee(s)) as if such person was the registered holder of our shares held by that clearing house or depository (or its nominee(s)), including the right to vote individually on a show of hands.

While there is nothing under the laws of the Cayman Islands that specifically prohibits or restricts the creation of cumulative voting rights for the election of our directors, unlike the requirement under Delaware law that cumulative voting for the election of directors is permitted only if expressly authorized in the certificate of incorporation, it is not a concept that is accepted as a common practice in the Cayman Islands, and we have made no provisions in our amended and restated memorandum and articles of association to allow cumulative voting for such elections.

Protection of Minority Shareholders

The Grand Court of the Cayman Islands may, on the application of shareholders holding not less than one fifth of our shares in issue, appoint an inspector to examine our affairs and report thereon in a manner as the Grand Court shall direct.

Any shareholder may petition the Grand Court of the Cayman Islands which may make a winding up order, if the court is of the opinion that it is just and equitable that we should be wound up.

Claims against us by our shareholders must, as a general rule, be based on the general laws of contract or tort applicable in the Cayman Islands or their individual rights as shareholders as established by our amended and restated memorandum and articles of association.

Our Cayman Islands counsel, Maples and Calder, is not aware of any reported class action having been brought in a Cayman Islands court. Derivative actions have been brought in the Cayman Islands courts, and the Cayman Islands courts have confirmed the availability for such actions. In most cases, the company will be the proper plaintiff in any claim based on a breach of duty owed to it, and a claim against (for example) the company's officers or directors usually may not be brought by a shareholder. However, based on English authorities, which would in all likelihood be of persuasive authority and be

applied by a court in the Cayman Islands, exceptions to the foregoing principle apply in circumstances in which:

- a company is acting, or proposing to act, illegally or beyond the scope of its authority;
- the act complained of, although not beyond the scope of the authority, could be effected if duly authorized by more than the number of votes which have actually been obtained; or
- those who control the company are perpetrating a "fraud on the minority."

A shareholder may have a direct right of action against the company where the individual rights of that shareholder have been infringed or are about to be infringed.

Pre-emption Rights

There are no pre-emption rights applicable to the issue of new shares under either Cayman Islands law or our amended and restated memorandum and articles of association.

Liquidation Rights

Subject to any special rights, privileges or restrictions as to the distribution of available surplus assets on liquidation applicable to any class or classes of shares (i) if we are wound up and the assets available for distribution among our shareholders are more than sufficient to repay the whole of the capital paid up at the commencement of the winding up, the excess shall be distributed *pari passu* among our shareholders in proportion to the amount paid up at the commencement of the winding up on the shares held by them, respectively, and (ii) if we are wound up and the assets available for distribution among our shareholders as such are insufficient to repay the whole of the paid-up capital, those assets shall be distributed so that, as nearly as may be, the losses shall be borne by our shareholders in proportion to the capital paid up at the commencement of the winding up on the shares held by them, respectively.

If we are wound up, the liquidator may with the sanction of an ordinary resolution and any other sanction required by the Companies Law, divide among our shareholders in specie or kind the whole or any part of our assets (whether they shall consist of assets of the same kind or not) and may, for such purpose, set such value as the liquidator deems fair upon any assets to be divided and may determine how such division shall be carried out as between the shareholders or different classes of shareholders. The liquidator may also, with the sanction of an ordinary resolution, vest any part of these assets in trustees upon such trusts for the benefit of our shareholders as the liquidator shall think fit, but so that no shareholder will be compelled to accept any assets, shares or other securities upon which there is a liability.

Modification of Rights

Except with respect to share capital (as described below), alterations to our amended and restated memorandum and articles of association may only be made by special resolution of no less than two-thirds of votes cast at a meeting of our shareholders at which a quorum is present.

Subject to the Companies Law and our amended and restated memorandum and articles of association, all or any of the special rights attached to shares of any class (unless otherwise provided for by the terms of issue of the shares of that class) may be varied, modified or abrogated with the sanction of a resolution passed by a majority of not less than two-thirds of the votes cast passed at a separate meeting of the holders of the shares of that class at which a quorum is present. The provisions of our amended and restated memorandum and articles of association relating to general meetings shall apply similarly to every such separate general meeting, but so that the quorum for the purposes of any such separate general meeting or at its adjourned meeting shall be a person or persons together

holding (or represented by proxy) not less than a majority in par value of the issued shares of that class, every holder of shares of the class shall be entitled on a poll to one vote for every such share held by such holder and that any holder of shares of that class present in person or by proxy may demand a poll.

The special rights conferred upon the holders of any class of shares shall not, unless otherwise expressly provided in the rights attaching to or the terms of issue of such shares, be deemed to be varied by the creation or issue of further shares that rank higher in priority or with the same rights and privileges.

Alteration of Capital

We may from time to time by ordinary resolution:

- increase our capital by such sum, to be divided into shares of such amounts, as the resolution shall prescribe;
- consolidate and divide all or any of our share capital into shares of larger amount than our existing shares;
- cancel any shares which at the date of the passing of the resolution have not been taken or agreed to be taken by any person, and diminish the amount of our share capital by the amount of the shares so cancelled, subject to the provisions of the Companies Law;
- subdivide our shares or any of them into shares of a smaller amount than is fixed by our amended and restated memorandum and articles of association, subject to the Companies Law; and
- divide shares into several classes.

We may, by special resolution, subject to any confirmation or consent required by the Companies Law, reduce our share capital or any capital redemption reserve in any manner authorized by law.

Transfer of Shares

Subject to any applicable restrictions set forth in our amended and restated memorandum and articles of association, any of our shareholders may transfer all or a portion of their shares by an instrument of transfer in the usual or common form or in a form prescribed by the Nasdaq Global Market or in any other form which our directors may approve.

Our directors may, in their absolute discretion, decline to register any transfer of shares, subject to any applicable requirements imposed from time to time by the Securities and Exchange Commission, the Nasdaq Global Market or any recognized stock exchange on which our securities are listed. If our directors refuse to register a transfer, they shall, within two months after the date on which the instrument of transfer was lodged, send to each of the transferor and the transferee notice of such refusal.

The registration of transfers may be suspended and the register closed at such times and for such periods as our directors may from time to time determine; provided, however, that registration shall not be suspended for more than forty-five days in any year.

Share Repurchase

We are empowered by the Companies Law and our amended and restated memorandum and articles of association to purchase our own shares, subject to certain restrictions. Our directors may only exercise this power on our behalf, subject to the Companies Law, our amended and restated memorandum and articles of association and to any applicable requirements imposed from time to time

by the Securities and Exchange Commission, the Nasdaq Global Market or any recognized stock exchange on which our securities are listed.

Dividends

Subject to the Companies Law, we may declare dividends in any currency to be paid to our shareholders but no dividend shall be declared in excess of the amount recommended by our directors. Dividends may be declared and paid out of our profits, realized or unrealized, or from any reserve set aside from profits that our directors determine is no longer needed. Our board of directors may also declare and pay dividends out of the share premium account or any other fund or account which can be authorized for this purpose in accordance with the Companies Law.

Registration Rights Agreement

Ordinary shares issued to GlaxoSmithKline plc (together with its affiliates, "GSK") are entitled to the rights set forth in the Registration Rights Agreement by and between GSK and us, dated March 3, 2014 (the "Registration Rights Agreement"). The rights under the Registration Rights Agreement will expire on December 31, 2024, or if GSK or its permitted assigns each hold one and a half percent or less of our then outstanding ordinary shares, if each such holder can sell its shares in a single transaction pursuant to Rule 144 under the Securities Act of 1933 (the "Securities Act").

Demand Registration Rights

Under the Registration Rights Agreement, GSK and its permitted assigns have the right to require that we register their ordinary shares, provided such demand comes from holders of at least 50% of the aggregate shares held by GSK and its permitted assigns and such registration relates to ordinary shares having an anticipated aggregate offering price of \$10 million. We are only obligated to effect one registration in response to these demand registration rights (subject to certain exceptions). We may postpone the filing of a registration statement for up to 90 days once in any 12-month period if our board of directors determines in good faith that the filing would be seriously detrimental to our shareholders or us. The underwriters of any underwritten offering have the right to limit the number of shares to be included in a registration statement filed in response to the exercise of these demand registration rights. We must pay all expenses, except for underwriters' discounts and commissions, incurred in connection with these demand registration rights.

Piggyback Registration Rights

If we register any securities for public sale, under the Registration Rights Agreement GSK has the right to include its shares in the registration, subject to specified exceptions. The underwriters of any underwritten offering have the right to limit the number of shares registered by GSK and its permitted assigns (but to no less than 25% of the shares to be registered in such registration) due to marketing reasons. We must pay all expenses, except for underwriters' discounts and commissions, incurred in connection with these piggyback registration rights.

S-3 Registration Rights

While we are eligible to file a registration statement on Form S-3, under the Registration Rights Agreement GSK and its permitted assigns can request that we register their shares, provided that such registration request is made by holders of not less than 10% in aggregate of GSK's and its permitted assigns shares and the total price of the ordinary shares offered to the public is at least \$10 million. GSK and its permitted assigns may only require us to file two Form S-3 registration statements in any 12-month period. We may postpone the filing of a Form S-3 registration statement for up to 90 days once in any 12-month period if our board of directors determines in good faith that the filing would be

seriously detrimental to our shareholders or us. We must pay all expenses, except for underwriters' discounts and commissions, incurred in connection with these S-3 registration rights.

Rights Agreement

Under our rights agreement, each ordinary share has associated with it one preferred share purchase right. Each of these rights entitles its holder to purchase, at a price of \$225.00 for each, one one-thousandth of a share of Series A junior participating preferred, (each subject to adjustment) under circumstances provided for in the rights agreement. The purpose of our rights agreement is to:

- give our board of directors the opportunity to negotiate with any persons seeking to obtain control of us;
- deter acquisitions of voting control of us without assurance of fair and equal treatment of all of our shareholders; and
- prevent a person from acquiring in the market a sufficient amount of voting power over us to be in a position to block an action sought to be taken by our shareholders.

The exercise of the rights under our rights agreement would cause substantial dilution to a person attempting to acquire us on terms not approved by our board of directors, and therefore would significantly increase the price that such person would have to pay to complete the acquisition. Our rights agreement may deter a potential acquisition or tender offer. Until a "distribution date" occurs, the rights will:

- not be exercisable;
- be represented in the same book-entry form or by the same certificate that represents the shares with which the rights are associated; and
- trade together with those shares.

The rights will expire at the close of business on May 24, 2024, unless earlier redeemed or exchanged by us. Following a "distribution date," the rights would become exercisable and we would issue separate certificates representing the rights, which would trade separately from our ordinary shares. A "distribution date" would occur upon the earlier of:

- ten business days after a public announcement that the person has become an "acquiring person;" or
- ten business days (or such later date as may be determined by action of the board of directors prior to such time as any person or group of affiliated persons becomes an "acquiring person") after the commencement of, or announcement of an intention to make, a tender offer or exchange offer the consummation of which would result in the beneficial ownership by a person or group of 19.9% or more of the outstanding ordinary shares.

A holder of rights will not, as such, have any rights as a shareholder, including the right to vote or receive dividends.

Under our rights agreement, a person becomes an "acquiring person" if the person, alone or together with a group, acquires beneficial ownership of 19.9% or more of our outstanding ordinary shares. In addition, an "acquiring person" shall not include us, any of our subsidiaries, or any of our employee benefit plans or any person or entity acting pursuant to such employee benefit plans. Our rights agreement also contains provisions designed to prevent the inadvertent triggering of the rights by institutional or certain other shareholders.

If any person becomes an acquiring person, each holder of a right, other than the acquiring person, will be entitled to purchase, at the purchase price, a number of our ordinary shares having a

market value of two times the purchase price. If, following a public announcement that a person has become an acquiring person:

- we merge or enter into any similar business combination transaction and we are not the surviving corporation; or
- 50% or more of our assets, cash flow or earning power is sold or transferred,

each holder of a right, other than the acquiring person, will be entitled to purchase a number of ordinary shares of the surviving entity having a market value of two times the purchase price.

After a person becomes an acquiring person, but prior to such person acquiring 50% of our outstanding ordinary shares, our board of directors may exchange each right, other than rights owned by the acquiring person, for

- one ordinary share;
- one one-thousandth of a share of our Series A junior preferred share; or
- a fractional share of another series of preferred share having equivalent value.

At any time until a person has become an acquiring person, our board of directors may redeem all of the rights at a redemption price of \$0.01 per right. On the redemption date, the rights will expire and the only entitlement of the holders of rights will be to receive the redemption price.

For so long as the rights are redeemable, our board of directors may amend any provisions in the rights agreement without shareholder consent. After the rights are no longer redeemable, our board of directors may only amend the rights agreement without shareholder consent if such amendment would not adversely affect the interests of the holders of rights. Despite the foregoing, at no time may the redemption price of the rights be amended or changed.

The adoption of the rights agreement and the distribution of the rights should not be taxable to our shareholders or us. Our shareholders may recognize taxable income when the rights become exercisable in accordance with the rights agreement.

Differences in Corporate Law

The Companies Law is modeled after similar laws in the United Kingdom but does not follow recent changes in United Kingdom laws. In addition, the Companies Law differs from laws applicable to U.S. corporations and their shareholders. Set forth below is a summary of the significant differences between the provisions of the Companies Law applicable to us and the laws applicable to companies incorporated in the United States and their shareholders.

Mergers and Similar Arrangements

The Companies Law permits mergers and consolidations between Cayman Islands companies and between Cayman Islands companies and non-Cayman Islands companies.

For these purposes, (a) "merger" means the merging of two or more constituent companies and the vesting of their undertaking, property and liabilities in one of such companies as the surviving company and (b) a "consolidation" means the combination of two or more constituent companies into a consolidated company and the vesting of the undertaking, property and liabilities of such companies to the consolidated company. In order to effect such a merger or consolidation, the directors of each constituent company must approve a written plan of merger or consolidation, which must then be authorized by a special resolution of the shareholders of each constituent company and such other authorization, if any, as may be specified in such constituent company's articles of association. The plan must be filed with the Registrar of Companies together with a declaration as to the solvency of the

consolidated or surviving company, a list of the assets and liabilities of each constituent company and an undertaking that a copy of the certificate of merger or consolidation will be given to the members and creditors of each constituent company and published in the Cayman Islands Gazette.

Dissenting shareholders have the right to be paid the fair value of their shares (which, if not agreed between the parties, will be determined by the Cayman Islands court) if they follow the required procedures, subject to certain exceptions. Court approval is not required for a merger or consolidation which is effected in compliance with these statutory procedures.

In addition, there are statutory provisions that facilitate the reconstruction and amalgamation of companies, provided that the arrangement in question is approved by a majority in number representing 75% in value of each class of shareholders and creditors with whom the arrangement is to be made that are present and voting either in person or by proxy at a meeting, or meetings convened for that purpose. The convening of the meetings and subsequently the arrangement must be sanctioned by the Grand Court of the Cayman Islands. While a dissenting shareholder would have the right to express to the court the view that the transaction should not be approved, the court can be expected to approve the arrangement if it satisfies itself that:

- we are not proposing to act illegally or ultra vires and the statutory provisions as to majority vote have been complied with;
- the shareholders have been fairly represented at the meeting in question;
- the arrangement is such as a businessman would reasonably approve; and
- the arrangement is not one that would more properly be sanctioned under some other provision of the Companies Law or that would amount to a "fraud on the minority."

When a takeover offer is made and accepted by holders of at least 90% of the shares within four months, the offeror may, within a two-month period, require the holders of the remaining shares to transfer such shares on the terms of the offer. An objection may be made to the Grand Court of the Cayman Islands but is unlikely to succeed unless there is evidence of fraud, bad faith or collusion.

If the arrangement and reconstruction are thus approved, any dissenting shareholders would have no rights comparable to appraisal rights, which might otherwise ordinarily be available to dissenting shareholders of U.S. corporations and allow such dissenting shareholders to receive payment in cash for the judicially determined value of their shares.

Shareholders' Suits

We are not aware of any reported class action or derivative action having been brought in a Cayman Islands court. However, a class action suit could nonetheless be brought in a U.S. court pursuant to an alleged violation of U.S. securities laws and regulations. Our Cayman Islands counsel, Maples and Calder, is not aware of any reported class action having been brought in a Cayman Islands court. Derivative actions have been brought in the Cayman Islands courts, and the Cayman Islands courts have confirmed the availability for such actions. In most cases, the company will be the proper plaintiff in any claim based on a breach of duty owed to it, and a claim against (for example) the company's officers or directors usually may not be brought by a shareholder. However, based on English authorities, which would in all likelihood be of persuasive authority and be applied by a court in the Cayman Islands, exceptions to the foregoing principle apply in circumstances in which:

- a company is acting, or proposing to act, illegally or beyond the scope of its authority;
- the act complained of, although not beyond the scope of the authority, could be effected if duly authorized by more than the number of votes which have actually been obtained; or
- those who control the company are perpetrating a "fraud on the minority."

A shareholder may have a direct right of action against the company where the individual rights of that shareholder have been infringed or are about to be infringed.

Corporate Governance

Cayman Islands laws do not restrict transactions with directors, requiring only that directors exercise a duty of care and owe fiduciary duties to the companies for which they serve. Under our amended and restated memorandum and articles of association, subject to any separate requirement for audit committee approval under the applicable rules of the Nasdaq Global Market or unless disqualified by the chairman of the relevant board meeting, so long as a director discloses the nature of his interest in any contract or arrangement which he is interested in, such a director may vote in respect of any contract or proposed contract or arrangement in which such director is interested and may be counted in the quorum at such meeting.

Board of Directors

We are managed by our board of directors. Our amended and restated memorandum and articles of association will provide that the number of our directors will be fixed from time to time by our board of directors but may not consist of less than three or more than 15 directors. Our board of directors is currently comprised of eleven members who are divided into three classes with staggered three-year terms. Each director holds office until the expiration of his or her term in accordance with the terms of our amended and restated memorandum and articles of association, until his or her successor has been duly elected and qualified or until his or her death, resignation or removal. The classification of our board of directors may have the effect of delaying or preventing changes in our control or management. Our directors may only be removed for cause by special resolution passed by not less than two-thirds of votes cast by our shareholders. Any vacancies on our board of directors or additions to the existing board of directors can only be filled by the affirmative vote of a simple majority of the remaining directors, although this may be less than a quorum. Any additional directorships resulting from an increase in the authorized number of directors would be distributed among the three classes so that, as nearly as possible, each class would consist of one-third of the authorized number of directors. Any director so appointed by the board of directors shall hold office only for the remaining term of the class of director which he or she replaces and shall then be eligible for re-election. Our directors are not required to hold any of our shares to be qualified to serve on our board of directors.

Meetings of our board of directors may be convened at any time deemed necessary by our secretary on request of the chairman of our board of directors, our chief executive officer, if not the chairman of our board of directors, or a majority of our board of directors. Advance notice of a meeting is not required if each director entitled to attend consents to the holding of such meeting.

Issuance of Additional Ordinary Shares or Preferred Shares

Our amended and restated memorandum and articles of association authorize our board of directors to issue additional ordinary shares from time to time as our board of directors shall determine, to the extent available, authorized but unissued shares. The issuance of additional ordinary shares may, subject to applicable law, be used as an anti-takeover device without further action on the part of our shareholders. Such issuance may dilute the voting power of existing holders of ordinary shares.

Our board of directors may authorize by resolution or resolutions from time to time the issuance of one or more classes or series of preferred shares and to fix the designations, powers, preferences and relative, participating, optional and other rights, if any, and the qualifications, limitations and restrictions thereof, if any, including, without limitation, the number of shares constituting each such

class or series, dividend rights, conversion rights, redemption privileges, voting powers, full or limited or no voting powers, and liquidation preferences, and to increase or decrease the size of any such class or series (but not below the number of shares of any class or series of preferred shares then outstanding) to the extent permitted by applicable law. The resolution or resolutions providing for the establishment of any class or series of preferred shares may, to the extent permitted by applicable law, provide that such class or series shall be superior to, rank equally with or be junior to the preferred shares of any other class or series. Additionally, the issuance of preference shares may have the effect of decreasing the market price of the ordinary shares and may adversely affect the voting and other rights of the holders of ordinary shares.

Our board of directors may issue series of preferred shares without action by our shareholders to the extent authorized but unissued. Accordingly, the issuance of preferred shares may adversely affect the enjoyment of the rights of the holders of our ordinary shares. In addition, the issuance of preferred shares may be used as an anti-takeover device without further action on the part of our shareholders, subject to applicable law. Issuance of preferred shares may dilute the voting power of holders of ordinary shares.

DESCRIPTION OF PURCHASE CONTRACTS AND PURCHASE UNITS

We may issue purchase contracts, including contracts obligating holders to purchase from or sell to us, and obligating us to sell to or purchase from the holders, a specified number of our ordinary shares at a future date or dates, which we refer to in this prospectus as purchase contracts. The price per ordinary share and the number of shares of each may be fixed at the time the purchase contracts are issued or may be determined by reference to a specific formula set forth in the purchase contracts. The purchase contracts may be issued separately or as part of units, often known as purchase units, consisting of one or more purchase contracts and beneficial interests in:

- debt securities;
- debt obligations of third parties, including U.S. treasury securities; or
- any other securities described in the applicable prospectus supplement or any combination of the foregoing, securing the holders' obligations to purchase the ordinary shares under the purchase contracts.

The purchase contracts may require us to make periodic payments to the holders of the purchase units or vice versa, and these payments may be unsecured or prefunded on some basis. The purchase contracts may require holders to secure their obligations under those contracts in a specified manner, including pledging their interest in another purchase contract.

The applicable prospectus supplement will describe the terms of the purchase contracts and purchase units, including, if applicable, collateral or depositary arrangements.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of debt securities, or ordinary shares, or any combination thereof. We may issue warrants independently or together with any other securities offered by any prospectus supplement and may be attached to or separate from the other offered securities. Each series of warrants may be issued under a separate warrant agreement to be entered into by us with a warrant agent. The applicable warrant agent will act solely as our agent in connection with the warrants and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants. Further terms of the warrants and the applicable warrant agreements will be set forth in the applicable prospectus supplement.

The applicable prospectus supplement relating to any particular issue of warrants will describe the terms of the warrants, including, as applicable, the following:

- the title of the warrants;
- the aggregate number of the warrants;
- the price or prices at which the warrants will be issued;
- the designation, terms and number of ordinary shares or principal amount of debt securities purchasable upon exercise of the warrants;
- the designation and terms of the offered securities, if any, with which the warrants are issued and the number of the warrants issued with each offered security;
- the date, if any, on and after which the warrants and the related debt securities or ordinary shares will be separately transferable;
- the price at which each debt security or ordinary share purchasable upon exercise of the warrants may be purchased or the manner of determining such price;
- the date on which the right to exercise the warrants shall commence and the date on which that right shall expire;
- the minimum or maximum amount of the warrants which may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- a discussion of certain federal income tax considerations; and
- any other terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

We and the warrant agent may amend or supplement the warrant agreement for a series of warrants without the consent of the holders of the warrants issued thereunder to effect changes that are not inconsistent with the provisions of the warrants and that do not materially and adversely affect the interests of the holders of the warrants.

FORMS OF SECURITIES

Each debt security, depositary share, purchase contract, purchase unit and warrant will be represented either by a certificate issued in definitive form to a particular investor or by one or more global securities representing the entire issuance of securities. Unless the applicable prospectus supplement provides otherwise, certificated securities will be issued in definitive form and global securities will be issued in registered form. Definitive securities name you or your nominee as the owner of the security, and in order to transfer or exchange these securities or to receive payments other than interest or other interim payments, you or your nominee must physically deliver the securities to the trustee, registrar, paying agent or other agent, as applicable. Global securities name a depositary or its nominee as the owner of the debt securities, purchase contracts, purchase units or warrants represented by these global securities. The depositary maintains a computerized system that will reflect each investor's beneficial ownership of the securities through an account maintained by the investor with its broker/dealer, bank, trust company or other representative, as we explain more fully below.

Registered Global Securities

We may issue the registered debt securities, purchase contracts, purchase units and warrants in the form of one or more fully registered global securities that will be deposited with a depositary or its

nominee identified in the applicable prospectus supplement and registered in the name of that depository or nominee. In those cases, one or more registered global securities will be issued in a denomination or aggregate denominations equal to the portion of the aggregate principal or face amount of the securities to be represented by registered global securities. Unless and until it is exchanged in whole for securities in definitive registered form, a registered global security may not be transferred except as a whole by and among the depository for the registered global security, the nominees of the depository or any successors of the depository or those nominees.

If not described below, any specific terms of the depository arrangement with respect to any securities to be represented by a registered global security will be described in the prospectus supplement relating to those securities. We anticipate that the following provisions will apply to all depository arrangements.

Ownership of beneficial interests in a registered global security will be limited to persons, called participants, that have accounts with the depository or persons that may hold interests through participants. Upon the issuance of a registered global security, the depository will credit, on its book-entry registration and transfer system, the participants' accounts with the respective principal or face amounts of the securities beneficially owned by the participants. Any underwriters, dealers or agents participating in the distribution of the securities will designate the accounts to be credited. Ownership of beneficial interests in a registered global security will be shown on, and the transfer of ownership interests will be effected only through, records maintained by the depository, with respect to interests of participants, and on the records of participants, with respect to interests of persons holding through participants. The laws of some states may require that some purchasers of securities take physical delivery of these securities in definitive form. These laws may impair your ability to own, transfer or pledge beneficial interests in registered global securities.

So long as the depository, or its nominee, is the registered owner of a registered global security, that depository or its nominee, as the case may be, will be considered the sole owner or holder of the securities represented by the registered global security for all purposes under the applicable indenture, purchase contract, warrant agreement or purchase unit agreement. Except as described below, owners of beneficial interests in a registered global security:

- will not be entitled to have the securities represented by the registered global security registered in their names;
- will not receive or be entitled to receive physical delivery of the securities in definitive form; and
- will not be considered the owners or holders of the securities under the applicable indenture, depository share agreement, purchase contract, purchase unit agreement or warrant agreement.

Accordingly, each person owning a beneficial interest in a registered global security must rely on the procedures of the depository for that registered global security and, if that person is not a participant, on the procedures of the participant through which the person owns its interest, to exercise any rights of a holder under the applicable indenture, depository share agreement, purchase contract, purchase unit agreement or warrant agreement.

We understand that under existing industry practices, if we request any action of holders or if an owner of a beneficial interest in a registered global security desires to give or take any action that a holder is entitled to give or take under the applicable indenture, depository share agreement, purchase contract, purchase unit agreement or warrant agreement, the depository for the registered global security would authorize the participants holding the relevant beneficial interests to give or take that action, and the participants would authorize beneficial owners owning through them to give or take that action or would otherwise act upon the instructions of beneficial owners holding through them.

We will make payments of principal, premium, if any, and interest, if any, on debt securities, and any payments to holders with respect to warrants, purchase agreements or purchase units, represented by a registered global security registered in the name of a depositary or its nominee to the depositary or its nominee, as the case may be, as the registered owner of the registered global security. None of us, the trustees, the warrant agents, the unit agents or any other agent of ours, agent of the trustees or agent of the warrant agents or unit agents will have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the registered global security or for maintaining, supervising or reviewing any records relating to those beneficial ownership interests.

We expect that the depositary for any of the securities represented by a registered global security, upon receipt of any payment of principal, premium, interest or other distribution of underlying securities or other property to holders on that registered global security, will immediately credit participants' accounts in amounts proportionate to their respective beneficial interests in that registered global security as shown on the records of the depositary. We also expect that standing customer instructions and customary practices will govern payments by participants to owners of beneficial interests in a registered global security held through the participants, as is now the case with the securities held for the accounts of customers registered in "street name." We also expect that any of these payments will be the responsibility of those participants.

If the depositary for any of the securities represented by a registered global security is at any time unwilling or unable to continue as depositary or ceases to be a clearing agency registered under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and a successor depositary registered as a clearing agency under the Exchange Act is not appointed by us within 90 days, we will issue securities in definitive form in exchange for the registered global security that had been held by the depositary. Any securities issued in definitive form in exchange for a registered global security will be registered in the name or names that the depositary gives to the relevant trustee, warrant agent, unit agent or other relevant agent of ours or theirs. It is expected that the depositary's instructions will be based upon directions received by the depositary from participants with respect to ownership of beneficial interests in the registered global security that had been held by the depositary.

SELLING SECURITYHOLDERS

Information about selling securityholders, where applicable, will be set forth in a prospectus supplement, in a post-effective amendment, or in filings we make with the SEC under the Exchange Act that are incorporated by reference.

PLAN OF DISTRIBUTION

We or any selling securityholder may sell the securities offered by this prospectus to one or more underwriters or dealers for public offering and sale by them or to investors directly or through agents. The accompanying prospectus supplement will set forth the terms of the offering and the method of distribution and will identify any firms acting as underwriters, dealers or agents in connection with the offering, including:

- the name or names of any underwriters, dealers or agents;
- the purchase price of the securities and the proceeds to us or any selling securityholder from the sale;
- any underwriting discounts and other items constituting compensation to underwriters, dealers or agents;
- any public offering price;

- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchange or market on which the securities offered in the prospectus supplement may be listed.

Only those underwriters identified in such prospectus supplement are deemed to be underwriters in connection with the securities offered in the prospectus supplement.

The distribution of the securities may be effected from time to time in one or more transactions at a fixed price or prices, which may be changed, or at prices determined as the applicable prospectus supplement specifies. The securities may be sold through an at the market offering, a rights offering, forward contracts or similar arrangements. In addition, we or any selling securityholder may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement so indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or any selling securityholder or borrowed from us or any selling securityholder or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us or any selling securityholder in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be named in the applicable prospectus supplement (or a post-effective amendment). In addition, we or any selling securityholder may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus and an applicable prospectus supplement. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

In connection with the sale of the securities, underwriters, dealers or agents may be deemed to have received compensation from us in the form of underwriting discounts or commissions and also may receive commissions from securities purchasers for whom they may act as agent. Underwriters may sell the securities to or through dealers, and the dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they may act as agent.

We will provide in the applicable prospectus supplement information regarding any underwriting discounts or other compensation that we or any selling securityholder pays to underwriters or agents in connection with the securities offering, and any discounts, concessions or commissions that underwriters allow to dealers. Underwriters, dealers and agents participating in the securities distribution may be deemed to be underwriters, and any discounts, commissions or concessions they receive and any profit they realize on the resale of the securities may be deemed to be underwriting discounts and commissions under the Securities Act. Underwriters and their controlling persons, dealers and agents may be entitled, under agreements entered into with us or any selling securityholder, to indemnification against and contribution toward specific civil liabilities, including liabilities under the Securities Act. Some of the underwriters, dealers or agents who participate in the securities distribution may engage in other transactions with, and perform other services for, us or our subsidiaries in the ordinary course of business.

Our ordinary shares are currently listed on The Nasdaq Global Market, but any other securities may or may not be listed on a national securities exchange. To facilitate the offering of securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than were sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. In

addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, certain legal matters relating to the issuance of the securities offered by this prospectus will be passed upon for us by Maples and Calder, Cayman Islands. Additional legal matters will be passed upon for us by Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP. Any underwriters, dealers or agents, will be represented by counsel that we will name in the applicable prospectus supplement.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our [Annual Report on Form 10-K for the year ended December 31, 2018](#), and the effectiveness of our internal control over financial reporting as of December 31, 2018, as set forth in their reports, which are incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-3 with the SEC under the Securities Act. This prospectus is part of the registration statement but the registration statement includes and incorporates by reference additional information and exhibits. We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC also maintains a website that contains reports, proxy and information statements and other information regarding companies, such as ours, that file documents electronically with the SEC. The address of that website is <http://www.sec.gov>. The information on the SEC's website is not part of this prospectus, and any references to this website or any other website are inactive textual references only.

INFORMATION INCORPORATED BY REFERENCE

The SEC permits us to "incorporate by reference" the information contained in documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents rather than by including them in this prospectus. Information that is incorporated by reference is considered to be part of this prospectus and you should read it with the same care that you read this prospectus. Later information that we file with the SEC will automatically update and supersede the information that is either contained, or incorporated by reference, in this prospectus, and will be considered to be a part of this prospectus from the date those documents are filed. We have filed with the SEC, and incorporate by reference in this prospectus (other than portions of these documents that are furnished under applicable SEC rules rather than filed and exhibits furnished in connection with such items):

- [our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on February 28, 2019;](#)
- the information in our [Definitive Proxy Statement on Schedule 14A, filed with the SEC on March 20, 2019](#), to the extent incorporated by reference into our [Annual Report on Form 10-K for the fiscal year ended December 31, 2018;](#)

- our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2019, June 30, 2019 and September 30, 2019, filed with the SEC on [May 10, 2019](#), [August 5, 2019](#) and [November 8, 2019](#), respectively;
- our Current Reports on Form 8-K or Form 8-K/A, filed with the SEC on [January 3, 2019](#), [January 7, 2019](#), [March 1, 2019](#), [May 1, 2019](#), [June 4, 2019](#) and [September 30, 2019](#); and
- [the description of our ordinary shares contained in our Registration Statement No. 001-36033 on Form 10, which became effective on May 14, 2014, including any amendment or report filed for the purpose of updating such description.](#)

We also incorporate by reference all additional documents that we file with the SEC under the terms of Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, that are made after the filing date of the registration statement of which this prospectus is a part, as well as between the date of this prospectus and the termination of any offering of securities offered by this prospectus. We are not, however, incorporating, in each case, any documents or information that we are deemed to furnish and not file in accordance with SEC rules.

You may request a copy of any or all of the documents incorporated by reference but not delivered with this prospectus, at no cost, by writing or telephoning us at the following address and number: Investor Relations, Theravance Biopharma US, Inc., 901 Gateway Boulevard, South San Francisco, California 94080, (650) 808-6000. We will not, however, send exhibits to those documents, unless the exhibits are specifically incorporated by reference in those documents.



THERAVANCE BIOPHARMA, INC.

**Debt Securities
Ordinary Shares
Purchase Contracts
Purchase Units
Warrants**

PROSPECTUS



Up to \$150,000,000

Ordinary Shares

We have entered into a sales agreement with Cowen and Company, LLC ("Cowen"), relating to our ordinary shares offered by this prospectus. In accordance with the terms of the sales agreement, we may offer and sell our ordinary shares having an aggregate offering price of up to \$150 million from time to time through Cowen.

Our ordinary shares are traded on The Nasdaq Global Market under the symbol "TBPH." The last reported sale price of our ordinary shares on The Nasdaq Global Market on November 27, 2019 was \$21.15 per share.

Sales of our ordinary shares, if any, under this prospectus may be made in sales deemed to be an "at the market offering" as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended (the "Securities Act"), including sales made into The Nasdaq Global Market or any other existing trading market for our ordinary shares. Cowen is not required to sell any specific number or dollar amount of securities, but will act as a sales agent using commercially reasonable efforts consistent with its normal trading and sales practices, on mutually agreed terms between Cowen and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

The compensation to Cowen for sales of ordinary shares sold pursuant to the sales agreement will be an amount up to 3.0% of the aggregate gross proceeds of any ordinary shares sold under the sales agreement. See "Plan of Distribution" for additional information regarding compensation to be paid to Cowen. In connection with the sale of the ordinary shares on our behalf, Cowen will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of Cowen will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to Cowen with respect to certain liabilities, including liabilities under the Securities Act or the Securities Exchange Act of 1934, as amended (the "Exchange Act"). See "Plan of Distribution."

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties referenced under the heading "Risk Factors" on page 4 of this prospectus as well as those contained in any accompanying prospectus and any related free writing prospectus or prospectus supplement we prepare or authorize in connection with this offering, and in the other documents that are incorporated by reference into this prospectus or the accompanying prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Cowen

The date of this prospectus is December 3, 2019.

TABLE OF CONTENTS

	<u>Page</u>
About this Prospectus	1
Prospectus Summary	2
The Offering	3
Risk Factors	4
Special Note Regarding Forward-Looking Statements	6
Use of Proceeds	6
Dilution	7
Plan of Distribution	9
Material Irish Tax Considerations for Holders of Ordinary Shares	11
Material U.S. Federal Income Tax Considerations for U.S. Holders of Ordinary Shares	12
Material Cayman Islands Tax Considerations	17
Legal Matters	18
Experts	18
Where You Can Find More Information	18
Information Incorporated by Reference	18

ABOUT THIS PROSPECTUS

This prospectus relates to the offering of our ordinary shares. Before buying any of the ordinary shares that we are offering, we urge you to carefully read this prospectus, together with the information incorporated by reference as described under the headings "Where You Can Find More Information" and "Incorporation by Reference" in this prospectus, and any free writing prospectus or prospectus supplement that we have authorized for use in connection with this offering. These documents contain important information that you should consider when making your investment decision. This sales agreement prospectus is deemed a prospectus supplement to the base prospectus contained in the registration statement of which this sales agreement prospectus forms a part.

This prospectus describes the terms of this offering of ordinary shares and also adds to and updates information contained in the documents incorporated by reference into this prospectus. To the extent there is a conflict between the information contained in this prospectus, on the one hand, and the information contained in any document incorporated by reference into this prospectus that was filed with the Securities and Exchange Commission, or the SEC, before the date of this prospectus, on the other hand, you should rely on the information in this prospectus. If any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference into this prospectus—the statement in the document having the later date modifies or supersedes the earlier statement.

We have not authorized anyone to provide you with information in addition to or different from that contained in this prospectus, any applicable prospectus supplement and any related free writing prospectus. We take no responsibility for, and can provide no assurances as to the reliability of, any information not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus, the accompanying prospectus or any related free writing prospectus is accurate only as of the date on the front of the document and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, the accompanying prospectus or any related free writing prospectus, or any sale of a security.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus and the accompanying prospectus are a part, and you may obtain copies of those documents as described below under the heading "Where You Can Find More Information."

Unless the context otherwise requires, references in this prospectus to "Theravance," "we," "us" and "our" refer to Theravance Biopharma, Inc.

We own various U.S. federal trademark registrations and applications and unregistered trademarks, including our corporate logo. This prospectus and the information incorporated herein by reference contains references to trademarks, service marks and trade names referred to in this prospectus and the information incorporated herein, including logos, artwork, and other visual displays, may appear without the ® or TM symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks, service marks or trade names. We do not intend our use or display of other companies' trade names, service marks or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus, any applicable prospectus supplement or any related free writing prospectus are the property of their respective owners.

PROSPECTUS SUMMARY

This summary highlights information contained in other parts of this prospectus or incorporated by reference in this prospectus from our [Annual Report on Form 10-K for the year ended December 31, 2018](#), and our other filings with the SEC listed below under the heading "Incorporation of Certain Information by Reference." This summary does not contain all of the information you should consider in making your investment decision. Before deciding to invest in our ordinary shares, you should read the entire prospectus, the applicable prospectus supplement and any related free writing prospectus, and the information incorporated by reference herein in their entirety. You should carefully consider, among other things, the matters discussed under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus. Some of the statements in this prospectus constitute forward-looking statements that involve risks and uncertainties. See "Special Note Regarding Forward-Looking Statements."

Our Company

Theravance is a diversified biopharmaceutical company primarily focused on the discovery, development and commercialization of organ-selective medicines. Our purpose is to create transformational medicines to improve the lives of patients suffering from serious illnesses. Our research is focused in the areas of inflammation and immunology.

Theravance was incorporated in the Cayman Islands in July 2013 under the name Theravance Biopharma, Inc. Our corporate address in the Cayman Islands and principal executive office is P.O. Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands and the address of our wholly-owned US operating subsidiary Theravance Biopharma US, Inc. is 901 Gateway Boulevard, South San Francisco, California 94080. Our telephone number is (650) 808-6000 and our corporate website address is www.theravance.com. Information contained on or accessible through our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only. While Theravance is incorporated under Cayman Island law, Theravance became an Irish tax resident effective July 1, 2015. The address of our wholly-owned Irish operating subsidiary, Theravance Biopharma Ireland Limited, is Connaught House, Burlington Road, Dublin 4, Ireland.

THE OFFERING

Ordinary shares offered by us	Ordinary shares having an aggregate offering price of up to \$150 million.
Ordinary shares to be outstanding immediately after this offering	Up to 63,854,505 shares (as more fully described in the notes following this table), assuming sales of 7,092,198 of our ordinary shares in this offering at an offering price of \$21.15 per share, which was the last reported sale price of our ordinary shares on The Nasdaq Global Market on November 27, 2019. The actual number of shares issued will vary depending on the sales price under this offering.
Manner of offering	"At the market offering" that may be made from time to time through our sales agent, Cowen and Company, LLC. See "Plan of Distribution."
Use of proceeds	We currently intend to use the net proceeds from this offering primarily for general corporate purposes, which may include funding research and development of our product candidates, expanding our manufacturing capabilities, increasing our working capital, acquisitions or investments in businesses, products or technologies that are complementary to our own and capital expenditures. See "Use of Proceeds."
Risk factors	Investing in our ordinary shares involves significant risks. See the disclosure under the heading "Risk Factors" in this prospectus and under similar headings in other documents incorporated by reference into this prospectus.
The Nasdaq Global Market symbol	"TBPH"

The number of ordinary shares shown above to be outstanding after this offering is based on 56,762,307 shares outstanding as of September 30, 2019, and excludes (each as of September 30, 2019):

- 2,905,516 ordinary shares issuable upon the exercise of outstanding options to purchase ordinary shares having a weighted-average exercise price of \$24.9972 per share;
- 3,564,759 ordinary shares reserved for issuance pursuant to future awards under our 2013 Equity Incentive Award Plan, and any addendums thereto, as well as any automatic increases in the number of ordinary shares reserved for future issuance under this plan;
- 195,476 ordinary shares reserved for future issuance under our 2014 New Employee Equity Incentive Plan;
- 2,093,462 ordinary shares reserved for issuance pursuant to future awards under our 2013 Employee Share Purchase Plan, as well as any automatic increases in the number of ordinary shares reserved for future issuance under this plan;
- 5,088,852 ordinary shares issuable upon vesting of outstanding restricted stock units; and
- any ordinary shares issuable upon conversion of the Company's outstanding 3.25% Convertible Senior Notes due 2023 with an outstanding aggregate principal amount of \$230.0 million and having an initial conversion rate of 29.0276 ordinary shares for each \$1,000 principal amount of notes, as adjusted from time to time pursuant to the provisions of the indenture covering such notes.

RISK FACTORS

Investing in our ordinary shares involves a high degree of risk. You should carefully consider the risks and uncertainties referenced below and described in the documents incorporated by reference in this prospectus and any prospectus supplement, as well as other information we include or incorporate by reference into this prospectus and any applicable prospectus supplement, before making an investment decision. Our business, financial condition or results of operations could be materially adversely affected by the materialization of any of these risks. The trading price of our ordinary shares could decline due to the materialization of any of these risks, and you may lose all or part of your investment. This prospectus and the documents incorporated herein by reference also contain forward-looking statements that involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks described below and in the documents incorporated herein by reference, including (i) our [Annual Report on Form 10-K for the fiscal year ended December 31, 2018](#), which is on file with the SEC and incorporated by reference into this prospectus, (ii) our Quarterly Reports on Form 10-Q for the quarterly periods ended [March 30, 2019](#), [June 30, 2019](#) and [September 30, 2019](#), and (iii) other documents we file with the SEC that are deemed incorporated by reference into this prospectus.

Additional Risks Related To This Offering

Our management team may invest or spend the proceeds of this offering in ways with which you may not agree or in ways which may not yield a significant return.

Our management will have broad discretion over the use of proceeds from this offering. The net proceeds from this offering will be used for general corporate purposes, which may include funding research and development of our product candidates, expanding our manufacturing capabilities, increasing our working capital, acquisitions or investments in businesses, products or technologies that are complementary to our own and capital expenditures. Our management will have considerable discretion in the application of the net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. The net proceeds may be used for corporate purposes that do not increase our operating results or enhance the value of our ordinary shares.

You may experience immediate and substantial dilution.

The offering price per share in this offering may exceed the net tangible book value per share of our ordinary shares outstanding prior to this offering. Assuming that an aggregate of 7,092,198 ordinary shares are sold at a price of \$21.15 per share, the last reported sale price of our ordinary shares on The Nasdaq Global Market on November 27, 2019, for aggregate gross proceeds of \$150 million, and after deducting commissions and estimated offering expenses payable by us, you may experience immediate dilution of \$21.75 per share, representing the difference between our as adjusted net tangible book value per share as of September 30, 2019 after giving effect to this offering and the assumed offering price. The exercise of outstanding stock options and warrants may result in further dilution of your investment. See "Dilution" below for a more detailed illustration of the dilution you would incur if you participate in this offering.

Since we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, stock price appreciation, if any, will be your sole source of gain.

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. As a result, appreciation, if any, in the market price of our ordinary shares will be your sole source of gain for the foreseeable future.

The actual number of ordinary shares we will issue under the sales agreement, at any one time or in total, is uncertain.

Subject to certain limitations in the sales agreement and compliance with applicable law, we have the discretion to deliver a placement notice to Cowen at any time throughout the term of the sales agreement. The number of shares that are sold by Cowen after delivering a placement notice will fluctuate based on the market price of our ordinary shares during the sales period and limits we set with Cowen. Because the price per share of each share sold will fluctuate based on the market price of our ordinary shares during the sales period, it is not possible at this stage to predict the number of shares that will be ultimately issued.

The ordinary shares offered hereby will be sold in "at the market offerings," and investors who buy shares at different times will likely pay different prices.

Investors who purchase shares in this offering at different times will likely pay different prices, and so may experience different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices, and numbers of shares sold, and there is no minimum or maximum sales price. Investors may experience a decline in the value of their shares as a result of share sales made at prices lower than the prices they paid.

If a United States person is treated as owning at least 10% of our ordinary shares, such United States person may be subject to adverse U.S. federal income tax consequences.

For U.S. federal income tax purposes, if a United States person is treated as owning (directly, indirectly or constructively) at least 10% of the value or voting power of our ordinary shares, such U.S. holder will be treated as a "United States shareholder" with respect to each "controlled foreign corporation" in our group (if any). Because our group includes at least one U.S. subsidiary, our non-U.S. subsidiaries and any non-U.S. subsidiaries we were to form or acquire in the future generally would be treated as controlled foreign corporations. A United States shareholder of a controlled foreign corporation will be required to annually report and include in its U.S. taxable income its pro rata share of "subpart F income," "global intangible low-taxed income" and investments in U.S. property by controlled foreign corporations, regardless of whether we make any distributions. An individual that is a United States shareholder with respect to a controlled foreign corporation generally will not be allowed certain tax deductions or foreign tax credits that are available to a United States shareholder that is a domestic corporation. Failure to comply with such reporting obligations may subject a holder of our ordinary shares that is a United States shareholder to significant monetary penalties and may prevent the statute of limitations with respect to your U.S. federal income tax return for the year for which reporting was due from starting. Holders of our ordinary shares that are United States persons should consult their tax advisors regarding the potential application of these rules to their investment in our ordinary shares.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference into this prospectus contain forward-looking statements. Forward-looking statements include all statements that are not historical facts and can be identified by the words "believe," "may," "will," "potentially," "estimate," "continue," "anticipate," "intend," "could," "would," "project," "plan," "expect," and similar expressions that convey uncertainty of future events or outcomes.

These forward-looking statements are subject to a number of risks, uncertainties, and assumptions, including those described in and incorporated by reference under the heading "Risk Factors." Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties, and assumptions, the forward-looking events and circumstances discussed in this prospectus may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus to conform these statements to actual results or to changes in our expectations, except as required by law.

You should read this prospectus, the documents incorporated by reference into this prospectus and the documents that we reference in this prospectus and have filed with the SEC as exhibits to the registration statement of which this prospectus is a part, with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect.

USE OF PROCEEDS

We may offer and sell our ordinary shares having aggregate sales proceeds of up to \$150 million from time to time pursuant to this sales agreement prospectus. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. There can be no assurance that we will sell any shares under or fully utilize the sales agreement with Cowen as a source of financing.

We intend to use the net proceeds from the sale of ordinary shares offered by this prospectus, if any, for general corporate purposes, which may include, among other things, research activities, preclinical and clinical development of existing product candidates, manufacture of pre-clinical, clinical and commercial drug supplies, selling and marketing expenses, capital expenditures, working capital, general and administrative expenses and acquisitions of technology or drug candidates. We have not determined the amount of net proceeds to be used specifically for such purposes and currently do not have any agreements relating to any material acquisitions. As a result, management will retain broad discretion over the allocation of net proceeds. Pending the application of the net proceeds, we intend to invest the net proceeds in short-term or long-term, investment-grade, interest-bearing securities.

DILUTION

Our net tangible book value as of September 30, 2019 was approximately \$(183.4) million, or \$(3.23) per share. Net tangible book value per share is determined by dividing our total tangible assets, less total liabilities, by the number of our ordinary shares outstanding as of September 30, 2019. Dilution with respect to net tangible book value per share represents the difference between the amount per share paid by purchasers of ordinary shares in this offering and the net tangible book value per share of our ordinary shares immediately after this offering.

After giving effect to the assumed sale of 7,092,198 of our ordinary shares in this offering at an assumed offering price of \$21.15 per share, the last reported sale price of our ordinary shares on The Nasdaq Global Market on November 27, 2019, and after deducting commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2019 would have been approximately \$(38.3) million, or \$(0.60) per share. This represents an immediate increase in net tangible book value of \$2.63 per share to existing shareholders. Investors purchasing our ordinary shares in this offering will have paid \$21.75 more than the as adjusted net tangible book value per share after this offering. The following table illustrates this on a per share basis:

Assumed offering price per share	\$ 21.15
Net tangible book value per share as of September 30, 2019	\$ (3.23)
Increase per share attributable to new investors	\$ 2.63
As-adjusted net tangible book value per share after this offering	\$ (0.60)
Dilution per share to new investors	\$ 21.75

The above discussion and table above excludes (each as of September 30, 2019):

- 2,905,516 ordinary shares issuable upon the exercise of outstanding options to purchase ordinary shares as of September 30, 2019 having a weighted-average exercise price of \$24.9972 per share;
- 3,564,759 ordinary shares reserved for issuance pursuant to future awards under our 2013 Equity Incentive Award Plan, and any addendums thereto, as well as any automatic increases in the number of ordinary shares reserved for future issuance under this plan;
- 195,476 ordinary shares reserved for future issuance under our 2014 New Employee Equity Incentive Plan;
- 2,093,462 ordinary shares reserved for issuance pursuant to future awards under our 2013 Employee Share Purchase Plan, as well as any automatic increases in the number of ordinary shares reserved for future issuance under this plan;
- 5,088,852 ordinary shares issuable upon vesting of outstanding restricted stock units; and
- any ordinary shares issuable upon conversion of the Company's outstanding 3.25% Convertible Senior Notes due 2023 with an outstanding aggregate principal amount of \$230.0 million and having an initial conversion rate of 29.0276 ordinary shares for each \$1,000 principal amount of notes, as adjusted from time to time pursuant to the provisions of the indenture covering such notes.

The table above assumes for illustrative purposes that an aggregate of 7,092,198 ordinary shares are sold during the term of the sales agreement with Cowen at a price of \$21.15 per share, the last reported sale price of our ordinary shares on The Nasdaq Global Market on November 27, 2019, for aggregate gross proceeds of approximately \$150 million. The shares subject to the sales agreement with Cowen are being sold from time to time at various prices. An increase of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$21.15 per share shown in the table above, assuming all of our ordinary shares in the aggregate amount of \$150 million during the term of

the sales agreement with Cowen are sold at that price, would cause our adjusted net tangible book value per share after the offering to be \$(0.60) per share and would increase the dilution in net tangible book value per share to new investors in this offering to \$22.75 per share, after deducting commissions and estimated aggregate offering expenses payable by us. A decrease of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$21.15 per share shown in the table above, assuming all of our ordinary shares in the amount of \$150 million during the term of the sales agreement with Cowen are sold at that price, would cause our adjusted net tangible book value per share after the offering to be \$(0.60) per share and would decrease the dilution in net tangible book value per share to new investors in this offering to \$20.75 per share, after deducting commissions and estimated aggregate offering expenses payable by us. This information is supplied for illustrative purposes only and may differ based on the actual offering price and the actual number of shares offered.

To the extent that options outstanding as of September 30, 2019 have been or may be exercised or other shares issued, investors purchasing our ordinary shares in this offering may experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our shareholders.

PLAN OF DISTRIBUTION

We have entered into a sales agreement with Cowen, under which we may issue and sell from time to time up to an aggregate of \$150 million of our ordinary shares through Cowen as our sales agent. Sales of our ordinary shares, if any, will be made at market prices by any method that is deemed to be an "at the market offering" as defined in Rule 415(a)(4) under the Securities Act, including sales made directly on The Nasdaq Global Market or any other trading market for our ordinary shares. If authorized by us in writing, Cowen may purchase our ordinary shares as principal.

Cowen will offer our ordinary shares subject to the terms and conditions of the sales agreement on a daily basis or as otherwise agreed upon by us and Cowen. We will designate the maximum amount of ordinary shares to be sold through Cowen on a daily basis or otherwise determine such maximum amount together with Cowen. Subject to the terms and conditions of the sales agreement, Cowen will use its commercially reasonable efforts to sell on our behalf all of the ordinary shares requested to be sold by us. We may instruct Cowen not to sell ordinary shares if the sales cannot be effected at or above the price designated by us in any such instruction. Cowen or we may suspend the offering of our ordinary shares being made through Cowen under the sales agreement upon proper notice to the other party. Cowen and we each have the right, by giving written notice as specified in the sales agreement, to terminate the sales agreement in each party's sole discretion at any time.

The aggregate compensation payable to Cowen as sales agent equals up to 3.0% of the aggregate gross sales price of the shares sold through it pursuant to the sales agreement. We have also agreed to reimburse Cowen up to \$50,000 of actual outside legal expenses incurred by Cowen in connection with this offering, and for certain other expenses, including Cowen's FINRA counsel fees, in an amount up to \$10,000. In accordance with FINRA Rule 5110 these reimbursed expenses are deemed sales compensation in connection with this offering. We estimate that the total expenses of the offering payable by us, excluding commissions payable to Cowen under the sales agreement, will be approximately \$374,000.

The remaining sales proceeds, after deducting any expenses payable by us and any transaction fees imposed by any governmental, regulatory, or self-regulatory organization in connection with the sales, will equal our net proceeds for the sale of such ordinary shares.

Cowen will provide written confirmation to us following the close of trading on The Nasdaq Global Market on each day in which ordinary shares are sold through it as sales agent under the sales agreement. Each confirmation will include the number of ordinary shares sold through it as sales agent on that day, the volume weighted average price of the shares sold, the percentage of the daily trading volume and the net proceeds to us.

We will report at least quarterly the number of ordinary shares sold through Cowen under the sales agreement, the net proceeds to us and the compensation paid by us to Cowen in connection with the sales of ordinary shares.

Settlement for sales of ordinary shares will occur, unless the parties agree otherwise, on the second business day that is also a trading day following the date on which any sales were made in return for payment of the net proceeds to us. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

In connection with the sales of our ordinary shares on our behalf, Cowen will be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation paid to Cowen will be deemed to be underwriting commissions or discounts. We have agreed in the sales agreement to provide indemnification and contribution to Cowen against certain liabilities, including liabilities under the Securities Act. As sales agent, Cowen will not engage in any transactions that stabilize our ordinary shares.

Our ordinary shares are listed on The Nasdaq Global Market and trade under the symbol "TBPH." The transfer agent of our ordinary shares is Computershare Trust Company, N.A.

Cowen and/or its affiliates have provided, and may in the future provide, various investment banking and other financial services for us for which services they have received and, may in the future receive, customary fees.

MATERIAL IRISH TAX CONSIDERATIONS FOR HOLDERS OF ORDINARY SHARES

We became an Irish tax resident effective July 1, 2015, though we remain incorporated in the Cayman Islands. The following is a discussion of certain Irish tax considerations with respect to the ownership and disposition of our ordinary shares applicable to investors who acquire such shares in this offering.

THIS SUMMARY IS FOR GENERAL INFORMATION ONLY AND IS NOT INTENDED TO CONSTITUTE A COMPLETE DESCRIPTION OF ALL TAX CONSEQUENCES RELATING TO THE OWNERSHIP AND DISPOSITION OF OUR ORDINARY SHARES. PROSPECTIVE HOLDERS OF OUR ORDINARY SHARES SHOULD REFER TO DISCLOSURES WITH RESPECT TO OTHER TAX MATTERS IN DOCUMENTS INCORPORATED BY REFERENCE INTO THIS PROSPECTUS SUPPLEMENT AND CONSULT WITH THEIR TAX ADVISORS REGARDING THE TAX CONSEQUENCES TO THEM (INCLUDING THE APPLICATION AND EFFECT OF ANY STATE, LOCAL, FOREIGN INCOME AND OTHER TAX LAWS) OF THE OWNERSHIP AND DISPOSITION OF OUR ORDINARY SHARES UNDER THE LAWS OF THEIR COUNTRY OF RESIDENCE, CITIZENSHIP OR DOMICILE.

THE FOLLOWING CONSIDERATIONS ARE BASED ON THE LAWS AND PRACTICE OF THE IRISH REVENUE COMMISSIONERS CURRENTLY IN FORCE IN IRELAND AND MAY BE SUBJECT TO CHANGE. IT DEALS WITH HOLDERS WHO BENEFICIALLY OWN OUR ORDINARY SHARES AS AN INVESTMENT. PARTICULAR RULES NOT DISCUSSED BELOW MAY APPLY TO CERTAIN CLASSES OF TAXPAYERS HOLDING OUR ORDINARY SHARES, SUCH AS DEALERS IN SECURITIES, TRUSTS, ETC. THE SUMMARY DOES NOT CONSTITUTE LEGAL OR TAX ADVICE.

Irish Stamp Duty

No Irish stamp duty will be payable in respect of the issue of any shares forming part of this offering. No Irish stamp duty will be payable in respect of a sale of our ordinary shares after this offering unless such sale relates to shares in an Irish incorporated company or Irish land or mineral rights. Currently the Company is incorporated in the Cayman Islands and is only an Irish tax resident.

Irish Tax on Capital Gains on a disposition of our ordinary shares

A liability to Irish tax on capital gains on a disposition of our ordinary shares depends on the individual circumstances of each shareholder.

- Non-Irish resident / ordinarily resident shareholders. Shareholders should not be subject to Irish tax on capital gains on a disposal of our ordinary shares if such holders are neither resident nor ordinarily resident in Ireland and do not hold such shares in connection with a trade carried on by such holder in Ireland through a branch or agency.
- Irish resident shareholders. Shareholders who are resident or ordinarily resident in Ireland for tax purposes, or corporate shareholders who hold their shares in connection with a trade carried on by such holder in Ireland through a branch or agency may be subject to Irish tax on capital gains at the rate of 33% if they dispose of our ordinary shares. Shareholders falling into this category should consult their own tax advisors as to the tax consequences of such a disposal.

Dividends

We do not currently intend to pay dividends to our shareholders. A payment of a dividend by an Irish resident entity is subject to dividend withholding tax at the current rate of 20% (expected to be

increased to a rate of 25% from January 1, 2020), however a number of exemptions apply including exemptions for dividends paid to:

- an individual shareholder (not being a company) who is neither resident nor ordinarily resident in Ireland and who is resident for tax purposes in a Relevant Territory (as described below);
- a corporate shareholder which is not resident for tax purposes in Ireland and which is resident for tax purposes in a Relevant Territory provided that the corporate shareholder is not under the control, whether directly or indirectly, of a person or persons who is or are resident in Ireland;
- a corporate shareholder which is not resident for tax purposes in Ireland and which is ultimately controlled, directly or indirectly, by persons resident in a Relevant Territory;
- a corporate shareholder which is not resident for tax purposes in Ireland and whose principal class of shares (or those of its 75% parent) is substantially and regularly traded on a recognised stock exchange either in a Relevant Territory, Ireland or on such other stock exchange approved by the Minister for Finance; or
- a corporate shareholder which is not resident for tax purposes in Ireland and is wholly owned, directly or indirectly, by two or more companies where the principal class of shares of each of such companies is substantially and regularly traded on a recognised stock exchange in a Relevant Territory, Ireland or on such other stock exchange approved by the Minister for Finance.

In this context, Relevant Territory means (i) a Member State of the European Union (other than Ireland) or (ii) a country with which Ireland has a tax treaty in force by virtue of section 826(1) of the Taxes Consolidation Act 1997 ("TCA") or (iii) a country with which Ireland has a tax treaty that is signed and which will come into force once all the ratification procedures set out in section 826(1) TCA have been completed.

Capital Acquisitions Tax

A gift or inheritance comprising of our ordinary shares will be within the charge to capital acquisitions tax (which, subject to available exemptions and reliefs, is currently levied at 33%) if either (i) the disponer or the donee/successor in relation to the gift or inheritance is resident or ordinarily resident in Ireland (or, in certain circumstances, if the disponer is domiciled in Ireland irrespective of his residence or that of the donee/successor) on the relevant date or (ii) if our ordinary shares are regarded as property situate in Ireland (e.g. if the share register is located in Ireland).

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR U.S. HOLDERS OF ORDINARY SHARES

The following summary discusses material U.S. federal income tax consequences of the ownership and disposition by "U.S. Holders" (as defined below) of our ordinary shares, as described below, who acquire our ordinary shares in this offering and who hold our ordinary shares as capital assets within the meaning of Section 1221 of the Code. This discussion is based upon the Internal Revenue Code of 1986, as amended (the "Code"), Treasury Regulations, published positions of the U.S. Internal Revenue Service (the "IRS"), judicial decisions and other applicable authorities, all as currently in effect, and all of which are subject to change or differing interpretations, possibly with retroactive effect. Any such change could affect the accuracy of this discussion.

Although Theravance Biopharma does not expect to be treated as a U.S. corporation under Section 7874 of the Code, the IRS may disagree with our conclusion on this point or there could be changes to the law that could result in our being treated as a U.S. corporation. If we were treated as a U.S. corporation for U.S. federal income tax purposes, the U.S. tax consequences to holders of

ordinary shares would be significantly different from the U.S. tax consequences described herein. Holders should consult their tax advisors about the U.S. tax consequences of holding ordinary shares if Theravance Biopharma were treated as a U.S. corporation. The remainder of the discussion below assumes that Theravance Biopharma is not treated as a U.S. corporation for U.S. federal tax purposes under Section 7874 of the Code. We will, from time to time, evaluate our corporate structure in light of applicable changes to tax laws. Based on such evaluation, we may choose to make changes to our corporate structure in order to respond to changing tax laws, if any.

This summary does not discuss all tax considerations that may be relevant to holders of our ordinary shares in light of their particular circumstances, nor does it address the consequences to holders of our ordinary shares subject to special treatment under the U.S. federal income tax laws, such as tax-exempt entities, pension plans, partnerships (including entities treated as partnerships for U.S. federal income tax purposes) and S corporations, real estate investment trusts and regulated investment companies, financial institutions, insurance companies, dealers or traders in securities, persons who hold our ordinary shares as part of a straddle, hedge, conversion, constructive sale, synthetic security, integrated investment or other risk-reduction transaction for U.S. federal income tax purposes, corporations that accumulate earnings to avoid U.S. federal income tax, persons whose "functional currency is not the U.S. dollar and persons who actually or constructively own 10% or more, by vote or value, of our stock. This discussion does not address any U.S. federal estate, gift or other non-income tax consequences or any state, local or foreign tax consequences, or the consequences of the alternative minimum tax or the Medicare tax on net investment income.

Prospective purchasers of our ordinary shares should consult their tax advisors as to the particular tax consequences to them of the ownership and disposition of our ordinary shares.

For purposes of this discussion, a "U.S. Holder" is a beneficial owner of our ordinary shares that is, for U.S. federal income tax purposes:

- an individual who is a citizen or a resident of the United States;
- a corporation, or other entity taxable as a corporation for U.S. federal income tax purposes, created or organized under the laws of the United States or any state or the District of Columbia;
- an estate, the income of which is subject to United States federal income taxation regardless of its source; or
- a trust, if (i) a court within the United States is able to exercise primary jurisdiction over its administration and one or more U.S. persons have the authority to control all of its substantial decisions, or (ii) a valid election is in place under applicable Treasury Regulations for the trust to be treated as a U.S. person.

If a partnership (including any entity treated as a partnership for U.S. federal income tax purposes) holds our ordinary shares, the tax treatment of a partner in the partnership generally will depend upon the status of the partner and the activities of the partnership. A partner of a partnership holding our ordinary shares should consult its tax advisor as to the particular U.S. federal income tax consequences applicable to them.

Owning or Disposing of our Ordinary Shares

Subject to the "passive foreign investment company" ("PFIC") rules discussed below, distributions with respect to our ordinary shares (which for these purposes will include the amount of any non-U.S. taxes withheld therefrom) should generally be includible in the gross income of a U.S. Holder on the date of receipt as foreign source dividend income to the extent that such distributions are paid out of our current or accumulated earnings and profits as determined under U.S. federal income tax

principles. Such distributions will not be eligible for the dividends-received deduction generally allowed to U.S. corporations. To the extent that such distributions exceed our current and accumulated earnings and profits, they will be treated first as a tax-free return of the U.S. Holder's tax basis in ordinary shares, and then to the extent the amount of such distributions exceed the U.S. Holder's tax basis, the excess will be treated as capital gain.

Subject to the PFIC rules discussed below, dividends paid to certain non-corporate U.S. Holders that constitute "qualified dividend income" will be taxable at the preferential rate applicable to long-term capital gains, provided that the U.S. Holder holds our ordinary shares for more than 60 days during the 121-day period beginning 60 days before the ex-dividend date and meets other holding period requirements. Dividends we pay with respect to our ordinary shares generally will be qualified dividend income provided that, in the year that the U.S. Holder receives the dividend, our ordinary shares are readily tradable on an established securities market in the United States.

To the extent we pay dividends in a currency other than the U.S. dollar, the amount of any dividend paid to U.S. Holders in such currency will (subject to the PFIC rules discussed below) be includible in income in a U.S. dollar amount calculated by reference to the exchange rate in effect on the date of receipt, regardless of whether the amount of such dividend is in fact converted into U.S. dollars. If the dividend is converted into U.S. dollars on the date of receipt, a U.S. Holder should not be required to recognize foreign currency exchange gain or loss in respect of the dividend income. A U.S. Holder may have foreign currency exchange gain or loss if the dividend is converted into U.S. dollars after the date of receipt. In general, foreign currency exchange gain or loss will be treated as U.S.-source ordinary gain or loss for foreign tax credit purposes.

Subject to certain limitations, including the PFIC rules discussed below, non-U.S. taxes (if any) withheld from or paid on dividend distributions generally will be eligible for credit against the U.S. Holder's U.S. federal income taxes. The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. The foreign tax credit rules are complex, and U.S. Holders are urged to consult their tax advisors regarding the availability of foreign tax credits in their particular circumstances.

Subject to the PFIC rules discussed below, a U.S. Holder will generally recognize a capital gain or loss for U.S. federal income tax purposes on the sale or disposition of our ordinary shares equal to the difference between the amount realized on the sale or disposition and such U.S. Holder's tax basis in the ordinary shares. Such capital gain or loss will be long-term capital gain or loss if the U.S. Holder's holding period for such ordinary shares exceeds one year as of the date of sale or disposition. Long-term capital gains of non-corporate U.S. Holders are generally taxed at preferential rates. Any gain or loss generally will be U.S.-source gain or loss for foreign tax credit purposes. The deductibility of capital losses is subject to limitations.

Passive Foreign Investment Company Status

We were a PFIC for 2014, but we were not a PFIC from 2015 through 2018, and we do not expect to be a PFIC for the foreseeable future. For U.S. federal income tax purposes, we generally would be classified as a PFIC for any taxable year if either (i) 75% or more of our gross income (including gross income of certain 25% or more owned corporate subsidiaries) is "passive income" (as defined for such purposes) or (ii) the percentage of our assets (including the assets of certain 25% or more owned corporate subsidiaries) that produce passive income or that are held for the production of passive income (based on the average of the fair market values of the assets determined at the end of each quarterly period) is at least 50%. In addition, whether we will be a PFIC for any taxable year depends on our assets and income over the course of each such taxable year and, as a result, cannot be predicted with certainty until after the end of the year. Passive income generally includes dividends, interest, royalties and rents (other than royalties and rents derived in the active conduct of a trade or

business and not derived from a related person) and certain gains. Because a company's PFIC status depends on the composition of a company's income and assets and the market value of its assets from time to time, there can be no assurance that we will not be a PFIC for any taxable year. The treatment of U.S. Holders in some cases will be materially different from that described above if, at any relevant time, Theravance Biopharma is a PFIC. If we are a PFIC for any taxable year during which a U.S. Holder holds our ordinary shares, unless the U.S. Holder makes a mark-to-market election or QEF election (each as described below) with respect to the ordinary shares, the U.S. Holder generally will, except as discussed below, be subject to special tax rules that have a penalizing effect, regardless of whether we remain a PFIC for future taxable years, on (i) any excess distribution that we make to the U.S. Holder (which generally means any distribution paid during a taxable year to a U.S. Holder that is greater than 125% of the average annual distributions paid in the three preceding taxable years or, if shorter, the U.S. Holder's holding period for the ordinary shares), and (ii) any gain realized on the sale or other disposition, including, under certain circumstances, a pledge, of ordinary shares. Under the PFIC rules:

- the excess distribution and/or gain will be allocated ratably over the U.S. Holder's holding period for the ordinary shares;
- the amount allocated to the current taxable year and any taxable years in the U.S. Holder's holding period prior to the first taxable year in which we are classified as a PFIC (each, a "pre-PFIC year") will be taxable as ordinary income;
- the amount allocated to each prior taxable year, other than the current taxable year or a pre-PFIC year, will be subject to tax at the highest tax rate in effect applicable to the individuals or corporations, as appropriate, for that year; and
- an interest charge will be imposed on the resulting tax deemed deferred with respect to each prior taxable year, other than a pre-PFIC year.

If we are a PFIC for any taxable year during which a U.S. Holder holds our ordinary shares and any of our non-U.S. subsidiaries is also a PFIC, such U.S. Holder will be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC for purposes of the application of these rules. Each U.S. Holder is advised to consult its tax advisors regarding the application of the PFIC rules to any of our subsidiaries.

Even though we do not currently believe that we are a PFIC, we believe that we, and one of our wholly-owned subsidiaries, Theravance Biopharma R&D, Inc., was a PFIC in 2014. Any U.S. Holder who currently owns any of our ordinary shares that it held while we were or may have been a PFIC should consult its tax advisor.

As an alternative to the foregoing rules if we are classified as a PFIC, a U.S. Holder may make a mark-to-market election with respect to our ordinary shares, provided that our ordinary shares are regularly traded. Our ordinary shares would be treated as "regularly traded" for any calendar year in which more than a de minimis quantity of the ordinary shares were traded on a qualified exchange on at least 15 days during each calendar quarter. The Nasdaq Global Market, where our ordinary shares are listed, is a qualified exchange for this purpose. If a mark-to-market election is made, the U.S. Holder will generally (i) include as ordinary income for each taxable year that we are a PFIC the excess, if any, of the fair market value of ordinary shares held at the end of the taxable year over the adjusted tax basis of such ordinary shares and (ii) deduct as an ordinary loss the excess, if any, of the adjusted tax basis of the ordinary shares over the fair market value of such ordinary shares held at the end of the taxable year, but only to the extent of the net amount previously included in income as a result of the mark-to-market election. The U.S. Holder's adjusted tax basis in the ordinary shares would be adjusted to reflect any income or loss resulting from the mark-to-market election. If a U.S. Holder makes an effective mark-to-market election, in each year that we are a PFIC, any gain recognized upon

the sale or other disposition of the ordinary shares will be treated as ordinary income and loss will be treated as ordinary loss, but only to the extent of the net amount previously included in income as a result of the mark-to-market election.

If a U.S. Holder makes a mark-to-market election in respect of a corporation classified as a PFIC and such corporation ceases to be classified as a PFIC, the U.S. Holder will not be required to take into account the mark-to-market gain or loss described above during any period that such corporation is not classified as a PFIC.

Because a mark-to-market election cannot be made for any lower-tier PFICs that we may own, a U.S. Holder who makes a mark-to-market election with respect to our ordinary shares may continue to be subject to the general PFIC rules with respect to such U.S. Holder's indirect interest in any of our non-United States subsidiaries that is classified as a PFIC.

If we are classified as a PFIC, a U.S. Holder of ordinary shares in a PFIC may instead make a qualified electing fund election ("QEF election"), with respect to our ordinary shares. A U.S. Holder who makes a timely QEF election with respect to our ordinary shares must report for U.S. federal income tax purposes its pro rata share of our ordinary earnings and net capital gain, if any, for each taxable year for which we are a PFIC that ends with or within such U.S. Holder's taxable year, regardless of whether or not they receive any distributions on the ordinary shares that they own. No portion of any such inclusions of ordinary earnings would be eligible to be treated as "qualified dividend income." For a non-corporate U.S. Holder, any such net capital gain inclusions would be eligible for taxation at the preferential capital gains tax rates. A U.S. Holder's adjusted tax basis in our ordinary shares would be increased to reflect any taxed but undistributed earnings and profits. Any distribution of earnings and profits that had been previously taxed would not be taxed again when a U.S. Holder receives such distribution, but would result in a corresponding reduction in the adjusted tax basis in our ordinary shares. A U.S. Holder would not, however, be entitled to a deduction for their pro rata share of any losses a PFIC incurs with respect to any year. A U.S. Holder generally would recognize capital gain or loss on the sale, exchange or other disposition of our ordinary shares. A U.S. Holder may make a timely QEF election with respect to our ordinary shares by filing IRS Form 8621 with its U.S. federal income tax return for the first year in which we are a PFIC and such U.S. Holder holds our ordinary shares. If we are a PFIC for any taxable year, we will make available to U.S. Holders the necessary information in order to make a QEF election as described above.

Dividends that we pay on our ordinary shares will not be eligible for the reduced tax rate that applies to qualified dividend income if we are classified as a PFIC for the taxable year in which the dividend is paid or the preceding taxable year. In addition, if a U.S. Holder owns our ordinary shares during any taxable year that we are a PFIC, such U.S. Holder must file an annual report with the IRS, subject to certain limited exceptions. Each U.S. Holder is urged to consult its tax advisor concerning the United States federal income tax consequences of owning and disposing our ordinary shares if we are or become a PFIC, including the possibility of making a mark-to-market election or a qualified electing fund election with respect to us and with respect to its indirect interests in Theravance Biopharma R&D, Inc.

Information Reporting and Backup Withholding

Payments of dividends and sales proceeds that are made within the United States or through certain U.S.-related financial intermediaries may be subject to information reporting and backup withholding, unless the U.S. Holder is a corporation or other "exempt recipient." Backup withholding (currently at a 24% rate) may apply to such payments if a holder of our ordinary shares fails to provide a correct taxpayer identification number or other certification that it is not subject to backup withholding. The amount of any backup withholding from a payment to a U.S. Holder will generally be

allowed as a credit against the U.S. Holder's U.S. federal income tax liability and may entitle it to a refund, provided that the required information is timely furnished to the IRS.

Certain U.S. Holders are required to report information relating to an interest in our ordinary shares, subject to exceptions (including an exception for ordinary shares held in accounts maintained by certain financial institutions), by attaching a completed IRS Form 8938, Statement of Specified Foreign Financial Assets, with their tax return for each year in which they hold an interest in our ordinary shares. U.S. Holders are urged to consult their own tax advisors regarding information reporting requirements relating to their ownership of our ordinary shares.

MATERIAL CAYMAN ISLANDS TAX CONSIDERATIONS

Prospective investors should consult their professional advisers on the possible tax consequences of buying, holding or selling our ordinary shares under the laws of their country of citizenship, residence or domicile.

Cayman Islands Taxation

The following is a discussion of certain Cayman Islands income tax consequences of an investment in the ordinary shares. The discussion is a general summary of present law, which is subject to prospective and retroactive change. It is not intended as tax advice, does not consider any investor's particular circumstances, and does not consider tax consequences other than those arising under Cayman Islands law.

Under Existing Cayman Islands Laws:

Payments of dividends and capital in respect of our ordinary shares will not be subject to taxation in the Cayman Islands and no withholding will be required on the payment of a dividend or capital to any holder of the ordinary shares, nor will gains derived from the disposal of the ordinary shares be subject to Cayman Islands income or corporation tax. The Cayman Islands currently have no income, corporation or capital gains tax and no estate duty, inheritance tax or gift tax.

No stamp duty is payable in respect of the issue of the ordinary shares or on an instrument of transfer in respect of an ordinary share.

We have received on May 20, 2014 an undertaking from the Governor-in-Cabinet of the Cayman Islands that, in accordance with section 6 of the Tax Concession Law (2018 Revision) of the Cayman Islands, for a period of 20 years from the date of the undertaking, no law which is enacted in the Cayman Islands imposing any tax to be levied on profits, income, gains or appreciations shall apply to us or our operations and, in addition, that no tax to be levied on profits, income, gains or appreciations or which is in the nature of estate duty or inheritance tax shall be payable (i) on or in respect of the shares, debentures or other obligations of ours or (ii) by way of the withholding in whole or in part of a payment of dividend or other distribution of income or capital by us to our members or a payment of principal or interest or other sums due under a debenture or other obligation of ours.

LEGAL MATTERS

Certain legal matters relating to the issuance of the ordinary shares offered by this prospectus will be passed upon for us by Maples and Calder, Cayman Islands, our Cayman Islands counsel, and certain other legal matters will be passed upon for us by Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP. Cowen and Company, LLC is being represented by Covington & Burling LLP, New York, New York in connection with this offering.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our [Annual Report on Form 10-K for the year ended December 31, 2018](#), and the effectiveness of our internal control over financial reporting as of December 31, 2018, as set forth in their reports, which are incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-3 with the SEC under the Securities Act. This prospectus is part of the registration statement but the registration statement includes and incorporates by reference additional information and exhibits. We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC also maintains a website that contains reports, proxy and information statements and other information regarding companies, such as ours, that file documents electronically with the SEC. The address of that website is <http://www.sec.gov>. The information on the SEC's website is not part of this prospectus, and any references to this website or any other website are inactive textual references only.

INFORMATION INCORPORATED BY REFERENCE

The SEC permits us to "incorporate by reference" the information contained in documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents rather than by including them in this prospectus. Information that is incorporated by reference is considered to be part of this prospectus and you should read it with the same care that you read this prospectus. Later information that we file with the SEC will automatically update and supersede the information that is either contained, or incorporated by reference, in this prospectus, and will be considered to be a part of this prospectus from the date those documents are filed. We have filed with the SEC, and incorporate by reference in this prospectus (other than portions of these documents that are furnished under applicable SEC rules rather than filed and exhibits furnished in connection with such items):

- [our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on February 28, 2019;](#)
- the information in our [Definitive Proxy Statement on Schedule 14A, filed with the SEC on March 20, 2019](#), to the extent incorporated by reference into our [Annual Report on Form 10-K for the fiscal year ended December 31, 2018;](#)
- our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2019, June 30, 2019 and September 30, 2019, filed with the SEC on [May 10, 2019](#), [August 5, 2019](#) and [November 8, 2019](#), respectively;
- our Current Reports on Form 8-K or Form 8-K/A, filed with the SEC on [January 3, 2019](#), [January 7, 2019](#), [March 1, 2019](#), [May 1, 2019](#), [June 4, 2019](#) and [September 30, 2019](#); and

- [the description of our ordinary shares contained in our Registration Statement No. 001-36033 on Form 10, which became effective on May 14, 2014, including any amendment or report filed for the purpose of updating such description.](#)

We also incorporate by reference all additional documents that we file with the SEC under the terms of Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, that are made after the filing date of the registration statement of which this prospectus is a part, as well as between the date of this prospectus and the termination of any offering of securities offered by this prospectus. We are not, however, incorporating, in each case, any documents or information that we are deemed to furnish and not file in accordance with SEC rules.

You may request a copy of any or all of the documents incorporated by reference but not delivered with this prospectus, at no cost, by writing or telephoning us at the following address and number: Investor Relations, Theravance Biopharma US, Inc., 901 Gateway Boulevard, South San Francisco, California 94080, (650) 808-6000. We will not, however, send exhibits to those documents, unless the exhibits are specifically incorporated by reference in those documents.



Up to \$150,000,000

Ordinary shares

PROSPECTUS

Cowen

December 3, 2019

PART II
Information Not Required In Prospectus

Item 14. Other Expenses of Issuance and Distribution.

The following is a statement of estimated expenses payable by the Registrant in connection with the issuance and distribution of the securities being registered, other than underwriting discounts and commission.

SEC registration fee(1)	\$ 19,470
The Nasdaq Stock Market listing fees	*
Transfer agent and registrar, trustee and depository fees	*
Printing expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Miscellaneous	*
	<u>\$</u>

(1) Represents registration fee applicable to amount included in prospectus for \$150 million in shares of common stock. Additional registration fees deferred in reliance upon Rules 456(b) and 457(r) under the Securities and Exchange Act of 1934, as amended.

* Estimated expenses are not presently known. The foregoing sets forth the general categories of expenses (other than underwriting discounts and commissions) that we anticipate we will incur in connection with the offering of securities under this registration statement. An estimate of the aggregate expenses in connection with the issuance and distribution of the securities being offered will be included in the applicable prospectus supplement.

Item 15. Indemnification of Directors and Officers.

Cayman Islands law does not limit the extent to which a company's memorandum and articles of association may provide for indemnification of directors and officers, except to the extent any such provision may be held by the Cayman Islands courts to be contrary to public policy, such as to provide indemnification against civil fraud or the consequences of committing a crime. The Registrant's amended and restated memorandum and articles of association provide for indemnification of directors and officers for actions, costs, charges, losses, damages and actual expenses incurred in their capacities as such, except that such indemnification does not extend to any matter in respect of any actual fraud or willful default that may attach to any of them.

We have entered into indemnification agreements with each of our directors and executive officers and certain other key employees providing for indemnification to the fullest extent permitted by Cayman Islands law and, in certain respects, the indemnification agreements may provide greater protection than that specifically provided for by Cayman Islands law. The indemnification agreements will not provide indemnification for, among other things, conduct which is found to be knowingly fraudulent or deliberately dishonest, or for willful misconduct. We also intend to obtain policies that insure our directors and officers against certain liabilities they may incur in their capacity as directors and officers. Under these policies, the insurer, on our behalf, may pay amounts for which we have granted indemnification to the directors or officers.

We currently carry and intend to continue to carry liability insurance for our directors and officers.

Item 16. Exhibits.

Exhibit Number	Description	Form	Incorporation by Reference		Filing Date/Period End Date	Filed Herewith
			File No.	Exhibit/Appendix Reference		
1.1±	Form of Underwriting Agreement.					
1.2	Sales Agreement, dated as of December 3, 2019, by and between Theravance Biopharma, Inc. and Cowen and Company, LLC.					X
2.1	Separation and Distribution Agreement by and between Theravance Biopharma, Inc. and Innoviva, Inc., dated June 1, 2014.	8-K	001-36033	10.1	June 3, 2014	
4.1	Specimen Share Certificate.	10-12B/A	001-36033	4.1	April 30, 2014	
4.2	Registration Rights Agreement, dated March 3, 2014.	10-12B/A	001-36033	4.2	April 8, 2014	
4.3	Form of indenture relating to debt securities.					X
4.5±	Form of supplemental indenture or other instrument establishing the issuance of one or more series of debt securities (including the form of such debt security).					
4.6±	Form of Warrant Agreement and Warrant Certificate.					
5.1	Opinion of Maples and Calder.					X
5.2	Opinion of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP					X
23.1	Consent of Independent Registered Public Accounting Firm.					X
23.2	Consent of Maples and Calder (included in Exhibit 5.1).					X
23.3	Consent of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP (included in Exhibit 5.2).					X

Exhibit Number	Description	Form	Incorporation by Reference		Filing Date/Period End Date	Filed Herewith
			File No.	Exhibit/Appendix Reference		
24.1	Power of Attorney (included on signature page of Registration Statement).					X

± To be filed by amendment or pursuant to a report to be filed pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, if applicable, and incorporated herein by reference.

Item 17. Undertakings.

The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (i), (ii) and (iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Securities and Exchange Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned Registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned Registrant or used or referred to by the undersigned Registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned Registrant or its securities provided by or on behalf of the undersigned Registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned Registrant to the purchaser.

(6) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(7) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to any charter provision, by law or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(8) To file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act of 1939 in accordance with the rules and regulations prescribed by the Securities and Exchange Commission under Section 305(b)(2) of the Trust Indenture Act of 1939.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ ERAN BROSHY</u> Eran Broshy	Director	December 3, 2019
<u>/s/ ROBERT V. GUNDERSON, JR.</u> Robert V. Gunderson, Jr.	Director	December 3, 2019
<u>/s/ BURTON G. MALKIEL PH.D.</u> Burton G. Malkiel Ph.D.	Director	December 3, 2019
<u>/s/ DEAN J. MITCHELL</u> Dean J. Mitchell	Director	December 3, 2019
<u>/s/ SUSAN M. MOLINEAUX PH. D.</u> Susan M. Molineaux Ph. D.	Director	December 3, 2019
<u>/s/ DONAL O'CONNOR</u> Donal O'Connor	Director	December 3, 2019
<u>/s/ PETER S. RINGROSE PH.D.</u> Peter S. Ringrose Ph.D.	Director	December 3, 2019
<u>/s/ GEORGE M. WHITESIDES PH.D.</u> George M. Whitesides Ph.D.	Director	December 3, 2019
<u>/s/ WILLIAM D. YOUNG</u> William D. Young	Director	December 3, 2019

THERAVANCE BIOPHARMA, INC.

\$150,000,000

ORDINARY SHARES

SALES AGREEMENT

December 3, 2019

Cowen and Company, LLC
599 Lexington Avenue
New York, NY 10022

Ladies and Gentlemen:

Theravance Biopharma, Inc., a Cayman Islands exempted company (the "Company"), confirms its agreement (this "Agreement") with Cowen and Company, LLC ("Cowen"), as follows:

1. Issuance and Sale of Shares. The Company agrees that, from time to time during the term of this Agreement, on the terms and subject to the conditions set forth herein, it may issue and sell through Cowen, acting as agent and/or principal, the Company's ordinary shares (the "Placement Shares"), par value \$0.00001 per share (the "Ordinary Shares"), having an aggregate offering price of up to \$150,000,000. Notwithstanding anything to the contrary contained herein, the parties hereto agree that compliance with the limitation set forth in this Section 1 on the number of Ordinary Shares issued and sold under this Agreement shall be the sole responsibility of the Company, and Cowen shall have no obligation in connection with such compliance. The issuance and sale of Ordinary Shares through Cowen will be effected pursuant to the Registration Statement (as defined below) being filed by the Company and which will become automatically effective under Rule 462(e) of the Securities Act (as defined below) upon filing with the Securities and Exchange Commission (the "Commission"), although nothing in this Agreement shall be construed as requiring the Company to use the Registration Statement (as defined below) to issue the Ordinary Shares.

The Company has filed or will file, in accordance with the provisions of the Securities Act of 1933, as amended, and the rules and regulations thereunder (collectively, the "Securities Act"), with the Commission an "automatic shelf registration statement" (as defined in Rule 405 promulgated under the Securities Act ("Rule 405") on Form S-3, including a base prospectus, relating to certain securities, including the Ordinary Shares, to be issued from time to time by the Company, and which incorporates by reference documents that the Company has filed or will file in accordance with the provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (collectively, the "Exchange Act"). The Company has prepared a prospectus supplement specifically relating to the Placement Shares (the "Prospectus Supplement") to the base prospectus included as part of such registration statement. The Company has furnished to Cowen, for use by Cowen, copies of the prospectus included as part of such registration statement, as supplemented by the Prospectus Supplement, relating to the Placement Shares. Except where the context otherwise requires, such registration statement, as

amended, when it becomes effective, including all documents filed as part thereof or incorporated by reference therein, and including any information contained in a Prospectus (as defined below) subsequently filed with the Commission pursuant to Rule 424(b) promulgated under the Securities Act or deemed to be a part of such registration statement pursuant to Rule 430B or 462(b) promulgated under the Securities Act, is herein called the “**Registration Statement**.” The base prospectus, including all documents incorporated therein by reference, included in the Registration Statement, as it may be supplemented by the Prospectus Supplement, in the form in which such prospectus and/or Prospectus Supplement have most recently been filed by the Company with the Commission pursuant to Rule 424(b) promulgated under the Securities Act, together with any “issuer free writing prospectus,” as defined in Rule 433 of the Securities Act regulations (“**Rule 433**”), relating to the Placement Shares that (i) is required to be filed with the Commission by the Company or (ii) is exempt from filing pursuant to Rule 433(d)(5)(i), in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company’s records pursuant to Rule 433(g), is herein called the “**Prospectus**.” Any reference herein to the Registration Statement, the Prospectus or any amendment or supplement thereto shall be deemed to refer to and include the documents incorporated by reference therein, and any reference herein to the terms “amend,” “amendment” or “supplement” with respect to the Registration Statement or the Prospectus shall be deemed to refer to and include the filing after the execution hereof of any document with the Commission deemed to be incorporated by reference therein. For purposes of this Agreement, all references to the Registration Statement, the Prospectus or to any amendment or supplement thereto shall be deemed to include any copy filed with the Commission pursuant to the Electronic Data Gathering Analysis and Retrieval System (“**EDGAR**”).

2. **Placements.** Each time that the Company wishes to issue and sell the Placement Shares hereunder (each, a “**Placement**”), it will notify Cowen by email notice (or other method mutually agreed to in writing by the parties) (a “**Placement Notice**”) containing the parameters in accordance with which it desires the Placement Shares to be sold, which shall at a minimum include the number of shares of Placement Shares to be issued, the time period during which sales are requested to be made, any limitation on the number of Placement Shares that may be sold in any one Trading Day (as defined in **Section 3**) and any minimum price below which sales may not be made, a form of which containing such minimum sales parameters necessary is attached hereto as **Schedule 1**. The Placement Notice shall originate from any of the individuals from the Company set forth on **Schedule 2** (with a copy to each of the other individuals from the Company listed on such schedule), and shall be addressed to each of the individuals from Cowen set forth on **Schedule 2**, as such **Schedule 2** may be amended from time to time. The Placement Notice shall be effective upon receipt by Cowen unless and until (i) in accordance with the notice requirements set forth in **Section 4**, Cowen declines to accept the terms contained therein for any reason, in its sole discretion, (ii) the entire amount of the Placement Shares have been sold, (iii) in accordance with the notice requirements set forth in **Section 4**, the Company suspends or terminates the Placement Notice for any reason, in its sole discretion, (iv) the Company issues a subsequent Placement Notice with parameters superseding those on the earlier dated Placement Notice, or (v) this Agreement has been terminated under the provisions of **Section 11**. The amount of any discount, commission or other compensation to be paid by the Company to Cowen in connection with the sale and issuance of the Placement Shares shall be calculated in accordance with the terms set forth in **Schedule 3**. It is expressly acknowledged and agreed that neither the Company nor Cowen will have any obligation whatsoever with respect to a

Placement or any Placement Shares unless and until the Company delivers a Placement Notice to Cowen and Cowen does not decline such Placement Notice pursuant to the terms set forth above, and then only upon the terms specified therein and herein. In the event of a conflict between the terms of this Agreement and the terms of a Placement Notice, the terms of the Placement Notice will control.

3. Sale of Placement Shares by Cowen. Subject to the terms and conditions herein set forth, upon the Company's delivery of a Placement Notice, and unless the sale and issuance of the Placement Shares described therein has been declined, suspended, or otherwise terminated in accordance with the terms of this Agreement, Cowen, for the period specified in the Placement Notice, will use its commercially reasonable efforts consistent with its normal trading and sales practices and applicable state and federal laws, rules and regulations and the rules of the Nasdaq Stock Market, Inc. to sell such Placement Shares up to the amount specified in such Placement Notice, and otherwise in accordance with the terms of such Placement Notice. Cowen will provide written confirmation to the Company (including by email correspondence to each of the individuals of the Company set forth on Schedule 2, if receipt of such correspondence is actually acknowledged by any of the individuals to whom the notice is sent, other than via auto-reply) no later than the opening of the Trading Day (as defined below) immediately following the Trading Day on which it has made sales of Placement Shares hereunder setting forth the number of Placement Shares sold on such day, the volume-weighted average price of the Placement Shares sold, and the Net Proceeds (as defined below) payable to the Company. Subject to the terms of the Placement Notices, Cowen may sell Placement Shares by any method permitted by law deemed to be an "at the market offering" as defined in Rule 415(a)(4) of the Securities Act, including, without limitation, sales made on or through The Nasdaq Global Market ("**Nasdaq**") or on any other existing trading market for the Ordinary Shares or to or through a market maker. If expressly authorized by the Company in a Placement Notice, Cowen may also sell Placement Shares in negotiated transactions. Notwithstanding the provisions of Section 6(ww), Cowen shall not purchase Placement Shares for its own account as principal unless expressly authorized to do so by the Company in a Placement Notice. The Company acknowledges and agrees that (i) there can be no assurance that Cowen will be successful in selling Placement Shares, and (ii) Cowen will incur no liability or obligation to the Company or any other person or entity if it does not sell Placement Shares for any reason other than a failure by Cowen to use its commercially reasonable efforts consistent with its normal trading and sales practices to sell such Placement Shares as required under this Section 3. For the purposes hereof, "**Trading Day**" means any day on which the Company's Ordinary Shares is purchased and sold on Nasdaq or the principal market on which the Ordinary Shares may then be listed or quoted.

4. Suspension of Sales.

(a) The Company or Cowen may, upon notice to the other party in writing (including by email correspondence to each of the individuals of the other party set forth on Schedule 2, if receipt of such correspondence is actually acknowledged by any of the individuals to whom the notice is sent, other than via auto-reply) or by telephone (confirmed immediately by verifiable facsimile transmission or email correspondence to each of the individuals of the other party set forth on Schedule 2), suspend any sale of Placement Shares; *provided, however*, that such suspension shall not affect or impair either party's obligations with respect to any Placement Shares sold hereunder prior to the receipt of such notice. While a suspension is in effect any

obligation under Section 7(m), 7(n) and 7(o) with respect to delivery of certificates, opinion, or comfort letters to Cowen, shall be waived. Each of the parties agrees that no such notice under this Section 4 shall be effective against the other unless it is made to one of the individuals named on Schedule 2 hereto, as such schedule may be amended from time to time.

(b) Notwithstanding any other provision of this Agreement, during any period in which the Company is in possession of material non-public information, the Company and Cowen agree that (i) no sale of Placement Shares will take place, (ii) the Company shall not request the sale of any Placement Shares, and (iii) Cowen shall not be obligated to sell or offer to sell any Placement Shares.

(c) If either Cowen or the Company has reason to believe that the exemptive provisions set forth in Rule 101(c)(1) of Regulation M under the Exchange Act are not satisfied with respect to the Ordinary Shares, it shall promptly notify the other party, and Cowen may, at its sole discretion, suspend sales of the Placement Shares under this Agreement.

(d) Notwithstanding any other provision of this Agreement, during any period in which the Registration Statement is no longer effective under the Securities Act, the Company shall promptly notify Cowen, the Company shall not request the sale of any Placement Shares, and Cowen shall not be obligated to sell or offer to sell any Placement Shares.

5. Settlement.

(a) Settlement of Placement Shares. Unless otherwise specified in the applicable Placement Notice, settlement for sales of Placement Shares will occur on the second (2nd) Trading Day (or such earlier day as is industry practice for regular-way trading) following the date on which such sales are made (each, a "**Settlement Date**" and the first such settlement date, the "**First Delivery Date**"). The amount of proceeds to be delivered to the Company on a Settlement Date against receipt of the Placement Shares sold (the "**Net Proceeds**") will be equal to the aggregate sales price received by Cowen at which such Placement Shares were sold, after deduction for (i) Cowen's commission, discount or other compensation for such sales payable by the Company pursuant to Section 2 hereof, (ii) any other amounts due and payable by the Company to Cowen hereunder pursuant to Section 7(g) (Expenses) hereof, and (iii) any transaction fees imposed by any governmental or self-regulatory organization in respect of such sales.

(b) Issuance of Placement Shares. On or before each Settlement Date, the Company will, or will cause its transfer agent to, electronically transfer the Placement Shares being sold by crediting Cowen's or its designee's account (provided Cowen shall have given the Company written notice of such designee prior to the Settlement Date) at The Depository Trust Company through its Deposit and Withdrawal at Custodian System ("**DWAC**") or by such other means of issue or delivery as may be mutually agreed upon by the parties hereto which in all cases shall be freely tradeable, transferable, registered shares in good form. On each Settlement Date, Cowen will deliver the related Net Proceeds in same day funds to an account designated by the Company on, or prior to, the Settlement Date. Cowen will be responsible for providing DWAC instructions or instructions by other means with regard to the transfer of the Placement Shares being sold. The Company agrees that if the Company, or its transfer agent (if applicable),

defaults in its obligation to issue duly authorized Placement Shares on a Settlement Date through no fault of Cowen, the Company agrees that in addition to and in no way limiting the rights and obligations set forth in Section 9(a) (Indemnification and Contribution) hereto, it will (i) hold Cowen harmless against any loss, claim, damage, or reasonable and documented expense (including reasonable legal fees and expenses), as incurred, arising out of or in connection with such default by the Company and (ii) pay to Cowen (without duplication) any commission, discount, or other compensation to which it would otherwise have been entitled absent such default.

6. Representations and Warranties of the Company. The Company represents and warrants to, and agrees with, Cowen that, unless such representation, warranty or agreement specifies a different time, as of the date of this Agreement, each Representation Date (as defined in Section 7(m)), each date on which a Placement Notice is given, and any date on which Placement Shares are sold hereunder:

(a) Compliance with Registration Requirements. Prior to the delivery of any Placement Notice by the Company, the Registration Statement will have become effective. No stop order suspending the effectiveness of the Registration Statement or any Rule 462(b) Registration Statement is in effect and no proceedings for such purpose have been instituted or are pending or, to the knowledge of the Company, contemplated or threatened by the Commission. The Company meets the requirements for use of Form S-3 under the Securities Act. The sale and issuance of the Placement Shares hereunder meets the requirements of General Instruction I.B.1 of Form S-3.

(b) No Misstatement or Omission. The Prospectus when filed complied and, as amended or supplemented, if applicable, will comply in all material respects with the Securities Act. Each of the Registration Statement, any Rule 462(b) Registration Statement, the Prospectus and any post-effective amendments or supplements thereto, at the time it became effective or its date, as applicable, complied and as of each of the Settlement Dates, if any, complied in all material respects with the Securities Act and did not and, as of each Settlement Date, if any, did not and will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. The Prospectus, as amended or supplemented, as of its date, did not and, as of each of the Settlement Dates, if any, will not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The representations and warranties set forth in the two immediately preceding sentences do not apply to statements in or omissions from the Registration Statement, any Rule 462(b) Registration Statement, or any post-effective amendment thereto, or the Prospectus, or any amendments or supplements thereto, made in reliance upon and in conformity with information relating to Cowen furnished to the Company in writing by Cowen expressly for use therein. There are no contracts or other documents required to be described in the Prospectus or to be filed as exhibits to the Registration Statement which have not been described or filed as required.

(c) Offering Materials Furnished to Cowen. The Company has delivered to Cowen one complete copy of the Registration Statement and a copy of each consent and certificate of experts filed as a part thereof, and conformed copies of the Registration Statement (without

exhibits) and the Prospectus, as amended or supplemented, in such quantities and at such places as Cowen has reasonably requested.

(d) Well-Known Seasoned Issuer. (A) Upon the effectiveness of the Registration Statement, (B) at the time of the most recent amendment thereto for the purposes of complying with Section 10(a)(3) of the Exchange Act (whether such amendment was by post-effective amendment, incorporated report filed pursuant to Section 13 or 15(d) of the Exchange Act or form of prospectus), (C) at the time the Company or any person acting on its behalf (within the meaning, for this clause only, of Rule 163(c) promulgated under the Securities Act) made any offer relating to the Placement Shares in reliance on the exemption of Rule 163 promulgated under the Securities Act, and (D) as of the Applicable Time, the Company was and is a “well-known seasoned issuer” (as defined in Rule 405).

(e) Not an Ineligible Issuer. The Company currently is not an “ineligible issuer,” as defined in Rule 405, without taking account of any determination by the Commission pursuant to Rule 405 that it is not necessary that the Company be considered an ineligible issuer. The Company agrees to notify Cowen promptly upon the Company becoming an “ineligible issuer.”

(f) Distribution of Offering Material By the Company. The Company has not distributed and will not distribute, prior to the completion of Cowen’s distribution of the Placement Shares, any offering material in connection with the offering and sale of the Placement Shares other than the Prospectus or the Registration Statement.

(g) The Sales Agreement. This Agreement has been duly authorized, executed and delivered by, and is a valid and binding agreement of, the Company, enforceable in accordance with its terms, except as rights to indemnification hereunder may be limited by applicable law and except as the enforcement hereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting the rights and remedies of creditors or by general equitable principles.

(h) Authorization of the Placement Shares. The Placement Shares will be duly authorized for issuance and sale pursuant to this Agreement and, when issued by the Company against payment therefor pursuant to this Agreement and the amended and restated memorandum and articles of association of the Company, and registered in the Register of Members of the Company, will be duly authorized, validly issued, fully paid and nonassessable.

(i) No Applicable Registration or Other Similar Rights. There are no persons with registration or other similar rights to have any equity or debt securities registered for sale under the Registration Statement or included in the offering contemplated by this Agreement, except for such rights as have been duly waived.

(j) No Material Adverse Change. Except as otherwise disclosed in the Registration Statement and the Prospectus, subsequent to the respective dates as of which information is given in the Registration Statement and the Prospectus: (i) there has been no material adverse change, or any development that could reasonably be expected to result in a material adverse change, in the condition, financial or otherwise, or in the earnings, business, operations or prospects, whether or not arising from transactions in the ordinary course of business, of the Company and its subsidiaries, considered as one entity (any such change is called a “Material

Adverse Change”); (ii) the Company and its subsidiaries, considered as one entity, have not incurred any material liability or obligation, indirect, direct or contingent, not in the ordinary course of business nor entered into any material transaction or agreement not in the ordinary course of business; and (iii) there has been no dividend or distribution of any kind declared, paid or made by the Company or, except for regular quarterly dividends publicly announced by the Company or dividends paid to the Company or other subsidiaries, by any of its subsidiaries on any class of share capital or repurchase or redemption by the Company or any of its subsidiaries of any class of share capital.

(k) Independent Accountants. Ernst & Young LLP, who has expressed its opinion with respect to the financial statements (which term as used in this Agreement includes the related notes thereto) and supporting schedules filed with the Commission or incorporated by reference as a part of the Registration Statement and included in the Prospectus, is (i) an independent registered public accounting firm as required by the Securities Act, the Exchange Act and the rules of the Public Company Accounting Oversight Board (“**PCAOB**”) whose registration has not been suspended or revoked and who has not requested such registration to be withdrawn and (ii) in compliance with the applicable requirements relating to the qualification of accountants under Rule 2-01 of Regulation S-X under the Securities Act.

(l) Preparation of the Financial Statements. The financial statements filed with the Commission as a part of or incorporated by reference in the Registration Statement and the Prospectus present fairly in all material respects the consolidated financial position of the Company and its subsidiaries as of the dates indicated and the results of their operations and cash flows for the periods specified. The supporting schedules included in or incorporated in the Registration Statement present fairly in all material respects the information required to be stated therein. Such financial statements and supporting schedules have been prepared in conformity with generally accepted accounting principles as applied in the United States applied on a consistent basis throughout the periods involved, except as may be expressly stated in the related notes thereto. No other financial statements or supporting schedules are required to be included in or incorporated in the Registration Statement. To the Company’s knowledge, no person who has been suspended or barred from being associated with a registered public accounting firm, or who has failed to comply with any sanction pursuant to Rule 5300 promulgated by the PCAOB, has participated in or otherwise aided the preparation of, or audited, the financial statements or other financial data filed with the Commission as a part of or incorporated by reference in the Registration Statement and the Prospectus. The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission’s rules and guidelines applicable thereto.

(m) Incorporation and Good Standing of the Company. The Company has been duly incorporated and is validly existing as an exempted company in good standing under the laws of the Cayman Islands and has corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Prospectus and to enter into and perform its obligations under this Agreement. The Company is duly qualified as a foreign corporation to transact business and is in good standing (where such concept exists) in each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify or to be in

good standing outside of the Cayman Islands would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Change. Each member of the corporate bodies of the Company has been duly elected or appointed in such capacity and exercises his or her functions in accordance with applicable laws and regulations and the Company's by-laws and internal regulations.

(n) Subsidiaries. Each "significant subsidiary" of the Company (as such term is defined in Rule 1-02 of Regulation S-X) (each, a "**Subsidiary**" and, collectively, the "**Subsidiaries**") has been duly organized and is validly existing in good standing (or the functional equivalent to the extent it exists) under the laws of the jurisdiction of its incorporation or organization, has corporate or similar power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement and the Prospectus and is duly qualified to transact business and is in good standing (or the functional equivalent to the extent it exists) in each jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify or to be in good standing would not reasonably be expected to result in a Material Adverse Change. Except as otherwise disclosed in the Registration Statement and the Prospectus, all of the issued and outstanding share capital or capital stock of each Subsidiary has been duly authorized and validly issued, is fully paid and non-assessable and is owned by the Company, directly or through subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance, claim or equity. None of the outstanding shares of share capital or capital stock of any Subsidiary were issued in violation of the preemptive or similar rights of any securityholder of such Subsidiary. The only subsidiaries of the Company are the subsidiaries listed in Exhibit 21.1 to the Company's Annual Report on Form 10-K for the most recently ended fiscal year.

(o) Share Capital Matters. The authorized, issued and outstanding share capital of the Company is as set forth in the Registration Statement and the Prospectus (except for subsequent issuances, if any, pursuant to this Agreement, pursuant to reservations, agreements or employee benefit plans referred to in the Registration Statement and the Prospectus or pursuant to the exercise of convertible securities or options referred to in the Registration Statement and the Prospectus). The Ordinary Shares conform in all material respects to the description thereof contained in the Prospectus. All of the issued and outstanding Ordinary Shares have been duly authorized and validly issued as fully paid and non-assessable and have been issued in compliance with federal and state securities laws. None of the outstanding Ordinary Shares were issued in violation of any preemptive rights, rights of first refusal or other similar rights to subscribe for or purchase securities of the Company. There are no authorized or outstanding options, warrants, preemptive rights, rights of first refusal or other rights to purchase, or equity or debt securities convertible into or exchangeable or exercisable for, any share capital or capital stock of the Company or any of its subsidiaries other than those accurately described in all material respects in the Prospectus. The description of the Company's share option, share bonus and other share plans or arrangements, and the options or other rights granted thereunder, set forth in the Prospectus accurately and fairly presents in all material respects the information required to be shown with respect to such plans, arrangements, options and rights.

(p) Non-Contravention of Existing Instruments; No Further Authorizations or Approvals Required. Neither the Company nor any of its Subsidiaries is in violation of its

charter, by-laws or similar organizational document or is in default (or, with the giving of notice or lapse of time, would be in default) (“**Default**”) under any indenture, mortgage, loan or credit agreement, note, contract, franchise, lease or other instrument to which the Company or any of its subsidiaries is a party or by which it or any of them may be bound, or to which any of the property or assets of the Company or any of its subsidiaries is subject (each, an “**Existing Instrument**”), except for such Defaults as would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change. The Company’s execution, delivery and performance of this Agreement and consummation of the transactions contemplated hereby and by the Prospectus (i) have been duly authorized by all necessary corporate action and will not result in any violation of the provisions of the charter, by-laws or similar organizational document of the Company or any Subsidiary, (ii) will not conflict with or constitute a breach of, or Default under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of the Company or any of its subsidiaries pursuant to, or require the consent of any other party to, any Existing Instrument, except for such conflicts, breaches, Defaults, liens, charges or encumbrances as would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change and (iii) will not result in any violation of any law, administrative regulation or administrative or court decree applicable to the Company or any Subsidiary as would, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change. No consent, approval, authorization or other order of, or registration or filing with, any court or other governmental or regulatory authority or agency, is required for the Company’s execution, delivery and performance of this Agreement and consummation of the transactions contemplated hereby and by the Prospectus, except such as have been obtained or made by the Company and are in full force and effect under the Securities Act, applicable state securities or blue sky laws and from the Financial Industry Regulatory Authority (“**FINRA**”).

(q) **No Material Actions or Proceedings.** Except as disclosed in the Prospectus, there are no legal or governmental actions, suits or proceedings pending or, to the Company’s knowledge, threatened in writing (i) against or affecting the Company or any of its Subsidiaries, (ii) which has as the subject thereof any officer or director of, or property owned or leased by, the Company or any of its Subsidiaries or (iii) relating to environmental or discrimination matters, where in any such case (A) there is a reasonable possibility that such action, suit or proceeding might be determined adversely to the Company or such subsidiary and (B) any such action, suit or proceeding, if so determined adversely, would reasonably be expected to result in a Material Adverse Change or adversely affect the consummation of the transactions contemplated by this Agreement. No material labor dispute with the employees of the Company or any of its subsidiaries exists or, to the Company’s knowledge, is threatened in writing or imminent.

(r) **All Necessary Permits, etc.** The Company and each subsidiary possess such valid and current certificates, authorizations or permits issued by the appropriate state, federal or foreign regulatory agencies or bodies necessary to conduct their respective businesses, other than those the failure to possess or own would not result in a Material Adverse Change, and neither the Company nor any subsidiary has received any written notice of proceedings relating to the revocation or modification of, or non-compliance with, any such certificate, authorization or permit which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would result in a Material Adverse Change.

9

(s) **Tax Law Compliance.** The Company and each of its Subsidiaries has filed all federal, state, local and foreign tax returns which are required to be filed through the date hereof except in any case in which the failure to so file would not be reasonably likely to result in a Material Adverse Change. The filed returns are true and correct in all material respects and the Company has timely filed extensions thereof. The Company has paid all taxes shown on such returns, including any additional assessments received by it to the extent that the assessments are reasonable under the application of the law and have become due. To the Company’s knowledge, there are no tax audits or investigations pending, which if adversely determined would be reasonably likely to result in a Material Adverse Change; nor, to the Company’s knowledge are there any material proposed additional tax assessments against the Company or any of its Subsidiaries.

(t) **Company Not an “Investment Company”.** The Company has been advised of the rules and requirements under the Investment Company Act of 1940, as amended (the “**Investment Company Act**”). The Company is not, and after receipt of payment for the Placement Shares will not be, an “investment company” within the meaning of Investment Company Act.

(u) **Insurance.** Except as otherwise described in the Prospectus, each of the Company and its subsidiaries are insured by insurers of recognized financial responsibility with policies in such amounts and with such deductibles and covering such risks as are generally deemed prudent and customary for the business for which it is engaged including, but not limited to, policies covering real and personal property owned or leased by the Company and its subsidiaries against theft, damage, destruction, acts of vandalism and earthquakes. The Company has no reason to believe that it or any subsidiary will not be able (i) to renew its existing insurance coverage as and when such policies expire or (ii) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not result in a Material Adverse Change.

(v) **No Price Stabilization or Manipulation.** The Company has not taken and will not take, directly or indirectly, any action designed to or that might be reasonably expected to cause or result in stabilization or manipulation of the price of any security of the Company to facilitate the issuance and sale or resale of the Placement Shares.

(w) **Related Party Transactions.** There are no business relationships or related-party transactions involving the Company or any subsidiary or any other person required to be described in the Prospectus which have not been described as required.

(x) **Exchange Act Compliance.** The documents incorporated or deemed to be incorporated by reference in the Prospectus, at the time they were or hereafter are filed with the Commission, complied and will comply in all material respects with the requirements of the Exchange Act, and, when read together with the other information in the Prospectus, at the Settlement Dates, will not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

10

(y) No Unlawful Contributions or Other Payments. Neither the Company nor any of its subsidiaries nor, to the Company's knowledge, any director, officer, employee, agent, affiliate or other person acting on behalf of the Company or any subsidiary has (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; (ii) made any direct or indirect unlawful payment to any foreign or domestic government officials or employees, political parties or campaigns, political party officials, or candidates for political office from corporate funds; (iii) violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended, or any applicable anti-corruption laws, rules, or regulations of any other jurisdiction in which the Company or any subsidiary conducts business; or (iv) made any other unlawful bribe, rebate, payoff, influence payment, kickback or other unlawful payment to any person.

(z) Compliance with Money Laundering Laws. The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with all applicable financial recordkeeping and reporting requirements, including those of the U.S. Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act), and the applicable anti-money laundering statutes of jurisdictions where the Company and its subsidiaries conduct business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "Anti-Money Laundering Laws"), and no action, suit or proceeding by or before any court or governmental agency, authority, body or any arbitrator involving the Company or any of its subsidiaries with respect to Anti-Money Laundering Laws is pending, or to the knowledge of the Company, threatened.

(aa) Compliance with OFAC.

(A) Neither the Company nor any of its subsidiaries, nor any director or officer thereof, nor, to the Company's knowledge, any employee (other than an officer), agent, affiliate, representative or other person acting on behalf of the Company or any subsidiary, is an individual or entity ("Person") that is, or is owned or controlled by a Person that is: (i) the subject of any sanctions administered or enforced by the U.S. Department of Treasury's Office of Foreign Assets Control ("OFAC"), the United Nations Security Council, the European Union ("EU"), Her Majesty's Treasury, or other relevant sanctions authority (collectively, "Sanctions"), nor (ii) located, organized, or resident in a country or territory that is the subject of a U.S. government embargo (including, without limitation, Cuba, Iran, North Korea, Sudan, Syria and the Crimea).

(B) The Company will not, directly or indirectly, use the Net Proceeds, or lend, contribute or otherwise make available such Net Proceeds to any subsidiary, joint venture partner or other Person: (i) to fund or facilitate any activities or business of or with any Person that, at the time of such funding or facilitation, is the subject of Sanctions, or in any country or territory that, at the time of such funding or facilitation, is the subject of a U.S. government embargo; or

(ii) in any other manner that will result in a violation of Sanctions by any Person (including Cowen).

- (C) For the past five (5) years, the Company and its subsidiaries have not knowingly engaged in, are not now knowingly engaged in, and will not knowingly engage in, any direct or indirect dealings or transactions with any Person that at the time of the dealing or transaction is or was the subject of Sanctions or any country or territory that, at the time of the dealing or transaction is or was the subject of a U.S. government embargo.

(bb) Company's Accounting System. The Company maintains a system of "internal control over financial reporting" (as such term is defined in Rule 13a-15(f) of the General Rules and Regulations under the Exchange Act (the "Exchange Act Rules")) that is designed to comply with the requirements of the Exchange Act and is sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company's internal controls over financial reporting are effective. Except as disclosed in the Registration Statement or the Prospectus, since the end of the Company's most recent audited fiscal year, there has been no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially effect, the Company's internal control over financial reporting and the Company is not aware of any material weakness in its internal controls over financial reporting.

(cc) Disclosure Controls. The Company has established and maintains disclosure controls and procedures (as such term is defined in Rule 13a-15 promulgated under the Exchange Act) that (i) are designed to ensure that material information relating to the Company is made known to the Company's principal executive officer and its principal financial officer by others within the Company, particularly during the periods in which the periodic reports required under the Exchange Act are required to be prepared; (ii) provide for the periodic evaluation of the effectiveness of such disclosure controls and procedures at the end of the periods in which the periodic reports are required to be prepared; and (iii) are effective in all material respects to perform the functions for which they were established. Based on the evaluation of its disclosure controls and procedures, the Company is not aware of (i) any material weakness in the design or operation of internal controls which could adversely affect the Company's ability to record, process, summarize and report financial data or any material weaknesses in internal controls; or (ii) any fraud, whether or not material, that involves management or other employees who have a role in the Company's internal controls.

(dd) Compliance with Environmental Laws. Except as otherwise described in the Prospectus, and except as would not, individually or in the aggregate, result in a Material Adverse Change (i) neither the Company nor any of its Subsidiaries is in violation of any applicable federal, state, local or foreign statute, law, rule, regulation, ordinance, code, policy or rule of common law or any judicial or administrative interpretation thereof, including any

judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health, the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, laws and regulations relating to the release or threatened release of hazardous chemicals, pollutants, contaminants, hazardous wastes, toxic substances, hazardous substances, petroleum or petroleum products, asbestos-containing materials or toxic mold (collectively, "**Hazardous Materials**") or to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials (collectively, "**Environmental Laws**"), (ii) the Company and its Subsidiaries have all permits, authorizations and approvals required under any applicable Environmental Laws for the operation of their business or the occupancy of their real property and are each in compliance with their requirements, (iii) there are no pending or, to the Company's knowledge, threatened administrative, regulatory or judicial actions, suits, demands, demand letters, claims, liens, notices of noncompliance or violation, proceedings or, to the Company's knowledge, investigations relating to any Environmental Law against the Company or any of its Subsidiaries and (iv) to the Company's knowledge, there are no events or circumstances that would reasonably be expected to form the basis of an order for clean-up or remediation, or an action, suit or proceeding by any private party or Governmental Entity, against or affecting the Company or any of its Subsidiaries relating to Hazardous Materials or any Environmental Laws.

(ee) **Intellectual Property.** The Company and its subsidiaries own or possess the valid right to use all (i) valid and enforceable patents, patent applications, trademarks, trademark registrations, service marks, service mark registrations, Internet domain name registrations, copyrights, copyright registrations, licenses, trade secret rights ("**Intellectual Property Rights**") and (ii) inventions, software, works of authorships, trademarks, service marks, trade names, databases, formulae, know how, Internet domain names and other intellectual property (including trade secrets and other unpatented and/or unpatentable proprietary confidential information, systems, or procedures) (collectively, "**Intellectual Property Assets**") necessary to conduct their respective businesses as currently conducted, and as described in the Prospectus, except to the extent that the failure to own or possess the valid right to use the Intellectual Property Rights or the Intellectual Property Assets would not reasonably be expected to result in a Material Adverse Change. The Company and its subsidiaries have not received any written opinion from their legal counsel concluding that any activities of their respective businesses infringe, misappropriate, or otherwise violate, valid and enforceable Intellectual Property Rights of any other person, and have not received written notice of any challenge, which is to their knowledge still pending, by any other person to the rights of the Company and its subsidiaries with respect to any material Intellectual Property Rights or Intellectual Property Assets owned or used by the Company or its subsidiaries. To the knowledge of the Company, the Company and its subsidiaries' respective businesses as now conducted do not give rise to any infringement of, any misappropriation of, or other violation of, any valid and enforceable Intellectual Property Rights of any other person which would result in a Material Adverse Change. All material licenses for the use of the Intellectual Property Rights ("**Intellectual Property Licenses**") described in the Prospectus are valid, binding upon, and enforceable by or against the parties thereto in accordance to its terms. The Company has complied in all material respects with, and is not in breach nor has received any written asserted or threatened claim of breach of any Intellectual Property License, and the Company has no knowledge of any breach or anticipated breach by any other person to any Intellectual Property License which would result in a Material Adverse

Change. Except as described in the Prospectus, no material written claim has been made against the Company alleging the infringement by the Company of any patent, trademark, service mark, trade name, copyright, trade secret, license in or other intellectual property right or franchise right of any person. The Company has taken reasonable steps to protect, maintain and safeguard in all material respects its Intellectual Property Rights, including the execution of appropriate nondisclosure and confidentiality agreements. The consummation of the transactions contemplated by this Agreement will not result in the loss or impairment of or payment of any additional amounts with respect to, nor require the consent of any other person in respect of, the Company's right to own, use, or hold for use any of the Intellectual Property Rights as owned, used or held for use in the conduct of the business as currently conducted.

(ff) Listing. The Company is subject to and in compliance in all material respects with the reporting requirements of Section 13 or Section 15(d) of the Exchange Act. The Ordinary Shares are registered pursuant to Section 12(b) or Section 12(g) of the Exchange Act and is listed on Nasdaq, and the Company has taken no action designed to, or reasonably likely to have the effect of, terminating the registration of the Ordinary Shares under the Exchange Act or delisting the Ordinary Shares from Nasdaq, nor has the Company received any notification that the Commission or Nasdaq is contemplating terminating such registration or listing.

(gg) Brokers. Except for Cowen, there is no broker, finder or other party that is entitled to receive from the Company any brokerage or finder's fee or other fee or commission as a result of any transactions contemplated by this Agreement.

(hh) No Outstanding Loans or Other Indebtedness. Except as described in the Prospectus, there are no outstanding loans, advances (except normal advances for business expenses in the ordinary course of business) or guarantees or indebtedness by the Company to or for the benefit of any of the officers or directors of the Company or any of the members of any of them.

(ii) No Reliance. The Company has not relied upon Cowen or legal counsel for Cowen for any legal, tax or accounting advice in connection with the offering and sale and issuance of the Placement Shares.

(jj) FINRA Exemption. To enable Cowen to rely on Rule 5110(b)(7)(C)(i) of FINRA, the Company represents that the Company (i) has a non-affiliate, public common equity float of at least \$150 million or a non-affiliate, public common equity float of at least \$100 million and annual trading volume of at least three million shares and (ii) has been subject to the Exchange Act reporting requirements for a period of at least 36 months.

(kk) Compliance with Laws. The Company has not been advised, and has no reason to believe, that it and each of its Subsidiaries are not conducting business in compliance with all applicable laws, rules and regulations of the jurisdictions in which it is conducting business, except where failure to be so in compliance would not reasonably be expected to result in a Material Adverse Change.

(ll) Privacy Laws. The Company and each of its Subsidiaries are, and at all prior times were, in material compliance with all applicable U.S. data privacy and security laws and regulations, including, without limitation, the Health Insurance Portability and Accountability

Act (“**HIPAA**”), as amended by the Health Information Technology for Economic and Clinical Health Act (the “**HITECH Act**”) (42 U.S.C. Section 17921 et seq.); and the Company and each its subsidiaries have taken all necessary actions to materially comply with the European Union General Data Protection Regulation (“**GDPR**”) (EU 2016/679) to the extent applicable (collectively, “**Privacy Laws**”). To ensure compliance with the Privacy Laws, the Company and each of its subsidiaries have in place, comply with, and take appropriate steps reasonably designed to ensure compliance in all material respects with their policies and procedures relating to data privacy and security and the collection, storage, use, disclosure, handling and analysis of Personal Data (the “**Policies**”). The Company provides materially accurate notice of its Policies to its customers, employees, third party vendors and representatives, to the extent required by applicable Privacy Laws. The Policies provide materially accurate and sufficient (for material compliance with applicable Privacy Laws) notice of the Company’s then-current privacy practices relating to its subject matter and such Policies do not contain any material omissions of the Company’s then-current privacy practices. “**Personal Data**” means (i) a natural persons’ name, street address, telephone number, email address, photograph, social security number, bank information, or customer or account number; (ii) any information which would qualify as “personally identifying information” under the Federal Trade Commission Act, as amended; (iii) Protected Health Information as defined by HIPAA; (iv) “personal data” as defined by GDPR; and (v) any other piece of information that allows the identification of such natural person, or his or her family, or permits the collection or analysis of any data related to an identified person’s health or sexual orientation. The execution, delivery and performance of this Agreement or any other agreement referred to in this Agreement by the Company will not result in a material breach of any Policies or Privacy Laws. Neither the Company nor any of its subsidiaries, (i) has received written notice from a third party of any actual or potential liability under or relating to, or actual or potential material violation of, any of the Privacy Laws, and has no knowledge of any event or condition that would reasonably be expected to result in any such notice; (ii) is currently conducting or paying for, in whole or in part, any investigation, remediation or other corrective action pursuant to receipt of any such notice of liability or material violation under applicable Privacy Law; or (iii) is a party to any written order, decree, or agreement with a governmental authority that imposed any obligation or liability on the Company specifically under any Privacy Law.

(mm) **IT Systems.** (i)(x) There has been no security breach or attack or other compromise of or relating to any of the Company’s and its Subsidiaries’ information technology and computer systems, networks, hardware, software, data (including the data of their respective customers, employees, suppliers, vendors and any third party data maintained by or on behalf of them), equipment or technology (“**IT Systems and Data**”) which would result in a Material Adverse Change, and (y) the Company and its Subsidiaries have not been notified in writing of, and have no knowledge of any event or condition that would reasonably be expected to result in any such security breach, attack or compromise to their IT Systems and Data which would result in a Material Adverse Change, (ii) the Company and each of its Subsidiaries have complied with, and are presently in compliance with, all applicable laws, statutes or any judgment, order, rule or regulation of any court or arbitrator or governmental or regulatory authority and all internal policies and contractual obligations relating to the privacy and security of IT Systems and Data and to the protection of such IT Systems and Data from unauthorized use, access, misappropriation or modification, except, in the case of this clause (ii), as would not,

individually or in the aggregate, result in a Material Adverse Change, and (iii) the Company and each of its Subsidiaries have implemented reasonable backup and disaster recovery technology.

(nn) [Reserved].

(oo) [Reserved].

(pp) Compliance with the Sarbanes-Oxley Act. There is and has been no failure on the part of the Company or any of the Company's directors or officers, in their capacities as such, to comply in all material respects with any provision of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated in connection therewith, including Section 402 related to loans and Sections 302 and 906 related to certifications.

(qq) Trials and Studies. All preclinical studies and clinical trials conducted by or on behalf of the Company that are material to the Company and its Subsidiaries, taken as a whole, have been adequately described in the Registration Statement and the Prospectus in all material respects. The preclinical studies and clinical trials conducted by or on behalf of the Company were and, if still ongoing, are being conducted in material compliance with all laws and regulations applicable thereto in the jurisdictions in which they are being conducted and with all laws and regulations applicable to preclinical studies and clinical trials from which data will be submitted to support marketing approval. The descriptions in the Registration Statement and the Prospectus of the material results of such studies and trials are accurate and complete in all material respects and fairly present the data derived from such studies, and the Company has no knowledge of any large well-controlled clinical trial the aggregate results of which call into question the results of any material clinical trial conducted by or on behalf of the Company that are described in the Registration Statement and the Prospectus or the results of which are referred to in the Registration Statement and the Prospectus. Except as disclosed in the Registration Statement and the Prospectus, the Company has not received any written notices or statements from the U.S. Food and Drug Administration ("**FDA**") or any comparable non-U.S. regulatory agency (each a "**Regulatory Authority**") imposing, requiring, requesting or suggesting a clinical hold, termination, suspension or material modification for or of any material preclinical studies or clinical trials that are described in the Registration Statement and the Prospectus or the results of which are referred to in the Registration Statement and the Prospectus. Except as disclosed in the Registration Statement and the Prospectus, the Company has not received any written notices or statements from any Regulatory Authority, and otherwise has no knowledge of (i) any investigational new drug application for any potential product of the Company is or has been rejected or determined to be non-approvable or conditionally approvable; and (ii) any license, approval, permit or authorization to conduct any material clinical trial of any potential product of the Company has been, will be or may be suspended, revoked, materially modified or limited.

(rr) Regulatory Compliance. The Company and each of its Subsidiaries: (i) are and at all times have been in compliance in all material respects with all statutes, rules, or regulations applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product manufactured or distributed by the Company ("**Applicable Laws**"); (ii) have not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from any Regulatory Authority alleging or asserting material

noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws (“**Authorizations**”); (iii) possess all material Authorizations and such material Authorizations are valid and in full force and effect and are not in violation of any term of any such material Authorizations; (iv) have not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any governmental authority or third party alleging that any product operation or activity is in material violation of any Applicable Laws or Authorizations and, to the knowledge of the Company, no such proceedings are threatened or contemplated by any such governmental authority or third party; (v) have not received written notice that any Regulatory Authority has taken, is taking or will take action to limit, suspend, modify or revoke any Authorizations and, to the knowledge of the Company, no such Regulatory Authority has threatened such action; and (iv) have filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and correct on the date filed (or were corrected or supplemented by a subsequent submission).

(ss) Valid Choice of Law. The choice of laws of the State of New York as the governing law of this Agreement is a valid choice of law under the laws of the Cayman Islands that will be honored by courts in the Cayman Islands. The Company has the power to submit, and pursuant to Section 16 of this Agreement, has legally, validly, effectively and irrevocably submitted, to the non-exclusive personal jurisdiction of the Specified Courts (as defined in Section 16 of this Agreement), and the Company has the power to designate, appoint and authorize, and pursuant to Section 16 of this Agreement, has legally, validly, effectively and irrevocably designated, appointed an authorized agent for service of process in any action arising out of or relating to this Agreement or the Placement Shares in any Specified Court, and service of process effected on such authorized agent will be effective to confer valid personal jurisdiction over the Company as provided in Section 16 hereof.

(tt) Enforceability of Judgments. Any final judgment for a fixed sum of money rendered by a Specified Court having jurisdiction under its own domestic laws in respect of any suit, action or proceeding against the Company based upon this Agreement and the Placement Shares would be recognized and enforced against the Company by Cayman Islands courts without re-examining the merits of the case under the common law doctrine of obligation; provided that (i) adequate service of process has been effected and the defendant has had a reasonable opportunity to be heard, (ii) such judgments or the enforcement thereof are not contrary to the law, public policy, security or sovereignty of the Cayman Islands, (iii) such judgments were not obtained by fraudulent means and do not conflict with any other valid judgment in the same matter between the same parties, and (iv) an action between the same parties in the same matter is not pending in any Cayman Islands court at the time the lawsuit is instituted in the foreign court; it is not necessary that this Agreement, the Prospectus or any other document be filed or recorded with any court or other authority in the Cayman Islands.

(uu) No Stamp or Transaction Taxes. Except as disclosed in the Registration Statement and the Prospectus, no transaction stamp or other issuance, transfer or withholding taxes or duties are payable by or on behalf of Cowen to the government of the Cayman Islands, Ireland or

any political subdivision or taxing authority thereof or therein in connection with (i) the issuance of the Placement Shares, (ii) the sale and issuance by the Company of the Placement Shares to or for the account of Cowen, (iii) the initial resale sale and issuance by Cowen of the Placement Shares to purchasers thereof or (iv) the execution, delivery and performance of this Agreement or any other document contemplated hereby; provided, that, this Agreement is not executed in, or after execution, brought within the jurisdiction of the Cayman Islands. The Company confirms it has not executed this Agreement in, nor will it, after execution, bring this Agreement within, the jurisdiction of the Cayman Islands.

(vv) [Reserved].

(ww) Cowen Purchases. The Company acknowledges and agrees that Cowen has informed the Company that Cowen may, to the extent permitted under the Securities Act and the Exchange Act, purchase and sell Placement Shares for its own account while this Agreement is in effect, provided, that (i) no such purchase or sales shall take place while a Placement Notice is in effect (except to the extent Cowen may engage in sales of Placement Shares purchased or deemed purchased from the Company as a “riskless principal” or in a similar capacity) and (ii) the Company shall not be deemed to have authorized or consented to any such purchases or sales by Cowen.

Any certificate signed by an officer of the Company and delivered to Cowen or to counsel for Cowen shall be deemed to be a representation and warranty by the Company to Cowen as to the matters set forth therein.

The Company acknowledges that Cowen and, for purposes of the opinions to be delivered pursuant to Section 7 hereof, counsel to the Company and counsel to Cowen, will rely upon the accuracy and truthfulness of the foregoing representations and hereby consents to such reliance.

7. Covenants of the Company. The Company covenants and agrees with Cowen that:

(a) Registration Statement Amendments. After the date of this Agreement and during any period in which a Prospectus relating to any Placement Shares is required to be delivered by Cowen under the Securities Act (including in circumstances where such requirement may be satisfied pursuant to Rule 172 promulgated under the Securities Act or similar rule), (i) the Company will notify Cowen promptly of the time when any subsequent amendment to the Registration Statement, other than documents incorporated by reference or amendments not related to the Placement Shares, has been filed with the Commission and/or has become effective or any subsequent supplement to the Prospectus related to the Placement Shares has been filed and of any request by the Commission for any amendment or supplement to the Registration Statement or Prospectus related to the Placement Shares or for additional information related to the Placement Shares, (ii) the Company will prepare and file with the Commission, promptly upon Cowen’s request, any amendments or supplements to the Registration Statement or Prospectus that, in Cowen’s reasonable opinion, may be necessary or advisable in connection with the distribution of the Placement Shares by Cowen (*provided, however*, that (A) the failure of Cowen to make such request shall not relieve the Company of any obligation or liability hereunder, or affect Cowen’s right to rely on the representations and warranties made by the Company in this Agreement, and (B) the only remedy Cowen shall have with respect to the

failure to make such filing (other than Cowen's right under Section 9 hereof) will be to cease making sales under this Agreement until such amendment or supplement is filed); (iii) the Company will not file any amendment or supplement to the Registration Statement or Prospectus, other than documents incorporated by reference, relating to the Placement Shares or a security convertible into the Placement Shares unless a copy thereof has been submitted to Cowen within a reasonable period of time before the filing and Cowen has not reasonably objected thereto (*provided, however*, that (A) the failure of Cowen to make such objection shall not relieve the Company of any obligation or liability hereunder, or affect Cowen's right to rely on the representations and warranties made by the Company in this Agreement and (B) the Company has no obligation to provide Cowen any advance copy of such filing or to provide Cowen an opportunity to object to such filing if the filing does not name Cowen or does not relate to the transaction herein provided and (C) the only remedy Cowen shall have with respect to the failure by the Company to provide Cowen with such copy or the filing of such amendment or supplement despite Cowen's objection shall be to cease making sales under this Agreement) and the Company will furnish to Cowen at the time of filing thereof a copy of any document that upon filing is deemed to be incorporated by reference into the Registration Statement or Prospectus, except for those documents available via EDGAR; (iv) the Company will cause each amendment or supplement to the Prospectus, other than documents incorporated by reference, to be filed with the Commission as required pursuant to the applicable paragraph of Rule 424(b) of the Securities Act, and (v) prior to the termination of this Agreement, the Company will notify Cowen if at any time the Registration Statement shall no longer be effective as a result of the passage of time pursuant to Rule 415 promulgated under the Securities Act or otherwise. The determination to file or not file any amendment or supplement with the Commission under this Section 7(a), based on the Company's reasonable opinion or reasonable objections, shall be made exclusively by the Company.

(b) Notice of Commission Stop Orders. The Company will advise Cowen, promptly after it receives notice or obtains knowledge thereof, of the issuance or threatened issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement, of the suspension of the qualification of the Placement Shares for offering or sale in any jurisdiction, or of the initiation or threatening of any proceeding for any such purpose; and it will promptly use its commercially reasonable efforts to prevent the issuance of any stop order or to obtain its withdrawal if such a stop order should be issued.

(c) Delivery of Prospectus; Subsequent Changes. During any period in which a Prospectus relating to the Placement Shares is required to be delivered by Cowen under the Securities Act with respect to a pending sale and issuance of the Placement Shares, (including in circumstances where such requirement may be satisfied pursuant to Rule 172 promulgated under the Securities Act or similar rule), the Company will comply with all requirements imposed upon it by the Securities Act, as from time to time in force, and to file on or before their respective due dates all reports and any definitive proxy or information statements required to be filed by the Company with the Commission pursuant to Sections 13(a), 13(c), 14, 15(d) or any other provision of or under the Exchange Act. If during such period any event occurs as a result of which the Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances then existing, not misleading, or if during such period it is necessary to amend or supplement the Registration Statement or Prospectus to comply with the Securities

19

Act, the Company will promptly notify Cowen to suspend the offering of Placement Shares during such period and the Company will promptly amend or supplement the Registration Statement or Prospectus (at the reasonable expense of the Company) so as to correct such statement or omission or effect such compliance; *provided, however*, that the Company may delay the filing of any amendment or supplement if, in the sole judgment of the Company, it is in the best interest of the Company to do so.

(d) Listing of Placement Shares. During any period in which the Prospectus relating to the Placement Shares is required to be delivered by Cowen under the Securities Act with respect to a pending sale and issuance of the Placement Shares (including in circumstances where such requirement may be satisfied pursuant to Rule 172 promulgated under the Securities Act or similar rule), the Company will use its commercially reasonable efforts to cause the Placement Shares to be listed on Nasdaq and to qualify the Placement Shares for sale under the securities laws of such jurisdictions as Cowen reasonably designates and to continue such qualifications in effect so long as required for the distribution of the Placement Shares; *provided, however*, that the Company shall not be required in connection therewith to qualify as a foreign corporation or dealer in securities or file a general consent to service of process in any jurisdiction.

(e) Delivery of Registration Statement and Prospectus. The Company will furnish to Cowen and its counsel (at the reasonable expense of the Company) copies of the Registration Statement, the Prospectus (including all documents incorporated by reference therein) and all amendments and supplements to the Registration Statement or Prospectus that are filed with the Commission during any period in which a Prospectus relating to the Placement Shares is required to be delivered under the Securities Act (including all documents filed with the Commission during such period that are deemed to be incorporated by reference therein), in each case as soon as reasonably practicable and in such quantities as Cowen may from time to time reasonably request and, at Cowen's request, will also furnish copies of the Prospectus to each exchange or market on which sales of the Placement Shares may be made; *provided, however*, that the Company shall not be required to furnish any document (other than the Prospectus) to Cowen to the extent such document is available on EDGAR.

(f) Earnings Statement. The Company will make generally available to its security holders as soon as practicable, but in any event not later than 15 months after the end of the Company's current fiscal quarter, an earnings statement covering a 12-month period that satisfies the provisions of Section 11(a) and Rule 158 of the Securities Act. For the avoidance of doubt, the Company's timely compliance with the reporting requirements of the Exchange Act shall be deemed to satisfy this Section 7(f).

(g) Expenses. The Company, whether or not the transactions contemplated hereunder are consummated or this Agreement is terminated, in accordance with the provisions of Section 11 hereunder, will pay the following expenses all incident to the performance of its obligations hereunder, including, but not limited to, expenses relating to (i) the preparation, printing and filing of the Registration Statement and each amendment and supplement thereto, of each Prospectus and of each amendment and supplement thereto, (ii) the preparation and issuance of the Placement Shares, (iii) the qualification of the Placement Shares under securities laws in accordance with the provisions of Section 7(d) of this Agreement, including filing fees (provided, however, that any fees or disbursements of counsel for Cowen in connection

20

therewith shall be paid by Cowen except as set forth in (vii) below), (iv) the printing and delivery to Cowen of copies of the Prospectus and any amendments or supplements thereto, and of this Agreement, (v) the fees and expenses incurred in connection with the listing or qualification of the Placement Shares for trading on Nasdaq, (vi) the filing fees and expenses, if any, of the Commission, (vii) the filing fees and associated legal expenses of Cowen's outside counsel for filings with the FINRA Corporate Financing Department, such legal expense reimbursement not to exceed \$10,000 and, (viii) the reasonable fees and disbursements of Cowen's counsel in an amount not to exceed \$50,000.

(h) Use of Proceeds. The Company will use the Net Proceeds as described in the Prospectus in the section entitled "Use of Proceeds."

(i) Notice of Other Sales. During the pendency of any Placement Notice given hereunder, and for three (3) Trading Days following the termination of any Placement Notice given hereunder, the Company shall provide Cowen notice as promptly as reasonably practicable before it offers to sell, contracts to sell, sells, grants any option to sell or otherwise disposes of any Ordinary Shares (other than Placement Shares offered pursuant to the provisions of this Agreement) or securities convertible into or exchangeable for Ordinary Shares, warrants or any rights to purchase or acquire Ordinary Shares; *provided*, that such notice shall not be required in connection with the (i) issuance, grant or sale of Ordinary Shares, options to purchase Ordinary Shares or Ordinary Shares issuable upon the exercise of options or other equity awards pursuant to any share option, share bonus or other share plan or arrangement described in the Prospectus, (ii) the issuance of securities in connection with an acquisition, merger or sale or purchase of assets, (iii) the issuance or sale of Ordinary Shares pursuant to any dividend reinvestment plan that the Company may adopt from time to time provided the implementation of such is disclosed to Cowen in advance, (iv) any Ordinary Shares issuable upon the exchange, conversion or redemption of securities or the exercise or vesting of warrants, options or other rights in effect or outstanding, or (v) the issuance of any Ordinary Shares, or securities convertible into or exercisable for Ordinary Shares, offered and sold in a privately negotiated transaction to vendors, customers, investors, strategic partners or potential strategic partners, licensors, and otherwise conducted in a manner so as not to be integrated with the offering of the Placement Shares contemplated hereby. Notwithstanding the foregoing provisions, nothing herein shall be construed to restrict the Company's ability to file a registration statement under the Securities Act or require notice to Cowen with respect thereto.

(j) Change of Circumstances. The Company will, at any time during a fiscal quarter in which the Company intends to tender a Placement Notice or sell Placement Shares, advise Cowen promptly after it shall have received notice or obtained knowledge thereof, of any information or fact that would alter or affect in any material respect any opinion, certificate, letter or other document required to be provided to Cowen pursuant to this Agreement; *provided*, that the Company may satisfy its obligations under this Section 7(j) by effecting a filing in accordance with the Exchange Act with respect to such information or fact.

(k) Due Diligence Cooperation. During the term of this Agreement, the Company will cooperate with any reasonable due diligence review conducted by Cowen or its agents in connection with the transactions contemplated hereby, including, without limitation, providing information and making available documents and senior corporate officers, during regular

business hours and at the Company's principal offices or such other location mutually agreeable by the parties as Cowen may reasonably request.

(l) **Required Filings Relating to Placement of Placement Shares.** The Company agrees that on such dates as the Securities Act shall require, the Company will (i) file a prospectus supplement with the Commission under the applicable paragraph of Rule 424(b) promulgated under the Securities Act, which prospectus supplement will set forth, within the relevant period, the amount of Placement Shares sold through Cowen, the Net Proceeds to the Company and the compensation payable by the Company to Cowen with respect to such Placement Shares (provided that the Company may satisfy its obligations under this Section 7(l)(i) by effecting a filing in accordance with the Exchange Act with respect to such information), and (ii) if requested by Cowen, deliver such number of copies of each such prospectus supplement to each exchange or market on which such sales were effected as may be required by the rules or regulations of such exchange or market.

(m) **Representation Dates; Certificate.** On or prior to the First Delivery Date, and each time thereafter during the term of this Agreement, the Company (i) files the Prospectus relating to the Placement Shares or amends or supplements the Registration Statement or the Prospectus relating to the Placement Shares (other than a prospectus supplement filed in accordance with Section 7(l) of this Agreement) by means of a post-effective amendment, sticker, or supplement but not by means of incorporation of document(s) by reference to the Registration Statement or the Prospectus relating to the Placement Shares; (ii) files an annual report on Form 10-K under the Exchange Act; (iii) files its quarterly reports on Form 10-Q under the Exchange Act; or (iv) files a current report on Form 8-K containing amended financial information (other than an earnings release or other information "furnished" under Items 2.02, 7.01 or 9.01 of Form 8-K) under the Exchange Act (each date of filing of one or more of the documents referred to in clauses (i) through (iv) shall be a "**Representation Date**"); the Company shall furnish Cowen with a certificate, in the form attached hereto as Exhibit 7(m) within three (3) Trading Days of any Representation Date if requested by Cowen. The requirement to provide a certificate under this Section 7(m) shall be automatically waived for any Representation Date occurring at a time at which no Placement Notice is pending, which waiver shall continue until the earlier to occur of the date the Company delivers a Placement Notice hereunder (which for such calendar quarter shall be considered a Representation Date) and the next occurring Representation Date; *provided, however*, that such waiver shall not apply for any Representation Date on which the Company files its annual report on Form 10-K. Notwithstanding the foregoing, if the Company subsequently decides to sell Placement Shares following a Representation Date when the Company relied on such waiver and did not provide Cowen with a certificate under this Section 7(m), then before the Company delivers the Placement Notice or Cowen sells any Placement Shares, the Company shall provide Cowen with a certificate, in the form attached hereto as Exhibit 7(m), dated the date of the Placement Notice.

(n) **Legal Opinion.** On or prior to the First Delivery Date and within three (3) Trading Days of each Representation Date with respect to which the Company is obligated to deliver a certificate in the form attached hereto as Exhibit 7(m) for which no waiver is applicable, the Company shall cause to be furnished to Cowen a written opinion of each of (i) Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP, ("**U.S. Company Counsel**"), and (ii) Maples and Calder, counsel for the Company as to certain matters of Cayman

Islands law (“**Cayman Company Counsel**”), or other counsel satisfactory to Cowen, in form and substance reasonably satisfactory to Cowen and its counsel and subject to customary and appropriate assumptions and qualifications, dated the date that the opinions are required to be delivered, respectively, modified, as necessary, to relate to the Registration Statement and the Prospectus as then amended or supplemented; *provided, however*, that in lieu of such opinions for subsequent Representation Dates, each counsel may furnish Cowen with a letter (a “**Reliance Letter**”) to the effect that Cowen may rely on a prior opinion delivered under this **Section 7(n)** to the same extent as if it were dated the date of such Reliance Letter (except that statements in such prior opinion shall be deemed to relate to the Registration Statement and the Prospectus as amended or supplemented at such Representation Date).

(o) **Comfort Letter.** On or prior to the First Delivery Date and within three (3) Trading Days of each Representation Date with respect to which the Company is obligated to deliver a certificate in the form attached hereto as **Exhibit 7(m)** for which no waiver is applicable, the Company shall cause its independent accountants to furnish Cowen letters (the “**Comfort Letters**”), on each occasion dated the date on which each Comfort Letter is delivered, in form and substance reasonably satisfactory to Cowen, (i) confirming that they are an independent registered public accounting firm within the meaning of the Securities Act and the PCAOB, (ii) stating, as of such date, the conclusions and findings of such firm with respect to the financial information and other matters ordinarily covered by accountants’ “comfort letters” to Cowen in connection with registered public offerings (the first such letter, the “**Initial Comfort Letter**”) and (iii) updating the Initial Comfort Letter with any information that would have been included in the Initial Comfort Letter had it been given on such date and modified as necessary to relate to the Registration Statement and the Prospectus, as amended and supplemented to the date of such letter.

(p) **Market Activities.** The Company will not, directly or indirectly, (i) take any action designed to cause or result in, or that constitutes or might reasonably be expected to constitute, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale and issuance of the Placement Shares or (ii) sell, bid for, or purchase the Ordinary Shares to be issued and sold pursuant to this Agreement in violation of Regulation M, or pay anyone any compensation for soliciting purchases of the Placement Shares other than Cowen; provided, however, that the Company may bid for and purchase its Ordinary Shares in accordance with Rule 10b-18 under the Exchange Act.

(q) **Insurance.** The Company and its subsidiaries shall maintain, or cause to be maintained, insurance in such amounts and covering such risks as is reasonable and customary for the business for which it is engaged.

(r) **Compliance with Laws.** The Company and each of its subsidiaries shall use commercially reasonable efforts to maintain, or cause to be maintained, all applicable material environmental permits, licenses and other authorizations required by applicable federal, state and local law in order to conduct their businesses as described in the Prospectus, and the Company and each of its subsidiaries shall conduct their businesses, or cause their businesses to be conducted, in substantial compliance with such permits, licenses and authorizations and with applicable environmental laws, except where the failure to maintain or be in compliance with such permits, licenses and authorizations would not reasonably be expected to result in a Material Adverse Change.

(s) Investment Company Act. The Company will conduct its affairs in such a manner so as to reasonably ensure that neither it nor its subsidiaries will be or become, at any time prior to the termination of this Agreement, an “investment company,” as such term is defined in the Investment Company Act, assuming no change in the Commission’s current interpretation as to entities that are not considered an investment company.

(t) Securities Act and Exchange Act. The Company will use its commercially reasonable efforts to comply with all requirements imposed upon it by the Securities Act and the Exchange Act as from time to time in force, so far as necessary to permit the continuance of sales of, or dealings in, the Placement Shares as contemplated by the provisions hereof and the Prospectus.

(u) No Offer to Sell. Other than the Prospectus or a free writing prospectus (as defined in Rule 405) approved in advance by the Company and Cowen in its capacity as principal or agent hereunder, neither Cowen nor the Company (including its agents and representatives, other than Cowen in its capacity as such) will make, use, prepare, authorize, approve or refer to any written communication (as defined in Rule 405), required to be filed with the Commission, that constitutes an offer to sell or solicitation of an offer to buy Placement Shares hereunder.

(v) Sarbanes-Oxley Act. The Company and its subsidiaries will use their commercially reasonable efforts to comply with all effective applicable provisions of the Sarbanes-Oxley Act.

8. Conditions to Cowen’s Obligations. The obligations of Cowen hereunder with respect to a Placement will be subject to the continuing accuracy and completeness of the representations and warranties made by the Company herein, to the due performance by the Company of its obligations hereunder, to the completion by Cowen of a due diligence review satisfactory to Cowen in its reasonable judgment, and to the continuing satisfaction (or waiver by Cowen in its sole discretion) of the following additional conditions:

(a) Registration Statement Effective. The Registration Statement shall be effective and shall be available for (i) all sales of Placement Shares issued pursuant to all prior Placement Notices and (ii) the sale of all Placement Shares contemplated to be issued by any Placement Notice.

(b) No Material Notices. None of the following events shall have occurred and be continuing: (i) receipt by the Company or any of its subsidiaries of any request for additional information from the Commission or any other federal or state governmental authority during the period of effectiveness of the Registration Statement, the response to which would require any post-effective amendments or supplements to the Registration Statement or the Prospectus; (ii) the issuance by the Commission or any other federal or state governmental authority of any stop order suspending the effectiveness of the Registration Statement or the initiation of any proceedings for that purpose; (iii) receipt by the Company of any notification from the Commission or any other federal or state governmental authority with respect to the suspension of the qualification or exemption from qualification of any of the Placement Shares for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose; or (iv) the occurrence of any event that makes any material statement made in the Registration Statement or

the Prospectus or any material document incorporated or deemed to be incorporated therein by reference untrue in any material respect or that requires the making of any changes in the Registration Statement, related Prospectus or such documents so that, in the case of the Registration Statement, it will not contain any materially untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading and, that in the case of the Prospectus, it will not contain any materially untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(c) No Misstatement or Material Omission. Cowen shall not have advised the Company that the Registration Statement or Prospectus, or any amendment or supplement thereto, contains an untrue statement of fact that in Cowen's reasonable opinion is material, or omits to state a fact that in Cowen's reasonable opinion is material and is required to be stated therein or is necessary to make the statements therein not misleading.

(d) Material Changes. Except as contemplated in the Prospectus, or disclosed in the Company's reports filed with the Commission, there shall not have been any Material Adverse Change, on a consolidated basis, in the capitalization of the Company or any Material Adverse Change or any development that could reasonably be expected to result in a Material Adverse Change, or any downgrading in or withdrawal of the rating assigned to any of the Company's securities (other than asset backed securities) by any rating organization or a public announcement by any rating organization that it has under surveillance or review its rating of any of the Company's securities (other than asset backed securities), the effect of which, in the case of any such action by a rating organization described above, in the reasonable judgment of Cowen (without relieving the Company of any obligation or liability it may otherwise have), is so material as to make it impracticable or inadvisable to proceed with the offering of the Placement Shares on the terms and in the manner contemplated in the Prospectus.

(e) Company Counsel Legal Opinions. Cowen shall have received the opinions of U.S. Company Counsel and Cayman Company Counsel required to be delivered pursuant to Section 7(n) on or before the date on which such delivery of such opinions is required pursuant to Section 7(n).

(f) Cowen Counsel Legal Opinion. Cowen shall have received from Covington & Burling LLP, counsel for Cowen, such opinion or opinions, on or before the date on which the delivery of the U.S. Company Counsel and Cayman Company Counsel legal opinions are required pursuant to Section 7(n), with respect to such matters as Cowen may reasonably require, and the Company shall have furnished to such counsel such documents as they request for enabling them to pass upon such matters.

(g) Comfort Letter. Cowen shall have received the Comfort Letter required to be delivered pursuant to Section 7(o) on or before the date on which such delivery of such Comfort Letter is required pursuant to Section 7(o).

(h) Representation Certificate. Cowen shall have received the certificate required to be delivered pursuant to Section 7(m) on or before the date on which delivery of such certificate is required pursuant to Section 7(m).

(i) Secretary's Certificate. On or prior to the First Delivery Date, Cowen shall have received a certificate, signed on behalf of the Company by its corporate Secretary, in form and substance satisfactory to Cowen and its counsel.

(j) No Suspension. Trading in the Ordinary Shares shall not have been suspended on Nasdaq.

(k) Other Materials. On each date on which the Company is required to deliver a certificate pursuant to Section 7(m), the Company shall have furnished to Cowen such appropriate further information, certificates and documents as Cowen may have reasonably requested. All such opinions, certificates, letters and other documents shall have been in compliance with the provisions hereof. The Company will furnish Cowen with such conformed copies of such opinions, certificates, letters and other documents as Cowen shall have reasonably requested.

(l) Securities Act Filings Made. All filings with the Commission required by Rule 424 promulgated under the Securities Act will have been filed prior to the issuance of any Placement Notice hereunder and shall have been made within the applicable time period prescribed for such filing by Rule 424.

(m) Approval for Listing. The Placement Shares shall either have been (i) approved for listing on Nasdaq, subject only to notice of issuance, or (ii) the Company shall have filed an application for listing of the Placement Shares on Nasdaq at, or prior to, the issuance of any Placement Notice.

(n) No Termination Event. There shall not have occurred any event that would permit Cowen to terminate this Agreement pursuant to Section 11(a).

9. Indemnification and Contribution.

(a) Company Indemnification. The Company agrees to indemnify and hold harmless Cowen, the directors, officers, partners, employees and agents of Cowen and each person, if any, who (i) controls Cowen within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, or (ii) is controlled by or is under common control with Cowen from and against any and all losses, claims, liabilities, reasonable and documented expenses and damages (including, but not limited to, any and all reasonable and documented investigative, legal and other expenses incurred in connection with, and any and all amounts paid in settlement (in accordance with Section 9(c)) of, any action, suit or proceeding between any of the indemnified parties and any indemnifying parties or between any indemnified party and any third party, or otherwise, or any claim asserted), as and when incurred, to which Cowen, or any such person, may become subject under the Securities Act, the Exchange Act or other federal or state statutory law or regulation, at common law or otherwise, insofar as such losses, claims, liabilities, expenses or damages arise out of or are based, directly or indirectly, on (x) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or the Prospectus or any amendment or supplement to the Registration Statement or the Prospectus or in any free writing prospectus or in any application or other document executed by or on behalf of the Company or based on written information furnished by or on behalf of the Company filed in any jurisdiction in order to qualify the Ordinary Shares under the securities laws thereof or

filed with the Commission, or (y) the omission or alleged omission to state in any such document a material fact required to be stated in it or necessary to make the statements in it not misleading; *provided, however*, that this indemnity agreement shall not apply to the extent that such loss, claim, liability, expense or damage arises from the sale and issuance of the Placement Shares pursuant to this Agreement and is caused directly or indirectly by an untrue statement or omission made in reliance upon and in conformity with the Agent's Information (as defined in Section 20). This indemnity agreement will be in addition to any liability that the Company might otherwise have.

(b) Cowen Indemnification. Cowen agrees to indemnify and hold harmless the Company and its directors and each officer of the Company that signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act against any and all loss, liability, claim, reasonable and documented damage and expense described in the indemnity contained in Section 9(a), as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement (or any amendments thereto) or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with the Agent's Information.

(c) Procedure. Any party that proposes to assert the right to be indemnified under this Section 9 will, promptly after receipt of notice in writing of commencement of any action against such party in respect of which a claim is to be made against an indemnifying party or parties under this Section 9, notify each such indemnifying party in writing of the commencement of such action, enclosing a copy of all papers served, but the omission so to notify such indemnifying party will not relieve the indemnifying party from (i) any liability that it might have to any indemnified party otherwise than under this Section 9 and (ii) any liability that it may have to any indemnified party under the foregoing provision of this Section 9 unless, and only to the extent that, such omission results in the forfeiture of substantive rights or defenses by the indemnifying party. If any such action is brought against any indemnified party and it notifies the indemnifying party of its commencement, the indemnifying party will be entitled to participate in and, to the extent that it elects by delivering written notice to the indemnified party promptly after receiving notice of the commencement of the action from the indemnified party, jointly with any other indemnifying party similarly notified, to assume the defense of the action, with counsel reasonably satisfactory to the indemnified party, and after notice from the indemnifying party to the indemnified party of its election to assume the defense, the indemnifying party will not be liable to the indemnified party for any legal or other expenses except as provided below and except for the reasonable and documented costs of investigation subsequently incurred by the indemnified party in connection with the defense. The indemnified party will have the right to employ its own counsel in any such action, but the fees, expenses and other charges of such counsel will be at the expense of such indemnified party unless (1) the employment of counsel by the indemnified party has been authorized in writing by the indemnifying party, (2) the indemnified party has reasonably concluded (based on advice of counsel) that there may be legal defenses available to it or other indemnified parties that are different from or in addition to those available to the indemnifying party, (3) a conflict or potential conflict exists (based on advice of counsel to the indemnified party) between the indemnified party and the indemnifying party (in which case the indemnifying party will not have the right to direct the defense of such action on behalf of the indemnified party) or (4) the

indemnifying party has not in fact employed counsel to assume the defense of such action within a reasonable time after receiving notice of the commencement of the action, in each of which cases the reasonable fees, disbursements and other charges of counsel will be at the expense of the indemnifying party or parties. It is understood that the indemnifying party or parties shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable and documented fees, disbursements and other charges of more than one separate firm admitted to practice in such jurisdiction at any one time for all such indemnified party or parties. All such fees, disbursements and other charges will be reimbursed by the indemnifying party no later than thirty (30) days after the indemnifying party's receipt of a written invoice of such expenses detailing in reasonable detail such fees, disbursements and other charges. An indemnifying party will not, in any event, be liable for any settlement of any action or claim effected without its written consent. No indemnifying party shall, without the prior written consent of each indemnified party, settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding relating to the matters contemplated by this [Section 9](#) (whether or not any indemnified party is a party thereto), unless such settlement, compromise or consent includes an unconditional release of each indemnified party from all liability arising or that may arise out of such claim, action or proceeding.

(d) **Contribution.** In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in the foregoing paragraphs of this [Section 9](#) is applicable in accordance with its terms but for any reason is held to be unavailable from the Company or Cowen, the Company and Cowen will contribute to the total losses, claims, liabilities, reasonable and documented expenses and damages (including any investigative, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted, but after deducting any contribution received by the Company from persons other than Cowen, such as persons who control the Company within the meaning of the Securities Act, officers of the Company who signed the Registration Statement and directors of the Company, who also may be liable for contribution) to which the Company and Cowen may be subject in such proportion as shall be appropriate to reflect the relative benefits received by the Company on the one hand and Cowen on the other. The relative benefits received by the Company on the one hand and Cowen on the other hand shall be deemed to be in the same proportion as the total Net Proceeds from the sale and issuance of the Placement Shares (before deducting expenses) received by the Company bear to the total compensation received by Cowen from the sale of Placement Shares on behalf of the Company. If, but only if, the allocation provided by the foregoing sentence is not permitted by applicable law, the allocation of contribution shall be made in such proportion as is appropriate to reflect not only the relative benefits referred to in the foregoing sentence but also the relative fault of the Company, on the one hand, and Cowen, on the other, with respect to the statements or omission that resulted in such loss, claim, liability, expense or damage, or action in respect thereof, as well as any other relevant equitable considerations with respect to such offering. Such relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or Cowen, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and Cowen agree that it would not be just and equitable if contributions pursuant to this [Section 9\(d\)](#) were to be determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to herein. The

amount paid or payable by an indemnified party as a result of the loss, claim, liability, expense, or damage, or action in respect thereof, referred to above in this Section 9(d) shall be deemed to include, for the purpose of this Section 9(d), any documented legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim to the extent consistent with Section 9(c) hereof. Notwithstanding the foregoing provisions of this Section 9(d), Cowen shall not be required to contribute any amount in excess of the commissions received by it under this Agreement and no person found guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 9(d), any person who controls a party to this Agreement within the meaning of the Securities Act, and any officers, directors, partners, employees or agents of Cowen, will have the same rights to contribution as that party, and each officer and director of the Company who signed the Registration Statement will have the same rights to contribution as the Company, subject in each case to the provisions hereof. Any party entitled to contribution, promptly after receipt of notice of commencement of any action against such party in respect of which a claim for contribution may be made under this Section 9(d), will notify any such party or parties from whom contribution may be sought, but the omission to so notify will not relieve that party or parties from whom contribution may be sought from any other obligation it or they may have under this Section 9(d) except to the extent that the failure to so notify such other party materially prejudiced the substantive rights or defenses of the party from whom contribution is sought. Except for a settlement entered into pursuant to the last sentence of Section 9(c) hereof, no party will be liable for contribution with respect to any action or claim settled without its written consent if such consent is required pursuant to Section 9(c) hereof.

10. Representations and Agreements to Survive Delivery. The indemnity and contribution agreements contained in Section 9 of this Agreement and all representations and warranties of the Company herein or in certificates delivered pursuant hereto shall survive, as of their respective dates, regardless of (i) any investigation made by or on behalf of Cowen, any controlling persons, or the Company (or any of their respective officers, directors or controlling persons), (ii) delivery and acceptance of the Placement Shares and payment therefor or (iii) any termination of this Agreement.

11. Termination.

(a) Cowen shall have the right by giving written notice as hereinafter specified at any time to terminate this Agreement if (i) any Material Adverse Change, or any development that would reasonably be expected to result in a Material Adverse Change has occurred that, in the reasonable judgment of Cowen, would materially impair the ability of Cowen to sell the Placement Shares hereunder, (ii) the Company shall have failed, refused or been unable to perform any agreement on its part to be performed hereunder; *provided, however*, in the case of any failure of the Company to deliver (or cause another person to deliver) any certification, opinion, or letter required under Sections 7(m), 7(n), or 7(o), Cowen's right to terminate shall not arise unless such failure to deliver (or cause to be delivered) continues for more than thirty (30) days from the date such delivery was required; or (iii) any other condition of Cowen's obligations hereunder is not fulfilled, or (iv), any suspension or limitation of trading in the Placement Shares or in securities generally on Nasdaq shall have occurred. Any such termination shall be without liability of any party to any other party except that the provisions of

29

Section 7(g) (Expenses), Section 9 (Indemnification and Contribution), Section 10 (Representations and Agreements to Survive Delivery), Section 16 (Applicable Law; Consent to Jurisdiction; Waiver of Immunity) and Section 17 (Waiver of Jury Trial) hereof shall remain in full force and effect notwithstanding such termination. If Cowen elects to terminate this Agreement as provided in this Section 11(a), Cowen shall provide the required notice as specified in Section 12 (Notices).

(b) The Company shall have the right, by giving ten (10) days' notice as hereinafter specified to terminate this Agreement in its sole discretion at any time after the date of this Agreement. Any such termination shall be without liability of any party to any other party except that the provisions of Section 7(g), Section 9, Section 10, Section 16 and Section 17 hereof shall remain in full force and effect notwithstanding such termination.

(c) Cowen shall have the right, by giving ten (10) days' notice as hereinafter specified to terminate this Agreement in its sole discretion at any time after the date of this Agreement. Any such termination shall be without liability of any party to any other party except that the provisions of Section 7(g), Section 9, Section 10, Section 16 and Section 17 hereof shall remain in full force and effect notwithstanding such termination.

(d) Unless earlier terminated pursuant to this Section 11, this Agreement shall automatically terminate upon the issuance and sale of all of the Placement Shares through Cowen on the terms and subject to the conditions set forth herein; *provided* that the provisions of Section 7(g), Section 9, Section 10, Section 16 and Section 17 hereof shall remain in full force and effect notwithstanding such termination.

(e) This Agreement shall remain in full force and effect unless terminated pursuant to Sections 11(a), (b), (c), or (d) above or otherwise by mutual agreement of the parties; *provided, however*, that any such termination by mutual agreement shall in all cases be deemed to provide that Section 7(g), Section 9, Section 10, Section 16 and Section 17 shall remain in full force and effect. Upon termination of this Agreement, subject to Section 11(f), the Company shall not have any liability to Cowen for any discount, commission or other compensation with respect to any Placement Shares not otherwise sold by Cowen under this Agreement, or otherwise, except with respect to reimbursement of expenses pursuant to Section 7(b).

(f) Any termination of this Agreement shall be effective on the date specified in such notice of termination; *provided, however*, that such termination shall not be effective until the close of business on the date of receipt of such notice by Cowen or the Company, as the case may be. If such termination shall occur prior to the Settlement Date for any sale of Placement Shares, such Placement Shares shall settle in accordance with the provisions of this Agreement.

12. Notices. All notices or other communications required or permitted to be given by any party to any other party pursuant to the terms of this Agreement shall be in writing, unless otherwise specified in this Agreement, and if sent to Cowen, shall be delivered to Cowen at Cowen and Company, LLC, 599 Lexington Avenue, New York, NY 10022, fax no. 646-562-1124, Attention: General Counsel, with a copy to Covington & Burling LLP, 620 Eighth Avenue, New York, NY 10018, Attention: Eric W. Blanchard; or if sent to the Company, shall be delivered to Theravance Biopharma, Inc., c/o Theravance Biopharma US, Inc., 901 Gateway Boulevard, South San Francisco, CA 94080, Attention: General Counsel, with a copy to

30

Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP, Attention: David Young. Each party to this Agreement may change such address for notices by sending to the parties to this Agreement written notice of a new address for such purpose. Each such notice or other communication shall be deemed given (i) when delivered personally or by verifiable facsimile transmission (with an original to follow) on or before 4:30 p.m., New York City time, on a Business Day (as defined below), or, if such day is not a Business Day on the next succeeding Business Day, (ii) on the next Business Day after timely delivery to a nationally-recognized overnight courier and (iii) on the Business Day actually received if deposited in the U.S. mail (certified or registered mail, return receipt requested, postage prepaid). For purposes of this Agreement, "**Business Day**" shall mean any day on which the Nasdaq and commercial banks in the City of New York are open for business. An electronic communication ("**Electronic Notice**") shall be deemed written notice for purposes of this Section 12 if sent to the electronic mail address specified by the receiving party under separate cover and confirmed by such receiving party in writing (including via email or fax). Any party receiving Electronic Notice may request and shall be entitled to receive the notice on paper, in a nonelectronic form ("**Nonelectronic Notice**") which shall be sent to the requesting party within ten (10) days of receipt of the written request for Nonelectronic Notice.

13. Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Company and Cowen and their respective successors and the affiliates, controlling persons, officers and directors referred to in Section 9 hereof. References to any of the parties contained in this Agreement shall be deemed to include the successors and permitted assigns of such party. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assigns any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement. Neither party may assign its rights or obligations under this Agreement without the prior written consent of the other party; *provided, however*, that Cowen may assign its rights and obligations hereunder to an affiliate of Cowen without obtaining the Company's consent, so long as such affiliate is a registered broker-dealer.

14. Adjustments for Share Subdivisions. The parties acknowledge and agree that all share-related numbers contained in this Agreement shall be adjusted to take into account any share subdivisions, share consolidations, share capitalizations or similar event effected with respect to the Ordinary Shares.

15. Entire Agreement; Amendment; Severability. This Agreement (including all schedules and exhibits attached hereto and Placement Notices issued pursuant hereto) constitutes the entire agreement and supersedes all other prior and contemporaneous agreements and undertakings, both written and oral, among the parties hereto with regard to the subject matter hereof. Neither this Agreement nor any term hereof may be amended except pursuant to a written instrument executed by the Company and Cowen. In the event that any one or more of the provisions contained herein, or the application thereof in any circumstance, is held invalid, illegal or unenforceable as written by a court of competent jurisdiction, then such provision shall be given full force and effect to the fullest possible extent that it is valid, legal and enforceable, and the remainder of the terms and provisions herein shall be construed as if such invalid, illegal or unenforceable term or provision was not contained herein, but only to the extent that giving effect to such provision and the remainder of the terms and provisions hereof shall be in accordance with the intent of the parties as reflected in this Agreement.

16. Applicable Law; Consent to Jurisdiction; Waiver of Immunity. This Agreement and any claim, controversy or dispute arising under or related to this Agreement shall be governed by, and construed in accordance with the laws of, the State of New York without regard to its choice of law provisions. Any legal suit, action or proceeding arising out of or based upon this Agreement or the transactions contemplated hereby (“**Related Proceedings**”) shall be instituted in (i) the federal courts of the United States of America located in the City and County of New York, Borough of Manhattan or (ii) the courts of the State of New York located in the City and County of New York, Borough of Manhattan (collectively, the “**Specified Courts**”), and each party irrevocably submits to the exclusive jurisdiction (except for proceedings instituted in regard to the enforcement of a judgment of any such court (a “**Related Judgment**”), as to which such jurisdiction is non-exclusive) of such courts in any such suit, action or proceeding. Service of any process, summons, notice or document by mail to such party’s address set forth above shall be effective service of process for any suit, action or other proceeding brought in any such court. The parties irrevocably and unconditionally waive any objection to the laying of venue of any suit, action or other proceeding in the Specified Courts and irrevocably and unconditionally waive and agree not to plead or claim in any such court that any such suit, action or other proceeding brought in any such court has been brought in an inconvenient forum. The Company irrevocably appoints Theravance Biopharma US, Inc. as its agent to receive service of process or other legal summons for purposes of any such suit, action or proceeding that may be instituted in any state or federal court in the City and County of New York. With respect to any Related Proceeding, each party irrevocably waives, to the fullest extent permitted by applicable law, all immunity (whether on the basis of sovereignty or otherwise) from jurisdiction, service of process, attachment (both before and after judgment) and execution to which it might otherwise be entitled in the Specified Courts, and with respect to any Related Judgment, each party waives any such immunity in the Specified Courts or any other court of competent jurisdiction, and will not raise or claim or cause to be pleaded any such immunity at or in respect of any such Related Proceeding or Related Judgment, including, without limitation, any immunity pursuant to the United States Foreign Sovereign Immunities Act of 1976, as amended.

All payments to be made by the Company under this Agreement shall be paid free and clear of and without deduction or withholding for or on account of, any present or future taxes, levies, imposts, duties, fees, assessments or other charges of whatever nature, imposed by the Cayman Islands, Ireland, any other jurisdiction in which the Company is organized, doing business or resident for tax purposes or any jurisdiction from or through which a payment is made, or by any department, agency or other political subdivision or taxing authority thereof (each, a “**Taxing Jurisdiction**”), and all interest, penalties or similar liabilities with respect thereto (collectively, “**Taxes**”), except as required by law. If any Taxes are required by law to be deducted or withheld in connection with such payments, the Company will increase the amount paid so that the full amount of such payment is received by Cowen, except to the extent that such Taxes were imposed due to Cowen having any present or former connection with a Taxing Jurisdiction other than solely as a result of (A) the execution and delivery of, or performance of, its obligations under this Agreement, (B) receiving or paying for the Placement Shares or (C) receiving any payments or enforcing any rights hereunder.

The obligations of the Company pursuant to this Agreement in respect of any sum due to Cowen shall, notwithstanding any judgment in a currency other than United States dollars, not be discharged until the first Business Day, following receipt by such Cowen of any sum adjudged to

be so due in such other currency, on which (and only to the extent that) Cowen may in accordance with normal banking procedures purchase United States dollars with such other currency; if the United States dollars so purchased (net of any premiums and costs of exchange payable in connection with the purchase of United States dollars) are less than the sum originally due to Cowen hereunder, the Company agrees, as a separate obligation and notwithstanding any such judgment, to indemnify Cowen against such loss. If the United States dollars so purchased are greater than the sum originally due to Cowen hereunder, Cowen agrees to pay to the Company an amount equal to the excess of the dollars so purchased over the sum originally due to Cowen hereunder.

17. Waiver of Jury Trial. The Company and Cowen each hereby irrevocably waives any right it may have to a trial by jury in respect of any claim based upon or arising out of this Agreement or any transaction contemplated hereby.

18. Absence of Fiduciary Relationship. The Company acknowledges and agrees that:

(a) Cowen has been retained solely to act as sales agent in connection with the sale of the Ordinary Shares and that no fiduciary, advisory or agency relationship between the Company and Cowen has been created in respect of any of the transactions contemplated by this Agreement, irrespective of whether Cowen has advised or is advising the Company on other matters;

(b) the Company is capable of evaluating and understanding and understands and accepts the terms, risks and conditions of the transactions contemplated by this Agreement;

(c) the Company has been advised that Cowen and its affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company and that Cowen has no obligation to disclose such interests and transactions to the Company by virtue of any fiduciary, advisory or agency relationship; and

(d) the Company waives, to the fullest extent permitted by law, any claims it may have against Cowen, for breach of fiduciary duty or alleged breach of fiduciary duty in connection with this Agreement and agrees that Cowen shall have no liability (whether direct or indirect) to the Company in respect of such a fiduciary claim or to any person asserting a fiduciary duty claim on behalf of or in right of the Company, including shareholders, partners, employees or creditors of the Company.

19. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Delivery of an executed Agreement by one party to the other may be made by facsimile transmission or other means of electronic transmission (including, without limitation, email).

20. Definitions. As used in this Agreement, the following term has the meaning set forth below:

(a) “**Applicable Time**” means the date of this Agreement, each Representation Date, the date on which a Placement Notice is given, and any date on which Placement Shares are sold hereunder.

(b) “**Agent’s Information**” means, solely the following information in the Prospectus: the third sentence in the eighth paragraph under the caption “Plan of Distribution” in the Prospectus.

[Remainder of Page Intentionally Blank]

If the foregoing correctly sets forth the understanding between the Company and Cowen, please so indicate in the space provided below for that purpose, whereupon this letter shall constitute a binding agreement between the Company and Cowen.

Very truly yours,

COWEN AND COMPANY, LLC

By: /s/ Michael Murphy
Name: Michael Murphy
Title: Managing Director

**ACCEPTED as of the date
first-above written:**

THERAVANCE BIOPHARMA, INC.

By: /s/ Andrew Hindman
Name: Andrew Hindman
Title: Senior Vice President and Chief Financial Officer

FORM OF PLACEMENT NOTICE

From: []
Cc: []
To: []
Date: []
Subject: Cowen at the Market Offering—Placement Notice

Gentlemen:

Pursuant to the terms and subject to the conditions contained in the Sales Agreement between Theravance Biopharma, Inc. (the “Company”), and Cowen and Company, LLC (“Cowen”) dated December 3, 2019 (the “Agreement”), I hereby request on behalf of the Company that Cowen sell up to [] of the Company’s ordinary shares, par value \$0.00001 per share, at a minimum market price of \$[] per share. Sales should begin on the date of this Notice and shall continue until [DATE] [all shares are sold]. [The maximum number of Placement Shares that may be sold in any one Trading Day (as defined in the Agreement) is []].

Company.

Bradford Shafer
Andrew Hindman
Jessica Stitt

Cowen

Michael Murphy
William Follis

Compensation

Cowen shall be paid compensation of up to 3.0% of the gross proceeds from the sales of Ordinary Shares pursuant to the terms of this Agreement.

FORM OF OFFICER CERTIFICATE

The undersigned, the duly qualified and elected _____, of Theravance Biopharma, Inc. ("**Company**"), a Cayman Islands exempted company, does hereby certify in such capacity and on behalf of the Company, pursuant to Section 7(m) of the Sales Agreement dated December 3, 2019 (the "**Sales Agreement**") between the Company and Cowen and Company, LLC, that to the knowledge of the undersigned. Capitalized terms used but not defined herein shall have the meanings ascribed to them in the Sales Agreement.

(i) The representations and warranties of the Company in Section 6 of the Sales Agreement (A) to the extent such representations and warranties are subject to qualifications and exceptions contained therein relating to materiality or Material Adverse Change, are true and correct on and as of the date hereof with the same force and effect as if expressly made on and as of the date hereof, except for those representations and warranties that speak solely as of a specific date and which were true and correct as of such date, and (B) to the extent such representations and warranties are not subject to any qualifications or exceptions, are true and correct in all material respects as of the date hereof as if made on and as of the date hereof with the same force and effect as if expressly made on and as of the date hereof except for those representations and warranties that speak solely as of a specific date and which were true and correct as of such date; and

(ii) The Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied pursuant to the Sales Agreement at or prior to the date hereof.

By: _____
Name:
Title:

Date: _____

THERAVANCE BIOPHARMA, INC.

[]

Trustee

Indenture

Dated as of []

THERAVANCE BIOPHARMA, INC.

**Reconciliation and tie between Trust Indenture Act of 1939 and
Indenture, dated as of []**

Trust Indenture Act Section	Indenture Sections
§ 310(a)(1)	6.09
(a)(2)	6.09
(a)(3)	Not Applicable
(a)(4)	Not Applicable
(a)(5)	6.09
(b)	6.08
	6.10
§ 311(a)	6.13(a)
(b)	6.13(b)
(c)	Not Applicable
§ 312(a)	7.01
	7.02(a)
(b)	7.02(b)
(c)	7.02(c)
§ 313(a)	7.03(a)
(b)	7.03(a)
(c)	7.03(a)
(d)	7.03(c)
§ 314(a)	7.04, 10.04
(b)	Not Applicable
(c)(1)	1.02
(c)(2)	1.02
(c)(3)	Not Applicable
(d)	Not Applicable
(e)	1.02
§ 315(a)	6.01(a)
(b)	6.02
(c)	6.01(b)
(d)	6.01(c)
(d)(1)	6.01(c)(1)
(d)(2)	6.01(c)(2)
(d)(3)	6.01(c)(3)
(e)	5.14
§ 316	
(a)(1)(A)	5.02
	5.12
(a)(1)(B)	5.13
(a)(2)	Not Applicable
(b)	5.08
(c)	1.04(g)
§ 317(a)(l)	5.03

(a)(2)	5.04
(b)	10.03
§ 318(a)	1.07

Note: This reconciliation and tie shall not, for any purpose, be deemed to be a part of the Indenture.

TABLE OF CONTENTS

Page

ARTICLE ONE
DEFINITIONS AND OTHER PROVISIONS OF GENERAL APPLICATION

Section 1.01.	<i>Definitions</i>	1
Section 1.02.	<i>Compliance Certificates and Opinions</i>	7
Section 1.03.	<i>Form of Documents Delivered to Trustee</i>	7
Section 1.04.	<i>Acts of Holders</i>	7
Section 1.05.	<i>Notices, Etc. to Trustee and Company</i>	9
Section 1.06.	<i>Notice to Holders; Waiver</i>	9
Section 1.07.	<i>Conflict With Trust Indenture Act</i>	9
Section 1.08.	<i>Effect of Headings and Table of Contents</i>	9
Section 1.09.	<i>Successors and Assigns</i>	10
Section 1.10.	<i>Separability Clause</i>	10
Section 1.11.	<i>Benefits of Indenture</i>	10
Section 1.12.	<i>Governing Law</i>	10
Section 1.13.	<i>Legal Holidays</i>	10
Section 1.14.	<i>Rules by Trustee and Agents</i>	10
Section 1.15.	<i>No Recourse Against Others</i>	10

ARTICLE TWO
SECURITY FORMS

Section 2.01.	<i>Forms Generally</i>	10
Section 2.02.	<i>Form of Trustee's Certificate of Authentication</i>	11

ARTICLE THREE
THE SECURITIES

Section 3.01.	<i>Amount Unlimited; Issuable in Series</i>	11
Section 3.02.	<i>Denominations</i>	14
Section 3.03.	<i>Execution, Authentication, Delivery and Dating</i>	14
Section 3.04.	<i>Temporary Securities</i>	15
Section 3.05.	<i>Registration, Registration of Transfer and Exchange</i>	16
Section 3.06.	<i>Mutilated, Destroyed, Lost and Stolen Securities</i>	17
Section 3.07.	<i>Payment of Interest; Interest Rights Preserved</i>	17
Section 3.08.	<i>Persons Deemed Owners</i>	18
Section 3.09.	<i>Cancellation</i>	19
Section 3.10.	<i>Computation of Interest</i>	19
Section 3.11.	<i>Global Securities; Exchanges; Registration and Registration of Transfer</i>	19
Section 3.12.	<i>Extension of Interest Payment</i>	20

ARTICLE FOUR
SATISFACTION AND DISCHARGE; DEFEASANCE

Section 4.01.	<i>Satisfaction and Discharge of Indenture</i>	21
Section 4.02.	<i>Defeasance and Discharge of Indenture</i>	22
Section 4.03.	<i>Defeasance of Certain Obligations</i>	22
Section 4.04.	<i>Conditions to Defeasance</i>	22
Section 4.05.	<i>Application of Trust Money</i>	23
Section 4.06.	<i>Reinstatement</i>	24

ARTICLE FIVE
REMEDIES

Section 5.01.	<i>Events of Default</i>	24
Section 5.02.	<i>Acceleration of Maturity; Rescission and Annulment</i>	25
Section 5.03.	<i>Collection of Indebtedness and Suits for Enforcement by Trustee</i>	25
Section 5.04.	<i>Trustee May File Proofs of Claim</i>	26
Section 5.05.	<i>Trustee May Enforce Claims Without Possession of Securities or Coupons</i>	26
Section 5.06.	<i>Application of Money Collected</i>	26
Section 5.07.	<i>Limitation on Suits</i>	27
Section 5.08.	<i>Unconditional Right of Holders to Receive Principal, Premium and Interest</i>	27
Section 5.09.	<i>Restoration of Rights and Remedies</i>	27
Section 5.10.	<i>Rights and Remedies Cumulative</i>	27
Section 5.11.	<i>Delay or Omission Not Waiver</i>	28
Section 5.12.	<i>Control by Holders</i>	28
Section 5.13.	<i>Waiver of Past Defaults</i>	28
Section 5.14.	<i>Undertaking for Costs</i>	28
Section 5.15.	<i>Waiver of Stay or Extension Laws</i>	28

ARTICLE SIX
THE TRUSTEE

Section 6.01.	<i>Certain Duties and Responsibilities</i>	29
Section 6.02.	<i>Notice of Defaults</i>	29
Section 6.03.	<i>Certain Rights of Trustee</i>	30
Section 6.04.	<i>Not Responsible for Recitals or Issuance of Securities</i>	30
Section 6.05.	<i>May Hold Securities</i>	31
Section 6.06.	<i>Money Held in Trust</i>	31
Section 6.07.	<i>Compensation and Reimbursement</i>	31
Section 6.08.	<i>Disqualification; Conflicting Interests</i>	31
Section 6.09.	<i>Corporate Trustee Required; Eligibility</i>	31
Section 6.10.	<i>Resignation and Removal; Appointment of Successor</i>	32
Section 6.11.	<i>Acceptance of Appointment by Successor</i>	33
Section 6.12.	<i>Merger, Conversion, Consolidation or Succession to Business</i>	33
Section 6.13.	<i>Preferential Collection of Claims Against Company</i>	34
Section 6.14.	<i>Appointment of Authenticating Agent</i>	34

ARTICLE SEVEN
HOLDERS' LISTS AND REPORTS BY TRUSTEE AND COMPANY

Section 7.01.	<i>Company to Furnish Trustee Names and Addresses of Holders</i>	35
Section 7.02.	<i>Preservation of Information; Communications to Holders</i>	35
Section 7.03.	<i>Reports by Trustee</i>	36
Section 7.04.	<i>Reports by Company</i>	36

ARTICLE EIGHT
CONSOLIDATION, MERGER, CONVEYANCE OR TRANSFER

Section 8.01.	<i>Company May Consolidate, Etc. Only on Certain Terms</i>	37
Section 8.02.	<i>Successor Substituted for the Company</i>	37

ARTICLE NINE
SUPPLEMENTAL INDENTURES

Section 9.01.	<i>Supplemental Indentures Without Consent of Holders</i>	38
---------------	---	----

Section 9.02.	<i>Supplemental Indentures With Consent of Holders</i>	39
Section 9.03.	<i>Execution of Supplemental Indentures</i>	40
Section 9.04.	<i>Effect of Supplemental Indentures</i>	40
Section 9.05.	<i>Conformity With Trust Indenture Act</i>	40
Section 9.06.	<i>Reference in Securities to Supplemental Indentures</i>	40
Section 9.07.	<i>Revocation and Effect of Consents</i>	41
Section 9.08.	<i>Modification Without Supplemental Indenture</i>	41

ARTICLE TEN
COVENANTS

Section 10.01.	<i>Payment of Principal, Premium and Interest</i>	41
Section 10.02.	<i>Maintenance of Office or Agency</i>	42
Section 10.03.	<i>Money for Securities Payments to Be Held in Trust</i>	43
Section 10.04.	<i>Statement as to Compliance</i>	43
Section 10.05.	<i>Corporate Existence</i>	43
Section 10.06.	<i>Waiver of Certain Covenants</i>	44

ARTICLE ELEVEN
REDEMPTION OF SECURITIES

Section 11.01.	<i>Applicability of Article</i>	44
Section 11.02.	<i>Election to Redeem; Notice to Trustee</i>	44
Section 11.03.	<i>Selection by Trustee of Securities to Be Redeemed</i>	44
Section 11.04.	<i>Notice of Redemption</i>	45
Section 11.05.	<i>Securities Payable on Redemption Date</i>	46
Section 11.06.	<i>Securities Redeemed in Part</i>	46

ARTICLE TWELVE
REPAYMENT OF SECURITIES AT OPTION OF HOLDERS

Section 12.01.	<i>Applicability of Article</i>	46
Section 12.02.	<i>Notice of Repayment Date</i>	46
Section 12.03.	<i>Securities Payable on Repayment Date</i>	47
Section 12.04.	<i>Securities Repaid in Part</i>	48

INDENTURE, dated as of · , between THERAVANCE BIOPHARMA, INC, an exempted company incorporated in the Cayman Islands with limited liability (herein called the “**Company**”), having its registered office at P.O. Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands, and [TRUSTEE] (herein called the “**Trustee**”).

RECITALS OF THE COMPANY

The Company has duly authorized the execution and delivery of this Indenture to provide for the issuance from time to time of its unsecured debentures, notes or other evidences of indebtedness (each herein called a “**Security**” or, collectively, the “**Securities**”), in an unlimited aggregate principal amount to be issued in one or more series as in this Indenture provided.

All things necessary to make this Indenture a valid agreement of the Company, in accordance with its terms, have been done.

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

For and in consideration of the premises and the purchase of the Securities by the Holders thereof, it is mutually covenanted and agreed, for the equal and proportionate benefit of all Holders of the Securities or of any series thereof, as follows:

ARTICLE ONE

DEFINITIONS AND OTHER PROVISIONS OF GENERAL APPLICATION

Section 1.01. *Definitions.* For all purposes of this Indenture, except as otherwise expressly provided or unless the context otherwise requires;

- (1) the terms defined in this Article have the meanings assigned to them in this Article and include the plural as well as the singular;
- (2) all other terms used herein that are defined in the Trust Indenture Act, either directly or by reference therein, have the meanings assigned to them therein;
- (3) all accounting terms not otherwise defined herein have the meanings assigned to them in accordance with generally accepted accounting principles, and, except as otherwise herein expressly provided, the term “**generally accepted accounting principles**” with respect to any computation required or permitted hereunder shall mean such accounting principles as are generally accepted in the United States at the date of such computation or, at the election of the Company from time to time, at the date of the execution and delivery of this Indenture;
- (4) the word “or” is not exclusive; and

(5) the words “herein”, “hereof” and “hereunder” and other words of similar import refer to this Indenture as a whole and not to any particular Article, Section or other subdivision.

Certain terms, used principally in Article Six, are defined in that Article.

“Act”, when used with respect to any Holder, has the meaning specified in Section 1.04.

“**Affiliate**” of any specified Person means any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For the purposes of this definition, “control” when used with respect to any specified Person means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms “controlling” and “controlled” have meanings correlative to the foregoing.

“Authenticating Agent” means any Person authorized by the Trustee to act on behalf of the Trustee to authenticate Securities.

“Authorized Newspaper” means a newspaper in an official language of the country of publication or in the English language, customarily published on each Business Day, whether or not published on Saturdays, Sundays or holidays, and of general circulation in the place in connection with which the term is used or in the financial community of each such place. Whenever successive publications are required to be made in Authorized Newspapers, the successive publications may be made in the same or in different newspapers in the same city meeting the foregoing requirements and in each case on any Business Day. If it shall be impossible or impractical to make any publication of any notice required by this Indenture in the manner herein provided, any publication or other notice in lieu thereof that is made or given by the Trustee shall constitute a sufficient publication of such notice.

“Authorized Officer” means the [President, Chief Executive Officer, Chief Financial Officer, Secretary, Treasurer or General Counsel of the Company], or any person (whether designated by name or the persons for the time being holding a designated office) appointed by or pursuant to a Board Resolution for the purpose, or a particular purpose, of this Indenture, *provided* that written notice of such appointment shall have been given to the Trustee.

“Board of Directors” means either the board of directors of the Company or any duly authorized committee of that board.

“Board Resolution” when used with reference to the Company means a copy of a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors, or pursuant to authorization by the Board of Directors, and to be in full force and effect on the date of such certification, and delivered to the Trustee.

“Business Day”, when used with respect to any Place of Payment or any other particular location specified in the Securities or this Indenture, means each Monday, Tuesday, Wednesday, Thursday and Friday that is not a day on which banking institutions in that Place of Payment, such other location or the city in which the Corporate Trust Office of the Trustee is located, are authorized or obligated by law or executive order to close, except as may be otherwise specified as contemplated by Section 3.01(b).

“Commission” means the Securities and Exchange Commission, as from time to time constituted, created under the Securities Exchange Act of 1934, or, if at any time after the execution of this indenture such Commission is not existing and performing the duties now assigned to it under the Trust Indenture Act, then the body performing such duties at such time.

“Company” means the Person named as the “Company” in the first paragraph of this Indenture until a successor Person has become such pursuant to the applicable provisions of this Indenture, and thereafter “Company” shall mean such successor Person.

“Company Request” or **“Company Order”** means a written request or order signed in the name of the Company by an Authorized Officer and delivered to the Trustee.

“Corporate Trust Office” means the office of the Trustee at which at any particular time its corporate trust business shall be principally administered and which at the date hereof is located at [].

“corporation” means a corporation, association, joint stock company, limited liability company or business trust.

“Defaulted Interest” has the meaning specified in Section 3.07.

“Depository” means, with respect to the Securities of any series issuable or issued in the form of a Global Security, the Person designated as Depository by the Company in Section 3.01(b) until a successor Depository shall

have become such pursuant to the applicable provisions of this Indenture, and thereafter “Depository” shall mean or include each Person who is then a Depository hereunder, and if at any time there is more than one such Person, “Depository” as used with respect to the Securities of any such series shall mean the Depository with respect to the Securities of that series.

“**Dollar**” or “**\$**” means a dollar or other equivalent unit in such coin or currency of the United States of America that is legal tender for the payment of public and private debts at the time of payment.

“**Eligible Obligations**” means:

(a) with respect to Securities denominated in Dollars, U.S. Government Obligations; or

(b) with respect to Securities denominated in a currency other than Dollars or in a composite currency, such other obligations or instruments as shall be specified with respect to such Securities, as contemplated by Section 3.01(b).

“**Event of Default**” has the meaning specified in Section 5.01.

“**Global Security**” means a Security, if any, issued to evidence all or a part of a series of Securities in accordance with Section 3.01.

“**Hedging Obligations**” means, with respect to any Person, the obligations of such Person under (i) interest rate swap agreements, interest rate cap agreements and interest rate collar agreements and (ii) other agreements or arrangements designed to protect such Person against fluctuations in interest rates.

“**Holder**” means, with respect to a Registered Security, a Person in whose name such Registered Security is registered in the Security Register and, with respect to an Unregistered Security or coupon appertaining thereto, the bearer thereof.

“**Indenture**” means this instrument as originally executed and as it may from time to time be supplemented or amended by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof and shall include the form and terms of particular series of Securities established as contemplated by Section 3.01; *provided, however*, that, if at any time more than one Person is acting as Trustee under this instrument, “Indenture” shall mean, with respect to any one or more series of Securities for which such Person is Trustee, this instrument as originally executed or as it may from time to time be supplemented or amended by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof, exclusive, however, of any provisions or terms which relate solely to other series of Securities for which such Person is not Trustee, regardless of when such terms or provisions were adopted, and exclusive of any provisions or terms adopted by means of one or more indentures supplemental hereto executed and delivered after such Person had become such Trustee but to which such Person, as such Trustee, was not a party.

“**Indexed Security**” means a Security the terms of which provide that the principal amount thereof payable at Stated Maturity may be more or less than the principal face amount thereof at original issuance.

“**interest**”, when used with respect to an Original Issue Discount Security that by its terms bears interest only after Maturity, means interest payable after Maturity.

“**Interest Payment Date**”, when used with respect to any Security, means the Stated Maturity of an installment of interest on such Security.

“**Maturity**”, when used with respect to any Security, means the date on which the principal of such Security or an installment of principal becomes due and payable as therein or herein provided, whether at the Stated Maturity or by declaration of acceleration, upon call for redemption, exercise of repayment option, exercise of exchange or conversion, or otherwise.

“**Officer’s Certificate**” means a certificate signed by two Authorized Officers and delivered to the Trustee.

“**Opinion of Counsel**” means a written opinion of counsel, who may be an employee of, or counsel for, the Company or an Affiliate of the Company, and who shall be reasonably acceptable to the Trustee.

“**Original Issue Discount Security**” means any Security that provides for an amount less than the principal amount thereof to be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 5.02.

“**Outstanding**”, when used with respect to Securities of any series, means, as of the date of determination, all Securities theretofore authenticated and delivered under this Indenture, *except*:

(a) Securities theretofore cancelled by the Trustee or delivered to the Trustee for cancellation;

(b) Securities or portions thereof for whose payment or redemption money or Eligible Obligations (or any combination of money and Eligible Obligations) in the necessary amount has been theretofore deposited with the Trustee or any Paying Agent (other than the Company or any other obligor on such Security) in trust or set aside and segregated in trust by the Company or any other obligor on such Security (if the Company or any other obligor on such Security acts as its own Paying Agent) for the Holders of such Securities; *provided, however*, that if such Securities, or portions thereof, are to be redeemed prior to the Stated Maturity thereof, notice of such redemption has been duly given pursuant to this Indenture or provision therefor satisfactory to the Trustee has been made;

(c) Securities, except to the extent provided in Sections 4.02 and 4.03, as to which the Company has effected defeasance and/or covenant defeasance, as provided in Article Four;

(d) Securities that have been paid pursuant to Section 3.06 or in exchange for or in lieu of which other Securities have been authenticated and delivered pursuant to this Indenture, other than any such Securities in respect of which there have been presented to the Trustee proof satisfactory to it and the Company that such Securities are held by a bona fide purchaser in whose hands such Securities are valid obligations of the Company;

provided, however, that in determining whether the Holders of the requisite principal amount of the Outstanding Securities have given, made or taken any request, demand, authorization, direction, notice, consent, waiver or other action hereunder,

(i) Securities owned by the Company or any other obligor upon the Securities or any Affiliate of the Company or of such other obligor (unless the Company, such Affiliate or such obligor owns (x) all Securities Outstanding under this Indenture or (y) except for the purposes of actions to be taken by Holders of more than one series or Tranche voting as a class, all Outstanding Securities of each such series and each such Tranche, as the case may be, determined without regard to this clause) shall be disregarded and deemed not to be Outstanding, except that, in determining whether the Trustee shall be protected in relying upon any such request, demand, authorization, direction, notice, consent or waiver, only Securities that the Trustee knows to be so owned shall be so disregarded. Securities so owned that have been pledged in good faith may be regarded as Outstanding if the pledgee establishes to the satisfaction of the Trustee the pledgee’s right so to act with respect to such Securities and that the pledgee is not the Company or any other obligor upon the Securities or any Affiliate of the Company or of such other obligor;

(ii) in determining whether the Holders of the requisite principal amount of Securities of any series or Tranche have concurred in any direction, waiver or consent, the principal amount of Original Issue Discount Securities that shall be deemed to be outstanding shall be the amount of the principal thereof that would be due and payable as of the date of such determination upon acceleration of the maturity thereof pursuant to Section 5.02;

(iii) in the case of any Security the principal of that is payable from time to time without presentment or surrender, the principal amount of such Security that shall be deemed to be Outstanding at any time

for all purposes of this Indenture shall be the original principal amount thereof less the aggregate amount of principal thereof theretofore paid; and

(iv) in the case of Securities having been denominated in a currency other than Dollars and remaining outstanding contemporaneously with Securities denominated in Dollars, the principal amount of any Security that is denominated in a currency other than Dollars or in a composite currency that shall be deemed to be Outstanding for such purposes shall be determined as contemplated by Section 3.01(b).

“Paying Agent” means any Person, including the Company, authorized by the Company to pay the principal of (and premium, if any) or interest on any Securities on behalf of the Company.

“Periodic Offering” means an offering of Securities of a series from time to time any or all of the specific terms of which Securities, including without limitation the rate or rates of interest, if any, thereon, the Stated Maturity or Maturities thereof and the redemption provisions, if any, with respect thereto, are to be determined by the Company or its agents from time to time subsequent to the initial request for the authentication and delivery of such Securities by the Trustee, all as contemplated in Sections 3.01 and 3.03.

“Person” means any individual, corporation, partnership, joint venture, trust, unincorporated organization or government or any agency or political subdivision thereof or any syndicate or group that would be deemed to be a “person” under Section 13(d)(3) of the Securities Exchange Act of 1934, as amended, or any other entity.

“Place of Payment”, when used with respect to the Securities of any series, or any Tranche thereof, means the place or places where the principal of (and premium, if any) and interest, if any, on the Securities of that series or Tranche are payable as specified as contemplated by Section 3.01(b).

“Predecessor Security” of any particular Security means every previous Security evidencing all or a portion of the same debt as that evidenced by such particular Security, and, for the purposes of this definition, any Security authenticated and delivered under Section 3.06 in exchange for or in lieu of a mutilated, destroyed, lost or stolen Security shall be deemed to evidence the same debt as the mutilated, destroyed, lost or stolen Security.

“Redemption Date”, when used with respect to any Security to be redeemed, means the date fixed for such redemption by or pursuant to this Indenture.

“Redemption Price”, when used with respect to any Security to be redeemed, means the price at which it is to be redeemed pursuant to this Indenture.

“Registered Security” means any Security issued hereunder and registered by the Security Registrar or any recorded interest in a Global Security issued hereunder.

“Regular Record Date” for the interest payable on any Interest Payment Date on the Securities of any series means the date specified for that purpose as contemplated by Section 3.01(b).

“Repayment Date”, when used with respect to any Security of any series to be repaid or repurchased, means the date, if any, fixed for such repayment or for such repurchase (whether at the option of the Holders or otherwise) pursuant to this Indenture.

“Repayment Price”, when used with respect to any Security of any series to be repaid, means the price, if any, at which it is to be repaid pursuant to Section 3.01(b).

“Responsible Officer”, when used with respect to the Trustee, means any officer within the corporate trust department or any other successor group of the Trustee, including any vice president, assistant vice president, assistant secretary or any other officer of the Trustee customarily performing functions similar to those performed by any of the above designated officers and also means, with respect to a particular corporate trust matter, any other officer of the Trustee to whom such matter is referred because of his or her knowledge of and familiarity with the particular subject.

“**Security**” or “**Securities**” has the meaning stated in the first recital of this Indenture and, more particularly, means any Security or Securities authenticated and delivered under this Indenture; *provided, however*, that if at any time there is more than one Person acting as Trustee under this Indenture, “**Securities**” with respect to the Indenture as to which such Person is Trustee shall have the meaning stated in the first recital of this Indenture and shall more particularly mean Securities authenticated and delivered under this Indenture, exclusive, however of Securities of any series as to which such Person is not Trustee.

“**Security Register**” and “**Security Registrar**” have the respective meanings specified in Section 3.05.

“**series**” or “**series of Securities**” means a series of Securities issued under this Indenture as determined by Board Resolution or as otherwise determined under this Indenture.

“**Special Record Date**” for the payment of any Defaulted Interest means a date fixed by the Trustee pursuant to Section 3.07.

“**Stated Maturity**”, when used with respect to any Security or any installment of principal thereof or interest thereon, means the date specified in such Security as the fixed date on which the principal of such Security or such installment of principal or interest is due and payable.

“**Subsidiary**” of any Person means (a) any corporation, association or other business entity of which more than 50% of the outstanding total voting power ordinarily entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers, trustees or other voting members of the governing body thereof is at the time owned or controlled, directly or indirectly, by the Company or by one or more other Subsidiaries, or by the Company and one or more other Subsidiaries or (b) any partnership the sole general partner or the managing general partner of which is the Company or a Subsidiary of the Company or the only general partners of which are the Company or of one or more Subsidiaries of the Company (or any combination thereof).

“**Tranche**” means a group of Securities which (a) are of the same series and (b) have identical terms to other Tranches of such series except as to principal amount, date of issuance or first interest payment date, each of which may vary among Tranches of any one series.

“**Trustee**” means the Person named as the “Trustee” in the first paragraph of this instrument until a successor Trustee shall have been appointed with respect to one or more series of Securities pursuant to the applicable provisions of this Indenture, and thereafter “Trustee” shall mean or include each Person who is then a Trustee hereunder, and if at any time there is more than one such Person, “Trustee” as used with respect to the Securities of any series shall mean the Trustee with respect to Securities of that series.

“**Trust Indenture Act**” means the Trust Indenture Act of 1939 as in force at the date as of which this instrument was executed, except as provided in Section 9.05.

“**U.S. Government Obligations**” means (x) any security that is (i) a direct obligation of the United States of America for the payment of which the full faith and credit of the United States of America are pledged or (ii) an obligation of a Person controlled or supervised by and acting as an agency or instrumentality of the United States of America the payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States of America, and (y) any depositary receipt issued by a bank (as defined in Section 3(a)(2) of the Securities Act of 1933) as custodian with respect to any U.S. Government Obligation that is specified in clause (x) above and held by such bank for the account of the holder of such depositary receipt, or with respect to any specific payment of principal of or interest on any U.S. Government Obligation which is so specified and held, provided that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depositary receipt from any amount received by the custodian in respect of the U.S. Government Obligation or the specific payment of principal of or interest on the U.S. Government Obligation evidenced by such depositary receipt.

“**Unregistered Security**” means any Security issued hereunder that is not a Registered Security.

“**Vice President**”, when used with respect to the Company or the Trustee, means any vice president, whether or not designated by a number or a word or words added before or after the title “vice president”.

Section 1.02. *Compliance Certificates and Opinions.* (a) Except as otherwise expressly provided in this Indenture, upon any application or request by the Company to the Trustee to take any action under any provision of this Indenture, the Company shall, if requested by the Trustee, furnish to the Trustee an Officer’s Certificate stating that all conditions precedent, if any, provided for in this Indenture relating to the proposed action have been complied with and an Opinion of Counsel stating that in the opinion of such counsel all such conditions precedent, if any, have been complied with, except that in the case of any such application or request as to which the furnishing of such documents is specifically required by any provision of this Indenture relating to such particular application or request, no additional certificate or opinion need be furnished.

(b) Every certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture (except for certificates provided for in Section 10.04) shall include:

- (1) a statement that each individual signing such certificate or opinion has read such covenant or condition and the definitions herein relating thereto;
- (2) a statement that, in the opinion of each such individual, he or she has made such examination or investigation as is necessary to enable him or her to express an informed opinion as to whether or not such covenant or condition has been complied with; and
- (3) a statement as to whether, in the opinion of each such individual, such condition or covenant has been complied with.

Section 1.03. *Form of Documents Delivered to Trustee.* (a) In any case where several matters are required to be certified by, or covered by an opinion of, any specified Person, it is not necessary that all such matters be certified by, or covered by the opinion of, only one such Person, or that they be so certified or covered by only one document, but one such Person may certify or give an opinion with respect to some matters and one or more other such Persons as to other matters, and any such Person may certify or give an opinion as to such matters in one or several documents.

(b) Any certificate, statement or opinion of an officer of the Company may be based, insofar as it relates to legal matters, upon a certificate or an Opinion of Counsel, or representations by counsel. Any such certificate, statement or Opinion of Counsel may be based, insofar as it relates to factual matters, upon a certificate, statement or opinion of, or representations by, an officer or officers of the Company stating that the information with respect to such factual matters is in the possession of the Company. Any certificate, statement or opinion of an officer of the Company or of counsel may be based, insofar as it relates to accounting matters, upon a certificate, statement or opinion of, or representations by, an accountant or firm of accountants in the employ of the Company. Any certificate, statement or opinion of, or representations by, any independent firm of public accountants filed with the Trustee shall contain a statement that such firm is independent.

(c) Where any Person is required to make, give or execute two or more applications, requests, consents, certificates, statements, opinions or other instruments under this Indenture, they may, but need not, be consolidated and form one instrument.

Section 1.04. *Acts of Holders.* (a) Any request, demand, authorization, direction, notice, consent, waiver or other action provided or permitted by this Indenture to be made, given or taken by Holders may be embodied in and evidenced by one or more instruments of substantially similar tenor signed by such Holders in person or by an agent duly appointed in writing; and, except as herein otherwise expressly provided, such action shall become effective when such instrument or instruments are delivered to the Trustee and, where it is hereby expressly required, to the Company. Such instrument or instruments (and the action embodied therein and evidenced thereby) are herein sometimes referred to as the “Act” of the Holders signing such instrument or instruments. Proof of execution of any such instrument or of a writing appointing any such agent, or of the holding

by any Person of Unregistered Securities, shall be sufficient for any purpose of this Indenture and (subject to Section 6.01) conclusive in favor of the Trustee and the Company, if made in the manner provided in this Section.

(b) The fact and date of the execution by any Person of any such instrument or writing may be proved by the affidavit of a witness of such execution or by a certificate of a notary public or other officer authorized by law to take acknowledgments of deeds, certifying that the individual signing such instrument or writing acknowledged to him the execution thereof. Where such execution is by a signer acting in a capacity other than his individual capacity, such certificate or affidavit shall also constitute sufficient proof of his authority. The fact and date of the execution of any such instrument or writing, or the authority of the Person executing the same, may also be proved in any other manner acceptable to the Trustee.

(c) The amount of Unregistered Securities held by any Person executing any such instrument or writings as the Holder thereof, and the numbers of such Unregistered Securities, and the date of his holding the same, may be proved by the production of such Unregistered Securities or by a certificate executed, as depository, by any trust company, bank, banker or member of a national securities exchange (wherever situated), if such certificate is in form satisfactory to the Trustee, showing that at the date therein mentioned such Person had on deposit with such depository, or exhibited to it, the Unregistered Securities therein described; or such facts may be proved by the certificate or affidavit of the Person executing such instrument or writing as the Holder thereof, if such certificate or affidavit is in form satisfactory to the Trustee. The Trustee and the Company may assume that such ownership of any Unregistered Securities continues until (1) another certificate bearing a later date issued in respect of the same Unregistered Securities is produced or (2) such Unregistered Securities are produced by some other Person or (3) such Unregistered Securities are registered as to principal or are surrendered in exchange for Registered Securities, or (4) such Unregistered Securities are no longer Outstanding.

(d) The fact and date of execution of any such instrument or writing and the amount and number of Unregistered Securities held by the Person so executing such instrument or writing may also be proved in any other manner that the Trustee deems sufficient; and the Trustee may in any instance require further proof with respect to any of the matters referred to in this Section.

(e) The principal amount (except as otherwise contemplated in clause (ii) of the proviso to the definition of "Outstanding") and serial numbers of Securities held by any Person, and the date of holding the same, shall be proved by the Security Register.

(f) Any request, demand, authorization, direction, notice, consent, election, waiver or other Act of the Holder of any Security shall bind every future Holder of the same Security and the Holder of every Security issued upon the registration of transfer thereof or in exchange therefor or in lieu thereof in respect of anything done, omitted or suffered to be done by the Trustee, any Security Registrar, any Paying Agent, any Authenticating Agent or the Company in reliance thereon, whether or not notation of such action is made upon such Security.

(g) The Company may set a record date for purposes of determining the identity of Holders of any Outstanding Securities of any series entitled to vote or consent to any action by vote or consent authorized or permitted by Section 5.12 or 5.13. Such record date shall be not less than 10 nor more than 60 days prior to the first solicitation of such consent or the date of the most recent list of Holders of such Securities furnished to the Trustee pursuant to Section 7.01 prior to such solicitation.

(h) If the Company solicits from Holders any request, demand, authorization, direction, notice, consent, election, waiver or other Act, the Company may, at its option, fix in advance a record date for the determination of Holders entitled to give such request, demand, authorization, direction, notice, consent, election, waiver or other Act, but the Company shall have no obligation to do so. If such a record date is fixed, such request, demand, authorization, direction, notice, consent, election, waiver or other Act may be given before or after such record date, but only the Holders of record at the close of business on the record date shall be deemed to be Holders for the purposes of determining whether Holders of the requisite proportion of the Outstanding Securities have authorized or agreed or consented to such request, demand, authorization, direction, notice, consent, election, waiver or other Act, and for that purpose the Outstanding Securities shall be computed as of the record date.

Section 1.05. *Notices, Etc. to Trustee and Company.* Except as otherwise provided herein, any request, demand, authorization, direction, notice, consent, election, waiver or Act of Holders or other document provided or permitted by this Indenture to be made upon, given or furnished to, or filed with,

(a) the Trustee by any Holder or by the Company shall be sufficient for every purpose hereunder if made, given, furnished or filed in writing to or with the Trustee at its Corporate Trust Office, Attention: [], or

(b) the Company by the Trustee or by any Holder shall be sufficient for every purpose hereunder (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid or overnight delivery service, to the Company addressed to it at the address of its principal office specified in the first paragraph of this Indenture, to the attention of the [General Counsel], or at any other address furnished in writing to the Trustee by the Company prior to such mailing.

Section 1.06. *Notice to Holders; Waiver.* (a) Except as otherwise expressly provided herein or otherwise specified with respect to any series of Securities pursuant to Section 3.01, where this Indenture provides for notice of any event or reports to Holders, such notice or report shall be sufficiently given if in writing and mailed, first-class postage prepaid, to each Holder of Registered Securities affected by such event, at the address of such Holder as it appears in the Security Register and to addresses filed with the Trustee or preserved on the Trustee's list pursuant to Section 7.02(a) for other Holders (and to such other addressees as may be required in the case of such notice or report under Section 313(c) of the Trust Indenture Act), not later than the latest date, and not earlier than the earliest date, prescribed for the giving of such notice or report.

(b) In any case where notice to Holders is given by mail, neither the failure to mail such notice, nor any defect in any notice so mailed, to any particular Holder shall affect the sufficiency of such notice with respect to other Holders.

(c) Notice shall be sufficiently given to Holders of Unregistered Securities if published in an Authorized Newspaper in each of The City of New York and, if such Securities are listed on any securities exchange outside of the United States, in the city in which such securities exchange is located, or in such other city or cities as may be specified in the Securities, at least twice, the first publication to be not earlier than the earliest date, if any, and not later than the last date, if any, prescribed for the giving of such notice. Any such notice shall be deemed to have been given on the date of such publication, or if published more than once, on the date of the first such publication.

(d) Where this Indenture provides for notice in any manner, such notice may be waived in writing by the Person entitled to receive such notice, either before or after the event, and such waiver shall be the equivalent of such notice. Waivers of notice by Holders shall be filed with the Trustee, but such filing shall not be a condition precedent to the validity of any action taken in reliance upon such waiver.

(e) In case by reason of the suspension of regular mail service or by reason of any other cause it is impracticable to give such notice by mail, then such notification as shall be made at the direction of the Company and with the approval of the Trustee shall constitute a sufficient notification for every purpose hereunder.

(f) If it is impractical in the opinion of the Trustee or the Company to make any publication of any notice required hereby in an Authorized Newspaper, any publication or other notice in lieu thereof that is made or given with the approval of the Trustee shall constitute a sufficient publication of such notice.

Section 1.07. *Conflict With Trust Indenture Act.* If any provision hereof limits, qualifies or conflicts with a provision of the Trust Indenture Act that is required under the Trust Indenture Act to be a part of and govern this Indenture, the latter provision shall control. If any provision of this Indenture modifies or excludes any provision of the Trust Indenture Act that may be so modified or excluded, the latter provision shall be deemed to apply to this Indenture as so modified or to be excluded, as the case may be.

Section 1.08. *Effect of Headings and Table of Contents.* The Article and Section headings herein and the Table of Contents are for convenience only and shall not affect the construction hereof.

Section 1.09. *Successors and Assigns.* All covenants and agreements in this Indenture by the Company shall bind its successors and assigns, whether so expressed or not.

Section 1.10. *Separability Clause.* In case any provision in this Indenture or in the Securities is invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

Section 1.11. *Benefits of Indenture.* Nothing in this Indenture or in the Securities, express or implied, shall give to any Person, other than the parties hereto (including any Paying Agent appointed pursuant to Section 10.02 and Authenticating Agent appointed pursuant to Section 6.14 to the extent provided herein) and their successors hereunder and the Holders, any benefit or any legal or equitable right, remedy or claim under this Indenture.

Section 1.12. *Governing Law; Waiver of Jury Trial.* THIS INDENTURE AND THE SECURITIES, INCLUDING ANY CLAIM OR CONTROVERSY ARISING OUT OF OR RELATING TO THE INDENTURE OR THE SECURITIES, SHALL BE GOVERNED BY THE LAWS OF THE STATE OF NEW YORK. EACH OF THE COMPANY AND THE TRUSTEE HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS INDENTURE, THE SECURITIES OR THE TRANSACTIONS CONTEMPLATED HEREBY..

Section 1.13. *Legal Holidays.* In any case where any Interest Payment Date, Redemption Date, Repayment Date or Stated Maturity of any Security is not a Business Day at any Place of Payment or the city in which the Corporate Trust Office of the Trustee is located, then (notwithstanding any other provision of this Indenture or of the Securities, other than a provision in Securities of any series, or in the Board Resolution, any indenture supplemental hereto or Officer's Certificate that establishes the terms of such Securities, that specifically states that such provision shall apply in lieu of this Section) payment of interest or principal (and premium, if any) need not be made at such Place of Payment on such date, but may be made on the next succeeding Business Day at such Place of Payment with the same force and effect as if made on the Interest Payment Date or Redemption Date, Repayment Date, or at the Stated Maturity, and such extension of time shall in such case be (1) excluded in the computation of interest, if any, accruing on such Security at a fixed rate and (2) included in the computation of interest, if any, accruing on such Security at a floating rate; *provided, however*, that if such extension would cause payment of interest at a floating rate to be made in the next following calendar month, such payment shall be made on the next preceding Business Day.

Section 1.14. *Rules by Trustee and Agents.* The Trustee may make reasonable rules for action by or at a meeting of Holders of one or more series. The Paying Agent or Security Registrar may make reasonable rules and set reasonable requirements for its functions.

Section 1.15. *No Recourse Against Others.* No past, present or future director, officer, stockholder or employee, as such, of the Company or any of its Affiliates or any successor corporation shall have any liability for any obligation, covenant or agreement of the Company under this Indenture or any indenture supplemental hereto, or in the Securities or any coupon appertaining thereto, or for any claim based on, in respect of or by reason of such obligations, covenants or agreements or their creation. Each Holder by accepting a Security waives and releases all such liability. The waiver and release are part of the consideration for the execution and delivery of this Indenture and the issue of the Securities.

ARTICLE TWO

SECURITY FORMS

Section 2.01. *Forms Generally.* (a) The Securities of each series and related coupons, if any, shall be in substantially such form as shall be established by or pursuant to a Board Resolution, and set forth in an Officer's Certificate, or established in one or more indentures supplemental hereto, in each case with such appropriate insertions, omissions, substitutions and other variations as are required or permitted by this Indenture and may have such letters, numbers or other marks of identification and such legends or endorsements placed thereon as may be

10

required to comply with law or with any rules or regulations pursuant thereto, or with any rules of any securities exchange or to conform with general usage, all as may, consistently herewith, be determined by the officers executing such Securities, as evidenced by their execution of the Securities. When the form of Securities of any series is established by action taken pursuant to a Board Resolution, a copy of an appropriate record of such action shall be delivered to the Trustee at or prior to the delivery of the Company Order contemplated by Section 3.03 for the authentication and delivery of such Securities.

(b) The definitive Securities shall be produced in such manner or combination of manners, all as determined by the officers executing such Securities, as evidenced by their execution of such Securities.

Section 2.02. *Form of Trustee's Certificate of Authentication.* The Trustee's certificate of authentication shall be in substantially the following form:

This is one of the Securities of the series designated herein, referred to in the within-mentioned Indenture.

[]
as Trustee

By

Authorized Officer

ARTICLE THREE

THE SECURITIES

Section 3.01. *Amount Unlimited; Issuable in Series.* (a) The aggregate principal amount of Securities that may be authenticated and delivered under this Indenture is unlimited.

(b) The Securities may be issued in one or more series. There shall be established in or pursuant to a Board Resolution, and set forth in an Officer's Certificate, or established in one or more indentures supplemental hereto, prior to the issuance of Securities of any series, any or all of the following, as applicable:

(1) the title of the Securities of the series (which shall distinguish the Securities of the series from all other Securities);

(2) the aggregate principal amount of the Securities and any limit upon the aggregate principal amount of the Securities of the series that may be authenticated and delivered under this Indenture (except for Securities authenticated and delivered upon registration of transfer of, or in exchange for, or in lieu of, other Securities of the series pursuant to Section 3.04, 3.05, 3.06, 9.06, 11.06 or 12.04 and except for any Securities that, pursuant to Section 3.03, are deemed never to have been authenticated and delivered hereunder);

(3) the date or dates on which the principal and premium, if any, of the Securities of such series, or any Tranche thereof, is payable or any formula or other method or other means by which such date or dates shall be determined, by reference to an index or other fact or event ascertainable outside of this Indenture or otherwise (without regard to any provisions for redemption, prepayment, acceleration, purchase or extension);

(4) the rate or rates at which the Securities of such series, or any Tranche thereof, shall bear interest, if any (including the rate or rates at which overdue principal shall bear interest, if different from the rate or rates at which such Securities shall bear interest prior to Maturity, and, if applicable, the rate or rates at which overdue premium or interest shall bear interest, if any), or any formula or other method or other means by which such rate or rates shall be determined, by reference to an index or other fact or event ascertainable outside of this Indenture or otherwise; the date or dates from which such interest shall accrue; the Interest Payment Dates on which such interest shall be payable and the Regular Record Date, if any, for the interest payable on such Securities on any

Interest Payment Date; the right of the Company, if any, to extend the interest payment periods and the duration of any such extension as contemplated by Section 3.12; and the basis of computation of interest, if other than as provided in Section 3.10;

(5) the place or places where the principal of and premium, if any, and interest, if any, on Securities of the series, or any Tranche thereof, shall be payable, any Registered Securities of the series, or any Tranche thereof, may be surrendered for registration of transfer, Securities of the series, or any Tranche thereof, may be surrendered for exchange, and where notices and demands to or upon the Company in respect of the Securities of the series, or any Tranche thereof, and this Indenture may be served and notices to Holders pursuant to Section 1.06 will be published; the Security Registrar and any Paying Agent or Agents for such series or Tranche; and if such is the case, that the principal of such Securities shall be payable without presentment or surrender thereof;

(6) if applicable, the period or periods within which, the price or prices at which and the terms and conditions upon which Securities of the series, or any Tranche thereof, may be redeemed, in whole or in part, at the option of the Company and, if other than by a Board Resolution, the manner in which any election by the Company to redeem the Securities shall be evidenced;

(7) the obligation, if any, of the Company to redeem or purchase Securities of the series, or any Tranche thereof, pursuant to any sinking fund or analogous provisions or at the option of the Holder thereof and the period or periods within which, the price or prices at which and the terms and conditions upon which Securities of the series, or any Tranche thereof, shall be redeemed or purchased, in whole or in part, pursuant to such obligation;

(8) the terms, if any, on which the Securities of such series will be subordinate in right and priority of payment to other debt of the Company;

(9) the denominations in which any Registered Securities of the series shall be issuable, if other than denominations of \$1,000 and any integral multiple thereof, and the denominations in which any Unregistered Securities of the series shall be issuable, if other than denominations of \$5,000 and any integral multiple thereof;

(10) if other than the principal amount thereof, the portion of the principal amount of Securities of the series that shall be payable upon declaration of acceleration of the Maturity thereof pursuant to Section 5.02 or how this portion will be determined;

(11) whether Securities of the series are to be issuable in whole or in part as Registered Securities, Unregistered Securities, or both, whether Securities of the series are to be issuable with or without coupons, whether any Securities of the series are to be issuable in whole or in part in the form of a Global Security or Securities and, such case, the Depositary for such Global Security or Securities;

(12) if other than the currency of the United States of America, the currency or currencies, including composite currencies, in which the principal of or any premium or interest on the Securities of the series shall be payable and the manner of determining the equivalent of any such amount in Dollars is to be determined for any purpose, including for the purpose of determining the principal amount of such Securities deemed to be Outstanding at any time;

(13) if the principal of or any premium or interest on the Securities of such series is to be payable, or is to be payable at the election of the Company or a Holder thereof, in securities or other property, the type and amount of such securities or other property, or the manner of determining such amount shall be determined, and the period or periods within which, and the terms and conditions upon which, any such election may be made;

(14) the Person to whom any interest on any Registered Security of the series shall be payable, if other than the Person in whose name that Security is registered at the close of business on the Regular Record Date for such interest, and the manner in which, or the Person to whom, any interest on any Unregistered Security of the series shall be payable, if otherwise than upon presentation and surrender of the coupons appertaining thereto as

they severally mature, and the extent to which, or the manner in which, any interest payable on a temporary or permanent Global Security on an interest payment date will be paid;

- (15) provisions, if any, granting special rights to the Holders of Securities of the series upon the occurrence of such events as may be specified;
- (16) any addition to or change in the Events of Default, with respect to the Securities of such series, and any addition to or change in the covenants of the Company for the benefit of the Holders of the Securities of such series in addition to those set forth in Article Ten;
- (17) the terms and conditions, if any, pursuant to which the Securities of such series may be converted into or exchanged for securities or other property of the Company or any other Person;
- (18) the terms and conditions, if any, pursuant to which the Company's obligations under this Indenture may be terminated through the deposit of money or Eligible Instruments as provided in Article Four;
- (19) any exceptions to Section 1.13, or variation in the definition of Business Day, with respect to the Securities of such series;
- (20) any collateral security, assurance or guaranty for the Securities of such series;
- (21) the non-applicability of Section 6.08 to the Securities of such series or any exceptions or modifications of Section 6.08 with respect to the Securities of such series;
- (22) any rights or duties of another Person to assume the obligations of the Company with respect to the Securities of such series (whether as joint obligor, primary obligor, secondary obligor or substitute obligor) and any rights or duties to discharge and release any obligor with respect to the Securities of such series or this Indenture to the extent related to such series; and
- (23) any other terms, conditions and rights of the series (which terms, conditions and rights shall not be inconsistent with the provisions of this Indenture, except as permitted by Section 9.01(a)(5)).

(c) All Securities of any one series (other than Securities offered in a Periodic Offering) and the coupons appertaining to any Unregistered Securities of such series shall be substantially identical except in the case of Registered Securities as to denomination and except as may otherwise be provided in or pursuant to such Board Resolution and set forth in such Officer's Certificate or in any such indenture supplemental hereto and as reasonably acceptable to the Trustee. Securities of different series may differ in any respect. Not all Securities of any one series need be issued at the same time and unless otherwise provided, a series may be reopened without the consent of the Holders for issuances of additional Securities of such series.

(d) If the terms and form or forms of any series of Securities are established by or pursuant to a Board Resolution, the Company shall deliver a copy of such Board Resolution to the Trustee at or prior to the issuance of such series with (1) the form or forms of Security that have been approved attached thereto, or (2) if such Board Resolution authorizes a specific officer or officers to approve the terms and form or forms of the Securities, a certificate of such officer or officers approving the terms and form or forms of Security with such form or forms of Securities attached thereto. Such Board Resolution or certificate may provide general terms or parameters for Securities of any series and may provide that the specific terms of particular Securities of a series may be determined in accordance with or pursuant to the Company Order referred to in Section 3.03.

(e) With respect to Securities of a series subject to a Periodic Offering, the indenture supplemental hereto or the Board Resolution that establishes such series, or the Officer's Certificate pursuant to such supplemental indenture or Board Resolution, as the case may be, may provide general terms or parameters for Securities of such series and provide either that the specific terms of Securities of such series shall be specified in a Company Order or that such terms shall be determined by the Company or its agents in accordance with procedures specified in a Company Order as contemplated by Section 3.03(c).

(f) Unless otherwise specified with respect to a series of Securities pursuant to paragraph (2) of Section 3.01(b), such series of Securities may be issued in one or more Tranches with various principal amounts without the consent of any Holders and additional Tranches of such series may be authenticated and delivered pursuant to Section 3.03.

Section 3.02. *Denominations.* The Securities of each series shall be issuable in registered or unregistered form with or without coupons in such denominations as shall be specified as contemplated by Section 3.01(b). In the absence of any such provisions with respect to the Securities of any series, the Registered Securities of such series shall be issuable in denominations of \$1,000 and any integral multiple thereof and the Unregistered Securities of such series shall be issuable in denominations of \$5,000 and any integral multiple thereof.

Section 3.03. *Execution, Authentication, Delivery and Dating.* (a) The Securities shall be signed on behalf of the Company by its chairman of its Board of Directors, its Chief Executive Officer, its President, any Vice President, its Treasurer, or any Assistant Treasurer, under its corporate seal and attested by its Secretary or any Assistant Secretary. The signature of any of these officers on the Securities may be manual or facsimile. The seal of the Company may be in the form of a facsimile thereof and may be impressed, affixed, imprinted or otherwise reproduced on the Securities. Typographical and other minor errors or defects in any such reproduction of the seal or any such signature shall not affect the validity or enforceability of any Security that has been duly authenticated and delivered by the Trustee. The coupons, if any, of Unregistered Securities shall bear the manual or facsimile signature of any one of the officers referred to in the first sentence of this Section 3.03(a).

(b) Securities bearing the manual or facsimile signatures of individuals who were at any time the proper officers of the Company shall bind the Company notwithstanding that such individuals or any of them have ceased to hold such offices prior to the authentication and delivery of such Securities or did not hold such offices at the date of such Securities.

(c) At any time and from time to time after the execution and delivery of this Indenture, the Company may deliver Securities of any series (or any Tranche thereof) executed by the Company to the Trustee for authentication, together with a Company Order for the authentication and delivery of such Securities (or such Tranche), and the Trustee in accordance with the Company Order shall authenticate and deliver such Securities (or such Tranche); *provided, however,* that with respect to Securities of a series subject to a Periodic Offering, (i) such Company Order may be delivered by the Company to the Trustee prior to the delivery to the Trustee of such Securities for authentication and delivery, (ii) the Trustee shall authenticate and deliver Securities of such series for original issue from time to time, in an aggregate principal amount not exceeding the aggregate principal amount established for such series, all pursuant to a Company Order or pursuant to such procedures acceptable to the Trustee as may be specified from time to time by a Company Order, (iii) the maturity date or dates, original issue date or dates, interest rate or rates and any other terms of Securities of such series shall be determined by Company Order or pursuant to such procedures and (iv) if provided for in such procedures, such Company Order may authorize authentication and delivery pursuant to oral or electronic instructions from the Company or its duly authorized agent or agents, which oral instructions shall be promptly confirmed in writing.

(d) In authenticating such Securities and accepting the additional responsibilities under this Indenture in relation to such Securities, the Trustee shall be entitled to receive, and (subject to Section 6.01) shall be fully protected in relying upon, an Opinion of Counsel stating:

- (i) that such form of Securities has been established in conformity with the provisions of this Indenture;
- (ii) that the terms of such Securities have been established in conformity with the provisions of this Indenture; and

(iii) that such Securities, when authenticated and delivered by the Trustee and issued by the Company in the manner and subject to any conditions specified in such Opinion of Counsel, will constitute valid and legally binding obligations of the Company, enforceable in accordance with their terms, subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and similar laws of general applicability relating to or affecting creditors' rights generally and to general principles of equity.

(e) Notwithstanding the provisions of Section 3.01 and of the preceding paragraphs of Sections 3.03(c) and 3.03(d) in connection with a Periodic Offering, if all Securities of a series are not to be originally issued at one time, it shall not be necessary to deliver an Officer's Certificate or execute a supplemental indenture otherwise required pursuant to Section 3.01(b) or the Company Order and Opinion of Counsel otherwise required pursuant to such preceding paragraphs at or prior to the time of authentication of each Security of such series if such documents are delivered at or prior to the authentication upon original issuance of the first Security of such series to be issued.

(f) If such form or terms have been so established, the Trustee shall not be required to authenticate such Securities if the issuance of such Securities pursuant to this Indenture will affect the Trustee's own rights, duties or immunities under the Securities and this Indenture or otherwise in a manner that is not reasonably acceptable to the Trustee.

(g) Each Registered Security shall be dated the date of its authentication and each Unregistered Security shall be dated the date of its original issuance.

(h) No Security shall be entitled to any benefit under this Indenture or be valid or obligatory for any purpose unless there appears on such Security a certificate of authentication substantially in the form provided for herein executed by the Trustee by manual or facsimile signature and no coupon shall be valid until the Security to which it appertains has been so authenticated, and such certificate upon any Security shall be conclusive evidence, and the only evidence, that such Security has been duly authenticated and delivered hereunder and is entitled to the benefits of this Indenture.

(i) Notwithstanding the foregoing, until the Company has delivered an Officer's Certificate to the Trustee and the Security Registrar stating that, as a result of the action described, the Company would not suffer adverse consequences under the provisions of United States law or regulations in effect at the time of the delivery of Unregistered Securities, the Trustee or the Security Registrar will (i) deliver Unregistered Securities only outside the United States and its possessions and (ii) release Unregistered Securities in definitive form to the person entitled to physical delivery thereof only upon presentation of a certificate in the form prescribed by the Company.

Section 3.04. *Temporary Securities.* (a) Until definitive Securities of any series (including Global Securities) are ready for delivery, the Company may execute, and upon Company Order the Trustee shall authenticate and deliver one or more temporary Securities that are produced in any authorized denomination, substantially of the tenor of the definitive Securities in lieu of which they are issued and with such appropriate insertions, omissions, substitutions and other variations as the officers executing such Securities may determine, as evidenced by their execution of such Securities. Temporary Unregistered Securities of a series may have coupons attached or may be in the form of one or more temporary Global Securities that are Unregistered Securities of that series without coupons. Every temporary Security shall be executed by the Company and authenticated by the Trustee (and Registered Securities shall be registered by the Security Registrar) upon the same conditions, and with like effect, as a definitive Security.

(b) If temporary Securities of any series are issued, the Company will cause definitive Securities of that series to be prepared without unreasonable delay. After the preparation of definitive Securities of such series, the temporary Securities of such series shall be exchangeable for definitive Securities of such series upon surrender of the temporary Securities of such series at the office or agency of the Company in a Place of Payment for that series, without charge to the Holder. Upon surrender for cancellation of any one or more temporary Securities of any series the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a like principal amount of definitive Securities of the same series of authorized denominations. Until so exchanged the temporary Securities of any series shall in all respects be entitled to the same benefits under this Indenture as definitive Securities of such series.

(c) Every temporary Unregistered Security shall be substantially in the form approved by or pursuant to a Board Resolution and shall be delivered to one of the Paying Agents located outside the United States and its possessions or to such other person or persons as the Company shall direct against such certification as the Company may from time to time prescribe by or pursuant to a Board Resolution.

Section 3.05. *Registration, Registration of Transfer and Exchange.* (a) The Company shall cause to be kept at the Corporate Trust Office of the Trustee a register (the register maintained in such office and in any other office or agency of the Company in a Place of Payment being herein sometimes collectively referred to as the “**Security Register**”) in which, subject to such reasonable regulations as it may prescribe, the Company shall provide for the registration of Securities and of transfers of Securities. The Trustee is hereby appointed “**Security Registrar**” for the purpose of registering Securities and transfers of Securities as herein provided.

(b) Except in the case of Securities issued in the form of a Global Security, upon surrender for registration of transfer of any Registered Security of any series at the office or agency of the Company in a Place of Payment for that series, the Company shall execute, and the Trustee shall authenticate and deliver, in the name of the designated transferee or transferees, one or more new Registered Securities of the same series, of any authorized denominations and of a like aggregate principal amount.

(c) If both Registered and Unregistered Securities are authorized for a series of Securities and the terms of such Securities permit, (i) Unregistered Securities may be exchanged for an equal principal amount of Registered or Unregistered Securities of the same series and date of maturity in any authorized denominations upon delivery to the Security Registrar (or a Paying Agent (as herein defined), if the exchange is for Unregistered Securities) of the Unregistered Security with all unmatured coupons and all matured coupons in default appertaining thereto and if all other requirements of the Security Registrar (or such Paying Agent) and such Securities for such exchange are met, and (ii) Registered Securities, other than Securities issued in the form of a Global Security (except as provided in Section 3.11), may be exchanged for an equal principal amount of Unregistered Securities of the same series and date of maturity in any authorized denominations (except that any coupons appertaining to such Unregistered Securities which have matured and have been paid shall be detached) upon delivery to the Security Registrar of the Registered Securities and if all other requirements of the Security Registrar and such Securities for such exchange are met.

(d) Notwithstanding the foregoing, the exchange of Unregistered Securities for Registered Securities or Registered Securities for Unregistered Securities will be subject to the satisfaction of the provisions of United States law and regulations in effect at the time of such exchange, and no exchange of Registered Securities for Unregistered Securities will be made until the Company has notified the Trustee in an Officer’s Certificate and the Security Registrar that, as a result of such exchange, the Company would not suffer adverse consequences under such law or regulations.

(e) All Securities issued upon any registration of transfer or exchange of Securities shall be the valid obligations of the Company, evidencing the same debt, and entitled to the same benefits under this Indenture, as the Securities surrendered upon such registration of transfer or exchange.

(f) Every Security presented or surrendered for registration of transfer or for exchange shall (if so required by the Company or the Trustee) be duly endorsed, or be accompanied by a written instrument of transfer in form satisfactory to the Company and the Security Registrar duly executed by the Holder thereof or such Holder’s attorney duly authorized in writing.

(g) Unless otherwise provided in a Board Resolution or an Officer’s Certificate pursuant to a Board Resolution, or in an indenture supplemental hereto, with respect to Securities of any series, no service charge shall be made to the Holder for any registration of transfer or exchange of Securities, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any registration of transfer or exchange of Securities, other than exchanges pursuant to Section 3.04, 9.06, 11.06 or 12.04 not involving any transfer.

(h) The Company shall not be required (i) to issue, register the transfer of or exchange Securities of any series during a period beginning at the opening of business 15 days before the day of the mailing of a notice of redemption of Securities of that series selected for redemption under Section 11.03 and ending at the close of business on the day of such mailing, or (ii) to register the transfer of or exchange any Security so selected for redemption in whole or in part, except the unredeemed portion of any Security being redeemed in part.

- (i) Unregistered Securities or any coupons appertaining thereto shall be transferable by delivery thereof.

Section 3.06. *Mutilated, Destroyed, Lost and Stolen Securities.* (a) If any mutilated Security or a Security with a mutilated coupon or coupons appertaining to it is surrendered to the Trustee, the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a replacement Registered Security, if such surrendered security was a Registered Security, or a replacement Unregistered Security with coupons corresponding to the coupons appertaining to the surrendered Security, if such surrendered Security was an Unregistered Security, of the same series and of like tenor and principal amount and bearing a number not contemporaneously outstanding.

(b) If there has been delivered to the Company and the Trustee (i) evidence to their satisfaction of the destruction, loss or theft of any Security or any coupon or coupons appertaining thereto, and (ii) such bond, security or indemnity as may be required by them to save each of them and any agent of either of them harmless, then, in the absence of actual notice to the Company or the Trustee that such Security or any coupon or coupons appertaining thereto has been acquired by a bona fide purchaser, the Company shall execute and upon its request the Trustee shall authenticate and deliver, a replacement Registered Security, if such Holder's claim pertains to a Registered Security, or a replacement Unregistered Security with coupons corresponding to the coupons appertaining to the destroyed, lost or stolen Unregistered Security or the Unregistered Security to which such destroyed, lost or stolen coupon or coupons appertains, if such Holder's claim pertains to an Unregistered Security, of the same series (and Tranche, if applicable) and of like tenor and principal amount and bearing a number not contemporaneously outstanding.

(c) In case any such mutilated, destroyed, lost or stolen Security or any coupon or coupons appertaining thereto has become or is about to become due and payable, the Company in its discretion may, instead of issuing a new Security, pay such Security or any coupon or coupons appertaining thereto.

(d) Upon the issuance of any new Security under this Section or any coupon or coupons appertaining thereto, the Company may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto and any other expenses (including the fees and expenses of the Trustee) connected therewith.

(e) Every new Security or any coupon or coupons appertaining thereto of any series issued pursuant to this Section in lieu of any destroyed, lost or stolen Security or any coupon or coupons appertaining thereto shall constitute an original additional contractual obligation of the Company, whether or not the destroyed, lost or stolen Security or any coupon or coupons appertaining thereto is at any time enforceable by anyone, and shall be entitled to all the benefits of this Indenture equally and proportionately with any and all other Securities or any coupon or coupons appertaining thereto of that series duly issued hereunder.

(f) The provisions of this Section are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities or any coupon or coupons appertaining thereto.

Section 3.07. *Payment of Interest; Interest Rights Preserved.* (a) Unless otherwise provided as contemplated by Section 3.01(b) with respect to the Securities of any series, interest on any Registered Security that is payable, and is punctually paid or duly provided for, on any Interest Payment Date shall be paid to the Person in whose name that Registered Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest; *provided, however*, that interest payable at Maturity will be paid to the Person to whom principal is payable. In case an Unregistered Security of any series is surrendered in exchange for a Registered Security of such series after the close of business (at an office or agency of the Company in a Place of Payment for such series) on any Regular Record Date and before the opening of business (at such office or agency) on the next succeeding Interest Payment Date, such Unregistered Security shall be surrendered without the coupon relating to such Interest Payment Date and interest will not be payable on such Interest Payment Date in respect of the Registered Security issued in exchange for such Unregistered Security, but will be payable only to the Holder of such coupon when due in accordance with provisions of this Indenture.

(b) Any interest on any Registered Security of any series that is payable, but is not punctually paid or duly provided for, on any Interest Payment Date (herein called “**Defaulted Interest**”) shall forthwith cease to be payable to the Holder on the relevant Regular Record Date by virtue of having been such Holder, and such Defaulted Interest may be paid by the Company, at its election in each case, as provided in clause (i) or (ii) below:

(i) The Company may elect to make payment of any Defaulted Interest to the Persons in whose names the Registered Securities of such series (or their respective Predecessor Securities) are registered at the close of business on a Special Record Date for the payment of such Defaulted Interest, which shall be fixed in the following manner. The Company shall notify the Trustee in writing of the amount of Defaulted Interest proposed to be paid on each Registered Security of such series and the date of the proposed payment, and at the same time the Company shall deposit with the Trustee an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Trustee for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the Persons entitled to such Defaulted Interest as in this clause provided. Thereupon the Trustee shall fix a Special Record Date for the payment of such Defaulted Interest which shall be not more than 15 days and not less than 10 days prior to the date of the proposed payment and not less than 10 days after the receipt by the Trustee of the notice of the proposed payment. The Trustee shall promptly notify the Company of such Special Record Date and, in the name and at the expense of the Company, shall cause notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor to be given pursuant to Section 1.06, not less than 10 days prior to such Special Record Date. Notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor having been so given, such Defaulted Interest shall be paid to the Persons in whose names the Registered Securities of such series (or their respective Predecessor Securities) are registered at the close of business on such Special Record Date and shall no longer be payable pursuant to the following clause (ii). In case an Unregistered Security of any series is surrendered at the office or agency of the Company in a Place of Payment for such series in exchange for a Registered Security of such series after the close of business at such office or agency on any Special Record Date and before the opening of business at such office or agency on the related proposed date for payment of Defaulted Interest, such Unregistered Security shall be surrendered without the coupon relating to such proposed date of payment and Defaulted Interest will not be payable on such proposed date of payment in respect of the Registered Security issued in exchange for such Unregistered Security, but will be payable only to the Holder of such coupon when due in accordance with the provisions of this Indenture.

(ii) The Company may make payment of any Defaulted Interest on the Registered Securities of any series in any other lawful manner not inconsistent with the requirements of any securities exchange on which such Securities may be listed, and upon such notice as may be required by such exchange, if, after notice given by the Company to the Trustee of the proposed payment pursuant to this clause (ii), such manner of payment shall be deemed practicable by the Trustee.

(c) Subject to the foregoing provisions of this Section, each Registered Security delivered under this Indenture upon registration of transfer of or in exchange for or in lieu of any other Registered Security shall carry the rights to interest accrued and unpaid, and to accrue, which were carried by such other Registered Security.

(d) Subject to the limitations set forth in Section 10.02, the Holder of any coupon appertaining to an Unregistered Security shall be entitled to receive the interest payable on such coupon upon presentation and surrender of such coupon on or after the Interest Payment Date of such coupon at an office or agency maintained for such purpose pursuant to Section 10.02.

Section 3.08. *Persons Deemed Owners.* Prior to due presentment of a Registered Security for registration of transfer, the Company, the Trustee and any agent of the Company or the Trustee may treat the Person in whose name such Registered Security is registered as the owner of such Registered Security for the purpose of receiving payment of principal of (and any premium) and (subject to Section 3.05 and Section 3.07) any interest on such Registered Security and for all other purposes whatsoever, whether or not such Registered Security be overdue, and neither the Company, the Trustee nor any agent of the Company or the Trustee shall be affected by notice to the contrary.

Ownership of Registered Securities of a series shall be proved by the computerized book-entry system of the Depository in the case of Registered Securities issued in the form of a Global Security. Ownership of

Unregistered Securities may be proved by the production of such Unregistered Securities or by a certificate or affidavit executed by the person holding such Unregistered Securities or by a depository with whom such Unregistered Securities were deposited, if the certificate or affidavit is satisfactory to the Trustee and the Company. The Company, the Trustee and any agent of the Company may treat the bearer of any Unregistered Security or coupon and the person in whose name a Registered Security is registered as the absolute owner thereof for all purposes.

None of the Company, the Trustee, any Paying Agent or the Security Registrar shall have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests of a Global Security or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

Section 3.09. *Cancellation.* Except as otherwise specified as contemplated by Section 3.01(b) for Securities of any series, all Securities and coupons surrendered for payment, redemption, registration of transfer or exchange or for credit against any sinking fund payment shall, if surrendered to any Person other than the Trustee, be delivered to the Trustee and, if not theretofore cancelled, shall be promptly cancelled by it. Except as otherwise specified as contemplated by Section 3.01(b) for Securities of any series, the Company may at any time deliver to the Trustee for cancellation any Securities or coupons previously authenticated and delivered hereunder that the Company may have acquired in any manner whatsoever or that the Company has not issued and sold, and all Securities or coupons so delivered shall be promptly cancelled by the Trustee. No Securities or coupons shall be authenticated in lieu of or in exchange for any Securities or coupons cancelled as provided in this Section, except as expressly permitted by this Indenture. All cancelled Securities or coupons held by the Trustee shall be destroyed and the Trustee shall furnish an affidavit to the Company (setting forth the serial numbers of such Securities) attesting to such destruction unless by a Company Order the Company shall direct that the cancelled Securities or coupons be returned to it.

Section 3.10. *Computation of Interest.* Except as otherwise specified as contemplated by Section 3.01(b) for Securities of any series, interest on the Securities of each series shall be computed on the basis of a 360-day year of twelve 30-day months.

Section 3.11. *Global Securities; Exchanges; Registration and Registration of Transfer.* If specified as contemplated by Section 3.01(b) for Securities of any series, the Securities of such series may be issued in the form of one or more Global Securities, which shall be deposited with the Depository, and, unless otherwise specified in the form of Global Security adopted pursuant to Section 3.01, be registered in the name of the Depository's nominee.

Except as otherwise specified as contemplated by Section 3.01(b) for Securities of any series, any permanent Global Security shall be exchangeable only as provided in this paragraph. If the beneficial owners of interests in a permanent Global Security are entitled to exchange such interests for Securities of such series of like tenor and principal amount of another authorized form, as specified as contemplated by Section 3.01(b), then without unnecessary delay but in any event not later than the earliest date on which such interests may be so exchanged, the Company shall deliver to the Trustee definitive Securities of that series in aggregate principal amount equal to the principal amount of such permanent Global Security, executed by the Company. On or after the earliest date on which such interests may be so exchanged, such permanent Global Security shall be surrendered from time to time in accordance with instructions given to the Trustee and the Depository (which instructions shall be in writing but need not comply with Section 1.02 or be accompanied by an Opinion of Counsel) by the Depository or such other depository as shall be specified in the Company Order with respect thereto to the Trustee, as the Company's agent for such purpose, to be exchanged, in whole or in part, for definitive Securities of the same series without charge and the Trustee shall authenticate and deliver, in exchange for each portion of such permanent Global Security, a like aggregate principal amount of definitive Securities of the same series of authorized denominations and of like tenor as the portion of such permanent Global Security to be exchanged which, unless the Securities of the series are not issuable both as Unregistered Securities and as Registered Securities, as specified as contemplated by Section 3.01(b), shall be in the form of Unregistered Securities or Registered Securities, or any combination thereof, as shall be specified by the beneficial owner thereof; *provided, however*, that no such exchanges may occur during the periods specified by Section 3.05; and *provided, further*, that no Unregistered Security delivered in exchange for a portion of a permanent Global Security shall be mailed or otherwise delivered

to any location in the United States unless the Company has complied with Section 3.05(d). Promptly following any such exchange in part, such permanent Global Security shall be returned by the Trustee, to the Depository or such other depository referred to above, in accordance with the instructions of the Company referred to above.

The Global Security may be transferred to another nominee of the Depository, or to a successor Depository selected by the Company, and upon surrender for registration of transfer of the Global Security to the Trustee, the Company shall execute, and the Trustee shall authenticate and deliver, in the name of the designated transferee, a new Global Security in the same aggregate principal amount. If at any time the Depository notifies the Company that it is unwilling or unable to continue as Depository and a successor Depository satisfactory to the Company is not appointed within 90 days after the Company receives such notice, the Company will execute, and the Trustee will authenticate and deliver, Securities in definitive form to the Depository in exchange for the Global Security. In addition, if at any time the Company determines that it is not in the best interest of the Company or the beneficial owners of Securities to continue to have a Global Security representing all of the Securities held by a Depository, the Company may, at its option, execute, and the Trustee will authenticate and deliver, Securities in definitive form to the Depository in exchange for all or a portion of the Global Security. Promptly after any such exchange of Securities in definitive form for all or a portion of the Global Security pursuant to this paragraph, the Company shall promulgate regulations governing registration of transfers and exchanges of Securities in definitive form, which regulations shall be reasonably satisfactory to the Trustee and shall thereafter bind every Holder of such Securities.

Any Global Security issued hereunder shall bear a legend in substantially the following form:

“THIS SECURITY IS A GLOBAL SECURITY WITHIN THE MEANING OF THE INDENTURE HEREINAFTER REFERRED TO AND IS REGISTERED IN THE NAME OF THE DEPOSITARY OR A NOMINEE OF THE DEPOSITARY. THIS SECURITY IS EXCHANGEABLE FOR SECURITIES REGISTERED IN THE NAME OF A PERSON OTHER THAN THE DEPOSITARY OR ITS NOMINEE ONLY IN THE LIMITED CIRCUMSTANCES DESCRIBED IN THE INDENTURE, AND MAY NOT BE TRANSFERRED EXCEPT AS A WHOLE BY THE DEPOSITARY TO A NOMINEE OF THE DEPOSITARY, BY A NOMINEE OF THE DEPOSITARY TO THE DEPOSITARY OR ANOTHER NOMINEE OF THE DEPOSITARY OR BY THE DEPOSITARY OR ANY SUCH NOMINEE TO A SUCCESSOR DEPOSITARY OR A NOMINEE OF SUCH A SUCCESSOR DEPOSITARY.”

In addition, so long as the Depository Trust Company (“DTC”) is the Depository, each Global Note registered in the name of DTC or its nominee shall bear a legend in substantially the following form:

“UNLESS THIS GLOBAL NOTE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITARY TRUST COMPANY, A NEW YORK CORPORATION (“DTC”), TO THE ISSUER OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY GLOBAL NOTE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO. OR IN SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC (AND ANY PAYMENT IS MADE TO CEDE & CO. OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL INASMUCH THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN.”

Section 3.12. *Extension of Interest Payment.* The Company shall have the right at any time, so long as the Company is not in default in the payment of interest on the Securities of any series hereunder, to extend interest payment periods on all Securities of one or more series, if so specified as contemplated by Section 3.01(b) with respect to such Securities and upon such terms as may be specified as contemplated by Section 3.01(b) with respect to such Securities. If the Company ever so extends any such interest payment period, the Company shall promptly notify the Trustee.

ARTICLE FOUR

SATISFACTION AND DISCHARGE; DEFEASANCE

Section 4.01. *Satisfaction and Discharge of Indenture.* (a) This Indenture shall upon Company Request cease to be of further effect with respect to the Securities of any series (except as to any surviving rights of registration of transfer or exchange of Securities herein expressly provided for), and the Trustee, at the expense of the Company, shall execute instruments in form and substance satisfactory to the Trustee and the Company acknowledging termination of the Company’s obligations under the Securities of such series and this Indenture, when

(1) either

(A) all Securities of such series previously authenticated and delivered (other than (i) Securities of such series that have been destroyed, lost or stolen and that have been replaced or paid as provided in Section 3.06 and (ii) Securities of such series that are deemed paid and discharged pursuant to Section 4.02) have been delivered to the Trustee for cancellation; or

(B) all such Securities of such series not previously delivered to the Trustee for cancellation

(i) have become due and payable (whether at Stated Maturity, early redemption or otherwise), or

(ii) will become due and payable at their Stated Maturity within one year, or

(iii) if redeemable at the option of the Company, are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption by the Trustee in the name, and at the expense, of the Company,

and the Company in the case of (i), (ii) or (iii) above has irrevocably deposited or caused to be deposited with the Trustee as funds in trust solely for the benefit of the Holders of the Securities of such series an amount in cash in the currency or composite currency in which the Securities of such series are denominated, Eligible Obligations or any combination thereof, together (if necessary in the case of a series of Securities not bearing interest at a fixed rate) with any Hedging Obligation, so that such funds in each case are sufficient to pay principal of, and any premium and interest, if any, to the date of such deposit (in the case of Securities which have become due and payable) or to the Stated Maturity or Redemption Date, as the case may be, on all Outstanding Securities of such series;

(2) the Company has paid or caused to be paid all other sums payable hereunder by the Company; and

(3) the Company has delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that all conditions precedent herein provided for relating to the satisfaction and discharge of this Indenture have been complied with.

(b) Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee under Section 6.07, the obligations of the Trustee to any Authenticating Agent under Section 6.14 and, if money has been deposited with the Trustee pursuant to subclause (B) of clause (1) of this Section, the obligations of the Trustee under Section 4.05 and Section 10.03(e) shall survive.

(c) Upon satisfaction and discharge of this Indenture as provided in this Section 4.01, the Trustee shall assign, transfer and turn over to the Company, subject to the claim provided by Section 6.07, any and all money, securities and other property then held by the Trustee for the benefit of the Holders of the Securities.

The Company may elect, at its option at any time, to have Section 4.02 or Section 4.03 applied to the Outstanding Securities of any series in accordance with any applicable requirements provided pursuant to Section 3.01 and upon compliance with the conditions set forth below in this Article. Any such election shall be evidenced by a Board Resolution or in another manner specified as contemplated by Section 3.01(b) for such Securities.

Section 4.02. *Defeasance and Discharge of Indenture.* Upon the Company's exercise of its option (if any) to have this Section applied to all the Outstanding Securities of any series or Tranche, or any portion of the principal amount thereof, and subject to the conditions set forth in Section 4.04 being satisfied, the Company shall be deemed to have paid and discharged the entire indebtedness on such Outstanding Securities of such series or Tranche on the 91st day after the date of the deposit referred to in subparagraph (i) of Section 4.04, and the provisions of this Indenture, as it relates to such Outstanding Securities of such series or Tranche, shall be satisfied and discharged and shall no longer be in effect (and the Trustee, at the expense of the Company, shall at Company Request execute proper instruments acknowledging the same), except as to:

(a) the rights of Holders of Securities of such series to receive, solely from the trust funds described in Section 4.05, (x) payment of the principal of (and premium, if any) and each installment of principal of (and premium, if any) or interest, if any, on the Outstanding Securities of such series, or portions thereof, on the Stated Maturity of such principal or installment of principal or interest to and including the Redemption Date designated by the Company pursuant to subparagraph (x) of Section 4.04 and (y) the benefit of any mandatory sinking fund payments applicable to the Securities of such series or Tranche on the day on which such payments are due and payable in accordance with the terms of this Indenture and the Securities of such series or Tranche;

(b) the obligations of the Company and the Trustee with respect to such Securities of such series or Tranche under Sections 3.04, 3.05, 3.06, 6.14, 10.02 and 10.03 and, if the Company shall have designated a Redemption Date pursuant to subparagraph (x) of Section 4.04, Sections 11.04 and 11.06; and

(c) the Company's obligations with respect to the Trustee under Section 6.07.

Section 4.03. *Defeasance of Certain Obligations.* The Company may omit to comply with its obligations under the covenants contained in Sections 8.01, 10.05 and 10.06 with respect to any Security or Securities of any series (and in respect of any term, provision or condition set forth in the covenants or restrictions specified for such Securities pursuant to Section 3.01(b), in any supplemental indenture, Board Resolution or Officer's Certificate establishing such Security), and the failure to comply with any such provisions shall not constitute a Default or Event of Default under Section 5.01(3), *provided* that the conditions set forth in Section 4.04 have been satisfied.

Section 4.04. *Conditions to Defeasance.* The following conditions shall be the conditions to the application of Section 4.02 and Section 4.03 to any Outstanding Securities:

(i) the Company has deposited or caused to be deposited irrevocably with the Trustee as trust funds in trust, specifically pledged as security for, and dedicated solely to, the benefit of the Holders of the Securities of such series, (x) cash in Dollars (or such other currency or composite currency in which such Securities are denominated) in an amount sufficient, or (y) Eligible Obligations which through the payment of interest and principal in respect thereof in accordance with their terms will provide on or before the due date of any payment referred to in clause (1) or (2) of this subparagraph (i) money in an amount sufficient or (z) a combination of such cash and Eligible Obligations, together (if necessary in the case of a series of Securities not bearing interest at a fixed rate) with any Hedging Obligation so that such funds are sufficient, in the opinion of a nationally recognized firm of independent certified public accountants expressed in a written certification thereof delivered to the Trustee, to pay and discharge (1) the principal of (and premium, if any) and each installment of principal (and premium, if any) and interest, if any, on such Securities on the Stated Maturity of such principal or installment of principal or interest or to and including the Redemption Date designated by the Company in accordance with Section 4.04(x) and (2) any mandatory sinking fund payments applicable to the Securities of such series on the day on which such payments are due and payable in accordance with the terms of this Indenture and of the Securities of such series;

(ii) in the event of an election to have Section 4.02 apply, the Company has delivered to the Trustee an Officer's Certificate and an Opinion of Counsel to the effect that (x) the Company has received from, or there has been published by, the Internal Revenue Service a ruling or (y) there has been a change in law or regulation occurring after the date hereof, to the effect that Holders of the Securities of such series will not recognize income, gain or loss for federal income tax purposes as a result of such deposit, defeasance and discharge and will be subject to federal income tax on the same amount and in the same manner and at the same times, as would have been the case if such deposit, defeasance and discharge had not occurred;

(iii) in the event of an election to have Section 4.03 apply, the Company has delivered to the Trustee an Officer's Certificate and an Opinion of Counsel to the effect that Holders of the Securities of such series will not recognize income, gain or loss for federal income tax purposes as a result of such deposit and defeasance and will be subject to federal income tax on the same amount and in the same manner and at the same times, as would have been the case if such deposit and defeasance had not occurred;

(iv) such deposit will not result in a breach or violation of, or constitute a default under, any material agreement or instrument (other than this Indenture) to which the Company is a party or by which it is bound;

(v) no Event of Default or event that with notice or lapse of time would become an Event of Default with respect to the Securities of such series has occurred and is continuing on the date of such deposit or during the period ending on the 91st day after such date;

(vi) the Company has delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that all conditions precedent provided for relating to the defeasance contemplated by this Section have been complied with; and

(vii) if the Company has deposited or caused to be deposited money or Eligible Obligations to pay or discharge the principal of (and premium, if any) and interest on the Outstanding Securities of a series to and including a Redemption Date pursuant to clause (i) of this Section 4.04, such Redemption Date shall be irrevocably designated by a Board Resolution delivered to the Trustee on or prior to the date of deposit of such money or Eligible Obligations, and such Board Resolution shall be accompanied by an irrevocable Company Request that the Trustee give notice of such redemption in the name and at the expense of the Company not less than 30 nor more than 60 days prior to such Redemption Date in accordance with Section 11.04.

Section 4.05. *Application of Trust Money.* (a) Neither the Eligible Obligations nor the funds deposited with the Trustee pursuant to Sections 4.01, 4.02 or 4.03, nor the principal or interest payments on any such Eligible Obligations, shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal of and premium, if any, and interest, if any, on the Securities or portions of principal amount thereof in respect of which such deposit was made, all subject, however, to the provisions of Section 6.06; *provided, however*, that, so long as no Event of Default has occurred and is continuing, any cash received from such principal or interest payments on such Eligible Obligations deposited with the Trustee, if not then needed for such purpose, shall, to the extent practicable, be invested in Eligible Obligations of the type described in Section 4.01 maturing at such times and in such amounts as shall be sufficient to pay when due the principal of and any premium and interest due and to become due on such Securities or portions thereof on and prior to the Maturity thereof, and interest earned from such reinvestment shall be paid over to the Company as received by the Trustee, free and clear of any trust, lien or pledge under this Indenture except the claim provided by Section 6.07; and *provided, further*, that, so long as there shall not have occurred and be continuing an Event of Default, any moneys held by the Trustee in accordance with this Section on the Maturity of all such Securities in excess of the amount required to pay the principal of and premium, if any, and interest, if any, then due on such Securities shall be paid over to the Company free and clear of any trust, lien or pledge under this Indenture except the claim provided by Section 6.07.

(b) The Company shall pay and shall indemnify the Trustee against any tax, fee or other charge imposed on or assessed against Eligible Obligations deposited pursuant to Section 4.01, 4.02 or 4.03 or the principal and any premium and interest received in respect of such obligations other than any payable by or on behalf of Holders.

(c) The Trustee shall deliver or pay to the Company from time to time upon Company Request any Eligible Obligations or money held by it as provided in Section 4.01, 4.02 or 4.03 that, in the opinion of a nationally recognized firm of independent certified public accountants expressed in a written certification thereof delivered to the Trustee, are then in excess of the amount thereof that then would have been required to be deposited for the purpose for which such Eligible Obligations or money was deposited or received. This provision shall not authorize the sale by the Trustee of any Eligible Obligations held under this Indenture.

Section 4.06. *Reinstatement.* If the Trustee or the Paying Agent is unable to apply any money in accordance with this Article with respect to any Securities by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, then the obligations under this Indenture and such Securities from which the Company has been discharged or released pursuant to Section 4.02 or Section 4.03 shall be revived and reinstated as though no deposit had occurred pursuant to this Article with respect to such Securities, until such time as the Trustee or Paying Agent is permitted to apply all money held in trust pursuant to Section 4.05 with respect to such Securities in accordance with this Article; *provided, however,* that if the Company makes any payment of principal of or any premium or interest on any such Security following such reinstatement of its obligations, the Company shall be subrogated to the rights (if any) of the Holders of such Securities to receive such payment from the money so held in trust.

ARTICLE FIVE

REMEDIES

Section 5.01. *Events of Default.* “**Event of Default**”, wherever used herein with respect to Securities of any series, means any one of the following events, unless such event is either inapplicable to a particular series or it is specifically deleted or modified in the applicable Board Resolution or supplemental indenture under which such series of Securities is issued, as the case may be, as contemplated by Section 3.01:

(1) default in the payment of any interest upon any Security of that series when it becomes due and payable, and continuance of such default for a period of 30 days; *provided, however,* that a valid extension of the interest payment period by the Company as contemplated in Section 3.12 shall not constitute a failure to pay interest for this purpose; or

(2) default in the payment of the principal of (or premium, if any, on) any Security of that series at its Maturity and, in the case of technical or administrative difficulties, only if such default persists for a period of more than three Business Days; or

(3) default in the performance, or breach, of any covenant or warranty of the Company in this Indenture (other than a covenant or warranty a default in whose performance or whose breach is elsewhere in this Section specifically dealt with or which has expressly been included in this Indenture solely for the benefit of one or more series of Securities other than that series), and continuance of such default or breach for a period of 75 days after there has been given, by registered or certified mail, to the Company by the Trustee or to the Company and the Trustee by the Holders of at least 25% in aggregate principal amount of the Outstanding Securities of such series a written notice specifying such default or breach and requiring it to be remedied and stating that such notice is a “**Notice of Default**” hereunder; or

(4) the entry by a court having jurisdiction in the premises of (A) a decree or order for relief in respect of the Company in an involuntary case or proceeding under any applicable federal or state bankruptcy, insolvency, reorganization or other similar law or (B) a decree or order adjudging the Company a bankrupt or insolvent, or approving as properly filed a petition seeking reorganization, arrangement, adjustment or composition of or in respect of the Company under any applicable federal or state law, or appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or of any substantial part of its property, or ordering the winding up or liquidation of its affairs, and the continuance of any such decree or order for relief or any such other decree or order unstayed and in effect for a period of 90 consecutive days; or

(5) the commencement by the Company of a voluntary case or proceeding under any applicable federal or state bankruptcy, insolvency, reorganization or other similar law or of any other case or proceeding to be adjudicated a bankrupt or insolvent, or the consent by it to the entry of a decree or order for relief in respect of the Company in an involuntary case or proceeding under any applicable federal or state bankruptcy, insolvency, reorganization or other similar law or to the commencement of any bankruptcy or insolvency case or proceeding against it, or the filing by it of a petition or answer or consent seeking reorganization or relief under any applicable federal or state law, or the consent by it to the filing of such petition or to the appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee, sequestrator or similar official of the Company or of any substantial part of its property, or the making by it of an assignment for the benefit of creditors, or the admission by

it in writing of its inability to pay its debts generally as they become due, or the taking of corporate action by the Company in furtherance of any such action; or

(6) any other Event of Default provided with respect to Securities of such series pursuant to Section 3.01(b).

Section 5.02. *Acceleration of Maturity; Rescission and Annulment.* If an Event of Default with respect to Securities of any series at the time Outstanding occurs and is continuing, then in every such case the Trustee or the Holders of not less than 25% in aggregate principal amount of the Outstanding Securities of such series, by a notice in writing to the Company (and to the Trustee if given by such Holders), may declare the principal amount (or, if the Securities of such series are Original Issue Discount Securities or Indexed Securities, such portion of the principal amount of such Securities as may be specified in the terms thereof) to be due and payable immediately and upon any such declaration such principal amount (or specified amount) shall become immediately due and payable. If an Event of Default specified in Section 5.01(4) or (5) occurs, the principal of all the Securities then Outstanding (or if any such Securities are Original Issue Discount Securities or Indexed Securities, such portion of the principal amount of such Securities as may be specified in the terms thereof) shall automatically become and be immediately due and payable without any declaration or other act or notice on the part of the Trustee or any Holders of the Securities.

At any time after such a declaration of acceleration with respect to Securities of one or more series has been made and before a judgment or decree for payment of the money due has been obtained by the Trustee as hereinafter in this Article provided, the Event or Events of Default giving rise to such declaration of acceleration shall, without further act, be deemed to have been waived, and such declaration and its consequences shall, without further act, be deemed to have been rescinded and annulled, if

(1) the Company has paid or deposited irrevocably with the Trustee a sum sufficient to pay

(i) all overdue interest on all Outstanding Securities of any such series,

(A) the principal of (and premium, if any, on) any Securities of such series that have become due otherwise than by such declaration of acceleration and interest thereon at the rate or rates prescribed therefor in such Securities,

(B) to the extent that payment of such interest is lawful, interest upon overdue interest at the rate or rates borne by such Securities, unless another rate is provided in such Securities, and

(C) all amounts due to the Trustee under Section 6.07; and

(2) all Events of Default with respect to Securities of that series, other than the non-payment of the principal of Securities of that series that have become due solely by such declaration of acceleration, have been cured or waived as provided in Section 5.13.

No such rescission shall affect any subsequent Event of Default or impair any right consequent thereon.

Section 5.03. *Collection of Indebtedness and Suits for Enforcement by Trustee.* If an Event of Default described in clause (1) or (2) of Section 5.01 has occurred and is continuing, the Company shall, upon demand of the Trustee, pay to the Trustee, for the benefit of the Holders of the Securities of the series with respect to which such Event of Default has occurred, the whole amount then due and payable on such Securities for principal and any premium or interest and, to the extent that payment of such interest shall be legally enforceable, interest on any overdue principal and premium and on any overdue interest, at the rate or rates borne by such Securities, unless another rate is provided in such Securities, and, in addition thereto, such further amount as shall be sufficient to cover any amounts due to the Trustee under Section 6.07.

If an Event of Default with respect to Securities of any series occurs and is continuing, the Trustee may in its discretion proceed to protect and enforce its rights and the rights of the Holders of Securities of such series by

such appropriate judicial proceedings as the Trustee deems most effectual to protect and enforce any such rights, whether for the specific enforcement of any covenant or agreement in this Indenture or in aid of the exercise of any power granted herein, or to enforce any other proper remedy.

Section 5.04. *Trustee May File Proofs of Claim.* In case of the pendency of any receivership, insolvency, liquidation, bankruptcy, reorganization, arrangement, adjustment, composition or other judicial proceeding relative to the Company or any other obligor upon the Securities or the property of the Company or of such other obligor or their creditors, the Trustee (irrespective of whether the principal of the Securities shall then be due and payable as therein expressed or by declaration or otherwise and irrespective of whether the Trustee shall have made any demand on the Company for the payment of overdue principal or interest) shall be entitled and empowered, by intervention in such proceeding or otherwise,

(i) to file and prove a claim for the whole amount of principal and premium or interest owing and unpaid in respect of the Securities and to file such other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for amounts due to the Trustee under Section 6.07) and of the Holders allowed in such judicial proceeding, and

(ii) to collect and receive any moneys or other property payable or deliverable on any such claims and to distribute the same;

and any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby authorized by each Holder to make such payments to the Trustee and, if the Trustee consents to the making of such payments directly to the Holders, to pay to the Trustee any amount due it under Section 6.07.

Nothing herein contained shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder any plan of reorganization, arrangement, adjustment or composition affecting the Securities or the rights of any Holder thereof or to authorize the Trustee to vote in respect of the claim of any Holder in any such proceeding.

Section 5.05. *Trustee May Enforce Claims Without Possession of Securities or Coupons.* All rights of action and claims under this Indenture or the Securities or coupons may be prosecuted and enforced by the Trustee without the possession of any of the Securities or coupons or the production thereof in any proceeding relating thereto, and any such proceeding instituted by the Trustee shall be brought in its own name as trustee of an express trust, and any recovery of judgment shall, after provision for the payment of the amounts due to the Trustee under Section 6.07, be for the ratable benefit of the Holders of the Securities and coupons in respect of which such judgment has been recovered.

Section 5.06. *Application of Money Collected.* Any money collected by the Trustee pursuant to this Article shall be applied in the following order, at the date or dates fixed by the Trustee, and, in case of the distribution of such money on account of principal and any premium and interest, upon presentation of the Securities in respect of which or for the benefit of which such money shall have been collected and the notation thereon of the payment if only partially paid and upon surrender thereof if fully paid:

FIRST: To the payment of all amounts due the Trustee under Section 6.07;

SECOND: To the payment of the amounts then due and unpaid for principal of and any premium and interest on the Securities in respect of which or for the benefit of which such money has been collected, ratably, without preference or priority of any kind, according to the amounts due and payable on such Securities for principal and any premium and interest, respectively; and

THIRD: The balance, if any, to the Company.

The Trustee may fix a record date (with respect to Registered Securities) and payment date for any such payment to Holders of Securities.

Section 5.07. *Limitation on Suits.* No Holder of any Security of any series shall have any right to institute any proceeding, judicial or otherwise, with respect to this Indenture, or for the appointment of a receiver or trustee, or for any other remedy hereunder, unless

- (1) such Holder has previously given written notice to the Trustee of a continuing Event of Default with respect to the Securities of that series;
- (2) the Holders of not less than 25% in aggregate principal amount of the Outstanding Securities of that series in the case of any Event of Default described in clause (1), (2), (3) or (6) of Section 5.01, or, in the case of any Event of Default described in clause (4) or (5) of Section 5.01, the Holders of not less than 25% in aggregate principal amount of the Outstanding Securities, shall have made written request to the Trustee to institute proceedings in respect of such Event of Default in its own name as Trustee hereunder;
- (3) such Holder or Holders have offered to the Trustee security or indemnity against the reasonable costs, expenses and liabilities to be incurred in compliance with such request;
- (4) the Trustee for 60 days after its receipt of such notice, request and offer of indemnity has failed to institute any such proceeding; and
- (5) no direction inconsistent with such written request has been given to the Trustee during such 60-day period by the Holders of a majority in aggregate principal amount of the Outstanding Securities of that series in the case of any Event of Default described in clause (1), (2), (3) or (6) of Section 5.01, or in the case of any Event of Default described in clause (4) or (5) of Section 5.01 by the Holders of a majority in aggregate principal amount of all Outstanding Securities;

it being understood and intended that no one or more of such Holders shall have any right in any manner whatever by virtue of, or by availing of, any provision of this Indenture to affect, disturb or prejudice the rights of any other of such Holders of Securities of the same series, in the case of any Event of Default described in clause (1), (2), (3) or (6) of Section 5.01, or of Holders of all Securities in the case of any Event of Default described in clause (4) or (5) of Section 5.01, or to obtain or to seek to obtain priority or preference over any other of such Holders or to enforce any right under this Indenture, except in the manner herein provided and for the equal and ratable benefit of all of such Holders.

Section 5.08. *Unconditional Right of Holders to Receive Principal, Premium and Interest.* Notwithstanding any other provision in this Indenture, the Holder of any Security shall have the right, which is absolute and unconditional, to receive payment of the principal of and premium and (subject to Section 3.07) interest on such Security on the Stated Maturity or Maturities expressed in such Security (or, in the case of redemption, on the Redemption Date, or, in the case of repayment at the option of the Holder, on the Repayment Date) and to institute suit for the enforcement of any such payment, and such rights shall not be impaired without the consent of such Holder.

Section 5.09. *Restoration of Rights and Remedies.* If the Trustee or any Holder has instituted any proceeding to enforce any right or remedy under this Indenture and such proceeding has been discontinued or abandoned for any reason, or has been determined adversely to the Trustee or to such Holder, then and in every such case, subject to any determination in such proceeding, the Company, the Trustee and such Holder shall be restored severally and respectively to their former positions hereunder and thereafter all rights and remedies of the Trustee and such Holder shall continue as though no such proceeding had been instituted.

Section 5.10. *Rights and Remedies Cumulative.* Except as otherwise provided with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities in the last paragraph of Section 3.06, no right or remedy herein conferred upon or reserved to the Trustee or to the Holders is intended to be exclusive of any other right or remedy, and every right and remedy shall, to the extent permitted by law, be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other appropriate right or remedy.

Section 5.11. *Delay or Omission Not Waiver.* No delay or omission of the Trustee or of any Holder of any Securities to exercise any right or remedy accruing upon any Event of Default shall impair any such right or remedy or constitute a waiver of any such Event of Default or an acquiescence therein. Every right and remedy given by this Article or by law to the Trustee or to the Holders may be exercised from time to time, and as often as may be deemed expedient, by the Trustee or by the Holders, as the case may be.

Section 5.12. *Control by Holders.* If an Event of Default shall have occurred and be continuing in respect of a series of Securities, the Holders of a majority in aggregate principal amount of the Outstanding Securities of that series shall have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred on the Trustee, with respect to the Securities of such series or Tranche; *provided, however,* that if an Event of Default has occurred and is continuing with respect to more than one series of Securities of equal ranking, the Holders of a majority in aggregate principal amount of the Outstanding Securities of all such series of equal ranking, considered as one class, shall have the right to make such direction, and not the Holders of the Securities of any one of such series of equal ranking; *provided, further* that

- (1) such direction shall not be in conflict with any rule of law or with this Indenture, and
- (2) the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction.

Section 5.13. *Waiver of Past Defaults.* The Holders of not less than a majority in aggregate principal amount of the Outstanding Securities of any series may on behalf of the Holders of all the Securities of such series waive any past default hereunder with respect to such series and its consequences; *provided* that if any such past default has occurred with respect to more than one series of Securities of equal ranking, the Holders of a majority in aggregate principal amount of the Outstanding Securities of all such series of equal ranking, considered as one class, may make such waiver, and not the Holders of the Securities of any one of such series of equal ranking, in each case, except a default

- (1) in the payment of the principal of or premium or interest on any Security of such series, or
- (2) in respect of a covenant or provision hereof that under Section 9.02 cannot be modified or amended without the consent of the Holder of each Outstanding Security of such series affected.

Upon any such waiver, such default shall cease to exist, and any Event of Default arising therefrom shall be deemed to have been cured, for every purpose of this Indenture, but no such waiver shall extend to any subsequent or other default or impair any right consequent thereon.

Section 5.14. *Undertaking for Costs.* All parties to this Indenture agree, and each Holder of any Security by such Holder's acceptance thereof shall be deemed to have agreed, that any court may in its discretion require, in any suit for the enforcement of any right or remedy under this Indenture, or in any suit against the Trustee for any action taken, suffered or omitted by it as Trustee, the filing by any party litigant in such suit of an undertaking to pay the costs of such suit, and that such court may in its discretion assess reasonable costs, including reasonable attorneys' fees, against any party litigant in such suit, having due regard to the merits and good faith of the claims or defenses made by such party litigant; but the provisions of this Section shall not apply to any suit instituted by the Company, to any suit instituted by the Trustee, to any suit instituted by any Holder, or group of Holders, holding in the aggregate more than 10% in aggregate principal amount of the Outstanding Securities of all series in respect of which such suit may be brought, considered as one class, or to any suit instituted by any Holder for the enforcement of the payment of the principal of or any premium or interest on any Security on or after the Stated Maturity or Maturities expressed in such Security (or, in the case of redemption, on or after the Redemption Date, or, in the case of repayment at the option of the Holder, on or after the Repayment Date).

Section 5.15. *Waiver of Stay or Extension Laws.* The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, or plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay or extension law wherever enacted, now or at any time hereafter in force, which

may affect the covenants or the performance of this Indenture; and the Company (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

ARTICLE SIX

THE TRUSTEE

Section 6.01. *Certain Duties and Responsibilities.* (a) Except during the continuance of an Event of Default with respect to Securities of any series,

(1) the Trustee undertakes to perform, with respect to Securities of such series, such duties and only such duties as are specifically set forth in this Indenture, and no implied covenants or obligations shall be read into this Indenture against the Trustee; and

(2) in the absence of bad faith on its part, the Trustee may, with respect to Securities of such series, conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture; but in the case of any such certificates or opinions which by any provision hereof are specifically required to be furnished to the Trustee, the Trustee shall be under a duty to examine the same to determine whether or not they conform to the requirements of this Indenture.

(b) If an Event of Default with respect to Securities of any series has occurred and is continuing, the Trustee shall exercise, with respect to Securities of such series, such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in their exercise, as a prudent man would exercise or use under the circumstances in the conduct of his own affairs.

(c) No provision of this Indenture shall be construed to relieve the Trustee from liability for its own negligent action, its own negligent failure to act, or its own willful misconduct, *except that*

(1) this subsection shall not be construed to limit the effect of sub-section (a) of this Section;

(2) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer, unless it shall be proved that the Trustee was negligent in ascertaining the pertinent facts;

(3) the Trustee shall not be liable with respect to any action taken or omitted to be taken by it in good faith in accordance with the direction of the Holders of a majority in aggregate principal amount of the Outstanding Securities of any one or more series, as provided herein, relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee, under this Indenture with respect to the Securities of such series; and

(4) no provision of this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder, or in the exercise of any of its rights or powers, if it has reasonable grounds for believing that repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it.

(d) Whether or not therein expressly so provided, every provision of this Indenture relating to the conduct or affecting the liability of or affording protection to the Trustee shall be subject to the provisions of this Section.

Section 6.02. *Notice of Defaults.* Within 90 days after the occurrence of any default hereunder with respect to the Securities of any series, the Trustee shall transmit by mail to all Holders of Securities of such series entitled to receive reports pursuant to Section 7.04(3) (and, if Unregistered Securities of that series are outstanding, shall cause to be published at least once in an Authorized Newspaper in The City of New York and, if Securities of

that series are listed on any securities exchange outside of the United States, in the city in which such securities exchange is located) notice of such default hereunder known to the Trustee, unless such default shall have been cured or waived; *provided, however*, that, except in the case of a default in the payment of the principal of or any premium or interest on any Security of such series or in the payment of any sinking fund installment with respect to Securities of such series, the Trustee shall be protected in withholding such notice if and so long as the board of directors, the executive committee or a trust committee of directors or Responsible Officers of the Trustee in good faith determine that the withholding of such notice is in the interest of the Holders of Securities of such series; and *provided, further*, that in the case of any default of the character specified in Section 5.01(3) with respect to Securities of such series, no such notice to Holders shall be given until at least 75 days after the occurrence thereof. For the purpose of this Section, the term “*default*” means any event that is, or after notice or lapse of time or both would become, an Event of Default with respect to Securities of such series.

Section 6.03. *Certain Rights of Trustee.* Subject to the provisions of Section 6.01 and to the applicable provisions of the Trust Indenture Act:

- (a) the Trustee may rely and shall be protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, other evidence of indebtedness or other paper or document reasonably believed by it to be genuine and to have been signed or presented by the proper party or parties;
- (b) any request or direction of the Company mentioned herein shall be sufficiently evidenced by a Company Request or Company Order, or as otherwise expressly provided herein, and any resolution of the Board of Directors may be sufficiently evidenced by a Board Resolution;
- (c) whenever in the administration of this Indenture the Trustee shall deem it desirable that a matter be proved or established prior to taking, suffering or omitting any action hereunder, the Trustee (unless other evidence be herein specifically prescribed) may, in the absence of bad faith on its part, rely upon an Officer’s Certificate and such Officer’s Certificate, in the absence of negligence or bad faith on the part of the Trustee, shall be full warrant to the Trustee for any action taken, suffered or omitted by it under the provisions of this Indenture upon the faith thereof;
- (d) the Trustee may consult with counsel and the written advice of such counsel or any Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in reliance thereon;
- (e) the Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the Holders pursuant to this Indenture, unless such Holders shall have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities that might be incurred by it in compliance with such request or direction;
- (f) the Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, other evidence of indebtedness or other paper or document, but the Trustee, in its discretion, may make such further inquiry or investigation into such facts or matters as it may see fit; and
- (g) the Trustee may execute any of the trusts or powers hereunder or perform any duties hereunder either directly or by or through agents or attorneys and the Trustee shall not be responsible for any misconduct or negligence on the part of any agent or attorney appointed with due care by it hereunder.

Section 6.04. *Not Responsible for Recitals or Issuance of Securities.* The recitals contained herein and in the Securities, except the Trustee’s certificate of authentication, shall be taken as the statements of the Company, and the Trustee or any Authenticating Agent assumes no responsibility for their correctness. The Trustee makes no representations as to the validity or sufficiency of this Indenture or of the Securities of any series or any coupons. The Trustee or any Authenticating Agent shall not be accountable for the use or application by the Company of

Securities or the proceeds thereof. The Trustee shall not be responsible for and makes no representations as to the Company’s ability or authority to issue the Unregistered Securities or the lawfulness thereof.

Section 6.05. *May Hold Securities.* The Trustee, any Authenticating Agent, any Paying Agent, any Security Registrar or any other agent of the Company or the Trustee, in its individual or any other capacity, may become the owner or pledgee of Securities and, subject to Sections 6.08 and 6.13, may otherwise deal with the Company with the same rights it would have if it were not Trustee, Authenticating Agent, Paying Agent, Security Registrar or such other agent.

Section 6.06. *Money Held in Trust.* Money held by the Trustee or by any Paying Agent (other than the Company if the Company shall act as Paying Agent) in trust hereunder need not be segregated from other funds except to the extent required by law. Neither the Trustee nor any Paying Agent shall be liable for interest on any money received by it hereunder except as expressly provided herein or otherwise agreed with the Company.

Section 6.07. *Compensation and Reimbursement.* The Company agrees

- (1) to pay to the Trustee from time to time reasonable compensation for all services rendered by it hereunder (which compensation shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust);
- (2) except as otherwise expressly provided herein, to reimburse the Trustee upon its request for all reasonable expenses, disbursements and advances incurred or made by the Trustee in accordance with any provision of this Indenture (including the reasonable compensation and the expenses and disbursements of its agents and counsel), except any such expense, disbursement or advance as may be attributable to its negligence, willful misconduct or bad faith; and
- (3) to indemnify the Trustee for, and to hold it harmless against, any loss, liability or expense reasonably incurred without negligence, willful misconduct or bad faith on its part, arising out of or in connection with the acceptance or administration of the trust or trusts hereunder or performance of its duties hereunder, including the costs and expenses of defending itself against any claim or liability in connection with the exercise or performance of any of its powers or duties hereunder.

As security for the performance of the obligations of the Company under this Section, the Trustee shall have a claim prior to the Securities and any coupons upon all property and funds held or collected by the Trustee as such, except property and funds held in trust for the payment of principal of and any

premium and interest on particular Securities or any coupons.

Section 6.08. *Disqualification; Conflicting Interests.* If the Trustee has or acquires any conflicting interest within the meaning of the Trust Indenture Act with respect to the Securities of any series, it shall either eliminate such conflicting interest or resign to the extent, in the manner and with the effect, and subject to the conditions, provided in the Trust Indenture Act and this Indenture. For purposes of Section 310(b)(1) of the Trust Indenture Act and to the extent permitted thereby, the Trustee, in its capacity as trustee in respect of the equally ranked and unsecured Securities of any series, shall not be deemed to have a conflicting interest arising from its capacity as trustee in respect of the equally ranked and unsecured Securities of any other series under this Indenture.

Section 6.09. *Corporate Trustee Required; Eligibility.* There shall at all times be a Trustee hereunder that shall be a Person that is eligible pursuant to the Trust Indenture Act to act as such, having a combined capital and surplus of at least \$50,000,000, subject to supervision or examination by federal or state authority and qualified and eligible under this Article, *provided* that, neither the Company nor any Affiliate of the Company or any obligor on the Securities may serve as Trustee of any Securities. If such corporation publishes reports of condition at least annually, pursuant to law or to the requirements of said supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of such corporation shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. If at any time the Trustee ceases to be eligible in accordance with the provisions of this Section, it shall resign immediately in the manner and with the effect hereinafter specified in this Article.

Section 6.10. *Resignation and Removal; Appointment of Successor.* (a) No resignation or removal of the Trustee and no appointment of a successor Trustee pursuant to this Article shall become effective until the acceptance of appointment by the successor Trustee in accordance with the applicable requirements of Section 6.11.

(b) The Trustee may resign at any time with respect to the Securities of one or more series by giving written notice thereof to the Company. If the instrument of acceptance by a successor Trustee required by Section 6.11 has not been delivered to the Trustee within 30 days after the giving of such notice of resignation, the resigning Trustee may petition any court of competent jurisdiction for the appointment of a successor Trustee with respect to the Securities of such series.

(c) The Company may at any time by a Board Resolution remove the Trustee with respect to the Securities of any or all series.

(d) The Trustee may be removed at any time with respect to the Securities of any series by Act of the Holders of a majority in aggregate principal amount of the Outstanding Securities of such series, delivered to the Trustee and to the Company.

(e) If at any time:

(1) the Trustee fails to comply with Section 6.08 with respect to the Securities of any series, after written request therefor by the Company or by any Holder who has been a bona fide Holder of a Security of such series for at least six months, or

(2) the Trustee ceases to be eligible under Section 6.09 and fails to resign after written request therefor by the Company or by any such Holder, or

(3) the Trustee becomes incapable of acting or becomes adjudged a bankrupt or insolvent or a receiver of the Trustee or of its property is appointed or any public officer takes charge or control of the Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation,

then, in any such case, subject to Section 5.14, any Holder who has been a bona fide Holder of a Security for at least six months may, on behalf of himself and all others similarly situated, petition any court of competent jurisdiction for the removal of the Trustee with respect to all Securities and the appointment of a successor Trustee or Trustees.

(f) If the Trustee resigns, is removed or becomes incapable of acting, or if a vacancy shall occur in the office of Trustee for any cause, with respect to the Securities of one or more series, the Company, by a Board Resolution, shall promptly appoint a successor Trustee or Trustees with respect to the Securities of that or those series (it being understood that any such successor Trustee may be appointed with respect to the Securities of one or more or all of such series and that at any time there shall be only one Trustee with respect to the Securities of any particular series) and shall comply with the applicable requirements of Section 6.11. If, within one year after such resignation, removal or incapability, or the occurrence of such vacancy, a successor Trustee with respect to the Securities of any series is appointed by Act of the Holders of a majority in aggregate principal amount of the Outstanding Securities of such series delivered to the Company and the retiring Trustee, the successor Trustee so appointed shall, forthwith upon its acceptance of such appointment in accordance with the applicable requirements of Section 6.11, become the successor Trustee with respect to the Securities of such series and to that extent supersede the successor Trustee appointed by the Company. If no successor Trustee with respect to the Securities of any series has been so appointed by the Company or the Holders and accepted appointment in the manner required by Section 6.11, any Holder who has been a bona fide Holder of a Security of such series for at least six months may, subject to Section 5.14, on behalf of himself and all others similarly situated, petition any court of competent jurisdiction for the appointment of a successor Trustee with respect to the Securities of such series.

(g) The Company shall give notice of each resignation and each removal of the Trustee with respect to the Securities of any series and each appointment of a successor Trustee with respect to the Securities of any series by mailing written notice of such event by first-class mail, postage prepaid, to all Holders of Securities of such series entitled to receive reports pursuant to Section 7.04(3) and, if any Unregistered Securities are outstanding, by

publishing notice of such event once in an Authorized Newspaper in The City of New York and, if any Unregistered Securities are listed on any securities exchange outside of the United States, in the city in which such securities exchange is located. Each notice shall include the name of the successor Trustee with respect to the Securities of such series and the address of its Corporate Trust Office.

(h) All provisions of this Section except subparagraph (d) shall apply also to any Paying Agent located outside the United States and its possessions.

Section 6.11. *Acceptance of Appointment by Successor.* (a) In case of the appointment hereunder of a successor Trustee with respect to the Securities of all series, every such successor Trustee so appointed shall execute, acknowledge and deliver to the Company and to the retiring Trustee an instrument accepting such appointment, and thereupon the resignation or removal of the retiring Trustee shall become effective and such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee; but, on the request of the Company or the successor Trustee, such retiring Trustee shall, upon payment of its charges, execute and deliver an instrument transferring to such successor Trustee all the rights, powers and trusts of the retiring Trustee and shall duly assign, transfer and deliver to such successor Trustee all property and money held by such retiring Trustee hereunder.

(b) In case of the appointment hereunder of a successor Trustee with respect to the Securities of one or more (but not all) series, the Company, the retiring Trustee and each successor Trustee with respect to the Securities of one or more series shall execute and deliver an indenture supplemental hereto wherein each successor Trustee shall accept such appointment and which (1) shall contain such provisions as shall be necessary or desirable to transfer and confirm to, and to vest in, each successor Trustee all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates, (2) if the retiring Trustee is not retiring with respect to all Securities, shall contain such provisions as shall be deemed necessary or desirable to confirm that all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series as to which the retiring Trustee is not retiring shall continue to be vested in the retiring Trustee, and (3) shall add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, it being understood that nothing herein or in such supplemental indenture shall constitute such Trustees co-trustees of the same trust and that each such Trustee shall be trustee of a trust or trusts hereunder separate and apart from any trust or trusts hereunder administered by any other such Trustee; and upon the execution and delivery of such supplemental indenture the resignation or removal of the retiring Trustee shall become effective to the extent provided therein and each such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates; but, on request of the Company or any successor Trustee, such retiring Trustee shall duly assign, transfer and deliver to such successor Trustee, all property and money held by such retiring Trustee hereunder with respect to the Securities of that or those series to which the appointment of such successor Trustee relates.

(c) Upon request of any such successor Trustee, the Company shall execute any and all instruments for more fully and certainly vesting in and confirming to such successor Trustee all such rights, powers and trusts referred to in paragraph (a) or (b) of this Section, as the case may be.

(d) No successor Trustee shall accept its appointment unless at the time of such acceptance such successor Trustee shall be qualified and eligible under this Article.

Section 6.12. *Merger, Conversion, Consolidation or Succession to Business.* Any corporation into which the Trustee may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any corporation succeeding to all or substantially all the corporate trust business of the Trustee, shall be the successor of the Trustee hereunder, *provided* such corporation shall be otherwise qualified and eligible under this Article, without the execution or filing of any paper or any further act on the part of any of the parties hereto. In case any Securities shall have been authenticated, but not delivered, by the Trustee then in office, any successor by merger, conversion or consolidation to such authenticating Trustee may adopt such authentication and deliver the Securities so authenticated with the same effect as if such successor Trustee had itself authenticated such Securities. In case any Securities shall not

have been authenticated by such predecessor Trustee, any such successor Trustee may authenticate and deliver such Securities, in either its own name or that of its predecessor Trustee, with the full force and effect which this Indenture provides for the certificate of authentication of the Trustee.

Section 6.13. *Preferential Collection of Claims Against Company.* The Trustee shall comply with Trust Indenture Act § 311(a), excluding any creditor relationship listed in Trust Indenture Act § 311(b). A Trustee who has resigned or been removed shall be subject to Trust Indenture Act § 311(a) to the extent indicated therein.

Section 6.14. *Appointment of Authenticating Agent.* (a) At any time when any of the Securities remain Outstanding the Trustee may appoint an Authenticating Agent or Agents (which may include any Person that owns, directly or indirectly, all of the capital stock of the Trustee or a corporation that is a wholly-owned subsidiary of the Trustee or of such other Person) with respect to one or more series of Securities, or any Tranche thereof, that shall be authorized to act on behalf of the Trustee to authenticate Securities of such series or Tranche issued upon original issuance, exchange, registration of transfer or partial redemption thereof or pursuant to Section 3.06, and Securities so authenticated shall be entitled to the benefits of this Indenture and shall be valid and obligatory for all purposes as if authenticated by the Trustee hereunder. If any Unregistered Securities are outstanding, the Trustee shall publish notice of such event once in an Authorized Newspaper in The City of New York and, if any Unregistered Securities are listed on any securities exchange outside of the United States, in the city in which such securities exchange is located. Wherever reference is made in this Indenture to the authentication and delivery of Securities by the Trustee or the Trustee's certificate of authentication, such reference shall be deemed to include authentication and delivery on behalf of the Trustee by an Authenticating Agent and a certificate of authentication executed on behalf of the Trustee by an Authenticating Agent. Each Authenticating Agent shall be acceptable to the Company and shall at all times be a corporation organized and doing business under the laws of the United States of America, any state thereof or the District of Columbia, authorized under such laws to act as Authenticating Agent, having a combined capital and surplus of not less than \$50,000,000 and subject to supervision or examination by federal or state authority in the United States. If such Authenticating Agent publishes reports of condition at least annually, pursuant to law or to the requirements of said supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of such Authenticating Agent shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. If at any time an Authenticating Agent ceases to be eligible in accordance with the provisions of this Section, such Authenticating Agent shall resign immediately in the manner and with the effect specified in this Section.

(b) Any corporation into which an Authenticating Agent may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which such Authenticating Agent shall be a party, or any corporation succeeding to the corporate agency or corporate trust business of an Authenticating Agent, shall continue to be an Authenticating Agent, *provided* such corporation shall be otherwise eligible under this Section, without the execution or filing of any paper or any further act on the part of the Trustee or the Authenticating Agent.

(c) An Authenticating Agent may resign with respect to one or more series of Securities at any time by giving written notice thereof to the Trustee and to the Company. The Trustee may at any time terminate the agency of an Authenticating Agent with respect to one or more series of Securities by giving written notice thereof to such Authenticating Agent and to the Company. Upon receiving such a notice of resignation or upon such a termination, or in case at any time such Authenticating Agent ceases to be eligible in accordance with the provisions of this Section, the Trustee may appoint a successor Authenticating Agent that is acceptable to the Company and shall provide notice of such appointment to all Holders of Securities of the series or Tranche with respect to which such Authenticating Agent will serve, as provided in paragraph (a) of this Section. Any successor Authenticating Agent upon acceptance of its appointment hereunder shall become vested with all the rights, powers and duties of its predecessor hereunder, with like effect as if originally named as an Authenticating Agent. No successor Authenticating Agent shall be appointed unless eligible under the provisions of this Section. An Authenticating Agent appointed pursuant to this Section shall be entitled to rely on Sections 1.11, 3.08, 6.04 and 6.05 hereunder.

(d) The Trustee agrees to pay to each Authenticating Agent from time to time reasonable compensation for its services under this Section, and the Trustee shall be entitled to be reimbursed for such payments, subject to the provisions of Section 6.07.

(e) If an appointment with respect to the Securities of one or more series, or any Tranche thereof, is made pursuant to this Section, the Securities of such series or Tranche may have endorsed thereon, in addition to the Trustee's certificate of authentication, an alternate certificate of authentication in the following form:

This is one of the Securities of the series designated pursuant to and issued under the within-mentioned Indenture.

[]
As Trustee

By _____
As Authenticating Agent on behalf of the Trustee

By _____
Authorized Officer of Authenticating Agent

Dated: _____

(f) If all of the Securities of a series may not be originally issued at one time, and if the Trustee does not have an office capable of authenticating Securities upon original issuance located in a Place of Payment where the Company wishes to have Securities of such series authenticated upon original issuance, the Trustee, if so requested by the Company in writing (which writing need not comply with Section 1.02 and need not be accompanied by an Opinion of Counsel), shall appoint, in accordance with this Section and in accordance with such procedures as shall be acceptable to the Trustee, an Authenticating Agent (which, if so requested by the Company, may be an Affiliate of the Company) having an office in a Place of Payment designated by the Company with respect to such series of Securities.

ARTICLE SEVEN

HOLDERS' LISTS AND REPORTS BY TRUSTEE AND COMPANY

Section 7.01. *Company to Furnish Trustee Names and Addresses of Holders.* The Company will furnish or cause to be furnished to the Trustee:

(a) semi-annually, not later than the 15th day after each Regular Record Date for each series of Registered Securities at the time Outstanding or on June 30 and December 31 of each year with respect to each series of Securities for which there are no Regular Record Dates, a list, in such form as the Trustee may reasonably require, containing all the information in the possession or control of the Company, or any of its Paying Agents other than the Trustee, of the names and addresses of the Holders of Registered Securities of such series, including Holders of interests in Global Securities, as of such preceding Regular Record Date or on June 15 or December 15, as the case may be, or, in the case of a series of non-interest bearing Securities, on a date to be determined as contemplated pursuant to Section 3.01(b), and

(b) at such other times as the Trustee may request in writing, within 30 days after the receipt by the Company of any such request, a list of similar form and content as of a date not more than 15 days prior to the time such list is furnished; *excluding* from any such list names and addresses received by the Trustee in its capacity as Security Registrar for Registered Securities other than Global Securities.

Section 7.02. *Preservation of Information; Communications to Holders.* (a) The Trustee shall preserve, in as current a form as is reasonably practicable, the names and addresses of Holders of Registered Securities contained in the most recent list furnished to the Trustee as provided in Section 7.01 and the names and addresses of Holders of Registered Securities received by the Trustee in its capacity as Security Registrar or Paying Agent. The Trustee may destroy any list furnished to it as provided in Section 7.01 upon receipt of a new list so furnished.

(b) If three or more Holders (herein referred to as “applicants”) apply in writing to the Trustee, and furnish to the Trustee reasonable proof that each such applicant has owned a Security for a period of at least six months preceding the date of such application, and such application states that the applicants desire to communicate with other Holders with respect to their rights under this Indenture or under the Securities and is accompanied by a copy of the form of proxy or other communication that such applicants propose to transmit, then the Trustee shall, within five business days after the receipt of such application, at its election, either

(1) afford such applicants access to the information preserved at the time by the Trustee in accordance with Section 7.02(a), or

(2) inform such applicants as to the approximate number of Holders whose names and addresses appear in the information preserved at the time by the Trustee in accordance with Section 7.02(a), and as to the approximate cost of mailing to such Holders the form of proxy or other communication, if any, specified in such application.

If the Trustee elects not to afford such applicants access to such information, the Trustee shall, upon the written request of such applicants, mail to each Holder whose name and address appear in the information preserved at the time by the Trustee in accordance with Section 7.02(a) a copy of the form of proxy or other communication that is specified in such request, with reasonable promptness after a tender to the Trustee by the applicants of the material to be mailed and of payment, or provision for the payment, of the reasonable expenses of mailing, unless within five days after such tender the Trustee shall mail to such applicants and file with the Commission, together with a copy of the material to be mailed, a written statement to the effect that, in the opinion of the Trustee, such mailing would be contrary to the best interest of the Holders or would be in violation of applicable law. Such written statement shall specify the basis of such opinion. If the Commission, after opportunity for a hearing upon the objections specified in the written statement so filed, enters an order refusing to sustain any of such objections or if, after the entry of an order sustaining one or more of such objections, the Commission finds, after notice and opportunity for hearing, that all the objections so sustained have been met and enters an order so declaring, the Trustee shall mail copies of such material to all such Holders with reasonable promptness after the entry of such order and the renewal of such tender by such applicants; otherwise the Trustee shall be relieved of any obligation or duty to such applicants respecting their application.

(c) Every Holder of Securities or coupons, by receiving and holding the same, agrees with the Company and the Trustee that neither the Company nor the Trustee nor any agent of either of them shall be held accountable by reason of the disclosure of any such information as to the names and addresses of the Holders in accordance with Section 7.02(b), regardless of the source from which such information was derived, and that the Trustee shall not be held accountable by reason of mailing any material pursuant to a request made under Section 7.02(b).

Section 7.03. *Reports by Trustee.* (a) The Trustee shall transmit to Holders such reports concerning the Trustee and its actions under this Indenture as may be required pursuant to the Trust Indenture Act at the times and in the manner provided pursuant thereto.

(b) Reports so required to be transmitted at stated intervals of not more than 12 months shall be transmitted no later than July 1 in each calendar year, commencing with the first July 1 after the first issuance of Securities pursuant to this Indenture.

(c) A copy of each such report shall, at the time of such transmission to Holders, be filed by the Trustee with each securities exchange upon which any Securities are listed, with the Commission and with the Company. The Company will notify the Trustee in writing when any Securities are listed on any securities exchange.

Section 7.04. *Reports by Company.* The Company shall:

(1) file with the Trustee, within 15 days after the Company files the same with the Commission, copies of the annual reports and of the information, documents and other reports (or copies of such portions of any

of the foregoing as the Commission may from time to time by rules and regulations prescribe) that the Company may be required to file with the Commission pursuant to Section 13 or Section 15(d) of the U.S. Securities Exchange Act of 1934; or, if the Company is not required to file information, documents or reports pursuant to either of said Sections, then it shall file with the Trustee and the Commission, in accordance with rules and regulations prescribed from time to time by the Commission, such of the supplementary and periodic information, documents and reports that may be required pursuant to Section 13 of the U.S. Securities Exchange Act of 1934 in respect of a security listed and registered on a national securities exchange as may be prescribed from time to time in such rules and regulations;

(2) file with the Trustee and the Commission, in accordance with rules and regulations prescribed by the Commission, such additional information, documents and reports with respect to compliance by the Company with the conditions and covenants of this Indenture as may be required from time to time by such rules and regulations; and

(3) transmit by mail to all Holders of Registered Securities, as their names and addresses appear in the Security Register, to such Holders of Unregistered Securities as have, within the two years preceding such transmission, filed their names and addresses with the Trustee for that purpose and to each Holder whose name and address is then preserved on the Trustee's list pursuant to the first sentence of Section 7.02(a), within 30 days after the filing thereof with the Trustee, such summaries of any information, documents and reports required to be filed by the Company pursuant to paragraphs (1) and (2) of this Section as may be required by rules and regulations prescribed from time to time by the Commission.

ARTICLE EIGHT

CONSOLIDATION, MERGER, CONVEYANCE OR TRANSFER

Section 8.01. *Company May Consolidate, Etc. Only on Certain Terms.* The Company shall not consolidate with or merge with or into, or convey, transfer or lease all or substantially all of its properties and assets to any Person (other than to one or more of the Company's wholly-owned subsidiaries), unless:

(1) either (x) the Company shall be the continuing company or corporation or the successor company or corporation or (y) the Person formed by such consolidation or into which the Company is merged or the Person that acquires by conveyance, transfer or lease the properties and assets of the Company substantially as an entirety shall be a Person incorporated or organized and existing under the laws of the Cayman Islands, the British Virgin Islands, Bermuda, Hong Kong, the United States of America, any State thereof or the District of Columbia and shall expressly assume, by an indenture supplemental hereto, executed and delivered to the Trustee, in form satisfactory to the Trustee, the due and punctual payment of the principal of and any premium and interest on all the Outstanding Securities and the performance of every covenant and obligation of this Indenture on the part of the Company to be performed or observed;

(2) immediately after giving effect to such transaction, no Event of Default and no event that, after notice or lapse of time or both, would become an Event of Default, shall have occurred and be continuing; and

(3) if the Company is not the continuing or successor corporation, the Company has delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that such consolidation, merger, conveyance, transfer or lease and such supplemental indenture comply with this Article and that all conditions precedent herein provided for relating to such transaction have been met.

Section 8.02. *Successor Substituted for the Company.* Upon any consolidation or merger or any conveyance, transfer or lease of all or substantially all the properties and assets of the Company in accordance with Section 8.01, the successor Person formed by such consolidation or into which the Company is merged or to which such conveyance, transfer or lease is made shall succeed to, and be substituted for, and may exercise every right and power of, the Company under this Indenture with the same effect as if such successor Person had been named as the Company herein and thereafter, in the case of a conveyance, transfer or lease of properties and assets of the Company substantially as an entirety, such conveyance, transfer or lease shall have the effect of releasing the Person

named as the “Company” in the first paragraph of this instrument or any successor Person that shall theretofore have become such in the manner prescribed in this Article from its liability as obligor and maker on any of the Securities.

ARTICLE NINE

SUPPLEMENTAL INDENTURES

Section 9.01. *Supplemental Indentures Without Consent of Holders.* (a) Without the consent of any Holders, the Company and the Trustee, at any time and from time to time, may enter into one or more indentures supplemental hereto, in form satisfactory to the Trustee, for any of the following purposes:

- (1) to evidence the succession of another Person to the Company and the assumption by any such successor of the covenants of the Company herein and in the Securities; or
- (2) to add to the covenants of the Company for the benefit of the Holders of all or any series of Securities (and if such covenants are to be for the benefit of less than all series of Securities, stating that such covenants are expressly being included solely for the benefit of such series), or to surrender any right or power herein conferred upon the Company; or
- (3) to add any additional Events of Default with respect to all or any series of Securities Outstanding hereunder; or
- (4) to add to or change any of the provisions of this Indenture to such extent as shall be necessary to permit or facilitate the issuance of Securities in bearer form, registrable or not registrable as to principal, and with or without interest coupons; or
- (5) to change or eliminate any of the provisions of this Indenture, or to add any new provision to this Indenture, in respect of one or more series of Securities; *provided, however*, that any such change, elimination or addition (A) shall neither (i) apply to any Security Outstanding on the date of such indenture supplemental hereto nor (ii) modify the rights of the Holder of any such Security Outstanding with respect to such provision in effect prior to the date of such indenture supplemental hereto or (B) shall become effective only when no Security of such series remains Outstanding; or
- (6) to add guarantees or collateral security with respect to the Securities of any series; or
- (7) to establish for the issuance of and establish the form or terms and conditions of Securities of any series or Tranche thereof as permitted by Section 3.01(b), and to establish the form of any certificates required to be furnished pursuant to the terms of this Indenture or any series of Securities; or
- (8) to provide for uncertificated Securities in addition to or in place of all, or any series or Tranche of, certificated Securities; or
- (9) to evidence and provide for the acceptance of appointment hereunder by a separate or successor Trustee or co-trustee with respect to the Securities of one or more series and to add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, pursuant to the requirements of Section 6.11(b); or
- (10) to change any place or places where (a) the principal of or premium, if any, or interest, if any, on all or any series of Securities, or any Tranche thereof, shall be payable, (b) all or any series of Securities, or any Tranche thereof, may be surrendered for registration or transfer, (c) all or any series of Securities, or any Tranche thereof, may be surrendered for exchange and (d) notices and demands to or upon the Company in respect of all or any series of Securities, or any Tranche thereof, and this Indenture may be served;
- (11) to supplement any of the provisions of this Indenture to such extent as shall be necessary to permit or facilitate the defeasance and discharge of any series of Securities, or any Tranche thereof, pursuant to Article

Four, provided that any such action shall not adversely affect the interests of the Holders of Securities of such series or Tranche or any other series of Securities in any material respect;

(12) (i) to cure any ambiguity or omission or to correct or supplement any provision contained herein or in any supplemental indenture that may be defective or inconsistent with any other provision contained herein or in any supplemental indenture or (ii) to conform the terms of any series of Securities, or Tranche thereof, to the description thereof in the prospectus and prospectus supplement (or similar offering document) offering such series of Securities, or Tranche thereof; or

(13) to make any other provisions with respect to matters or questions arising under this Indenture, *provided* such action shall not adversely affect the interests of the Holders of any Securities of any series or Tranche Outstanding on the date of such indenture supplemental hereto in any material respect.

Without limiting the generality of the foregoing, if the Trust Indenture Act as in effect at the date of the execution and delivery of this Indenture or at any time thereafter becomes amended and

(x) if any such amendment requires one or more changes to any provisions hereof or the inclusion herein of any additional provisions, or by operation of law is deemed to effect such changes or incorporate such provisions by reference or otherwise, this Indenture shall be deemed to have been amended so as to conform to such amendment to the Trust Indenture Act, and the Company and the Trustee may, without the consent of any Holders, enter into an indenture supplemental hereto to effect or evidence such changes or additional provisions; or

(y) if any such amendment permits one or more changes to, or the elimination of, any provisions hereof that, at the date hereof or at any time thereafter, are required by the Trust Indenture Act to be contained herein (or if it is no longer required by the Trust Indenture Act for the Indenture to contain one or more provisions), this Indenture shall be deemed to have been amended to effect such changes or elimination, and the Company and the Trustee may, without the consent of any Holders, enter into an indenture supplemental hereto to evidence such amendment hereof; or

(z) if, by reason of any such amendment, it shall be no longer necessary for this Indenture to contain one or more provisions that, at the date of the execution and delivery hereof, are required by the Trust Indenture Act to be contained herein, the Company and the Trustee may, without the consent of any Holders, enter into an indenture supplemental hereto to effect the elimination of such provisions.

Section 9.02. *Supplemental Indentures With Consent of Holders.* (a) Except as set forth in paragraph (b) below, with the consent of the Holders of not less than a majority in aggregate principal amount of the Outstanding Securities of each series affected (voting as one class) by such supplemental indenture, by Act of said Holders delivered to the Company and the Trustee, the Company, when authorized by a resolution of its Board of Directors (which resolution may provide general terms or parameters for such action and may provide that the specific terms of such action may be determined in accordance with or pursuant to a Company Order), and the Trustee may, from time to time and at any time, enter into an indenture or indentures supplemental hereto for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or of any supplemental indenture or of modifying in any manner the rights of the Holders of the Securities of each such series or of the Coupons appertaining to such Securities or of modifying in any manner the rights of the Holders of Securities of such series under this Indenture; *provided, however*, that if there are Securities of more than one series of equal ranking Outstanding hereunder and if a proposed supplemental indenture shall directly affect the rights of the Holders of Securities of one or more, but less than all, of such series, then the consent only of the Holders of not less than a majority in aggregate principal amount of the Outstanding Securities of all series so directly affected, considered as one class, shall be required.

(b) No such supplemental indenture shall, without the consent of the Holder of each Outstanding Security affected thereby,

(1) change the Stated Maturity of the principal of, or any installment of principal of or interest on, any Security, or reduce the principal amount or premium, if any, thereof or the rate of interest thereon

(or the amount of any installment of interest thereon) or any premium payable upon the redemption thereof, or change the method of calculating the rate of interest thereon, or reduce the amount of the principal of an Original Issue Discount Security that would be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 5.02, or change the coin or currency (or other property) in which, any Security or any premium or the interest thereon is payable, or impair the right to institute suit for the enforcement of any such payment on or after the Stated Maturity thereof (or, in the case of redemption, on or after the Redemption Date, or, in the case of repayment at the option of the Holders, on or after the Repayment Date), or modify any provisions of this Indenture with respect to the conversion or exchange of the Securities into Securities of another series or into any other debt or equity securities in a manner adverse to the Holders, or

(2) reduce the percentage in principal amount of the Outstanding Securities of any series, the consent of whose Holders is required for any such supplemental indenture, or the consent of whose Holders is required for any waiver of compliance with certain provisions of this Indenture or certain defaults hereunder and their consequences provided for in this Indenture, or

(3) modify any of the provisions of this Section, Section 5.13 or Section 10.06, except to increase any such percentage or to provide that certain other provisions of this Indenture cannot be modified or waived without the consent of the Holder of each Outstanding Security affected thereby, *provided, however*, that this clause shall not be deemed to require the consent of any Holder with respect to changes in the references to “the Trustee” and concomitant changes in this Section and Section 10.06, or the deletion of this proviso, in accordance with the requirements of Sections 6.11(b) and 9.01(9).

A supplemental indenture that changes or eliminates any covenant or other provision of this Indenture that has expressly been included solely for the benefit of one or more particular series of Securities, or that modifies the rights of the Holders of Securities of such series with respect to such covenant or other provision, shall be deemed not to affect the rights under this Indenture of the Holders of Securities of any other series.

It shall not be necessary for any Act of Holders under this Section to approve the particular form of any proposed supplemental indenture, but it shall be sufficient if such Act shall approve the substance thereof. A waiver by a Holder of such Holder’s rights to consent under this Section shall be deemed to be a consent of such Holder.

Section 9.03. *Execution of Supplemental Indentures.* In executing, or accepting the additional trusts created by, any supplemental indenture permitted by this Article or the modifications thereby of the trusts created by this Indenture, the Trustee shall be entitled to receive, and (subject to Section 6.01) shall be fully protected in relying upon, an Opinion of Counsel stating that the execution of such supplemental indenture is authorized or permitted by this Indenture. The Trustee may, but shall not be obligated to, enter into any such supplemental indenture that affects the Trustee’s own rights, duties or immunities under this Indenture or otherwise.

Section 9.04. *Effect of Supplemental Indentures.* Upon the execution of any supplemental indenture under this Article, this Indenture shall be modified in accordance therewith, and such supplemental indenture shall form a part of this Indenture for all purposes; and every Holder of Securities theretofore or thereafter authenticated and delivered hereunder shall be bound thereby. Any supplemental indenture permitted by this Article may restate this Indenture in its entirety, and, upon the execution and delivery thereof, any such restatement shall supersede this Indenture as theretofore in effect for all purposes.

Section 9.05. *Conformity With Trust Indenture Act.* Every supplemental indenture executed pursuant to this Article shall conform to the requirements of the Trust Indenture Act as then in effect.

Section 9.06. *Reference in Securities to Supplemental Indentures.* Securities of any series, or any Tranche thereof, authenticated and delivered after the execution of any supplemental indenture pursuant to this Article may, and shall if required by the Trustee, bear a notation in form approved by the Trustee as to any matter provided for in such supplemental indenture. If the Company so determines, new Securities of any series, or any Tranche thereof, and any appertaining coupons so modified as to conform, in the opinion of the Trustee and the Company, to any such supplemental indenture may be prepared and executed by the Company and authenticated and delivered by the Trustee in exchange for Outstanding Securities of such series or Tranche and any appertaining coupons.

Section 9.07. *Revocation and Effect of Consents.* Until an amendment or waiver becomes effective, a consent to it by a Holder of a Security is a continuing consent by the Holder and every subsequent Holder of a Security or portion of a Security that evidences the same debt as the consenting Holder’s Security, even if notation of the consent is not made on any Security. However, any such Holder or subsequent Holder may revoke the consent as to his Security or portion of a Security if the Trustee receives the notice of revocation before the date on which the Trustee receives an Officer’s Certificate certifying that the Holders of the requisite principal amount of Securities have consented to the amendment or waiver. After an amendment or waiver becomes effective, it shall bind every Holder of each series of Securities affected by such amendment or waiver.

The Company may, but shall not be obligated to, fix a record date for the purpose of determining the Holders entitled to consent to any amendment or waiver. If a record date is fixed, then notwithstanding the provisions of the immediately preceding paragraph, those persons who were Holders at such record date (or their duly designated proxies), and only those persons, shall be entitled to consent to such amendment or waiver or to revoke any consent previously given, whether or not such persons continue to be Holders after such record date.

After an amendment or waiver becomes effective it shall bind every Holder, unless it is of the type described in any of clauses (1) through (3) of Section 9.02(b). In such case, the amendment or waiver shall bind each Holder of a Security who has consented to it and every subsequent Holder of a Security that evidences the same debt as the consenting Holder’s Security.

Section 9.08. *Modification Without Supplemental Indenture.* If the terms of any particular series of Securities have been established in a Board Resolution or an Officer’s Certificate as contemplated by Section 3.01, and not in an indenture supplemental hereto, additions to, changes in or the elimination of any of such terms may be effected by means of a supplemental Board Resolution or Officer’s Certificate, as the case may be, delivered to, and accepted by, the Trustee; *provided, however*, that such supplemental Board Resolution or Officer’s Certificate shall not be accepted by the Trustee or otherwise be effective unless all conditions set forth in this Indenture that would be required to be satisfied if such additions, changes or elimination were contained in a supplemental indenture shall have been appropriately satisfied. Upon the acceptance thereof by the Trustee, any such supplemental Board Resolution or Officer’s Certificate shall be deemed to be a “supplemental indenture” for purposes of Sections 9.04 and 9.06.

COVENANTS

Section 10.01. *Payment of Principal, Premium and Interest.* (a) Subject to the following provisions, the Company will pay to the Trustee the amounts, in such coin or currency as is at the time legal tender for the payment of public or private debt, in the manner, at the times and for the purposes set forth herein and in the text of the Securities for each series, and the Company hereby authorizes and directs the Trustee from funds so paid to it to make or cause to be made payment of the principal of and any premium and interest on the Securities and coupons of each series as set forth herein and in the text of such Securities and coupons. Unless otherwise provided in the Securities of a series, the Trustee will arrange directly with any Paying Agents for the payment, or the Trustee will make payment, from funds furnished by the Company, of the principal of and any premium and interest, on the Securities and coupons of each series by check or draft.

(b) Unless otherwise provided in the Securities of a series, interest, if any, on Registered Securities of a series shall be paid by check or draft on each Interest Payment Date for such series to the Holder thereof at the close of business on the Regular Record Date specified in the Securities of such series; *provided, however*, that interest payable at Maturity will be paid to the Person to whom principal is payable. The Company may pay such interest by check or draft mailed to such Holder's address as it appears on the register for Securities of such series. Unless otherwise provided in the Securities of a series, principal of Registered Securities shall be payable by check or draft and only against presentation and surrender of such Registered Securities at the office of the Paying Agent, unless the Company shall have otherwise instructed the Trustee in writing.

(c) Unless otherwise provided in the Securities of a series, (i) interest, if any, on Unregistered Securities shall be paid by check or draft and only against presentation and surrender of the coupons for such interest

installments as are evidenced thereby as they mature and (ii) original issue discount (as defined in Section 1273 of the Code), if any, on Unregistered Securities shall be paid by check or draft and only against presentation and surrender of such Securities, in either case at the office of a Paying Agent located outside of the United States and its possessions, unless the Company has otherwise instructed the Trustee in an Officer's Certificate. Unless otherwise provided in the Securities of a series, principal of and premium, if any, of Unregistered Securities shall be paid by check or draft and only against presentation and surrender of such Securities as provided in the Securities of a series. If at the time a payment of principal of and premium, if any, or interest, if any, or original issue discount, if any, on an Unregistered Security or coupon becomes due and the payment of the full amount so payable at the office or offices of all the Paying Agents outside the United States and its possessions is illegal or effectively precluded because of the imposition of exchange controls or other similar restrictions on the payment of such amount in United States currency, then the Company may instruct the Trustee in an Officer's Certificate to make such payments at the office of a Paying Agent located in the United States. The Company hereby covenants and agrees that it shall not so instruct the Trustee with respect to payment in the United States if such payment would cause such Unregistered Security to be treated as a "registration-required obligation" under United States law and regulations.

(d) At the election of the Company, any payments by the Company provided for in this Indenture or in any of the Securities may be made by electronic funds transfer.

Section 10.02. *Maintenance of Office or Agency.* (a) The Company will maintain in each Place of Payment for any series of Securities, or any Tranche thereof, an office or agency where Registered Securities, or any Tranche thereof, of that series may be surrendered for registration of transfer or exchange and a Place of Payment where (subject to Sections 3.05 and 3.07) Securities may be presented for payment or exchange and where notices and demands to or upon the Company in respect of the Securities of that series and this Indenture may be served. Unless otherwise specified pursuant to Section 3.01(b) with respect to any such series, the Company shall maintain such offices or agencies in connection with each series in the Borough of Manhattan, The City of New York, State of New York. With respect to any series of Securities issued in whole or in part as Unregistered Securities, the Company shall maintain one or more Paying Agents located outside the United States and its possessions and shall maintain such Paying Agents for a period of one year after the principal of such Unregistered Securities has become due and payable. During any period thereafter for which it is necessary in order to conform to United States tax law or regulations, the Company will maintain a Paying Agent outside the United States and its possessions to which the Unregistered Securities or coupons appertaining thereto may be presented for payment and will provide the necessary funds therefor to such Paying Agent upon reasonable notice. The Security Registrar shall keep a register with respect to each series of Securities issued in whole or in part as Registered Securities and to their transfer and exchange. The Company may appoint one or more co-Security Registrars acceptable to the Trustee and one or more additional Paying Agents for each series of Securities, and the Company may terminate the appointment of any co-Security Registrar or Paying Agent at any time upon written notice. The term "Security Registrar" includes any co-Security Registrar. The term "Paying Agent" includes any additional Paying Agent. The Company shall notify the Trustee of the name and address of any Agent not a party to this Indenture. Subject to Section 3.05, if the Company fails to maintain a Security Registrar or Paying Agent, the Trustee shall act as such.

The Company will give prompt written notice to the Trustee of the location, and any change in the location, of such office or agency. If at any time the Company fails to maintain any such required office or agency or fails to furnish the Trustee with the address thereof, such presentations, surrenders, notices and demands may be made or served at the Corporate Trust Office of the Trustee, and the Company hereby appoints the Trustee as its agent to receive all such presentations, surrenders, notices and demands.

(b) The Company may also from time to time designate one or more other offices or agencies where the Securities of one or more series may be presented or surrendered for any or all such purposes and may from time to time rescind such designations; *provided, however*, that no such designation or rescission shall in any manner relieve the Company of its obligation to maintain an office or agency in each Place of Payment for Securities of any series for such purposes. The Company will give prompt written notice to the Trustee of any such designation or rescission and of any change in the location of any such other office or agency.

(c) Anything herein to the contrary notwithstanding, any office or agency required by this Section may be maintained at any office of the Company in which event the Company shall perform all functions to be performed at such office or agency.

Section 10.03. *Money for Securities Payments to Be Held in Trust.* (a) If the Company at any time acts as its own Paying Agent with respect to any series of Securities, or any Tranche thereof, it will, on or before each due date of the principal of or any premium or interest on any of such Securities, segregate and hold in trust for the benefit of the Persons entitled thereto a sum sufficient to pay the principal (and premium, if any) or interest so becoming due until such sums are paid to such Persons or otherwise disposed of as herein provided and will promptly notify the Trustee of its action or failure so to act.

(b) Whenever the Company has one or more Paying Agents for any series of Securities, it will, on or prior to (and if on, then before 11:00 a.m. (New York City time)) each due date of the principal of and any premium or interest on such Securities, deposit with a Paying Agent a sum sufficient (in immediately available funds, if payment is made on the due date) to pay the principal and any premium and interest so becoming due, such sum to be held in trust for the benefit of the Persons entitled to such principal, premium or interest as provided in the Trust Indenture Act and (unless such Paying Agent is the Trustee) the Company will promptly notify the Trustee of its action or failure so to act.

(c) The Company will cause each Paying Agent for any series of Securities, or any Tranche thereof, other than the Trustee, to execute and deliver to the Trustee an instrument in which such Paying Agent shall agree with the Trustee, subject to the provisions of this Section, that such Paying Agent will:

(i) comply with the provisions of the Trust Indenture Act applicable to it as a Paying Agent, and

(ii) during the continuance of any default by the Company (or any other obligor upon the Securities of that series) in the making of any payment in respect of the Securities of that series, upon the written request of the Trustee, forthwith pay to the Trustee all sums held in trust by such Paying Agent for payment in respect of the Securities of that series.

(d) The Company may at any time, for the purpose of obtaining the satisfaction and discharge of this Indenture or for any other purpose, pay, or by Company Order direct any Paying Agent to pay, to the Trustee all sums held in trust by the Company or such Paying Agent, such sums to be held by the Trustee upon the same trusts as those upon which such sums were held by the Company or such Paying Agent; and, upon such payment by any Paying Agent to the Trustee, such Paying Agent shall be released from all further liability with respect to such money.

(e) Any money deposited with the Trustee or any Paying Agent, or received by the Trustee in respect of Eligible Obligations deposited with the Trustee pursuant to Section 4.01 or 4.04, or then held by the Company, in trust for the payment of the principal of and any premium or interest on any Security of any series and remaining unclaimed for two years (or such shorter period for the return of such funds to the Company under applicable abandoned property laws) after such principal, premium or interest has become due and payable shall be paid to the Company on Company Request, or (if then held by the Company) shall be discharged from such trust; and the Holder of such Security shall thereafter, as an unsecured general creditor, look only to the Company for payment thereof, and all liability of the Trustee or such Paying Agent with respect to such trust money, and all liability of the Company as trustee thereof, shall thereupon cease.

Section 10.04. *Statement as to Compliance.* The Company will deliver to the Trustee, within 120 days after the end of each fiscal year of the Company ending after the date hereof, a written statement, which need not comply with Section 1.02, signed by the principal executive officer, the principal financial officer or the principal accounting officer of the Company stating, as to each signer thereof stating whether or not to the knowledge of the signers thereof it is in default in the performance and observance of any of the terms, provisions, and conditions of this Indenture (without regard to any period of grace or requirement of notice provided hereunder) and, if it is in default, specifying all such defaults and the nature and status thereof of which they may have knowledge.

Section 10.05. *Corporate Existence.* Subject to Article Eight, the Company will do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence, rights (charter and statutory) and franchises; *provided, however*, that the Company shall not be required to preserve any such right or franchise if,

in the judgment of the Company, the preservation thereof is no longer desirable in the conduct of the business of the Company.

Section 10.06. *Waiver of Certain Covenants.* Except as otherwise specified as contemplated by Section 3.01 for Securities of such series, the Company may, with respect to the Securities of any series, omit in any particular instance to comply with any term, provision or condition set forth in (i) any additional covenants or restrictions specified with respect to the Securities of any series as contemplated by Section 3.01 if before the time for such compliance the Holders of not less than a majority in aggregate principal amount (or such larger proportion as may be required in respect of waiving a past default of any such additional covenant or restriction) of the Outstanding Securities of all series of equal ranking with respect to which such covenant or restriction was so specified, considered as one class, by Act of such Holders, either waive such compliance in such instance or generally waive compliance with such term, provision or condition and (ii) Sections 10.02, 10.04, 10.05 and Article Eight if before the time for such compliance the Holders of at least a majority in principal amount of Securities of all series of equal ranking Outstanding under this Indenture by Act of such Holders, either waive such compliance in such instance or generally waive compliance with such term, provision or condition; but, in the case of clause (i) or (ii) of this Section, no such waiver shall extend to or affect such term, provision or condition except to the extent so expressly waived, and, until such waiver becomes effective, the obligations of the Company and the duties of the Trustee in respect of any such term, provision or condition shall remain in full force and effect.

ARTICLE ELEVEN

REDEMPTION OF SECURITIES

Section 11.01. *Applicability of Article.* Securities of any series that are redeemable before their Stated Maturity (or, if the principal of the Securities of any series is payable in installments, the Stated Maturity of the final installment of the principal thereof) shall be redeemable in accordance with their terms and (except as otherwise specified as contemplated by Section 3.01(b) for Securities of any series) in accordance with this Article.

Section 11.02. *Election to Redeem; Notice to Trustee.* The election of the Company to redeem any Securities shall be evidenced by a Board Resolution or an Officer's Certificate. In case of any redemption at the election of the Company of less than all the Securities of any series, the Company shall, at least 45 days prior to the Redemption Date fixed by the Company (unless a shorter notice is satisfactory to the Trustee in its sole discretion), notify the Trustee of such Redemption Date and of the principal amount of Securities of such series to be redeemed. In the case of any redemption of Securities (a) prior to the expiration of any restriction on such redemption provided in the terms of such Securities or elsewhere in this Indenture, or (b) pursuant to an election of the Company that is subject to a condition specified in the terms of such Securities the Company shall furnish the Trustee with an Officer's Certificate evidencing compliance with such restriction.

Section 11.03. *Selection by Trustee of Securities to Be Redeemed.* If less than all the Securities of any series are to be redeemed, unless the procedures of the Depository provide otherwise, the particular Securities to be redeemed shall be selected by the Trustee, from the Outstanding Securities of such series not previously called for redemption, by such method as is provided for any particular series, or, in the absence of any such provision, by such method as the Trustee deems fair and appropriate and which may provide for the selection for redemption of portions (equal to the minimum authorized denomination for Securities of that series or any integral multiple thereof) of the principal amount of Securities of such series of a denomination larger than the minimum authorized denomination for Securities of that series; *provided, however*, that if, as indicated in an Officer's Certificate, the Company has offered to purchase all or any principal amount of the Securities then Outstanding of any series, and less than all of such Securities as to which such offer was made have been tendered to the Company for such purchase, the Trustee, if so directed by Company Order, shall select for redemption all or any principal amount of such Securities that have not been so tendered.

The Trustee shall promptly notify the Company and the Security Registrar in writing of the Securities selected for redemption and, in the case of any Securities selected for partial redemption, the principal amount thereof to be redeemed and the method it has chosen for the selection of such Securities.

For all purposes of this Indenture, unless the context otherwise requires, all provisions relating to the redemption of Securities shall relate, in the case of any Securities redeemed or to be redeemed only in part, to the portion of the principal amount of such Securities that has been or is to be redeemed.

Section 11.04. *Notice of Redemption.* Unless otherwise specified as contemplated by Section 3.01 with respect to any series of Securities, notice of redemption shall be given by electronic transmission or first-class mail, postage prepaid, mailed not less than 30 nor more than 60 days prior to the Redemption Date, to each Holder of Securities to be redeemed, at such Holder's address appearing in the Security Register.

If Unregistered Securities are to be redeemed, notice of redemption shall be published in an Authorized Newspaper in The City of New York and, if such Securities to be redeemed are listed on any securities exchange outside of the United States, in the city in which such securities exchange is located, or in such other city or cities as may be specified in the Securities, once in each of two different calendar weeks, the first publication to be not less than 30 nor more than 90 days before the redemption date.

All notices of redemption shall state:

- (1) the Redemption Date,
- (2) the Redemption Price, or the formula pursuant to which the Redemption Price is to be determined if the Redemption Price cannot be determined at the time notice is given,
- (3) if less than all the Outstanding Securities of any series are to be redeemed, the identification (and, in the case of partial redemption, the principal amounts) of the particular Securities to be redeemed, and the portion of the principal amount of any Security to be redeemed in part and, in the case of any such Security of such series to be redeemed in part, that, on and after the Redemption Date, upon surrender of such Security, a new Security or Securities of such series in principal amount equal to the remaining unpaid principal amount thereof will be issued as provided in Section 11.06,
- (4) that on the Redemption Date the Redemption Price will become due and payable upon each such Security to be redeemed and, if applicable, that interest thereon will cease to accrue on and after said date,
- (5) the place or places where such Securities and all unmatured coupons are to be surrendered for payment of the Redemption Price and accrued interest, if any,
- (6) that the redemption is for a sinking fund, if such is the case,
- (7) the CUSIP, "ISIN" or similar number(s), if any, assigned to such Securities; *provided however*, that such notice may state that no representation is made as to the correctness of CUSIP, "ISIN" or similar number(s), and the redemption of such Securities shall not be affected by any defect in or omission of such number(s), and
- (8) such other matters as the Company shall deem desirable or appropriate.

Unless otherwise specified with respect to any Securities in accordance with Section 3.01, with respect to any notice of redemption of Securities at the election of the Company, unless, upon the giving of such notice, such Securities are deemed to have been paid in accordance with Section 4.01, such notice may state that such redemption shall be conditional upon the receipt by the Paying Agent or Agents for such Securities, on or prior to the date fixed for such redemption, of money sufficient to pay the principal of and premium, if any, and interest, if any, on such Securities and that if such money has not been so received such notice shall be of no force or effect and the Company shall not be required to redeem such Securities. In the event that such notice of redemption contains such a condition and such money is not so received, the redemption shall not be made and within a reasonable time thereafter notice shall be given, in the manner in which the notice of redemption was given, that such money was not so received and such redemption was not required to be made, and the Paying Agent or Agents for the Securities

otherwise to have been redeemed shall promptly return to the Holders thereof any of such Securities that had been surrendered for payment upon such redemption.

Notice of redemption of Securities to be redeemed at the election of the Company, and any notice of non-satisfaction of a condition for redemption as aforesaid, shall be given by the Company or, at the Company's request, by the Security Registrar in the name and at the expense of the Company. Notice of mandatory redemption of Securities shall be given by the Security Registrar in the name and at the expense of the Company.

Section 11.05. *Securities Payable on Redemption Date.* (a) Notice of redemption having been given as aforesaid, and the conditions, if any, set forth in such notice having been satisfied, the Securities or portions thereof so to be redeemed shall, on the Redemption Date, become due and payable at the Redemption Price therein specified, and from and after such date (unless the Company defaults in the payment of the Redemption Price and accrued interest, if any) such Securities, or portions thereof, if interest-bearing, shall cease to bear interest. Upon surrender of any such Security together with all unmatured coupons for redemption in accordance with said notice, such Security or portion thereof, if any, shall be paid by the Company at the Redemption Price, together with accrued interest, if any, to the Redemption Date but in the case of Unregistered Securities installments of interest due on or prior to the Redemption Date will be payable to the bearers of the coupons for such interest by check or draft upon surrender of such coupons; *provided, however*, that installments of interest whose Stated Maturity is on or prior to the Redemption Date shall be payable to the Holders of such Securities, or one or more Predecessor Securities, registered as such at the close of business on the relevant Regular Record Dates according to their terms and the provisions of Section 3.07.

(b) If any Security called for redemption shall not be so paid upon surrender thereof for redemption, the principal and any premium shall, until paid, bear interest from the Redemption Date at the rate prescribed therefor in the Security.

Section 11.06. *Securities Redeemed in Part.* Any Security that is to be redeemed only in part shall be surrendered at a Place of Payment therefor (with, if the Company or the Trustee so requires, due endorsement by, or a written instrument of transfer in form satisfactory to the Company and the Trustee duly executed by, the Holder thereof or his or her attorney duly authorized in writing), and the Company shall execute, and the Trustee shall authenticate and deliver to the Holder of such Security without service charge, a new Security or Securities of the same series, of any authorized denomination as requested by such Holder, and of like tenor and in aggregate principal amount equal to and in exchange for the unredeemed portion of the principal of the Security so surrendered.

ARTICLE TWELVE

REPAYMENT OF SECURITIES AT OPTION OF HOLDERS

Section 12.01. *Applicability of Article.* Securities of any series that are repayable before their Stated Maturity at the option of the Holders shall be repayable in accordance with their terms and (except as otherwise specified as contemplated by Section 3.01 for Securities of any series) in accordance with this Article.

Section 12.02. *Notice of Repayment Date.* Notice of any Repayment Date with respect to Securities of any series shall be given by the Company not less than 30 nor more than 45 days prior to such Repayment Date (or at such other times as may be specified for such repayment or repurchase pursuant to Section 3.01) to each Holder of Securities of such series in accordance with Section 1.06 (except as otherwise specified as contemplated by Section 3.01 for Securities of any series).

The notice as to the Repayment Date shall state (unless otherwise specified for such repayment or repurchase pursuant to Section 3.01):

- (1) the Repayment Date;

- (2) the principal amount of the Securities required to be repaid or repurchased and the Repayment Price (or the formula pursuant to which the Repayment Price is to be determined if the Repayment Price cannot be determined at the time the notice is given);
- (3) the place or places where such Securities are to be surrendered for payment of the Repayment Price, and accrued interest, if any, and the date by which Securities must be so surrendered in order to be repaid or repurchased;
- (4) that any Security not tendered or accepted for payment shall continue to accrue interest;
- (5) that, unless the Company defaults in making such payment or the Paying Agent is prohibited from paying such money to the Holders on that date pursuant to the terms of this Indenture, Securities accepted for payment pursuant to any such offer of repayment or repurchase shall cease to accrue interest after the Repayment Date;
- (6) that Holders electing to have a Security repaid or purchased pursuant to such offer may elect to have all or any portion of such Security purchased;
- (7) that Holders electing to have a Security repaid or repurchased pursuant to any such offer shall be required to surrender the Security, with such customary documents of surrender and transfer as the Company may reasonably request, duly completed, or transfer by book-entry transfer, to the Company or the Paying Agent at the address specified in the notice at least two Business Days prior to the Repayment Date;
- (8) that Holders shall be entitled to withdraw their election if the Company or the Paying Agent, as the case may be, receives, not later than the expiration of the offer to repay or repurchase, a telegram, facsimile transmission or letter setting forth the name of the Holder, the principal amount of the Security the Holder delivered for purchase and a statement that such Holder is withdrawing its election to have such Security purchased;
- (9) that, in the case of a repayment or repurchase of less than all Outstanding Securities of a series, the method of selection of Securities to be repaid or repurchased to be applied by the Trustee if the principal amount of properly tendered Securities exceeds the principal amount of the Securities to be repaid or repurchased;
- (10) that Holders whose Securities are purchased only in part shall be issued new Securities of the same series equal in principal amount to the unpurchased portion of the Securities surrendered (or transferred by book-entry transfer); and
- (11) the CUSIP or other identification number, if any, printed on the Securities being repurchased and that no representation is made as to the correctness or accuracy of the CUSIP or other identification number, if any, listed in such notice or printed on the Securities.

Section 12.03. *Securities Payable on Repayment Date.* The form of option to elect repurchase or repayment having been delivered as specified in the form of Security for such series, the Securities of such series so to be repaid (after application of the method of selection described pursuant to clause (9) of Section 12.02, if the principal amount of properly tendered Securities exceeds the principal amount of the Securities to be repaid or repurchased) shall, on the Repayment Date, become due and payable at the Repayment Price applicable thereto and from and after such date (unless the Company defaults in the payment of the Repayment Price and accrued interest) such Securities shall cease to bear interest. Upon surrender of any such Security for repayment in accordance with said notice, such Security shall be paid by the Company at the Repayment Price together with accrued interest, if any, to the Repayment Date; *provided, however,* that if a Security is repaid or repurchased on or after a Regular Record Date but on or prior to the Stated Maturity of any installments of interest, then any accrued and unpaid interest due on such Stated Maturity shall be payable to the Holders of such Securities, or one or more Predecessor Securities, registered as such at the close of business on the relevant Regular Record Dates according to their terms and the provisions of Section 3.07.

If any Security is not paid upon surrender thereof for repayment, the principal (and premium, if any) shall, until paid, bear interest from the Repayment Date at the rate prescribed therefor in such Security.

Section 12.04. *Securities Repaid in Part.* Any Security that by its terms may be repaid in part at the option of the Holder and that is to be repaid only in part shall be surrendered at any office or agency of the Company designated for that purpose pursuant to Section 10.02 (with, if the Company or the Trustee so requires, due endorsement by, or a written instrument of transfer in form satisfactory to the Company and the Trustee duly executed by, the Holder thereof or his or her attorney duly authorized in writing), and the Company shall execute, and the Trustee shall authenticate and deliver to the Holder of such Security without service charge, a new Security or Securities of the same series, as provided in Section 3.05, of any authorized denomination as requested by such Holder, in aggregate principal amount equal to and in exchange for the unrepaid portion of the principal of the Security so surrendered.

This instrument may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be duly executed, and their respective corporate seals to be hereunto affixed and attested, all as of the date first above written.

THERAVANCE BIOPHARMA, INC.

By _____
Name:
Title:

[TRUSTEE]

By _____
Name:
Title:



Our ref MUL/683401-000001/60444228v3

Theravance Biopharma, Inc.
PO Box 309, Uglan House
Grand Cayman
KY1-1104
Cayman Islands

3 December 2019

Theravance Biopharma, Inc.

We have acted as counsel as to Cayman Islands law to Theravance Biopharma, Inc. (the "**Company**") to provide this opinion letter in connection with the Company's registration statement on Form S-3, including all amendments or supplements thereto, filed with the United States Securities and Exchange Commission (the "**Commission**") under the United States Securities Act of 1933 as amended (the "**Act**") (including its exhibits, the "**Registration Statement**") related to securities to be issued and sold by the Company from time to time (together, the "**Securities**"). The Securities include:

- (a) ordinary shares of the Company of a par value of US\$0.0001 each ("**Shelf Shares**");
- (b) warrants to purchase Shelf Shares or Debt Securities (as defined below) ("**Warrants**") issuable pursuant to the terms of a warrant agreement (the "**Warrant Agreement**") and warrant certificate (the "**Warrant Certificate**" and, together with the Warrant Agreement, the "**Warrant Documents**");
- (c) debt securities, including senior debt securities, senior subordinated debt securities, subordinated debt securities, convertible debt securities and exchangeable debt securities of the Company (the "**Debt Securities**"), each series of Debt Securities to be issued under an indenture to be entered into by the Company and the trustee, substantially in the form attached as an Exhibit to the Registration Statement, as each such indenture may be supplemented, in connection with the issuance of each such series, by a supplemental indenture, officers' certificate or other writing thereunder establishing the form and terms of such series;
- (d) purchase contracts, including contracts obligating holders to purchase from or sell to the Company, and obligating the Company to sell to or purchase from the holders, Shelf Shares ("**Purchase Contracts**"), such Purchase Contracts to be issued separately or as part of purchase units ("**Purchase Units**") which may be comprised of one or more Purchase Contracts and

Maples and Calder

PO Box 309 Uglan House Grand Cayman KY1-1104 Cayman Islands
Tel +1 345 949 8066 Fax +1 345 949 8080 maples.com

beneficial interests in Debt Securities, debt obligations of third parties, including U.S. treasury securities or any other securities described above;

- (e) ordinary shares of the Company of a par value of US\$0.0001 each (“**Sales Agreement Shares**” and, together with the Shelf Shares, “**Ordinary Shares**”) to be issued pursuant to the terms of a sales agreement (the “**Sales Agreement**”) between the Company and Cowen and Company, LLC;

This opinion letter is given in accordance with the terms of the Legal Matters section of the Registration Statement.

1 Documents Reviewed

We have reviewed originals, copies, drafts or conformed copies of the following documents:

- 1.1 The certificate of incorporation dated 29 July 2013 and the amended and restated memorandum and articles of association of the Company as registered or adopted on 28 April 2014 (the “**Memorandum and Articles**”).
- 1.2 The certificate in respect of the minutes (the “**Minutes**”) of the meeting of the board of directors of the Company held on 24 October 2019 (the “**Meeting**”) and the corporate records of the Company maintained at its registered office in the Cayman Islands.
- 1.3 A certificate of good standing with respect to the Company issued by the Registrar of Companies (the “**Certificate of Good Standing**”).
- 1.4 A certificate from a director of the Company a copy of which is attached to this opinion letter (the “**Director’s Certificate**”).
- 1.5 The Registration Statement.
- 1.6 The form of the Sales Agreement.
- 1.7 The form of indenture in respect of the Debt Securities (the “**Indenture**” and, together with the Warrant Documents, the Purchase Contracts, the Purchase Units and the Sales Agreement, the “**Documents**”).

2 Assumptions

The following opinions are given only as to, and based on, circumstances and matters of fact existing and known to us on the date of this opinion letter. These opinions only relate to the laws of the Cayman Islands which are in force on the date of this opinion letter. In giving the following opinions, we have relied (without further verification) upon the completeness and accuracy, as at the date of this opinion letter, of the Director’s Certificate and the Certificate of Good Standing. We have also relied upon the following assumptions, which we have not independently verified:

- 2.1 The Documents, the Warrants issuable under the Warrant Documents and the Debt Securities issuable under the Indenture have been, or will be, authorised and duly executed and unconditionally delivered by or on behalf of all relevant parties in accordance with all relevant laws.
- 2.2 The Documents, the Warrants issuable under the Warrant Documents and the Debt Securities issuable under the Indenture are, or will be, legal, valid, binding and enforceable against all

relevant parties in accordance with their terms under the laws of the State of New York (the “**Relevant Law**”) and all other relevant laws (other than, with respect to the Company, the laws of the Cayman Islands).

- 2.3 The choice of the Relevant Law as the governing law of the Documents, the Warrants issuable under the Warrant Documents and the Debt Securities issuable under the Indenture has been made in good faith and would be regarded as a valid and binding selection which will be upheld by the courts of the State of New York and any other relevant jurisdiction (other than the Cayman Islands) as a matter of the Relevant Law and all other relevant laws (other than the laws of the Cayman Islands).
- 2.4 Copies of documents, conformed copies or drafts of documents provided to us are true and complete copies of, or in the final forms of, the originals.
- 2.5 All signatures, initials and seals are genuine.
- 2.6 The capacity, power, authority and legal right of all parties under all relevant laws and regulations (other than, with respect to the Company, the laws of the Cayman Islands) to enter into, execute, unconditionally deliver and perform their respective obligations under the Documents, the Warrants issuable under the Warrant Documents and the Debt Securities issuable under the Indenture.
- 2.7 There is no contractual or other prohibition or restriction (other than as arising under Cayman Islands law) binding on the Company prohibiting or restricting it from entering into and performing its obligations under the Documents.
- 2.8 No monies paid to or for the account of any party under the Documents, the Warrants issuable under the Warrant Documents and the Debt Securities issuable under the Indenture or any property received or disposed of by any party to the Documents, the Warrants issuable under the Warrant Documents and the Debt Securities issuable under the Indenture in each case in connection with the Documents, the Warrants issuable under the Warrant Documents and the Debt Securities issuable under the Indenture or the consummation of the transactions contemplated thereby represent or will represent proceeds of criminal conduct or criminal property or terrorist property (as defined in the Proceeds of Crime Law (2019 Revision) and the Terrorism Law (2018 Revision), respectively).
- 2.9 The Debt Securities will be issued and authenticated in accordance with the provisions of a duly authorised, executed and delivered Indenture Document.
- 2.10 The Indenture, the Warrants and the Warrant Documents, the Purchase Contracts and the Purchase Units will be, or have been, duly executed and delivered by an authorised person of the parties thereto.
- 2.11 The Company will receive money or money’s worth in consideration for the issue of the Ordinary Shares and none of the Ordinary Shares will be issued for less than their par value.
- 2.12 There will be sufficient Ordinary Shares authorised for issue under the Memorandum and Articles.
- 2.13 The issue of the Warrants issuable under the Warrant Documents, the Purchase Contracts, the Purchase Units, the Debt Securities issuable under the Indenture and the Ordinary Shares will be of commercial benefit to the Company.

- 2.14 No invitation has been or will be made by or on behalf of the Company to the public in the Cayman Islands to subscribe for any of the Securities.
- 2.15 There is nothing under any law (other than the laws of the Cayman Islands) which would or might affect the opinions set out below. Specifically, we have made no independent investigation of the Relevant Law.

Save as aforesaid we have not been instructed to undertake and have not undertaken any further enquiry or due diligence in relation to the transaction the subject of this opinion letter.

3 Opinions

Based upon, and subject to, the foregoing assumptions and the qualifications set out below, and having regard to such legal considerations as we deem relevant, we are of the opinion that:

- 3.1 The Company has been duly incorporated as an exempted company with limited liability and is validly existing and in good standing with the Registrar of Companies under the laws of the Cayman Islands.
- 3.2 The Company has all requisite power and authority under the Memorandum and Articles to enter into, execute and perform its obligations under the Indenture to which it will be a party and the Debt Securities issuable under the Indenture to which it is, or will be, a party.
- 3.3 With respect to each issue of Debt Securities pursuant to the Indenture, when: (a) the board of directors of the Company have taken all necessary corporate action to approve the issue thereof, the terms of the offering thereof and related matters; and (b) such Debt Securities issued thereunder have been duly executed and delivered on behalf of the Company and authenticated in the manner set forth in the Indenture relating to such issue of Debt Securities and delivered against due payment therefor pursuant to, and in accordance with, the terms of the Registration Statement and any relevant prospectus supplement, such Debt Securities issued pursuant to the Indenture will have been duly executed, issued and delivered.
- 3.4 With respect to the Ordinary Shares, when: (a) the board of directors of the Company has taken all necessary corporate action to approve the issue thereof, the terms of the offering thereof and related matters; (b) the issue of such Ordinary Shares has been recorded in the Company's register of members (shareholders); and (c) the subscription price of such Ordinary Shares (being not less than the par value of the Ordinary Shares) has been fully paid in cash or other consideration approved by the board of directors of the Company, the Ordinary Shares will be duly authorised, validly issued, fully paid and non-assessable.
- 3.5 With respect to the Purchase Contracts and the Purchase Units, when: (a) the board of directors of the Company has taken all necessary corporate action to approve the creation and terms of the Purchase Contracts and the Purchase Units and to approve the issue thereof, the terms of the offering thereof and related matters; (b) a Purchase Contract or Purchase Unit shall have been duly authorised and validly executed and delivered by the Company; and (c) the Purchase Contracts and the Purchase Units have been duly executed, countersigned, registered and delivered in accordance with the applicable Purchase Contract or Purchase Unit and the applicable definitive purchase, underwriting or similar agreement approved by the board of directors of the Company upon payment of the consideration therefor provided therein, the Purchase Contracts and the Purchase Units will be duly authorised, legal and binding obligations of the Company.

3.6 With respect to the Warrants, when: (a) the board of directors of the Company has taken all necessary corporate action to approve the creation and terms of the Warrants and to approve the issue thereof, the terms of the offering thereof and related matters; (b) a Warrant Agreement relating to the Warrants shall have been duly authorised and validly executed and delivered by the Company and the financial institution designated as warrant agent thereunder; and (c) the Warrant Certificates have been duly executed, countersigned, registered and delivered in accordance with the Warrant Agreement relating to the Warrants and the applicable definitive purchase, underwriting or similar agreement approved by the board of directors of the Company upon payment of the consideration therefor provided therein, the Warrants will be duly authorised, legal and binding obligations of the Company.

4 Qualifications

The opinions expressed above are subject to the following qualifications:

- 4.1 The obligations assumed by the Company under the Documents or the relevant Securities issuable thereunder will not necessarily be enforceable in all circumstances in accordance with their terms. In particular:
- (a) enforcement may be limited by bankruptcy, insolvency, liquidation, reorganisation, readjustment of debts or moratorium or other laws of general application relating to or affecting the rights of creditors;
 - (b) enforcement may be limited by general principles of equity. For example, equitable remedies such as specific performance may not be available, *inter alia*, where damages are considered to be an adequate remedy;
 - (c) some claims may become barred under relevant statutes of limitation or may be or become subject to defences of set off, counterclaim, estoppel and similar defences;
 - (d) where obligations are to be performed in a jurisdiction outside the Cayman Islands, they may not be enforceable in the Cayman Islands to the extent that performance would be illegal under the laws of that jurisdiction;
 - (e) the courts of the Cayman Islands have jurisdiction to give judgment in the currency of the relevant obligation and statutory rates of interest payable upon judgments will vary according to the currency of the judgment. If the Company becomes insolvent and is made subject to a liquidation proceeding, the courts of the Cayman Islands will require all debts to be proved in a common currency, which is likely to be the “functional currency” of the Company determined in accordance with applicable accounting principles. Currency indemnity provisions have not been tested, so far as we are aware, in the courts of the Cayman Islands;
 - (f) arrangements that constitute penalties will not be enforceable;
 - (g) enforcement may be prevented by reason of fraud, coercion, duress, undue influence, misrepresentation, public policy or mistake or limited by the doctrine of frustration of contracts;
 - (h) provisions imposing confidentiality obligations may be overridden by compulsion of applicable law or the requirements of legal and/or regulatory process;

- (i) the courts of the Cayman Islands may decline to exercise jurisdiction in relation to substantive proceedings brought under or in relation to the Documents in matters where they determine that such proceedings may be tried in a more appropriate forum;
 - (j) any provision in a Document which is governed by Cayman Islands law purporting to impose obligations on a person who is not a party to such Document (a “**third party**”) is unenforceable against that third party. Any provision in a Document which is governed by Cayman Islands law purporting to grant rights to a third party is unenforceable by that third party, except to the extent that such Document expressly provides that the third party may, in its own right, enforce such rights (subject to and in accordance with the Contracts (Rights of Third Parties) Law, 2014 of the Cayman Islands);
 - (k) any provision of a Document which is governed by Cayman Islands law which expresses any matter to be determined by future agreement may be void or unenforceable;
 - (l) we reserve our opinion as to the enforceability of the relevant provisions of the Documents to the extent that they purport to grant exclusive jurisdiction as there may be circumstances in which the courts of the Cayman Islands would accept jurisdiction notwithstanding such provisions; and
 - (m) a company cannot, by agreement or in its articles of association, restrict the exercise of a statutory power and there is doubt as to the enforceability of any provision in the Documents whereby the Company covenants to restrict the exercise of powers specifically given to it under the Companies Law (2018 Revision) (the “**Companies Law**”), including, without limitation, the power to increase its authorised share capital, amend its memorandum and articles of association or present a petition to a Cayman Islands court for an order to wind up the Company;
 - (n) if the Company becomes subject to Part XVIIIA of the Companies Law, enforcement or performance of any provision in the Documents which relates, directly or indirectly, to an interest in the Company constituting shares, voting rights or director appointment rights in the Company may be prohibited or restricted if any such relevant interest is or becomes subject to a restrictions notice issued under the Companies Law; and
 - (o) enforcement or performance of any provision in the Documents which relates, directly or indirectly, to an interest in a Cayman Islands company or limited liability company constituting shares, membership interests, voting rights or director or manager appointment rights in respect of such company or limited liability company may be prohibited or restricted if any such relevant interest is or becomes subject to a restrictions notice issued under the Companies Law or the Limited Liability Companies Law (2018 Revision).
- 4.2 To maintain the Company in good standing with the Registrar of Companies under the laws of the Cayman Islands, annual filing fees must be paid and returns made to the Registrar of Companies within the time frame prescribed by law.
- 4.3 We express no opinion as to the meaning, validity or effect of any references to foreign (i.e. non-Cayman Islands) statutes, rules, regulations, codes, judicial authority or any other promulgations and any references to them in the Documents or the relevant Securities issuable thereunder.

- 4.4 We have not reviewed the final forms of the Indenture, the Debt Securities to be issued thereunder, the Warrant Documents or the Warrants to be issued thereunder, the Purchase Contracts or the Purchase Units, and our opinions are qualified accordingly.
- 4.5 We reserve our opinion as to the extent to which the courts of the Cayman Islands would, in the event of any relevant illegality or invalidity, sever the relevant provisions of the Indenture, the Debt Securities, the Warrant Documents, the Warrants, the Purchase Contracts or the Purchase Units and enforce the remainder of the Indenture, the Debt Securities, the Warrant Documents, the Warrants, the Purchase Contracts or the Purchase Units or the transaction of which such provisions form a part, notwithstanding any express provisions in the Indenture in this regard.
- 4.6 Under Cayman Islands law, the register of members (shareholders) is *prima facie* evidence of title to shares and this register would not record a third party interest in such shares. However, there are certain limited circumstances where an application may be made to a Cayman Islands court for a determination on whether the register of members reflects the correct legal position. Further, the Cayman Islands court has the power to order that the register of members maintained by a company should be rectified where it considers that the register of members does not reflect the correct legal position. As far as we are aware, such applications are rarely made in the Cayman Islands and there are no circumstances or matters of fact known to us on the date of this opinion letter which would properly form the basis for an application for an order for rectification of the register of members of the Company, but if such an application were made in respect of the Ordinary Shares, then the validity of such shares may be subject to re-examination by a Cayman Islands court.

We express no view as to the commercial terms of the Documents or the relevant Securities issuable thereunder or whether such terms represent the intentions of the parties and make no comment with regard to warranties or representations that may be made by the Company.

We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement and to the reference to our firm under the heading "Legal Matters" in the prospectus included in the Registration Statement. In providing our consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the Rules and Regulations of the Commission thereunder.

The opinions in this opinion letter are strictly limited to the matters contained in the opinions section above and do not extend to any other matters. We have not been asked to review and we therefore have not reviewed any of the ancillary documents relating to the Documents or the relevant Securities issuable thereunder and express no opinion or observation upon the terms of any such document.

Yours faithfully

/s/ Maples and Calder
Maples and Calder



SILICON VALLEY
ANN ARBOR
BEIJING
BOSTON
LOS ANGELES
NEW YORK
SAN DIEGO
SAN FRANCISCO
SINGAPORE

The Board of Directors
Theravance Biopharma, Inc.
PO Box 309
Ugland House, South Church Street
George Town, Grand Cayman, Cayman Islands KY1-1104

Theravance Biopharma, Inc.

Ladies and Gentlemen:

We have acted as special counsel to Theravance Biopharma, Inc., an exempted company incorporated in the Cayman Islands with limited liability (the "Company") in connection with the preparation and filing by the Company of a registration statement on Form S-3 (such registration statement, including the documents incorporated by reference therein, the "Registration Statement") being filed with the Securities and Exchange Commission (the "Commission") relating to the offering from time to time, pursuant to Rule 415 under the Securities Act of 1933, as amended (the "Securities Act"), by the Company of, among other things, (i) one or more series of debt securities of the Company (the "Debt Securities"), and (ii) warrants of the Company (the "Warrants"). The offering of the Debt Securities and the Warrants will be as set forth in the prospectus contained in the Registration Statement (the "Prospectus"), as supplemented by one or more supplements to the Prospectus (each supplement, a "Prospectus Supplement").

The Debt Securities will be issued pursuant to one or more indentures in the form filed as an exhibit to the Registration Statement, as amended or supplemented from time to time (each, an "Indenture"), between the Company, as obligor, and a trustee chosen by the Company and qualified to act as such under the Trust Indenture Act of 1939, as amended (each, a "Trustee").

In connection with this opinion, we have examined the Registration Statement and such other documents, records, certificates, memoranda and other instruments as we deem necessary as a basis for this opinion. We have assumed the genuineness of all signatures, the legal capacity of natural persons, the genuineness and authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies thereof and the due execution and delivery of all documents where due execution and delivery are a prerequisite to the effectiveness thereof. As to questions of fact material to this opinion, we have relied upon certificates or comparable documents of public officials and of officers and representatives of the Company.

Based upon the foregoing and subject to the additional qualifications set forth below, we are of the opinion that:

1. When the issuance and the terms of the sale of the Debt Securities have been duly authorized by the board of directors of the Company and duly established in conformity with the applicable Indenture so as not to violate any applicable law or result in a default under, or breach of, any agreement or instrument binding upon the Company and so as to comply with any requirement or restriction imposed by any court or governmental or regulatory body having jurisdiction over the Company or any of its property, and the Debt Securities have been duly executed, authenticated, issued, delivered and sold in accordance with the applicable definitive purchase, underwriting or similar agreement, as contemplated by the Registration Statement, the Prospectus and the related Prospectus Supplement, and in the manner provided for in the applicable Indenture against payment of the purchase price therefor, the Debt Securities will constitute

valid and binding obligations of the Company enforceable against the Company in accordance with their respective terms.

2. When the issuance and the terms of the sale of the Warrants have been duly authorized by the board of directors of the Company; the terms of the Warrants and of their issuance and sale have been duly established so as to not violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company and comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company or any of its property; and the Warrants have been duly executed and issued and sold in accordance with the applicable definitive purchase, underwriting or similar agreement, as contemplated by the Registration Statement, the Prospectus and the related Prospectus Supplement, the Warrants will constitute valid and binding obligations of the Company enforceable against the Company in accordance with their terms.

We do not express any opinion herein concerning any law other than the federal law of the United States of America and the laws of the State of New York (including the rules and regulations promulgated thereunder or pursuant thereto). Without limiting the generality of the foregoing, we express no opinion with respect to the qualification of the Debt Securities and Warrants under the securities or blue sky laws of any state or any foreign jurisdiction.

In rendering the opinions set forth above, we have assumed that (i) the Registration Statement will have become effective under the Securities Act, a Prospectus Supplement will have been prepared and filed with the SEC describing the Debt Securities and Warrants offered thereby and such Debt Securities and Warrants will have been issued and/or sold in accordance with the terms of such Prospectus Supplement; (ii) a definitive purchase, underwriting or similar agreement with respect to such Debt Securities and Warrants (if applicable) will have been duly authorized, executed and delivered by the Company and the other parties thereto; (iii) the Debt Securities and Warrants issued by the Company will be duly authorized by all necessary corporate action by the Company and any Indenture, any applicable supplemental indenture thereto, and other agreement pursuant to which such Debt Securities and Warrants may be issued will be duly authorized, executed and delivered by the Company and the other parties thereto; and (iv) the Company is and will remain duly organized, validly existing and in good standing under applicable state law.

The opinions set forth above are subject to the following exceptions, limitations and qualifications: (i) the effect of bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium or other similar laws now or hereafter in effect relating to or affecting the rights and remedies of creditors; (ii) the effect of general principles of equity, including without limitation, concepts of materiality, reasonableness, good faith and fair dealing and the possible unavailability of specific performance or injunctive relief, regardless of whether enforcement is considered in a proceeding in equity or at law, and the discretion of the court before which any proceeding therefore may be brought; (iii) the unenforceability under certain circumstances under law or court decisions of provision providing for the indemnification of, or contribution to, a party with respect to a liability where such indemnification or contribution is contrary to public policy. We express no opinion (i) concerning the enforceability of any waiver of rights or defenses with respect to stay, extension or usury laws or (ii) with respect to whether acceleration of Debt Securities may affect the collectability of any portion of the stated principal amount thereof which might be determined to constitute unearned interest thereon. Our opinions expressed herein are also subject to the qualification that no term or provision shall be included in any Indenture, any Warrant or any other agreement or instrument pursuant to which any of the Debt Securities and Warrants are to be issued that would affect the validity of such opinions.

We consent to the use of this opinion as Exhibit 5.2 to the Registration Statement, and further consent to the use of our name under the caption “Legal Matters” in the prospectus included in the Registration Statement, and in any amendment or supplement thereto.

Very truly yours,

/s/ Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP
GUNDERSON DETTMER STOUGH VILLENEUVE FRANKLIN & HACHIGIAN, LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the reference to our firm under the caption “Experts” in this Registration Statement (Form S-3) and related Prospectus of Theravance Biopharma, Inc. for the registration of Debt Securities, Ordinary Shares, Purchase Contracts, Purchase Units, and Warrants, and to the incorporation by reference therein of our reports dated February 28, 2019, with respect to the consolidated financial statements of Theravance Biopharma, Inc., and the effectiveness of internal control over financial reporting of Theravance Biopharma, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2018, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Redwood City, CA
December 3, 2019
