
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2022

OR
 TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____
Commission File No. 001-36033

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 No.)

P.O. Box 309
Ugland House, South Church Street
George Town, Grand Cayman, Cayman Islands
(Address of Principal Executive Offices)

KY1-1104
(Zip Code)

Registrant's telephone number, including area code: 650-808-6000

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:

Title of each class	Trading Symbol	Name of each exchange on which registered
Ordinary Share \$0.00001 Par Value	TBPH	The Nasdaq Global Market

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT: NONE

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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.

Large Accelerated Filer
Non-accelerated Filer

Accelerated Filer
Smaller reporting company
Emerging growth company

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 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was approximately \$677.0 million, based upon the closing price of \$9.06 on the Nasdaq Global Market on June 30, 2022.

On February 21, 2023, there were 62,864,474 of the registrant's ordinary shares outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Specified portions of the registrant's definitive Proxy Statement to be issued in conjunction with the registrant's 2023 Annual Meeting of Shareholders, which is expected to be filed not later than 120 days after the registrant's fiscal year ended December 31, 2022, are incorporated by reference into Part III of this Annual Report. Except as expressly incorporated by reference, the registrant's Proxy Statement shall not be deemed to be a part of this Annual Report on Form 10-K.

THERAVANCE BIOPHARMA, INC.
2022 Form 10-K Annual Report
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Special Note regarding Forward-Looking Statements

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Such forward-looking statements involve risks, uncertainties and assumptions. All statements in this Annual Report on Form 10-K, other than statements of historical facts, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans, intentions, designs, expectations and objectives are forward-looking statements. The words “aim,” “anticipate,” “assume,” “believe,” “contemplate,” “continue,” “could,” “designed,” “developed,” “drive,” “estimate,” “expect,” “forecast,” “goal,” “indicate,” “intend,” “may,” “mission,” “opportunities,” “plan,” “possible,” “potential,” “predict,” “project,” “pursue,” “represent,” “seek,” “suggest,” “should,” “target,” “will,” “would,” and similar expressions (including the negatives thereof) are intended to identify forward looking statements, although not all forward looking statements contain these identifying words. These statements reflect our current views with respect to future events or our future financial performance, are based on assumptions, and involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. We may not actually achieve the plans, intentions, expectations or objectives disclosed in our forward-looking statements and the assumptions underlying our forward-looking statements may prove incorrect. Therefore, you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions, expectations and objectives disclosed in the forward-looking statements that we make. Factors that we believe could cause actual results or events to differ materially from our forward-looking statements include, but are not limited to, those discussed in “Risk Factors,” in Item 1A, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Item 7 and elsewhere in this Annual Report on Form 10-K. Our forward-looking statements in this Annual Report on Form 10-K are based on current expectations and we do not assume any obligation to update any forward-looking statements for any reason, even if new information becomes available in the future. In addition, while the effects of COVID-19, including new variants, may continue to adversely impact our business operations and financial results, the extent of the impact on our ability to generate revenue from YUPELRI[®] (revelfenacin), our clinical development programs, and the value of and market for our ordinary shares, will depend on future developments that are uncertain and cannot be predicted with confidence at this time. These potential future developments include, but are not limited to, the ultimate duration of the COVID-19 pandemic, travel restrictions, quarantines, vaccination levels, social distancing and business closure requirements in the United States and in other countries, other measures taken by us and those we work with to help protect individuals from contracting COVID-19, and the effectiveness of actions taken globally to manage and treat the disease, including vaccine availability, distribution, acceptance and effectiveness. When used in this report, all references to “Theravance Biopharma”, the “Company”, or “we” and other similar pronouns refer to Theravance Biopharma, Inc. collectively with its subsidiaries.

PART I

ITEM 1. BUSINESS

Overview

Theravance Biopharma, Inc. (“we,” “our,” “Theravance Biopharma” or the “Company”) is a biopharmaceutical company primarily focused on the discovery, development, and commercialization of medicines. Our core purpose is to create *medicines that make a difference*[®] in people’s lives.

In pursuit of our purpose, we leverage decades of expertise, which has led to the development of the United States (“US”) Food and Drug Administration (the “FDA”) approved YUPELRI[®] (revefenacin) inhalation solution indicated for the maintenance treatment of patients with chronic obstructive pulmonary disease (“COPD”). Our pipeline of internally discovered programs is targeted to address significant unmet patient needs.

2022 Highlights

YUPELRI Sales Growth

In 2022, YUPELRI continued its sales growth trajectory and reached all-time high net sales and profitability on an annual basis. Through the combined commercialization efforts with our partner Viatrix Inc. (“Viatrix”), aggregate YUPELRI net sales increased by 25% in 2022 compared to 2021. While Viatrix records the total YUPELRI net sales, we are entitled to a 35% share of the profits and losses pursuant to a co-promotion agreement with Viatrix.

Sale of Theravance Respiratory Company, LLC

In July 2022, we completed the sale of all of our equity interests in Theravance Respiratory Company, LLC (“TRC”) representing our 85% economic interest in the sales-based royalty rights on worldwide net sales of GSK’s TRELEGY ELLIPTA (“TRELEGY”) to Royalty Pharma Investments 2019 ICAV (“Royalty Pharma”) for approximately \$1.1 billion in upfront cash while retaining future value through the right to receive contingent milestone payments and certain outer year-royalties (the “TRELEGY Royalty Transaction”).

Debt Paydown and Capital Return Program

In July and August 2022, we completed the process to retire all of our outstanding debt. We repaid our 9.5% non-recourse TRELEGY notes due 2035 for approximately \$420.0 million on July 20, 2022. We also completed a tender offer to retire \$230.0 million in principal amount of our 3.25% convertible senior notes due 2023, at par, on August 25, 2022. Following the retirement of all of our outstanding debt, we initiated a \$250.0 million capital return program to shareholders.

Ampreloxetine Funding

In conjunction with the TRELEGY Royalty Transaction, in July 2022, we received a \$25.0 million upfront cash investment from Royalty Pharma, and we shall receive another \$15.0 million cash investment upon the first regulatory approval of ampreloxetine. The upfront \$25.0 million cash received is expected to fund the majority of our new Phase 3 study for the use of ampreloxetine for patients suffering from Multiple System Atrophy (“MSA”) and symptomatic neurogenic orthostatic hypotension (“nOH”).

Reduction of Office Space

As a result of our reduction in workforce that was announced in September 2021, in the second quarter of 2022, we reduced our occupied leased office space by approximately 83,000 square feet representing approximately 57% of our total occupied leased office at the beginning of 2022. The reduction of occupied leased office space was achieved through a sublease of a significant portion of our offices in South San Francisco, California, and a move to a smaller office in Dublin, Ireland. We estimate that the cumulative cash savings from the reduction in occupied leased office space to be approximately \$54.1 million over the life of the original South San Francisco and Dublin lease terms ending in May 2030 and April 2027, respectively.

2023 Strategic Actions

On February 27, 2023, we announced additional strategic actions to sharpen the Company's focus and deliver on its commitment to create shareholder value:

- *Capital Return Program increased to \$325.0 million* – Our board of directors authorized a \$75.0 million increase to the existing \$250.0 million capital return program initiated in September 2022, bringing the total capital return program to \$325.0 million. As of February 27, 2023, we have repurchased \$155.3 million of shares, including \$27.1 million in 2023, and we have approximately \$170.0 million remaining in the capital return program which is expected to be completed by the end of 2023.
- *Discontinuing investments in research* – We plan to prioritize resource allocation toward the amprelosetine Phase 3 study and completion of the YUPELRI Peak Inspiratory Flow Rate (PIFR) Phase 4 study and discontinue our research activities including the inhaled Janus kinase (JAK) inhibitor program. As a result of halting further research investment, our headcount is being reduced by approximately 17% with the reductions planned for completion by the end of March 2023. We also plan to seek a partnership to continue progression of our inhaled JAK inhibitor program.
- *Appointed independent director to the board and commit to governance change* – We appointed a new independent director as part of our ongoing commitment to board refreshment, and we intend to put forth a proposal to declassify the board of the directors over time at the May 2, 2023, Annual General Meeting of Shareholders.

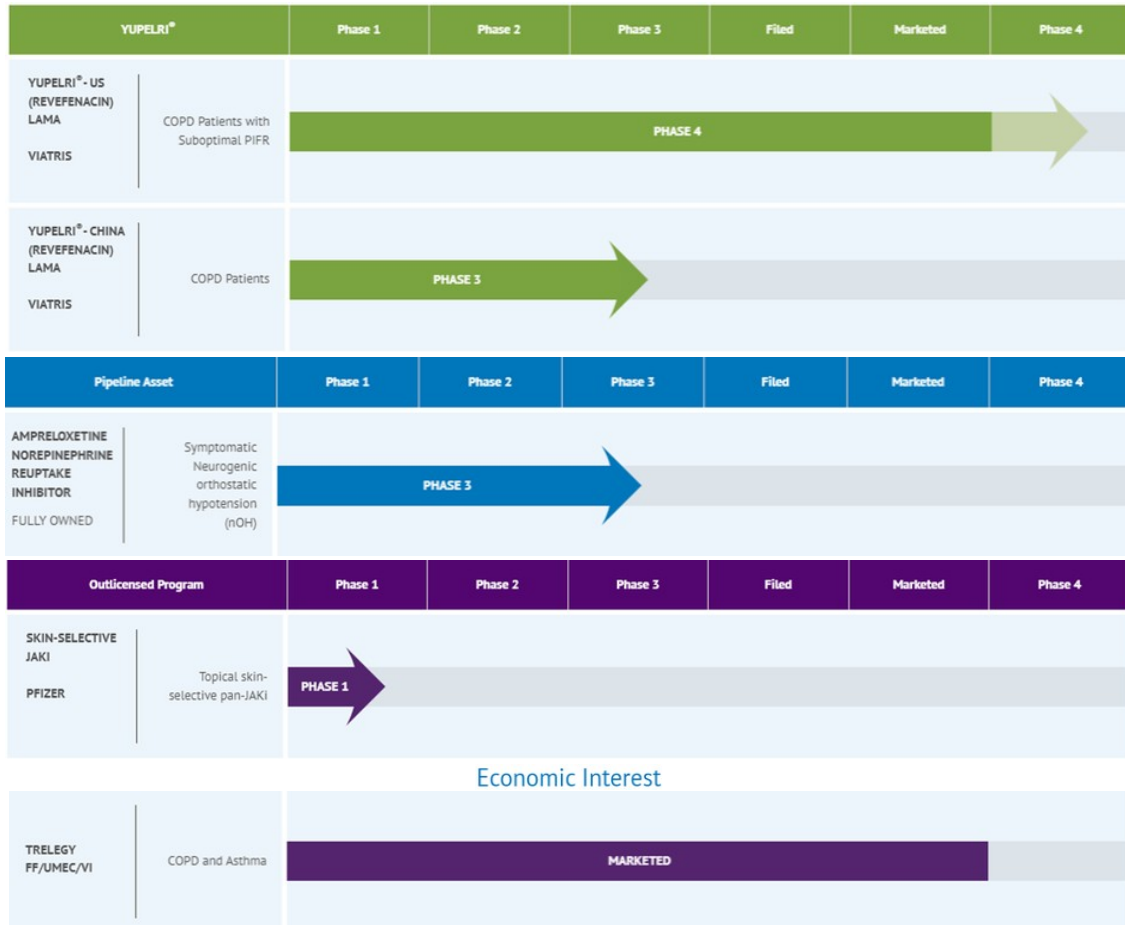
Impact of COVID-19 Pandemic

The effects of the COVID-19 pandemic and the related actions by governments, companies, and individuals around the world in an attempt to manage the spread of the virus (including new variants of COVID-19) continue to present a public health and economic challenge. The full extent to which the COVID-19 pandemic will continue to directly or indirectly impact our business, results of operations and financial condition, including revenue, expenses, clinical trials and research and development costs, will depend on future developments that are uncertain and may be impacted by the emergence of new information concerning the COVID-19 pandemic, new variants or sub-variants of the COVID-19 virus, and the actions taken to manage or treat the disease, including vaccine availability, distribution, acceptance and effectiveness.

As part of our response to the ongoing challenges presented by the COVID-19 pandemic, we continue to take steps to identify and mitigate the adverse impacts on, and risks to, our business posed by its spread and actions taken by governmental and health authorities to address the COVID-19 pandemic. We expect to continue to implement measures as may be required or recommended by government authorities or as we determine are in the best interests of our employees, clinical trial sites and participants, the patients we serve, and other stakeholders in light of COVID-19.

Our Programs

The chart below summarizes the status of our approved product, product candidates in development, and economic interest.



Glossary of Defined Terms used in Table Above:

- COPD:** Chronic Obstructive Pulmonary Disease;
- FF:** Fluticasone Furoate;
- JAKi:** Janus Kinase Inhibitor;
- LAMA:** Long-Acting Muscarinic Antagonist;
- PIFR:** Peak Inspiratory Flow Rate;
- UMEC:** Umeclidinium; and
- VI:** Vilanterol

Core Program Updates

YUPELRI (revefenacin) Inhalation Solution

YUPELRI (revefenacin) inhalation solution is a once-daily, nebulized long-acting muscarinic antagonist (“LAMA”) approved for the maintenance treatment of COPD in the US. LAMAs are recognized by international COPD treatment guidelines as a cornerstone of maintenance therapy for COPD, regardless of severity of disease. Our market research indicates there is an enduring population of COPD patients in the US that either need or prefer nebulized delivery for maintenance therapy. The stability of revefenacin in both metered dose inhaler and dry powder inhaler (“MDI/DPI”) formulations suggests that revefenacin could also serve as a foundation for novel handheld combination products.

We co-developed YUPELRI with our collaboration partner, Viatrix Inc. Under the terms of the Viatrix Development and Commercialization Agreement (the “Viatrix Agreement”), we led the US Phase 3 development program for YUPELRI in COPD, and Viatrix was responsible for reimbursement of our costs related to the registrational program up until the approval of the first new drug application, after which costs were shared. YUPELRI was approved by the FDA for the maintenance treatment of patients with COPD in November 2018. In the US, Viatrix is leading the commercialization of YUPELRI, and we co-promote the product under a profit and loss sharing arrangement (65% to Viatrix; 35% to us). Outside the US (excluding China and adjacent territories), Viatrix is responsible for development and commercialization and will pay us a tiered royalty on net sales at percentage royalty rates ranging from low double-digits to mid-teens. We retain worldwide rights to revefenacin delivered through other dosage forms, such as a MDI/DPI.

In June 2019, we announced the expansion of the Viatrix Agreement to grant Viatrix exclusive development and commercialization rights to nebulized revefenacin in China and adjacent territories, which include Hong Kong SAR, the Macau SAR, and Taiwan. In exchange, we received an upfront payment of \$18.5 million (before a required tax withholding) and is eligible to receive additional potential development and sales milestones totaling \$54.0 million and low double-digit tiered royalties on net sales of nebulized revefenacin, if approved. In March 2020, we earned a \$1.5 million development milestone for the acceptance of a clinical trial application associated with the use of revefenacin monotherapy in China and adjacent territories. Viatrix is responsible for all aspects of development and commercialization in the China and adjacent territories, including pre- and post-launch activities and product registration and all associated costs.

Under the terms of the Viatrix Agreement, as amended, as of December 31, 2022, we are eligible to receive from Viatrix potential global development, regulatory and sales milestone payments (excluding China and adjacent territories) totaling up to \$205.0 million in the aggregate with \$160.0 million associated with YUPELRI monotherapy and \$45.0 million associated with future potential combination products. Of the \$160.0 million associated with monotherapy, \$150.0 million relates to sales milestones based on achieving certain levels of net sales and \$10.0 million relates to regulatory actions in the EU.

In August 2021, we announced that in collaboration with our partner Viatrix, we were initiating a Phase 4 study comparing improvements in lung function in adults with severe to very severe COPD and suboptimal inspiratory flow rate following once-daily treatment with either YUPELRI delivered via standard jet nebulizer or tiotropium delivered via a dry powder inhaler (Spiriva® HandiHaler®). This study is aimed at helping to better inform decisions when physicians are designing a personalized COPD treatment plan with patients. In the future, this study could also be used to support promotional efforts for YUPELRI, which could aid in the capture of more of YUPELRI’s addressable market and further strengthen its competitive advantage. We have agreed to pay 35% of the Phase 4 study costs, and Viatrix has agreed to pay 65% of the Phase 4 study costs. In January 2022, we announced the enrollment of the first patient in the Phase 4 study.

While Viatrix records total YUPELRI net sales, we are entitled to a 35% share of the net profit (loss). Our implied 35% share of total YUPELRI net sales is presented below:

(In thousands)	Year Ended December 31,			Change			
	2022	2021	2020	2022		2021	
	\$	\$	\$	\$	%	\$	%
YUPELRI net sales (implied 35%)	\$ 70,653	\$ 56,678	\$ 49,979	\$ 13,975	25 %	\$ 6,699	13 %
Viatrix collaboration revenue	48,624	43,848	43,893	4,776	11	(45)	(0.1)

Since March 2020, YUPELRI’s growth trajectory has been impacted by the COVID-19 respiratory pandemic. However, in late 2021, we began to observe more sustained growth in YUPELRI sales. We continue to monitor external factors that are associated with the current healthcare market which may be impacting demand for YUPELRI due to the ongoing COVID-19 pandemic, including the return of customer orders to pre-pandemic utilization levels and the duration of use. Although pandemic restrictions have receded in many regions at this time, we are not able to predict with certainty the ultimate enduring disruptive impact of the ongoing pandemic on YUPELRI sales, and it is possible the pandemic may continue to put downward pressure on our sales. As a result, sales volatility may continue throughout 2023. As we have throughout the pandemic, we will continue to track market adoption, including formulary inclusion success and the various aspects of market access. We and Viatrix continue to supply YUPELRI to our patients and currently do not anticipate any material interruptions in supply.

Ampreloxetine (TD-9855)

Ampreloxetine is an investigational, once-daily norepinephrine reuptake inhibitor (“NRI”) that we are developing for the treatment of patients with Multiple System Atrophy (“MSA”) and symptomatic neurogenic orthostatic hypotension (“nOH”). nOH is caused by primary autonomic failure conditions and the majority of patients with MSA experience symptoms of nOH. Ampreloxetine has high affinity for binding to the norepinephrine (“NE”) transporter. By blocking the action of the NE transporter, ampreloxetine causes an increase in extracellular concentrations of norepinephrine. Ampreloxetine is wholly owned by Theravance Biopharma.

Based on positive results from a small exploratory Phase 2 study in nOH and discussions with the FDA, we advanced ampreloxetine into a Phase 3 program. We announced the initiation of patient dosing in study in early 2019. The Phase 3 program consisted of two pivotal studies and one non-pivotal study. The first pivotal study (SEQUOIA), a four-week, randomized double-blind, placebo-controlled study, was designed to evaluate the efficacy and safety of ampreloxetine in Parkinson’s disease (“PD”), pure autonomic failure (“PAF”) and MSA patients with symptomatic nOH. The second pivotal study (REDWOOD), a four-month open label study followed by a six-week randomized withdrawal phase was designed to evaluate the durability of the same patient groups response to ampreloxetine. The protocol for the pivotal studies stipulated an enrollment threshold of 40% MSA patients based on the hypothesis ampreloxetine would work the best in patients with MSA because they have more intact nerves on which ampreloxetine can exert its effect, relative to the other patient types in the study. The third, non-pivotal study (OAK), was designed to allow patients who completed REDWOOD to have continued access to ampreloxetine for up to three and half years.

In September 2021, we reported that the SEQUOIA Phase 3 clinical study did not meet its primary endpoint. Most treatment-related adverse events were mild or moderate in severity. Serious adverse events occurred in two patients on placebo and four on ampreloxetine and none of which were considered related to the study drug. No deaths were reported, and there was no signal for supine hypertension.

In April 2022, we reported that the REDWOOD Phase 3 clinical study did not meet its primary endpoint as the results were not statistically significant for the overall population of patients which included patients with PD, PAF, and MSA. The pre-specified subgroup analysis by disease type suggested that the average benefit seen in patients receiving ampreloxetine was largely driven by a benefit to MSA patients. The benefit to MSA patients in the study was observed in multiple endpoints including Orthostatic Hypotension Symptom Assessment Scale (“OHSA”) composite, Orthostatic Hypotension Daily Activities Scale (“OHDAS”) composite, Orthostatic Hypotension Questionnaire (“OHQ”) composite and OHSA #1. Throughout the study, there was no indication of worsening of supine hypertension among any of the patient sub-groups. Data suggest that ampreloxetine was well-tolerated and no new safety signals were identified among any of the patient sub-groups.

In June 2022, we held a Type C meeting with the FDA. From this meeting, we aligned on a path to an NDA filing with one additional Phase 3 clinical study in MSA patients with symptomatic nOH, using the OHSA composite score as the primary endpoint. We expect this additional Phase 3 study to begin enrolling in first quarter of 2023.

On July 13, 2022, in conjunction with the TRELEGY Royalty Transaction, Royalty Pharma agreed to invest up to \$40.0 million to advance the development of amprelosetine in MSA in exchange for unsecured low single-digit royalties. Royalty Pharma's \$40.0 million investment in amprelosetine includes a \$25.0 million upfront payment and an additional \$15.0 million payment upon the first regulatory approval of amprelosetine. We anticipate that the \$25.0 million upfront investment in amprelosetine will fund the majority of the Phase 3 study costs. In exchange, Royalty Pharma will receive future unsecured royalties of 2.5% on annual global net sales up to \$500.0 million and 4.5% on annual global net sales over \$500.0 million. If amprelosetine regulatory approval is not achieved or if amprelosetine sales are never recognized, the amounts invested by Royalty Pharma would not be repaid by us. On July 20, 2022, the TRELEGY Royalty Transaction was completed, and we received \$25.0 million in cash from Royalty Pharma related to amprelosetine royalty rights.

Out-Licensed Programs

Skin-selective Pan-JAK inhibitor Program

In December 2019, we entered into a global license agreement with Pfizer Inc. ("Pfizer") for our preclinical skin-selective, locally acting pan-JAK inhibitor program (the "Pfizer Agreement"). The compounds in this program are designed to target validated pro-inflammatory pathways and are specifically designed to possess skin-selective activity with minimal systemic exposure.

Under the Pfizer Agreement, Pfizer has an exclusive license to develop, manufacture and commercialize certain compounds for all uses other than gastrointestinal, ophthalmic, and respiratory applications. We received an upfront cash payment of \$10.0 million in 2019, and in March 2022, we received a \$2.5 million development milestone payment from Pfizer for the first patient dosed in a Phase 1 clinical trial of the skin-selective pan-JAK inhibitor program.

As of December 31, 2022, we are eligible to receive up to an additional \$237.5 million in development and sales milestone payments from Pfizer. In addition, we are eligible to receive a tiered royalty on worldwide net sales of any potential products under the license at percentage royalty rates ranging from middle single-digits to low double-digits.

Selective 5-HT4 Agonist (TD-8954)

TD-8954 is a selective 5-HT4 receptor agonist that was being developed for potential use in the treatment of gastrointestinal motility disorders. Pursuant to a License and Collaboration Agreement that we executed in June 2016 with Millennium Pharmaceuticals, Inc., an indirect wholly-owned subsidiary of Takeda Pharmaceutical Company Limited ("Takeda"), Takeda conducted a Phase 2 study of TD-8954 as a potential treatment for post-operative gastrointestinal dysfunction. The Phase 2 study did not meet its endpoints, and we mutually agreed with Takeda to discontinue further development of this program and the Collaboration Agreement in February 2023.

Economic Interests and Other Assets

Mid- and Long-Term Economic Interest in GSK-Partnered Respiratory Programs

On July 20, 2022, we completed the sale of all of our equity interests in TRC representing our 85% economic interest in the sales-based royalty rights on worldwide net sales of GSK's TRELEGY to Royalty Pharma.

From and after January 1, 2023, for any calendar year starting with the year ending December 31, 2023 and ending with the year December 31, 2026, upon certain milestone minimum royalty amounts for TRELEGY being met, Royalty Pharma is obligated to make certain cash payments to us (the "Milestone Payments"), which may total \$250.0 million in the aggregate. The first Milestone Payment of \$50.0 million will be triggered if Royalty Pharma receives \$240.0 million or more in royalty payments from GSK with respect to 2023 TRELEGY global net sales, which we

would expect to occur in the event TRELEGY global net sales reach approximately \$2.863 billion. Royalties payable from GSK to Royalty Pharma are upward-tiering from 6.5% to 10%.

Additionally, we will receive from Royalty Pharma 85% of the royalty payments on the Assigned Collaboration Products payable (a) for sales or other activities occurring on and after January 1, 2031 related to the Assigned Collaboration Products in the US, and (b) for sales or other activities occurring on and after July 1, 2029 related to the Assigned Collaboration Products outside of the US. US TRELEGY royalties payable to us by GSK are expected to end in late 2032 and ex-US royalties are expected to end in mid-2030s and are country specific.

TRELEGY (the combination of fluticasone furoate/umeclidinium bromide/vilanterol)

The following information regarding the TRELEGY program is based solely upon publicly available information and may not reflect the most recent developments under the programs.

TRELEGY provides the activity of an inhaled corticosteroid (FF) plus two bronchodilators (UMEC, a LAMA, and VI, a long-acting beta2 agonist, or LABA) in a single delivery device administered once-daily. TRELEGY is approved for use in the US, European Union (“EU”), and other countries for the long-term, once-daily, maintenance treatment of patients with COPD. Additionally, the FDA approved an sNDA for the use of TRELEGY to treat asthma in adults in September 2020 making TRELEGY the first once-daily single inhaler triple therapy for the treatment of both asthma and COPD in the US. GSK has obtained approval for the asthma indication in ten additional markets. TRELEGY is currently expected to generate global peak sales of \$3.5 billion annually according to consensus estimates. Over the past three years, TRELEGY has shown substantial growth, with global net sales increasing annually from \$661.4 million in 2019 to \$2.1 billion in 2022.

See “Risk Factors—We do not control the commercialization of TRELEGY; accordingly, our receipt of Milestone Payments and receipt of the value we currently anticipate from the Outer Years Royalty will depend on, among other factors, GSK’s ability to further commercialize TRELEGY” for additional information.

Velusetrag (TD-5108)

Velusetrag is an oral, investigational medicine developed for gastrointestinal motility disorders. It is a highly selective agonist with high intrinsic activity at the human 5-HT4 receptor.

On June 30, 2022, we entered into an Asset Purchase Agreement (“APA”) to sell all of our velusetrag assets to Alfasigma S.p.A. (“Alfasigma”). As consideration for the velusetrag sale, we received \$2.8 million in cash in July 2022, and we are eligible to receive future developmental and sales milestones totaling up to \$105.0 million. In the year ended December 31, 2022, we recognized a net gain of approximately \$2.7 million related to the sale of velusetrag.

Development Projects

Our development projects are prioritized by those with the highest expected potential value. Our enhanced focus remains on near-term value opportunities which include driving YUPELRI growth and conducting a new FDA-aligned ampreloxetine Phase 3 study. On February 27, 2023, we announced the decision to discontinue research activities including our inhaled JAK program. This includes nezulcitinib, a nebulized, lung-selective JAK inhibitor positioned for the treatment of acute and chronic lung diseases.

Our Strategy

Our focus is to deliver *medicines that make a difference*[®] in people’s lives. In pursuit of our purpose, we leverage decades of expertise, which has led to the development of FDA-approved YUPELRI[®] (revefenacin) inhalation solution indicated for the maintenance treatment of patients with COPD. Ampreloxetine, our late-stage investigational norepinephrine reuptake inhibitor in development for symptomatic nOH, has the potential to be a first in class therapy effective in treating a constellation of cardinal symptoms in MSA patients. We are committed to creating/driving shareholder value.

We follow these core guiding principles in our mission to drive value creation:

- Focus on insight and innovation;
- Outsource non-core activities;
- Create and foster an integrated environment; and
- Aggressively manage uncertainty.

We manage our pipeline with the goal of optimizing program value and allocation of resources. We employ multiple strategies for commercialization of our products. Our approach may involve retaining product rights and marketing a product independently in the US or we may partner a product to extend our commercial reach, to expand our geographic reach, and/or to manage the financial risk associated with the program. Alternatively, we may monetize or divest an asset that we designate as outside our core business, where we believe the program is optimized by leveraging partner capabilities and removing or limiting our research and development costs.

Manufacturing

We rely primarily on a network of third-party manufacturers, including contract manufacturing organizations, to produce the active pharmaceutical ingredients (“API”) and drug products required for our clinical trials and drug product. We believe that we and our partners have in-house expertise to manage this network of third-party manufacturers, and we believe that we will be able to continue to negotiate third-party manufacturing arrangements on commercially reasonable terms and that it will not be necessary for us to rely on internal manufacturing capacity in order to develop or, potentially, commercialize our products. However, if we are unable to obtain contract manufacturing or obtain such manufacturing on commercially reasonable terms, or if manufacturing is interrupted at one of our suppliers, whether due to regulatory or other reasons, we may not be able to develop our products or commercialize product as planned.

Any inability to acquire sufficient quantities of API or drug product in a timely manner from current or future sources could disrupt our research and development programs, the conduct of future clinical trials or our commercialization efforts. For more information, see the risk factor under the heading “*There is a single source of supply for a number of our product candidates and for YUPELRI, and our business will be harmed if any of these single-source manufacturers are not able to satisfy demand and alternative sources are not available*” of this Annual Report on Form 10-K.

Government Regulation

The development and commercialization of pharmaceutical products and our product candidates by us, our collaboration partners and licensees, and those commercializing products in which we have an economic interest, such as GSK, and our ongoing research are subject to extensive regulation by governmental authorities in the US and other countries. Before marketing in the US, any medicine must undergo rigorous preclinical studies and clinical studies and an extensive regulatory approval process implemented by the FDA under the Federal Food, Drug, and Cosmetic Act. Outside the US, the ability to market a product depends upon receiving a marketing authorization from the appropriate regulatory authorities which are subject to equally rigorous regulatory obligations. The requirements governing the conduct of clinical studies, marketing authorization, pricing and reimbursement vary widely from country to country. In any country, however, the commercialization of pharmaceutical products is permitted only if the appropriate regulatory authority is satisfied that we have presented adequate evidence of the safety, quality and efficacy of the product.

Before commencing clinical studies in humans in the US, we must submit to the FDA an investigational new drug application (“IND”) that includes, among other things, the general investigational plan and protocols for specific human studies and the results of preclinical studies. An IND will go into effect 30 days following its receipt by the FDA unless the FDA issues a clinical hold. Once clinical studies have begun under the IND, they are usually conducted in three phases and under FDA oversight. These phases generally include the following:

Phase 1. The product candidate is introduced into patients or healthy human volunteers and is tested for safety, dose tolerance and pharmacokinetics.

Phase 2. The product candidate is introduced into a limited patient population to assess the efficacy of the drug in specific, targeted indications, assess dosage tolerance and optimal dosage, and identify possible adverse effects and safety risks.

Phase 3. Phase 3 clinical trials are undertaken to further evaluate dosage, clinical efficacy, potency and safety in an expanded patient population at geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk/benefit profile of the product and provide an adequate basis for product labeling.

The results of product development, preclinical studies and clinical studies must be submitted to the FDA as part of an NDA. The NDA also must contain extensive manufacturing information, and under the Pediatric Research Equity Act (“PREA”), certain applications for approval must also include an assessment, generally based on clinical study data, of the safety and effectiveness of the subject drug in relevant pediatric populations. The submission of an NDA generally requires payment of a substantial user fee to the FDA under the Prescription Drug User Fee Act (“PDUFA”), subject to certain limited deferrals, waivers and reductions. FDA’s PDUFA performance goal is to review and act on 90 percent of priority new molecular entity (“NME”) NDA submissions within 6 months of the 60-day filing date, and to review and act on 90 percent of standard NME NDA submissions within 10 months of the 60-day filing date. The FDA may determine that a Risk Evaluation and Management Strategy (“REMS”) is necessary to ensure that the benefits of a product outweigh its risks. At the end of the review period, the FDA communicates either approval of the NDA or issues a complete response letter (“CRL”) listing the application’s deficiencies. The CRL may require additional testing or information, including additional pre-clinical or clinical data, for the FDA to reconsider the application. Even if such additional information and data are submitted, the FDA may decide that the NDA still does not meet the standards for approval. Data from clinical trials are not always conclusive and the FDA may interpret data differently than the sponsor. FDA approval of any application may include many delays or never be granted. If FDA grants approval, an approval letter authorizes commercial marketing of the product candidate with specific prescribing information for specific indications. Post-approval modifications to the drug, such as changes in indications, labeling, or manufacturing processes or facilities, may require a sponsor to develop additional data or conduct additional pre-clinical studies or clinical trials, to be submitted in a new or supplemental NDA, which would require FDA approval.

If an application is approved, drug products are subject to continuing regulation by the FDA, and the FDA may withdraw the product approval if compliance with post-marketing regulatory standards is not maintained or if safety or quality issues are identified after the product reaches the marketplace. In addition, the FDA may require post-marketing studies, sometimes referred to as Phase 4 studies, to monitor the safety and effectiveness of approved products, and may limit further marketing of the product based on the results of these post-marketing studies. The FDA has broad post-market regulatory and enforcement powers, including the ability to require changes to a product’s approved labeling, including the addition of new warnings and contraindications, or the implementation of other risk management measures, including distribution-related restrictions, if there are new safety information developments, suspend or delay issuance of approvals, seize products, withdraw approvals, enjoin violations, and initiate criminal prosecution.

If regulatory approval for a medicine is obtained, the clearance to market the product will be limited to those diseases and conditions approved by FDA and for which the medicine was shown to be effective, as demonstrated through clinical studies and specified in the medicine’s labeling. If this regulatory approval is obtained, a marketed medicine, its manufacturer and its manufacturing facilities are subject to continual review and periodic inspections by the FDA. The FDA ensures the quality of approved medicines, carefully monitoring manufacturers’ compliance with its current Good Manufacturing Practice (“cGMP”) regulations by conducting regular, periodic visits to re-inspect equipment, facilities, and processes following the initial approval of a product. Failure to comply with applicable cGMP requirements and conditions of product approval may lead the FDA to take enforcement actions or seek sanctions, including fines, issuance of warning letters, civil penalties, injunctions, suspension of manufacturing operations, operating restrictions, withdrawal of FDA approval, seizure or recall of products, and criminal prosecution. The cGMP regulations for drugs contain minimum requirements for the methods, facilities, and controls used in manufacturing, processing, and packaging of a medicine. The regulations are intended to make sure that a medicine is safe for use, and that it has the ingredients and strength it claims to have. Discovery of previously unknown problems with a medicine, manufacturer or facility may result in restrictions on the medicine or manufacturer, including fines, issuance of warning letters, civil penalties, injunctions, suspension of manufacturing operations, operating restrictions, costly recalls, withdrawal of FDA approval, and criminal prosecution.

Additionally, the FDA and other federal regulatory agencies closely regulate the marketing and promotion of drugs through, among other things, standards and regulations for direct-to-consumer advertising, advertising and promotion to healthcare professionals, communications regarding unapproved uses, industry-sponsored scientific and educational activities, and promotional activities involving the Internet. A product cannot be promoted before it is approved. After approval, product promotion can include only those claims relating to safety and effectiveness that are consistent with the labeling approved by the FDA. Healthcare providers are permitted to prescribe drugs for “off-label” uses - that is, uses not approved by the FDA and not described in the product’s labeling - because the FDA does not regulate the practice of medicine. However, FDA regulations impose restrictions on manufacturers’ communications regarding off-label uses. Broadly speaking, a manufacturer may not promote a drug for off-label use, but under certain conditions may engage in non-promotional, balanced, scientific communication regarding off-label use. Failure to comply with applicable FDA requirements and restrictions in this area may subject a company to adverse publicity and enforcement action by the FDA, the Department of Justice, or the Office of the Inspector General of the Department of Health and Human Services, as well as state authorities. This could subject a company to a range of penalties that could have a significant commercial impact, including civil and criminal fines and agreements that materially restrict the manner in which a company promotes or distributes a drug.

We, our collaboration partners and licensees are also subject to various laws and regulations regarding laboratory practices, the experimental use of animals and the use and disposal of hazardous or potentially hazardous substances in connection with our research. In each of these areas, as above, the FDA and other regulatory authorities have broad regulatory and enforcement powers, including the ability to suspend or delay issuance of approvals, seize products, withdraw approvals, enjoin violations, and initiate criminal prosecution, any one or more of which could have a material adverse effect upon our business, financial condition and results of operations.

Outside the US, the ability to market products will also depend on receiving marketing authorizations from the appropriate regulatory authorities. Risks similar to those associated with FDA approval described above exist with the regulatory approval processes in other countries.

United States Healthcare Reform

The Patient Protection and Affordable Care Act, as amended (the “Healthcare Reform Act”), substantially changed the way healthcare is financed by both governmental and private insurers, and impacts pricing and reimbursement of YUPELRI and the marketed drugs with respect to which we are entitled to royalty or similar payments, and related commercial operations. Certain provisions of the Healthcare Reform Act have been subject to judicial challenges as well as efforts to modify them or to alter their interpretation or implementation. We expect that the Healthcare Reform Act, its implementation, efforts to modify, or invalidate, the Healthcare Reform Act or portions thereof, or its implementation, and other healthcare reform measures that may be adopted in the future, could have a material adverse effect on our industry generally and on the ability of us, our collaboration partners, or those commercializing products with respect to which we have an economic interest or right to receive royalties to maintain or increase sales of our existing products or to successfully commercialize our product candidates, if approved. For more information, see the risk factor under the heading “*Changes in healthcare law and implementing regulations, including government restrictions on pricing and reimbursement, as well as healthcare policy and other healthcare payor cost-containment initiatives, may negatively impact us, our collaboration partners, or those commercializing products with respect to which we have an economic interest or right to receive royalties*” of this Annual Report on Form 10-K.

Pharmaceutical Pricing and Reimbursement

We participated in and had certain price reporting obligations under the Medicaid Drug Rebate and other programs and we remain responsible for data reported under those programs in past quarters, as described in greater detail under the risk factor “*If we failed to comply with our reporting and payment obligations under the Medicaid Drug Rebate program or other governmental pricing programs, we could be subject to additional reimbursement requirements, penalties, sanctions and fines, which could have a material adverse effect on our business, financial condition, results of operations and growth prospects*” of this Annual Report on Form 10-K.

Our ability, and the ability of our collaboration partners, licensees, or those commercializing products with respect to which we have an economic interest or right to receive royalties to commercialize our products successfully, and our ability to attract commercialization partners for our products, depends in significant part on the availability of adequate financial coverage and reimbursement from third-party payors, including, in the US, governmental payors such as the Medicare and Medicaid programs, managed care organizations, and private health insurers. The Inflation Reduction Act of 2022 (the “IRA”) establishes a new manufacturer discount program, Part B and Part D inflation rebates, and a Drug Price Negotiation Program under which the prices for Medicare units of certain high Medicare spend drugs without generic or biosimilar competition will be capped by reference to, among other things, a specified non-federal average manufacturer price, with negotiated prices set to take effect starting in 2026. Whether any of our products are selected for negotiation for a given year will depend on whether they are at least 7 years post-approval/licensure; whether they meet any of the exclusions from eligibility for selection for negotiation, such as the exclusion of certain orphan drugs; their expenditures under Medicare Part B or Part D during a statutorily specified period; and whether a generic of the product has been determined to have come to market. Our development candidate, ampreloxadine, could receive an orphan drug designation, which could shield it from being selected for negotiation. Our understanding of whether and when our products are likely to be subject to selection for negotiation could evolve as the Drug Price Negotiation Program is implemented. We further expect continued scrutiny on pricing from Congress, agencies, and other bodies with respect to drug pricing. The reimbursement environment is described in greater detail under the risk factor *“Changes in healthcare law and implementing regulations, including government restrictions on pricing and reimbursement, as well as healthcare policy and other healthcare payor cost-containment initiatives, may negatively impact us, our collaboration partners, or those commercializing products with respect to which we have an economic interest or right to receive royalties”* of this Annual Report on Form 10-K.

Fraud and Abuse Laws

Our interactions and arrangements with customers and third-party payors are subject to applicable US federal and state fraud and abuse laws and equivalent third country laws. These laws and the related risks are described in greater detail under the risk factor *“Our relationships with customers and third-party payors are subject to applicable anti-kickback, fraud and abuse, transparency and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, exclusion, contractual damages, reputational harm and diminished profits and future earnings”* of this Annual Report on Form 10-K.

Data Privacy and Protection

We are subject to laws and regulations that address privacy and data security. In the US, numerous federal and state laws and regulations, including state data breach notification laws, state health information and/or genetic privacy laws, and federal and state consumer protection laws (e.g., Section 5 of the Federal Trade Commission Act (“FTC Act”)), govern the collection, use, disclosure, and protection of health-related and other personal information. Similar obligations apply outside of the US. For example, the General Data Protection Regulation (“GDPR”) amplified existing data protection obligations in the EU. These laws and related risks are described in greater detail under the risk factor *“If we fail to comply with data protection laws and regulations, we could be subject to government enforcement actions (which could include civil or criminal penalties), private litigation and/or adverse publicity, which could negatively affect our operating results and business”* of this Annual Report on Form 10-K.

Patents and Proprietary Rights

We will be able to protect our technology from unauthorized use by third parties only to the extent that our technology is covered by valid and enforceable patents or is effectively maintained as trade secrets. Our success in the future will depend in part on obtaining patent protection for our product candidates. Accordingly, patents and other proprietary rights are essential elements of our business. Our policy is to seek patent protection in the US and selected foreign countries for novel technologies, including compositions of matter that are commercially important to the development of our business. For proprietary know-how that is not patentable, processes for which patents are difficult to enforce and any other elements of our drug discovery process that involve proprietary know-how and technology that is not covered by patent applications, we rely on trade secret protection and confidentiality agreements to protect our interests. We require all of our employees, consultants and advisors to enter into confidentiality agreements. Where it is necessary to share our proprietary information or data with outside parties, our policy is to make available only that

information and data required to accomplish the desired purpose and only pursuant to a duty of confidentiality on the part of those parties.

As of December 31, 2022, we owned a total of 235 issued US patents and 1,491 granted foreign patents, as well as additional pending US patent applications and foreign patent applications. The claims in these various patents and patent applications are typically directed to compositions of matter, including claims covering product candidates, crystalline forms, lead compounds and key intermediates, pharmaceutical compositions, methods of use and/or processes for making our compounds. Our patents and patent applications are also directed to other inventions made during the research and development process. In particular, our wholly-owned subsidiary Theravance Biopharma R&D IP, LLC owns the following US patents that are listed in the FDA *Approved Drug Products with Therapeutic Equivalence Evaluations* (Orange Book) for YUPELRI (revefenacin) inhalation solution: US Patent No. 7,288,657, expiring on December 23, 2025; US Patent No. 7,491,736, expiring March 10, 2025; US Patent No. 7,521,041, expiring March 10, 2025; US Patent No. 7,550,595, expiring March 10, 2025; US Patent No. 7,585,879, expiring March 10, 2025; US Patent No. 7,910,608, expiring March 10, 2025; US Patent No. 8,034,946, expiring March 10, 2025; US Patent No. 8,053,448, expiring March 10, 2025; US Patent No. 8,273,894, expiring March 10, 2025; US Patent No. 8,541,451, expiring August 25, 2031; US Patent No. 9,765,028, expiring July 14, 2030; US Patent No. 10,106,503, expiring March 10, 2025; US Patent No. 10,343,995, expiring March 10, 2025; US Patent No. 10,550,081, expiring July 14, 2030; US Patent No. 11,008,289, expiring July 14, 2030; US Patent No. 11,247,969, expiring March 10, 2025; and US Patent 11,484,531, expiring October 23, 2039 (each of the aforementioned expiration dates not including any patent term extensions that may be available under the Drug Price Competition and Patent Term Restoration Act of 1984). Thus, the last to expire patent currently listed in the Orange Book for YUPELRI (revefenacin) inhalation solution expires on October 23, 2039. On December 19, 2018, we filed patent term extension (“PTE”) applications in the US Patent and Trademark Office (“USPTO”) for US Patent Nos. 7,288,657 and 7,585,879. These PTE applications are currently pending and, if granted, we will be permitted to extend the term of one of these patents for the period determined by the USPTO.

Issued US and foreign patents generally expire 20 years after their filing date. The patent rights relating to YUPELRI (revefenacin) inhalation solution currently consist of issued US patents, pending US patent applications and counterpart patents and patent applications in a number of jurisdictions, including Europe.

Additionally, some of our patents and patent applications directed to products in development. Our patent rights relating to amprelosetine include an issued US composition of matter patent that expires in 2030 and an issued US method of treatment patent that expires in 2037 (in each case, not including any patent term extensions that may be available under the Drug Price Competition and Patent Term Restoration Act of 1984). Our patent rights relating to nezulcitinib currently include an issued US composition of matter patent that expires in 2039 (not including any patent term extensions that may be available under the Drug Price Competition and Patent Term Restoration Act of 1984). The patent portfolios for these development products include additional pending patent applications and granted patents in a number of jurisdictions. Nevertheless, issued patents can be challenged, narrowed, invalidated, or circumvented, which could limit our ability to stop competitors from marketing similar products and threaten our ability to commercialize our product candidates. Our patent position, similar to other companies in our industry, is generally uncertain and involves complex legal and factual questions. To maintain our proprietary position, we will need to obtain effective claims and enforce these claims once granted. It is possible that, before any of our products can be commercialized, any related patent may expire or remain in force only for a short period following commercialization, thereby reducing any advantage of the patent. Also, we do not know whether any of our patent applications will result in any issued patents or, if issued, whether the scope of the issued claims will be sufficient to protect our proprietary position.

Patent Term Restoration, Regulatory Exclusivities, and Hatch-Waxman Litigation

Depending upon the timing, duration, and specifics of FDA approval of our product candidates, some of our United States patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Act. The Hatch-Waxman Act permits a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product’s approval date. The patent term restoration period is generally one-half the time between the effective date of an IND and the submission date of an NDA, plus the time between the submission date of an NDA and the approval of that application, except that the period is reduced by any time during which the applicant failed to

exercise due diligence. Only one patent applicable to an approved drug is eligible for the extension, and the extension must be applied for prior to expiration of the patent and within 60 days of approval. The United States Patent and Trademark Office, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration.

The Hatch-Waxman Act also provides periods of regulatory exclusivity for products that would serve as a reference listed drug, or RLD, for an abbreviated new drug application, or ANDA, or application submitted under section 505(b)(2) of the FDCA, or 505(b)(2) application. If a product is a new chemical entity, or NCE — generally meaning that the active moiety has never before been approved in any drug — there is a period of five years from the product’s approval during which the FDA may not accept for filing any ANDA or 505(b)(2) application for a drug with the same active moiety. An ANDA or 505(b)(2) application may be submitted after four years, however, if the sponsor of the application makes a “Paragraph IV” certification stating that the relevant patents are invalid or will not be infringed by the applicant’s product.

A product, if not an NCE, or a new product use may instead qualify for a three-year period of exclusivity if the NDA contains new clinical data (other than bioavailability studies), derived from studies conducted by or for the sponsor, that were necessary for approval. In that instance, the exclusivity period does not preclude filing or review of an ANDA or 505(b)(2) application; rather, the FDA is precluded from granting final approval to the ANDA or 505(b)(2) application until three years after approval of the RLD. Additionally, the exclusivity applies only to the conditions of approval that required submission of the clinical data.

Once the FDA accepts for filing an ANDA or 505(b)(2) application containing a Paragraph IV certification, the applicant must within 20 days provide notice to the RLD NDA holder and patent owner that the application has been submitted and provide the factual and legal basis for the applicant’s assertion that the patent is invalid or not infringed. If the NDA holder or patent owner files suit against the ANDA or 505(b)(2) applicant for patent infringement within 45 days of receiving the Paragraph IV notice, the FDA is prohibited from approving the ANDA or 505(b)(2) application for a period of 30 months or the resolution of the underlying suit, whichever is earlier. If the RLD has NCE exclusivity and the notice is given and suit filed during the fifth year of exclusivity, the regulatory stay extends until 7.5 years after the RLD approval. The FDA may approve the proposed product before the expiration of the regulatory stay if a court finds the patent invalid or not infringed or if the court shortens the period because the parties have failed to cooperate in expediting the litigation.

During January 2023, we received notice from Accord Healthcare, Inc.; Cipla USA, Inc. and Cipla Limited; Eugia Pharma Specialties Ltd.; Lupin Inc.; Mankind Pharma Ltd.; Orbicular Pharmaceutical Technologies Private Limited; and Teva Pharmaceuticals, Inc. (collectively, the “generic companies”), that they have each filed with FDA an ANDA, for a generic version of YUPELRI. The notices from the generic companies each included a Paragraph IV certification with respect to five of our patents listed in FDA’s Orange Book for YUPELRI. The asserted patents relate generally to polymorphic forms of and a method of treatment using YUPELRI. In February 2023, we filed patent infringement suits against the generic companies in federal district courts, including the United States District Court for the District of New Jersey, the U.S. District Court for the District of Delaware, and the U.S. District Court for the Middle District of North Carolina. The complaint alleges that by filing the ANDAs, the generic companies have infringed five of our Orange Book listed patents. We are seeking a permanent injunction to prevent the generic companies from introducing a generic version of YUPELRI that would infringe our patents. As a result of this lawsuit, a stay of approval through May 2026 will be imposed by FDA on the generic companies’ ANDAs pending any adverse court decision. This litigation and the related risks are described in greater detail under the risk factor “*Litigation to protect or defend our intellectual property or third-party claims of intellectual property infringement would require us to divert resources and may prevent or delay our drug discovery and development efforts*” of this Annual Report on Form 10-K.

Competition

Our late-stage development programs, and the marketed products to which we are entitled to profit share revenue, royalty or similar payments are primarily focused on respiratory and neurological therapeutics. Our commercial infrastructure is focused primarily on the acute care setting. We expect that any medicines that we commercialize with our collaborative partners or on our own will compete with existing and future market-leading medicines.

Many of our competitors have substantially greater financial, technical and personnel resources than we have. In addition, many of these competitors have significantly greater commercial infrastructures than we have. Our ability to compete successfully will depend largely on our ability to leverage our experience in drug discovery, development and commercialization to:

- discover and develop medicines that are superior to other products in the market;
- attract and retain qualified scientific, clinical development and commercial personnel;
- obtain patent and/or other proprietary protection for our medicines and technologies;
- obtain required regulatory approvals;
- commercialize approved products; and
- successfully collaborate with pharmaceutical companies in the discovery, development and commercialization of new medicines.

YUPELRI (revefenacin) inhalation solution

YUPELRI competes predominately with the nebulized LAMA Lonhala[®] Magnair[®] (glycopyrrolate) dosed two times per day and with short acting nebulized bronchodilators that are dosed three to four times per day.

Amprelosetine norepinephrine reuptake inhibitor (“NRI”)

If successfully developed and approved for MSA patients with symptomatic nOH, amprelosetine would be expected to compete predominantly with droxidopa. Northera[®], marketed by Lundbeck NA Ltd., is the branded version of droxidopa and became generic in 2021. To a lesser extent, midodrine and fludrocortisone are considered to be competitors and are also currently available as generic medications.

TRELEGY (the combination of fluticasone furoate/umeclidinium bromide/vilanterol)

For treatment of COPD, TRELEGY competes in all major markets with AstraZeneca’s Breztri[®] Aerosphere[®] (budesonide/glycopyrronium/formoterol fumarate, dosed twice per day). Trimbow (beclometasone dipropionate/formoterol fumarate/glycopyrronium bromide, dosed twice per day) from Chiesi Farmaceutici is an additional COPD competitor in Europe.

For treatment of asthma, TRELEGY is the only triple therapy approved in the US and competes in Japan with Novartis’s Enerzair[®] Breezhaler[®] (indacaterol acetate, glycopyrronium bromide and mometasone furoate, dosed once daily).

In both COPD and asthma, TRELEGY also competes with “open triple” therapy which can be accomplished by the concurrent use of two or three products. An example of such use includes a LABA/ICS combination such as AstraZeneca’s Symbicort and a LAMA such as Boehringer Ingelheim’s Spiriva.

Human Capital

As of December 31, 2022, we had 111 employees. Of these employees, 103 were in the US, and 8 were non-US.

Culture and Employee Engagement

We consider our employee relations first-rate and strive to provide a culture of purpose, engagement, and learning. Theravance has a strong value proposition anchored in our Core Values—*We Think it Through, We Find a Way, We Get it Done, and We Win Together*. We strive to live these values across the Company every day, integrating them into everything from our interview, hiring, and onboarding processes to our *PULSE* performance process, total rewards, and recognition programs. In addition to valuing professional qualifications, we emphasize the importance of character and integrity, fostering a culture of empowerment where employees have ownership in business outcomes.

Reflected in our Core Values are behaviors that keep our people engaged and working collaboratively. Our employees are encouraged to ask questions, make suggestions, and provide input through many forms of corporate communication, such as an open-door policy, all-employee meetings, an anonymous online suggestion box, and an employee *PULSE* survey. Given the importance of engagement in a hybrid-remote work environment, the Company has put together a cross-functional Engagement Committee that designs and implements engagement initiatives for all employees across all levels and location. These initiatives include all employee Hub events, meeting free days, employee spotlights, and virtual social events, in addition to executing Company communication strategies.

Our employee *PULSE* survey is designed to assist us in measuring overall employee engagement, and we consistently achieve participation rates between 85% to 100%. 2022 survey scores averaged an overall score of 4.1 on a scale of 1 (Strongly Disagree) through 5 (Strongly Agree), and we received 100% participation from employees. These survey results provide important insight into organizational success and opportunity, allowing potential variation in overall satisfaction to be identified and addressed as we continue to move forward.

We have significant retention incentives in place post-Restructuring. These include a special incentive compensation program of both long- and short-term offerings and an engagement plan that connects the importance of achieving our core purpose to the strength of our connections and team-building. Our reimagined operating model celebrates the increased flexibility and productivity many employees reported during remote work while allowing broad access to office workstations and the in-person collaborations that elevate our culture and give us our competitive advantage.

We expect all employees to observe the highest levels of business ethics while delivering the highest levels of performance. These expectations are outlined and reinforced in various documents and forms of communication within and across our Company. The Company encourages employees to speak up and raise questions and concerns promptly about any situation that may violate our Code of Business Conduct, our Core Values, or our policies. It benefits the entire Company for employees to raise concerns so the Company may consider them carefully and address them appropriately. We seek to promote an environment that fosters honest communications about matters of conduct related to our business activities, whether that conduct occurs within the Company, involves one of the Company's contractors, suppliers, consultants, clients, or any other party with a business relationship with the Company. We work diligently to make clear that management is prepared to address any reported violations and ensure that it is known that any form of retaliation is strictly prohibited. In addition, we have an easily accessible hotline available to employees wishing to report complaints anonymously.

Diversity, Equity, and Inclusion

As an equal-opportunity employer, we strive to build and maintain a culture of diversity, equity, and inclusion through both our business and human resources practices and policies. We work to eliminate discrimination and harassment in all its forms, including related to color, race, sex or gender, sexual orientation, gender identity, age, pregnancy, caste, disability, ethnicity, national origin, ancestry, religious beliefs, veteran status, uniformed service member status, or physical or mental disability. We strive to build and foster a culture where all employees feel empowered to be their authentic selves. Our Diversity, Equity & Inclusion Council and Women's Leadership Network are Company-sponsored, employee-led groups that aim to improve attraction, retention, development, inclusion, and engagement of a diverse and global workforce. For the benefit of our employees, patients, and community, we must celebrate, encourage, and support similarities and differences to drive innovation.

Talent, Development, and Total Rewards

We believe that our talent strategy of providing exciting career growth and development opportunities, recognizing and rewarding performance, providing competitive compensation and benefits assists us in attracting and retaining the best talent. We believe we are successful in our retention efforts because we provide challenging work assignments, cross-functional teamwork experiences, and career progression supported by new skill-building. We invest in employee learning and development by identifying and providing training and development programs, speakers, tuition reimbursement, and cross-training in areas of interest beyond hired role.

We work diligently to attract the best talent from a diverse range of sources to meet the current and future demands of our business. We offer a competitive total rewards package that supports our business strategy to attract, retain and reward our employees in a highly competitive market. Our employees are provided with a strong base salary, cash bonus opportunities, equity incentives, health and wellness benefits, and programs. We regularly evaluate our compensation programs with an independent consultant and utilize industry benchmarking. In addition, we provide a variety of programs and services that meet our employees' needs and encourage work-life balance. These services include competitive and affordable healthcare and additional insurance benefits for both full-time and part-time employees, including eligible dependents. We also match contributions to tax-qualified defined contribution savings (401k) plans, offer an employee share purchase plan ("ESPP"), and provide training and development programs designed to improve workplace performance while supporting flexible, hybrid-remote working.

Understanding the importance of goal setting and ongoing career development conversations, we require managers and employees to play an active role in the *PULSE* performance management process at monthly, quarterly, and annual frequencies. *PULSE* is designed to increase clarity and accountability for roles and responsibilities, strengthen communication, and build trust, all while championing personal and professional growth, learning, and success.

Great teamwork is a critical foundation for Theravance Biopharma. The *TheraStars Rewards and Recognition Program* helps us maintain a culture of recognition and teamwork by offering various options for our employees and managers to recognize and reward colleagues across the organization. In 2022, 96.5% of our employee population were active registered users, with each user averaging 3.4 awards sent in recognition. These moments of celebration establish, reinforce, and maintain our sense of community and teamwork so critical in our ability to achieve our core purpose.

Workplace Safety and COVID-19

Workplace safety is always a priority for Theravance Biopharma. To maintain a safe and healthy workplace, we have implemented initiatives, procedures, and policies designed to address risk and stay compliant with relevant national and international health and safety standards.

In response to COVID-19, our COVID Task Force continues to lead the Company through the evolution of a pandemic with a continued focus on employee wellness and safety, policy updates based on Centers for Disease Control and Prevention ("CDC"), county, federal and state guidelines, and ongoing employee communication. As part of this evolution, we have moved to a strategically flexible workforce, encouraging a hybrid-remote model, allowing us to reimagine how we work, and propelling us to emerge as a stronger, more nimble company.

Financial Information About Geographic Areas

Information on our total revenues attributed to geographic areas and customers who represented at least 10% of our total revenues is included in "Item 8, Note 3. Segment Information," to our consolidated financial statements in this Annual Report on Form 10-K.

Corporation Information

Theravance Biopharma was incorporated in the Cayman Islands in July 2013 under the name Theravance Biopharma, Inc. Theravance Biopharma began operating as an independent, publicly-traded company on June 2, 2014 following a spin-off from Innoviva, 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. While Theravance Biopharma is incorporated under Cayman Island law, the Company became an Irish tax resident effective July 1, 2015. The office address of our wholly-owned Irish operating subsidiary, Theravance Biopharma Ireland Limited, is The Lennox Building, Suite 101, 50 Richmond Street South, Saint Kevin's, Dublin, Ireland.

Available Information

Our Internet address is www.theravance.com. Our investor relations website is located at <https://investor.theravance.com>. We make available free of charge on our investor relations website under "SEC Filings"

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our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, our directors' and officers' Section 16 Reports and any amendments to those reports as soon as reasonably practicable after filing or furnishing such materials to the US Securities and Exchange Commission ("SEC"). The SEC maintains a website that contains the materials we file with or furnish to the SEC at www.sec.gov. Our current Code of Business Conduct, Corporate Governance Guidelines, Articles of Association, Board of Director Committee Charters, and other materials, including amendments thereto, may also be found on our investor relations website under "Corporate Governance." The information found on our website is not part of this or any other report that we file with or furnish to the SEC. Theravance Biopharma and the Theravance Biopharma logo are registered trademarks of the Theravance Biopharma group of companies. Trademarks, tradenames or service marks of other companies appearing in this report are the property of their respective owners.

ITEM 1A. RISK FACTORS

The risks described below and elsewhere in this Annual Report on Form 10-K and in our other public filings with the SEC are not the only risks facing the Company. Additional risks and uncertainties not currently known to us or that we currently deem to be not material also may materially adversely affect our business, financial condition and/or operating results.

Summary of Principal Risks Associated with Theravance Biopharma's Business

- We may never achieve or sustain profitability from our operations over the long term;
- If YUPELRI does not continue to be accepted by physicians, patients, third-party payors, or the medical community in general, we may not receive significant additional revenues from sales of this product;
- We face risks related to health epidemics, including the recent COVID-19 pandemic, which could have a material adverse effect on our business and results of operations;
- Any delay in commencing or completing clinical studies for product candidates and any adverse results from clinical or non-clinical studies or regulatory obstacles product candidates may face, would harm our business and the price of our securities could fall;
- If our product candidates are not approved by regulatory authorities, including the FDA, we will be unable to commercialize them;
- If our partners do not satisfy their obligations under our agreements with them, or if they terminate our partnerships with them, we may not be able to develop or commercialize our partnered product candidates as planned;
- Our ongoing drug development efforts might not generate additional successful product candidates or approvable drugs;
- Our capital return program and our restructuring activities may not provide the benefits we anticipate;
- We do not control the commercialization of TRELEGY; accordingly our receipt of milestone payments and receipt of the value we currently anticipate from the outer years royalty will depend on, among other factors, GSK's ability to further commercialize TRELEGY; and
- If there are any adverse developments or perceived adverse developments with respect to TRELEGY, we may not receive milestone payments or the revenue we expect from the outer years royalty, which would harm our business and could cause the price of our securities to fall.

RISKS RELATING TO THE COMPANY

We may never achieve or sustain profitability.

First as part of Innoviva, Inc., and since June 2, 2014 as Theravance Biopharma, we have been engaged in discovery and development of compounds and product candidates since mid-1997. We are currently approaching non-GAAP profitability; however, we may never generate sufficient cash or revenue to achieve sustainable cash flow or profitability from our operations. Although we recognized \$872.1 million of net income for year ended December 31, 2022, which results were largely driven by net income from discontinued operations following the one-time TRELEGY Royalty Transaction, we recognized \$92.8 million in net losses from continuing operations during the same period. Despite the fact that we are approaching non-GAAP profitability, we may continue to incur net losses over the next several years due to expenditures relating to our continuing drug discovery efforts and preclinical and clinical

development of our current product candidates. Additionally, during the years ended December 31, 2021 and 2020, we recognized net losses of \$199.4 million and \$278.0 million, respectively, which are reflected in the shareholders' equity (deficit) on our consolidated balance sheets. We reflect the cumulative net loss incurred after June 2, 2014, the effective date of our spin-off from Innoviva, Inc. (the "Spin-Off"), as accumulated deficit on our consolidated balance sheets, which was \$853.9 million as of December 31, 2022. To the extent we advance our product candidates into and through later stage clinical studies without a partner, we may incur substantial expenses. In addition, we may invest strategically in our research efforts to continue to grow our development pipeline. While our YUPELRI operations have been profitable on a brand basis since the third quarter of 2020, we will continue to incur costs and expenses associated with the commercialization of YUPELRI in the United States ("US"), including the maintenance of an independent sales and marketing organization with appropriate technical expertise, a medical affairs presence and consultant support, and post-marketing studies. Our commitment of resources to the continued development of ampreloxetine and YUPELRI will require ongoing funding. Our operating expenses also will increase if, among other things:

- our earlier stage potential products move into and through later-stage clinical development, which is generally more expensive than early stage development;
- we pursue clinical development of our potential or current products in new indications;
- our clinical trials become more complicated or need to be extended due to the COVID-19 pandemic or other external factors;
- we increase the number of patents we are prosecuting or maintaining or otherwise expend additional resources on patent prosecution or defense or patent litigation; or
- we acquire or in-license additional technologies, product candidates, products or businesses.

While we are generating revenues and income from sales of YUPELRI, our economic and royalty interests, and payments under collaboration agreements, we may not generate significant profit in the near future. We could fail to meet our revenue expectations. If we or our collaborators or licensees are not able to successfully develop additional products, obtain required regulatory approvals, manufacture products at an acceptable cost or with appropriate quality, or successfully market and sell such products with desired margins, our expenses will continue to exceed any revenues we may receive in the future.

Our new strategic business plan is subject to significant uncertainties and risks as a result of, among other factors, the COVID-19 pandemic, the sales levels of our approved products, unplanned expenses, cash receipts being lower than anticipated, clinical program outcomes, expenses being higher than anticipated, whether, when and on what terms we are able to enter into new collaboration arrangements, and the need to satisfy contingent liabilities. Our ability to reach, and the time required to reach, and then to sustain, profitability are uncertain. As a result, we may incur substantial losses in the future. Failure to become and remain profitable would adversely affect the price of our securities and our ability to continue operations as planned.

If YUPELRI's acceptance by physicians, patients, third-party payors, or the medical community in general does not continue to grow, we may not receive significant additional revenues from sales of this product.

The commercial success of YUPELRI depends upon its acceptance by physicians, patients, third-party payors and the medical community in general. YUPELRI's acceptance by these parties may not continue to grow as we have planned. YUPELRI competes predominantly nebulized LAMA Lonhala® Magnair® (glycopyrrolate) dosed two times per day and with short acting nebulized bronchodilators that are dosed three to four times per day. We have seen increased volatility in sales of YUPELRI coinciding with the suspension of in-person sales calls, having less access to physicians and other healthcare providers and the progression of the COVID-19 pandemic and, if physicians, patients, third-party payors, or the medical community in general believe that nebulized therapy presents a risk of further spreading COVID-19 or that YUPELRI is otherwise not a preferred treatment option for those with COPD, we may see declines, or fail to grow. If YUPELRI's acceptance does not continue to grow, or declines from previous levels, our business and financial results could be materially harmed.

In collaboration with Viatris, we are responsible for marketing and sales of YUPELRI in the US, which subjects us to certain risks.

We currently maintain a sales force in the US to support our co-promotion obligations for YUPELRI under our agreement with Viatris. The risks of fulfilling our US co-promotion obligations to Viatris include:

- costs and expenses associated with maintaining an independent sales and marketing organization with appropriate technical expertise and supporting infrastructure, including third-party vendor logistics and consultant support, which costs and expenses could, depending on the scope and method of the marketing effort, exceed any product revenue;
- our ability to retain effective sales and marketing personnel and medical science liaisons in the US;
- the ability of our sales and marketing personnel to obtain access to, and educate adequate numbers of prescribers about prescribing YUPELRI, in appropriate clinical situations; and
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines.

If we are not successful in maintaining a sales and marketing organization with appropriate experience, technical expertise, supporting infrastructure and the ability to obtain access to and educate adequate numbers of physicians about prescribing YUPELRI in appropriate clinical situations, we will have difficulty maintaining effective commercialization of YUPELRI in the hospital setting, which would adversely affect our business and financial results, and the condition and the price of our securities could fall.

Any delay in commencing or completing clinical studies for product candidates or product and any adverse results from clinical or non-clinical studies or regulatory obstacles product candidates or product may face, would harm our business and the price of our securities could fall.

Each of our product candidates must undergo extensive non-clinical and clinical studies as a condition to regulatory approval. Clinical studies are expensive, take many years to complete and study results may lead to delays in further studies, new requirements for conducting future studies or decisions to terminate programs. In addition, we have voluntarily undertaken post-marketing studies with respect to YUPELRI. The commencement and completion of clinical studies for our product candidates, including ampreloxtine, and product may be delayed and programs may be terminated due to many factors, including, but not limited to:

- lack of effectiveness of product candidates during clinical studies;
- adverse events, safety issues or side effects (or perceived adverse developments or results) relating to the product candidates or their formulation into medicines;
- unfavorable study data or unfavorable interpretations of data among the FDA and foreign regulatory authorities;
- insufficient capital to continue our development programs;
- inability to enter into partnering arrangements relating to the development and commercialization of our programs and product candidates or partner decisions not to maintain a partnership with us;
- delays in patient enrollment and variability in the number and types of patients available for clinical studies;
- the need to sequence clinical studies as opposed to conducting them concomitantly in order to conserve resources;

- our inability or the inability of our collaborators or licensees to manufacture or obtain from third parties materials sufficient for use in non-clinical and clinical studies;
- governmental or regulatory delays or suspensions of the conduct of the clinical trials and changes in regulatory requirements, policy and guidelines;
- challenges related to the COVID-19 pandemic, including with recruitment and/or progressing patients through studies;
- failure of our partners to advance our product candidates through clinical development;
- difficulty in maintaining contact with patients after treatment, resulting in incomplete data;
- varying regulatory requirements or interpretations of data among the FDA and foreign regulatory authorities; and
- a disturbance where we or our collaborative partners are enrolling patients in clinical trials, such as a pandemic, terrorist activities or war, political unrest or a natural disaster.

Any adverse developments or results or perceived adverse developments or results with respect to our clinical programs including, without limitation, any delays in development in our programs, any halting of development in our programs, any difficulties or delays encountered with regard to the FDA or other third country regulatory authorities with respect to our programs, or any indication from clinical or non-clinical studies that the compounds in our programs are not safe, efficacious or sufficiently differentiated from those of our competitors, could have a material adverse effect on our business and cause the price of our securities to fall. For example, in August 2021 we announced that our Phase 2b study of izencitinib in ulcerative colitis did not meet its primary endpoint and in September 2021 we announced that our four-week SEQUOIA Phase 3 study for amprelosetine did not meet its primary endpoint. There can be no assurance that our Phase 3 study for amprelosetine will be completed on the timeline we expect or at all.

If our product candidates are not approved by regulatory authorities, including the FDA, we will be unable to commercialize them.

The FDA must approve any new medicine before it can be marketed and sold in the US. We will not obtain this approval for a product candidate, such as amprelosetine, unless and until the FDA approves an NDA. We, or our collaborative partners, must provide the FDA and similar foreign regulatory authorities with data from preclinical and clinical studies that demonstrate that our product candidates comply with the regulatory requirements for the quality of medicinal products and are safe and effective for a defined indication before they can be approved for commercial distribution. FDA or foreign regulatory authorities may disagree with our trial design and our interpretation of data from preclinical studies and clinical trials. The processes by which regulatory approvals are obtained from the FDA and foreign regulatory authorities to market and sell a new product are complex, require a number of years, depend upon the type, complexity and novelty of the product candidate and involve the expenditure of substantial resources for research, development and testing. The FDA has substantial discretion in the drug approval process and may require us to conduct additional non-clinical and clinical testing or to perform post-marketing studies. Further, the implementation of new laws and regulations, and revisions to FDA clinical trial design guidance may lead to increased uncertainty regarding the approvability of new drugs. See the risk factor entitled “*Any delay in commencing or completing clinical studies for product candidates or product and any adverse results from clinical or non-clinical studies or regulatory obstacles product candidates or product may face, would harm our business and the price of our securities could fall*” above for additional information. The shifting environment surrounding the collective response to the COVID-19 pandemic has led to and may lead to additional guidance from US and foreign regulatory agencies with respect to numerous matters regarding the conduct of clinical trials in general and the development of COVID-19 related therapies, which is subject to the risk of further change, misinterpretation or non-compliance due to the changing regulatory landscape. In addition, the FDA has additional standards for approval of new drugs, including recommended advisory committee meetings for certain new molecular entities, and formal risk evaluation and mitigation requirements at the FDA’s discretion. Even if

we receive regulatory approval of a product, the approval may limit the indicated uses for which the drug may be marketed or impose significant restrictions or limitations on the use and/or distribution of such product.

In addition, in order to market our medicines in foreign jurisdictions, we or our collaborative partners must obtain separate regulatory approvals in each country. The approval procedure varies among countries and can involve additional testing, and the time required to obtain approval may differ from that required to obtain FDA approval. Approval by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other foreign countries or by the FDA. Conversely, failure to obtain approval in one or more jurisdictions may make approval in other jurisdictions more difficult. These laws, regulations, additional requirements and changes in interpretation could cause non-approval or further delays in the FDA's or other regulatory authorities' review and approval of our and our collaborative partners' product candidates, which would materially harm our business and financial condition and could cause the price of our securities to fall.

If our partners do not satisfy their obligations under our agreements with them, or if they terminate our partnerships with us, we may not be able to develop or commercialize our partnered product candidates as planned.

In January 2015, we entered into a collaboration agreement with Viartis for the development and commercialization of a nebulized formulation of our LAMA revefenacin, including YUPELRI. Under the terms of the agreement, we and Viartis will co-develop nebulized revefenacin, including YUPELRI, for COPD and other respiratory diseases. In December 2019, we entered into a License Agreement with Pfizer Inc. ("Pfizer"). Under the license agreement, we provide Pfizer with an exclusive global license to develop, manufacture and commercialize compounds from our preclinical program for skin-targeted, locally-acting pan-Janus kinase (JAK) inhibitors that can be rapidly metabolized. In connection with these agreements, these parties have certain rights regarding the use of patents and technology with respect to the compounds in our development programs, including development and marketing rights.

Our partners may not fulfill their obligations under these agreements, and, in certain circumstances, they or we may terminate our partnership with them. In either event, we may be unable to assume the development and commercialization responsibilities covered by the agreements or enter into alternative arrangements with a third-party to develop and commercialize such product candidates. If a partner elected to promote alternative products and product candidates such as its own products and product candidates in preference to those licensed from us, does not devote an adequate amount of time and resources to our product candidates or is otherwise unsuccessful in its efforts with respect to our products or product candidates, the development and commercialization of product candidates covered by the agreements could be delayed or terminated, and future payments to us could be delayed, reduced or eliminated and our business and financial condition could be materially and adversely affected. Accordingly, our ability to receive any revenue from the product candidates covered by these agreements is dependent on the efforts of our partners. If a partner terminates or breaches its agreements with us, otherwise fails to complete its obligations in a timely manner or alleges that we have breached our contractual obligations under these agreements, the chances of successfully developing or commercializing product candidates under the collaboration could be materially and adversely affected. In addition, effective collaboration with a partner requires coordination to achieve complex and detail-intensive goals between entities that potentially have different priorities, capabilities and processes and successful navigation of the challenges such coordination entails. We could also become involved in disputes with a partner, which could lead to delays in or termination of our development and commercialization programs and time-consuming and expensive litigation or arbitration. Furthermore, termination of an agreement by a partner could have an adverse effect on the price of our ordinary shares or other securities even if not material to our business.

Our ongoing drug development efforts might not generate additional successful product candidates or approvable drugs.

Our compounds in clinical trials and our future leads for potential drug compounds are subject to the risks and failures inherent in the development of pharmaceutical products. These risks include, but are not limited to, the inherent difficulty in selecting the right drug and drug target and avoiding unwanted side effects, as well as unanticipated problems relating to product development, testing, enrollment, obtaining regulatory approvals, maintaining regulatory compliance, manufacturing, competition and costs and expenses that may exceed current estimates.

Clinical studies involving our product candidates may reveal that those candidates are ineffective, inferior to existing approved medicines, unacceptably toxic, or that they have other unacceptable side effects. In addition, the results of preclinical studies do not necessarily predict clinical success, and larger and later-stage clinical studies may not produce the same results as earlier-stage clinical studies. For example, despite promising early stage studies, we previously announced that two late stage clinical programs failed to meet their primary endpoints. There can be no assurance that our Phase 3 study for amprelosetine will meet its primary endpoint, and developments and results from that study may be adverse or may be perceived to be adverse.

Frequently, product candidates that have shown promising results in early preclinical or clinical studies have subsequently suffered significant setbacks or failed in later non-clinical or clinical studies. In some instances, there can be significant variability in safety and/or efficacy results between different trials of the same product candidate due to numerous factors, including changes in trial protocols, differences in size and type of the patient populations, varying levels of adherence to the dosing regimen and other trial protocols and the rate of dropout among clinical trial participants. Clinical and non-clinical studies of product candidates often reveal that it is not possible or practical to continue development efforts for these product candidates. In addition, the design of a clinical trial can determine whether its results will support regulatory approval and flaws in the design of a clinical trial may not become apparent until the clinical trial is well underway or completed. As our clinical studies for one of our current product candidates suggested that our product candidate was not efficacious in the indications we were investigating, we choose to cease development of this product candidate and are currently winding down our development programs for this product candidate. In addition, our product candidates may have undesirable side effects or other unexpected characteristics that could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restricted label or the delay or denial of regulatory approval by regulatory authorities.

We face substantial competition from companies with more resources and experience than we have, which may result in others discovering, developing, receiving approval for or commercializing products before or more successfully than we do.

Our ability to succeed in the future depends on our ability to demonstrate and maintain a competitive advantage with respect to our approach to the discovery, development and commercialization of medicines. Our objective is to discover, develop and commercialize new small molecule medicines with superior efficacy, convenience, tolerability and/or safety using our proprietary insights, where applicable. We expect that any medicines that we commercialize with or without our collaborative partners will compete with existing or future market-leading medicines.

Many of our current and potential competitors have substantially greater financial, technical and personnel resources than we have. In addition, many of these competitors have significantly greater commercial infrastructures than we have. Our ability to compete successfully will depend largely on our ability to leverage our experience in drug discovery, development and commercialization to:

- discover and develop medicines that are superior to other products in the market;
- attract and retain qualified personnel;
- obtain and enforce patent and/or other proprietary protection for our medicines and technologies;
- conduct effective clinical trials and obtain required regulatory approvals;
- develop and effectively implement commercialization strategies, with or without collaborative partners; and
- successfully collaborate with pharmaceutical companies in the discovery, development and commercialization of new medicines.

Pharmaceutical companies, including companies with which we collaborate, may invest heavily to quickly discover and develop or in-license novel compounds that could make our product candidates obsolete. Accordingly, our competitors may succeed in obtaining patent protection, receiving FDA or equivalent regulatory approval outside the US

or discovering, developing and commercializing medicines before we do. Other companies are engaged in the discovery of medicines that would compete with the product candidates that we are developing or our existing product.

Any new medicine that competes with a generic or proprietary market leading medicine must demonstrate compelling advantages in efficacy, convenience, tolerability and/or safety in order to overcome severe price competition and be commercially successful. For example, YUPELRI competes predominantly with the nebulized LAMA Lonhala[®] Magnair[®] (glycopyrrolate) dosed two times per day and with short acting nebulized bronchodilators that are dosed three to four times per day. If we are not able to compete effectively against our current and future competitors, our business will not grow, our financial condition and operations will suffer and the price of our securities could fall.

There is a single source of supply for a number of our product candidates and for YUPELRI, and our business will be harmed if any of these single-source manufacturers are not able to satisfy demand and alternative sources are not available.

We have limited in-house production capabilities for preclinical and clinical study purposes and depend primarily on a number of third-party Active Pharmaceutical Ingredient (“API”) and drug product manufacturers. We may not have long-term agreements with these third parties and our agreements with these parties may be terminable at will by either party at any time. In addition, there is a single supplier of YUPELRI API and a single supplier of YUPELRI drug product. If, for any reason, any of these third-party manufacturers are unable or unwilling to perform, or if their performance does not meet regulatory requirements, alternative manufacturers may not be available or may not be available on acceptable terms. Any inability to acquire sufficient quantities of API and drug product in a timely manner from these third parties could delay preclinical and clinical studies, prevent us from developing our product candidates in a cost-effective manner or on a timely basis or adversely impact the commercialization of YUPELRI. In addition, manufacturers of our API and drug product are subject to the FDA’s current Good Manufacturing Practice (“cGMP”) regulations and similar foreign standards and we do not have control over compliance with these regulations by our manufacturers.

Our manufacturing strategy presents the following additional risks:

- because of the complex nature of many of our compounds, our manufacturers may not be able to successfully manufacture our APIs and/or drug products in a cost-effective and/or timely manner and changing manufacturers for our APIs or drug products could involve lengthy technology transfer, validation and regulatory qualification activities for the new manufacturer;
- the processes required to manufacture certain of our APIs and drug products are specialized and available only from a limited number of third-party manufacturers;
- some of the manufacturing processes for our APIs and drug products have not been scaled to quantities needed for continued clinical studies or commercial sales, and delays in scale-up to higher quantities could delay clinical studies, regulatory submissions and commercialization of our product candidates; and
- because some of the third-party manufacturers are located outside of the US, there may be difficulties in importing our APIs and drug products or their components into the US as a result of, among other things, FDA import inspections, incomplete or inaccurate import documentation or defective packaging.

We are subject to extensive and ongoing regulation, oversight and other requirements by the FDA and failure to comply with these regulations and requirements may subject us to penalties that may adversely affect our financial condition or our ability to commercialize any approved products.

Prescription drug advertising and promotion are closely scrutinized by the FDA, including substantiation of promotional claims, disclosure of risks and safety information, and the use of themes and imagery in advertising and promotional materials. As with all companies selling and marketing products regulated by the FDA in the US, we are prohibited from promoting any uses of an approved product, such as YUPELRI, that are outside the scope of those uses that have been expressly approved by the FDA as safe and effective on the product’s label.

The manufacturing, labeling, packaging, adverse event reporting, advertising, promotion and recordkeeping for an approved product remain subject to extensive and ongoing regulatory requirements. If we become aware of previously unknown problems with an approved product in the US or overseas or at a contract manufacturer's facilities, a regulatory authority may impose restrictions on the product, the contract manufacturers or on us, including requiring us to reformulate the product, conduct additional clinical studies, change the labeling of the product, withdraw the product from the market or require the contract manufacturer to implement changes to its facilities.

We are also subject to regulation by regional, national, state and local agencies, including the Department of Justice, the Federal Trade Commission, the Office of Inspector General of the US Department of Health and Human Services ("OIG") and other regulatory bodies with respect to any approved product, such as YUPELRI, as well as governmental authorities in those foreign countries in which any product is approved for commercialization. The Federal Food, Drug, and Cosmetic Act, the Public Health Service Act and other federal and state statutes and regulations govern to varying degrees the research, development, manufacturing and commercial activities relating to prescription pharmaceutical products, including non-clinical and clinical testing, approval, production, labeling, sale, distribution, import, export, post-market surveillance, advertising, dissemination of information and promotion. If we or any third parties that provide these services for us are unable to comply, we may be subject to regulatory or civil actions or penalties that could significantly and adversely affect our business.

Regulatory approval for our product candidates, if any, may include similar or other limitations on the indicated uses for which we can market our medicines or the patient population that may utilize our medicines, which may limit the market for our medicines or put us at a competitive disadvantage relative to alternative therapies.

Failure to satisfy required post-approval requirements and/or commitments may have implications for a product's approval and may carry civil monetary penalties. Any failure to maintain regulatory approval will materially limit the ability to commercialize a product or any future product candidates and if we fail to comply with FDA regulations and requirements, the FDA could potentially take a number of enforcement actions against us, including the issuance of untitled letters, warning letters, preventing the introduction or delivery of the product into interstate commerce in the US, misbranding charges, product seizures, injunctions, and civil monetary penalties, which would materially and adversely affect our business and financial condition and may cause the price of our securities to fall.

The risks identified in this risk factor relating to regulatory actions and oversight by agencies in the US and throughout the world also apply to the commercialization of any partnered products by our collaboration partners and those commercializing products with respect to which we have an economic interest or right to receive royalties, including GSK, and such regulatory actions and oversight may limit those parties' ability to commercialize such products, which could materially and adversely affect our business and financial condition, and which may cause the price of our securities to fall.

We and/or our collaboration partners and those commercializing products with respect to which we have an economic interest or right to receive royalties may face competition from companies seeking to market generic versions of any approved products in which we have an interest, such as YUPELRI.

Under the Drug Price Competition and Patent Term Restoration Act of 1984, a company may submit an abbreviated new drug application ("ANDA") under section 505(j) of the Federal Food, Drug, and Cosmetic Act to market a generic version of an approved drug. Because a generic applicant does not conduct its own clinical studies, but instead relies on the FDA's finding of safety and effectiveness for the approved drug, it is able to introduce a competing product into the market at a cost significantly below that of the original drug. Although we have multiple patents protecting YUPELRI with expiration dates ranging from 2025 to 2039 that are listed in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, commonly known as the Orange Book, generic applicants have submitted, and could potentially submit additional, "paragraph IV certifications" to FDA stating that such patents are invalid or will not be infringed by the applicant's product. In fact, on January 10, 2023, the FDA included seven ANDAs that referred to YUPELRI (revefenacin) inhalation solution and contained a paragraph IV certification on its Paragraph IV Certifications List. We are not aware of any other paragraph IV notifications with respect to products in which we have an economic interest or right to receive royalties. Our collaboration partner, Viatris, is responsible for enforcing our Orange Book patents relating to YUPELRI, in consultation with us, and our views may differ from theirs with respect to the ongoing litigation, process or strategy and we have a reduced ability to control the outcome of the litigation. If any

competitors successfully challenge the patents related to these products, including YUPELRI, we and/or our collaboration partners and those commercializing products with respect to which we have an economic interest or right to receive royalties would face substantial competition. If we are not able to compete effectively against such future competition, our business will not grow, our financial condition and operations will suffer and the price of our securities could fall.

For additional discussion of the risk of generic competition to YUPELRI, please see the risk factor below entitled “*If our efforts to protect the proprietary nature of the intellectual property related to our technologies are not adequate, we may not be able to compete effectively in our current or future markets*” and “*Litigation to protect or defend our intellectual property or third party claims of intellectual property infringement will require us to divert resources and may prevent or delay our drug discovery and development efforts.*”

If we are unable to enter into future collaboration arrangements or if any such collaborations with third parties are unsuccessful, we may be unable to fully develop and commercialize certain product candidates and our business will be adversely affected.

We have collaborations with a number of third parties including Viatris for the development and commercialization of a nebulized formulation of revefenacin, which is a LAMA compound (including YUPELRI). Additional collaborations, if any, may be needed to fund development of certain programs that have not been licensed to a collaborator and to commercialize the product candidates in our programs if approved by the necessary regulatory authorities. We evaluate commercial strategy on a product by product basis either to engage pharmaceutical or other healthcare companies with an existing sales and marketing organization and distribution system to market, sell and distribute our products or to commercialize a product ourselves. However, we may not be able to establish these sales and distribution relationships on acceptable terms, or at all, or may encounter difficulties in commercializing a product ourselves. For any of our product candidates that receive regulatory approval in the future and are not covered by our current collaboration agreements, we will need a partner in order to commercialize such products unless we establish independent sales, marketing and distribution capabilities with appropriate technical expertise and supporting infrastructure.

Collaborations with third parties regarding our programs may require us to relinquish material rights, including revenue from commercialization of our medicines, or to assume material ongoing development obligations that we would have to fund. These collaboration arrangements are complex and time-consuming to negotiate, and if we are unable to reach agreements with third-party collaborators, we may fail to meet our business objectives and our financial condition may be adversely affected. We face significant competition in seeking third-party collaborators. We may be unable to find third parties to pursue product collaborations on a timely basis or on acceptable terms.

Furthermore, once we enter into a collaboration, our collaboration partners are frequently important for the success of the product or product candidate. For example, Viatris’ role in the commercialization of YUPELRI is important to the overall success of product. However, for any collaboration, we may not be able to control the amount of time and resources that our partners devote to our products or product candidates and our partners may choose to prioritize alternative programs or otherwise be unsuccessful in their efforts with respect to our products or product candidates. In addition, effective collaboration with a partner requires coordination to achieve complex and detail-intensive goals between entities that potentially have different priorities, capabilities and processes and successful navigation of the challenges such coordination entails. For example, Viatris has a substantial existing product portfolio largely comprising generic products, other considerations and incentives that influence its resource allocation, and background, experiences, priorities and internal organizational processes that differ from our own. As a result of these differing backgrounds, interests and processes, Viatris may take actions that it believes are in its best interest, but which might not be in the best interests of either us or our other shareholders. Our inability to successfully collaborate with third parties would increase our development costs and may cause us to choose not to continue development of certain product candidates, would limit the likelihood of successful commercialization of some of our product candidates, may cause us not to continue commercialization of our authorized products and could cause the price of our securities to fall.

We depend on third parties in the conduct of our non-clinical and clinical studies for our product candidates.

We depend on independent clinical investigators, contract research and manufacturing organizations and other third-party service providers in the conduct of our non-clinical and clinical studies for our product candidates. We rely

heavily on these parties for execution of our non-clinical and clinical studies, and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that our clinical studies are conducted in accordance with good clinical, laboratory and manufacturing practices (“GXPs”) and other regulations as required by the FDA and foreign regulatory authorities, and the applicable protocol. Failure by these parties to comply with applicable regulations and practices in conducting studies of our product candidates can result in a delay in our development programs or non-approval of our product candidates by regulatory authorities. Furthermore, to the extent the operations of these third parties are disrupted as result of the COVID-19 pandemic or otherwise, our development programs could be delayed.

The FDA, and equivalent authorities in third countries, enforces GXPs and other regulations through periodic inspections of trial sponsors, clinical research organizations (“CROs”), principal investigators and trial sites. If we or any of the third parties on which we have relied to conduct our clinical studies are determined to have failed to comply with GXPs (or other equivalent regulations outside the US), the study protocol or applicable regulations, the clinical data generated in our studies may be deemed unreliable. This could result in non-approval of our product candidates by the FDA, or equivalent authorities in other countries, or we, the FDA, or equivalent authorities in other countries may decide to conduct additional audits or require additional clinical studies, which would delay our development programs, could result in significant additional costs and cause the price of our securities to fall.

If there are any adverse developments or perceived adverse developments with respect to TRELEGY, we may not receive Milestone Payments or the revenue we expect from the Outer Years Royalty, which would harm our business and could cause the price of our securities to fall.

Through the milestone payments we may receive from Royalty Pharma if certain TRELEGY global net sales thresholds are met following our sale of our economic interest in TRELEGY (the “Milestone Payments”) and our right to receive from Royalty Pharma 85% of the royalty payments on the Assigned Collaboration Products (as defined in the Purchase Agreement) payable (a) for sales or other activities occurring on and after January 1, 2031 related to the Assigned Collaboration Products in the US, and (b) for sales or other activities occurring on and after July 1, 2029 related to the Assigned Collaboration Products outside of the US (the “Outer Years Royalty” and, together with the Milestone Payments, the “Ongoing Economic Interest”), we may participate in the mid- and long-term economically in royalty payments from GSK with respect to the TRELEGY. However, we cannot assure you as to the amount, if any, we might receive. We have no access to non-public information regarding the development progress of, or plans TRELEGY, and we have no current authority to enforce rights under the GSK Agreements assigned to TRC. However, if there are any adverse developments or perceived adverse developments with respect to TRELEGY, we may not realize the value we currently anticipate from the Ongoing Economic Interest, which would harm our business and may cause the price of our securities to fall. Examples of such adverse developments include, but are not limited to:

- disappointing or lower than expected sales of TRELEGY;
- the emergence of new closed triple or other alternative therapies or any developments regarding competitive therapies, including comparative price or efficacy of competitive therapies;
- disputes between any of Royalty Pharma, GSK, Innoviva and us;
- GSK deciding to modify, delay or halt the TRELEGY program;
- any adverse effects resulting from the COVID-19 pandemic;
- any safety, efficacy or other concerns regarding the TRELEGY program; or
- any particular FDA requirements or changes in FDA policy or guidance regarding the TRELEGY program or any particular regulatory requirements in other jurisdictions or changes in the policies or guidance adopted by foreign regulatory authorities.

We do not control the commercialization of TRELEGY; accordingly, our receipt of Milestone Payments and receipt of the value we currently anticipate from the Outer Years Royalty will depend on, among other factors, GSK's ability to further commercialize TRELEGY.

Our Ongoing Economic Interest in TRELEGY consists of the potential Milestone Payments and our right to receive from Royalty Pharma the Outer Years Royalty, both of which are ultimately based on the amount of sales of this product by GSK. Any benefit we may receive from the Ongoing Economic Interest will depend on GSK's ability to commercialize the product, and the future payments, if any, made by GSK to Royalty Pharma.

Accordingly, our Ongoing Economic Interest involves a number of risks and uncertainties, including:

- GSK's ability to have an adequate supply of TRELEGY product;
- ongoing compliance by GSK or its suppliers with the FDA's current Good Manufacturing Practice;
- compliance with other applicable FDA and other regulatory requirements in the US or other foreign jurisdictions, including those described elsewhere in this report;
- competition, whether from current competitors or new products developed by others in the future;
- claims relating to intellectual property;
- any future disruptions in GSK's business which would affect its ability to commercialize TRELEGY, including, disruptions due to the COVID-19 pandemic;
- the ability of TRELEGY to achieve wider acceptance among physicians, patients, third-party payors, or the medical community in general;
- global economic conditions; and
- any of the other risks relating to commercialization of TRELEGY.

These risks and uncertainties could materially impact the amount and timing of future Milestone Payments and Outer Years Royalty, which could have a material adverse effect on our future revenues, other financial results and our financial position and cause the price of our securities to fall.

If we lose key management, sales or scientific personnel, or if we fail to attract and retain key employees, our ability to discover and develop our product candidates and commercialize our products will be impaired.

We are highly dependent on principal members of our management team and commercial and scientific staff, and in particular, our Chief Executive Officer, Rick E. Winningham, to operate our business. Mr. Winningham has significant pharmaceutical industry experience. The loss of Mr. Winningham's services could impair our ability to discover, develop and commercialize new medicines.

If we fail to retain our qualified personnel or replace them when they leave, we may be unable to continue our development and commercialization activities, which may cause the price of our securities to fall. The Restructuring announced in September 2021, and completed in the third quarter of 2022, and the additional headcount reductions announced in February 2023, may make retention of our current personnel both more important and more challenging.

In addition, our US operating subsidiary's facility and most of its employees are located in northern California, headquarters to many other biotechnology and biopharmaceutical companies and many academic and research institutions. As a result, competition for certain skilled personnel in our market is intense. None of our employees have employment commitments for any fixed period of time and they all may leave our employment at will. If we fail to retain our qualified personnel or replace them when they leave, we may be unable to continue our development and commercialization activities and the price of our securities could fall.

Our business and operations would suffer in the event of significant disruptions of information technology systems or security breaches.

We rely extensively on computer systems to maintain information and manage our finances and business. In the ordinary course of business, we collect, store and transmit large amounts of confidential information (including but not limited to trade secrets or other intellectual property, proprietary business information and personal information) and it is critical that we maintain the confidentiality and integrity of such confidential information. Although we have security measures in place, our internal information technology systems and those of our CROs and other service providers, including cloud based and hosted applications, data and services, may be vulnerable to service interruptions and security breaches from inadvertent or intentional actions by our employees, service providers and/or business partners, from cyber-attacks by malicious third parties, including but not limited to those involving malware and ransomware, which can disrupt operations significantly, and/or from, natural disasters, terrorism, war and telecommunication and electrical failures. Cyber-attacks are increasing in their frequency, sophistication, and intensity, and have become increasingly difficult to detect. Significant disruptions of information technology systems or security breaches could adversely affect our business operations and result in financial, legal, business and reputational harm to us, including significant liability and/or significant disruption to our business. If a disruption of information technology systems or security breach results in a loss of or damage to our data or regulatory applications, unauthorized access, use, or disclosure of, or the prevention of access to, confidential information, or other harm to our business, we could incur liability and reputational harm, we could be required to comply with federal and/or state breach notification laws and foreign law equivalents, we may incur legal expenses to protect our confidential information, the further development of our product candidates could be delayed and the price of our securities could fall. For example, the loss of clinical trial data from completed or ongoing clinical trials of our product candidates could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. As another example, we may incur penalties imposed by the competent authorities in the EU Member States in case of breach of the EU rules governing the collection and processing of personal data, including unauthorized access to or disclosure of personal data. Although we have security and fraud prevention measures in place, we have been subject to immaterial payment fraud activity. In 2017, we filed a lawsuit (which has since been resolved) against a former employee for misappropriation of our confidential, proprietary and trade secret information. Moreover, there can be no assurance that our security measures will prevent service interruptions or security breaches that could adversely affect our business. These same risks also apply to our partners and vendors, who similarly hold sensitive and critical information related to our business in computer systems and are similarly potentially vulnerable to service interruptions and security breaches.

We face risks related to widespread illnesses, including the recent COVID-19 pandemic, which could have a material adverse effect on our business and results of operations.

Our business has been and will continue to be adversely affected by the outbreak of respiratory illness caused by a novel strain of coronavirus, SARS-CoV-2, causing the Coronavirus Disease 2019, also known as COVID-19 (the “COVID-19 pandemic”). The COVID-19 pandemic has weighed on the macroeconomic environment, and the pandemic has, directly and indirectly, significantly increased economic volatility and uncertainty.

Sales momentum has been affected by COVID-19 and may continue to be in the future. We market YUPELRI in the hospital setting and to pulmonologists, whose practices have been impacted by the pandemic. In mid-March 2020, we suspended in-person sales calls to accounts in response to the COVID-19 pandemic. In August 2020, we began reengaging with these customers in-person and remotely. We are now able to more frequently conduct in-person customer engagements, however there is still variability of access regionally. Customer orders or new patient use of YUPELRI may decline or fail to grow as a result of, among other things, a shift in our marketing efforts, increased workload of healthcare providers, staffing challenges at hospitals, and the impact of any concerns regarding nebulization in COVID-19 positive patients. We are preparing for continued volatility as disruptions of day-to-day operations of hospitals and clinics may continue. In addition, while we do not currently anticipate any supply issues, the COVID-19 pandemic could impact our supply of YUPELRI in the future. At this stage, we are unable to predict with certainty the ultimate disruptive impact of the COVID-19 pandemic on both YUPELRI and the rest of our business.

In addition, the COVID-19 pandemic makes the conduct of clinical trials more challenging given the paramount importance of adequate safety monitoring, collection of data and distribution of study drug, all of which are traditionally achieved by in-person visits to our study sites. Challenges may continue to arise from site closures, site staffing

shortages, potential interruptions to the supply chain for investigational products, or other considerations if site personnel or trial participants become infected with COVID-19. These challenges may lead to difficulties in meeting protocol-specified procedures. The Company implemented mitigation plans to help ensure patients in the clinical trials have continued access to drug supply and regular visits with their physicians for study visits per trial protocols, but there is a risk that our trial data could be impacted if our efforts are insufficient. It is also possible that demand for products that we may pursue could be materially and adversely affected as a result of COVID-19 and any related economic impact.

If significant portions of our workforce, and particularly our field-based teams, are unable to work effectively, including due to illness, quarantines, social distancing, government actions or other restrictions in connection with the COVID-19 pandemic or other health emergencies, our operations will be impacted. The COVID-19 pandemic or other health emergencies could limit the ability of our customers, suppliers and business partners to perform under their contracts with us, including third-party payers' ability to make timely payments to us during and following the pandemic. We may also experience a shortage of supplies and materials or a suspension of services from third parties. Even after the COVID-19 pandemic subsides, we may continue to experience an adverse impact to our business as a result of its global economic impact.

Global economic, political, and social conditions may harm our ability to do business, increase our costs and negatively affect our stock price.

Worldwide economic conditions remain uncertain due to current global economic challenges, hostilities in Ukraine, the COVID-19 pandemic and other health emergencies, the United Kingdom's ("UK") withdrawal from the EU (often referred to as "Brexit"), and other disruptions to global and regional economies and markets.

Further, development of our product candidates and/or regulatory approval may be delayed for other political events beyond our control. For example, a US federal government shutdown or budget sequestration, such as ones that occurred during 2013, 2018, and 2019, may result in significant reductions to the FDA's budget, employees and operations, which may lead to slower response times and longer review periods, potentially affecting our ability to progress development of our product candidates or obtain regulatory approval for our product candidates. Further, future government shutdowns, including as a result of the US failing to raise the debt ceiling, could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

Our operations also depend upon favorable trade relations between the US and those foreign countries in which our materials suppliers have operations. A protectionist trade environment in either the US or those foreign countries in which we do business, such as a change in the current tariff structures, export compliance or other trade policies, may materially and adversely affect our operations.

Brexit has created significant uncertainty about the future relationship between the UK and the EU, including with respect to the laws and regulations that will apply as the UK determines which EU laws to replace or replicate after withdrawal. From a regulatory perspective, the UK's withdrawal bears significant complexity and risks.

External factors, such as potential terrorist attacks, acts of war, geopolitical and social turmoil, including the ongoing hostilities between Russia and Ukraine, similar events in many parts of the world or the worsening of such factors, could also prevent or hinder our ability to do business, increase our costs and negatively affect our stock price. These geopolitical, social and economic conditions could harm our business.

Our US operating subsidiary's facility is located near known earthquake fault zones, and the occurrence of an earthquake, extremist attack or other catastrophic disaster could cause damage to our facilities and equipment, which could require us to cease or curtail operations.

Our US operating subsidiary's facility is located in the San Francisco Bay Area near known earthquake fault zones and therefore will be vulnerable to damage from earthquakes. In October 1989, a major earthquake struck this area and caused significant property damage and a number of fatalities. We are also vulnerable to damage from other types of disasters, including power loss, attacks from extremist organizations, fire, floods, communications failures and similar events. If any disaster were to occur, our ability to operate our business could be seriously impaired. In addition, the unique nature of our research activities and of much of our equipment could make it difficult and costly for us to recover from this type of disaster. We may not have adequate insurance to cover our losses resulting from disasters or other

similar significant business interruptions and we do not plan to purchase additional insurance to cover such losses due to the cost of obtaining such coverage. Any significant losses that are not recoverable under our insurance policies could seriously impair our business and financial condition, which could cause the price of our securities to fall.

If sufficient capital is not available, we may have to further curtail operations or we could be forced to share our rights to commercialize our product candidates with third parties on terms that may not be favorable to us.

Based on our current operating plans and financial forecasts, we believe that our existing cash, cash equivalents and marketable securities will be sufficient to meet our anticipated operating needs for at least the next twelve months, even assuming that we repurchase approximately \$170.0 million of our ordinary shares as has been announced by the board, whether pursuant to any current or future open-market share repurchase program or otherwise. However, our current operating plans or financial forecasts occasionally change. For example, in August 2017, we announced an increase in our anticipated operating loss for 2017, primarily driven by our decision to accelerate funding associated with the next phase of development of izedincitinib in our JAK inhibitor program. In addition, following unfavorable results from our late-stage development programs, in September 2021, we announced a strategic update and corporate restructuring (the “Restructuring”), including a reduction in headcount by approximately 75% through a reduction in our workforce of regular and contingent workers. The Restructuring was completed during the third quarter of 2022, and we announced additional headcount reductions in February 2023. If our current operating plans or financial forecasts change, we may require or seek additional funding in the form of public or private equity or equity-linked offerings, debt financings or additional collaborations and licensing arrangements. In addition, as of December 31, 2022, we had cash, cash equivalents and short-term marketable securities of \$327.5 million.

Our future capital needs depend on many factors, including:

- support and investments in YUPELRI, including funding our commercialization strategies and post marketing clinical studies;
- the scope, duration, expenditures and technical obstacles associated with our ampreloxetine program, including preparing for potential product approvals of ampreloxetine;
- the outcome of potential licensing or partnering transactions, if any;
- responding to competitive pressures and competing technological developments;
- the extent of our proprietary patent position in any approved products and our product candidates;
- our facilities expenses, which will vary depending on the time and terms of any facility lease or sublease we may enter into, and other operating expenses;
- the scope and extent of the sales and marketing efforts, including our independent sales and marketing organization and medical affairs team;
- litigation, potential litigation and other contingencies; and
- the regulatory approval process for our product candidates.

If we require additional funding, we may not be able to obtain additional financing on terms favorable to us, if at all. General market conditions may make it difficult for us to seek financing from the capital markets. We may be required to relinquish rights to our technologies, product candidates or territories, or grant licenses on terms that are not favorable to us, in order to raise additional funds through collaborations or licensing arrangements. We may also have to sequence studies as opposed to conducting them concomitantly in order to conserve resources, or, as we announced in September 2021 and in February 2023, we may need to delay, reduce, or eliminate one or more of our programs and reduce overall overhead expenses. In addition, we may have to make additional reductions in our workforce and may be prevented from continuing our development and commercialization efforts and exploiting other corporate opportunities. This would likely harm our business, prospects and financial condition, and cause the price of our securities to fall.

We may seek to obtain future financing through the issuance of debt or equity, which may have an adverse effect on our shareholders or may otherwise adversely affect our business.

We may in the future need to raise additional funds to continue to progress our business. If we raise funds through the issuance of additional debt, including convertible debt or debt secured by some or all of our assets, or equity, any debt securities or preferred shares issued will have rights, preferences and privileges senior to those of holders of our ordinary shares in the event of liquidation. We do not have any outstanding long-term debt, but if additional debt is issued or we otherwise borrow additional funds in the future, there is a possibility that once all senior claims are settled, there may be no assets remaining to pay out to the holders of ordinary shares. In addition, if we raise funds through the issuance of additional equity, whether through private placements or public offerings, such an issuance would dilute ownership of our current shareholders that do not participate in the issuance. If we are unable to obtain any needed additional funding, we may be required to reduce the scope of, delay, or eliminate some or all of, our planned research, development, and commercialization activities or to license to third parties the rights to develop and/or commercialize products or technologies that we would otherwise seek to develop and/or commercialize ourselves or on terms that are less attractive than they might otherwise be, any of which could materially harm our business.

Furthermore, the terms of any debt securities we may issue in the future may impose restrictions on our operations, which may include limiting our ability to incur additional indebtedness, pay dividends on or repurchase our share capital, or make certain acquisitions or investments. In addition, we may be subject to covenants requiring us to satisfy certain financial tests and ratios, and our ability to satisfy such covenants may be affected by events outside of our control.

We may be treated as a US corporation for US federal income tax purposes.

For US federal income tax purposes, a corporation generally is considered tax resident in the place of its incorporation. Theravance Biopharma is incorporated under Cayman Islands law and established tax residency in Ireland effective July 1, 2015. Therefore, it should be a non-US corporation under this general rule. However, Section 7874 of the Internal Revenue Code of 1986, as amended (the “Code”), contains rules that may result in a foreign corporation being treated as a US corporation for US federal income tax purposes. The application of these rules is complex and there is little guidance regarding certain aspects of their application.

Under Section 7874 of the Code, a corporation created or organized outside the US will be treated as a US corporation for US federal tax purposes if (i) the foreign corporation directly or indirectly acquires substantially all of the properties held directly or indirectly by a US corporation, (ii) the former shareholders of the acquired US corporation hold at least 80% of the vote or value of the shares of the foreign acquiring corporation by reason of holding stock in the US acquired corporation, and (iii) the foreign corporation’s “expanded affiliated group” does not have “substantial business activities” in the foreign corporation’s country of incorporation relative to its expanded affiliated group’s worldwide activities. For this purpose, “expanded affiliated group” generally means the foreign corporation and all subsidiaries in which the foreign corporation, directly or indirectly, owns more than 50% of the stock by vote and value, and “substantial business activities” generally means at least 25% of employees (by number and compensation), assets and gross income of our expanded affiliated group are based, located and derived, respectively, in the country of incorporation.

We do not expect to be treated as a US corporation under Section 7874 of the Code, because we do not believe that the assets contributed to us by Innoviva constituted “substantially all” of the properties of Innoviva (as determined on both a gross and net fair market value basis). However, the Internal Revenue Service may disagree with our conclusion on this point and assert that, in its view, the assets contributed to us by Innoviva did constitute “substantially all” of the properties of Innoviva. In addition, there could be legislative proposals to expand the scope of US corporate tax residence and there could be changes to Section 7874 of the Code or the Treasury Regulations promulgated thereunder that could apply retroactively and could result in Theravance Biopharma being treated as a US corporation.

If it were determined that we should be treated as a US corporation for US federal income tax purposes, we could be liable for substantial additional US federal income tax on our post-Spin-Off taxable income. In addition, though we have no current plans to pay any dividends, payments of any dividends to non-US holders may be subject to US withholding tax.

Future tax reform, including changes in tax rates and imposition of new taxes, could impact our results of operations and financial condition.

We are incorporated in the Cayman Islands, maintain subsidiaries in the Cayman Islands (until December 2020), the US, the UK and Ireland, and effective July 1, 2015, we migrated our tax residency from the Cayman Islands to Ireland. We are subject to new, evolving or revised tax laws and regulations in such jurisdictions, and the enactment of or increases in taxes, or other changes in the application of existing taxes, in such jurisdictions may have an adverse effect on our business or on our results of operations. Due to economic and political conditions, tax rates in various jurisdictions may be subject to significant change. Our future effective tax rate could be affected by changes in our mix of earnings in countries with differing statutory tax rates, changes in valuation of our deferred tax assets and liabilities, or changes in tax laws or their interpretation, including possible US tax reform and contemplated changes in other countries of long-standing tax principles. These and other similar changes, if finalized and adopted, could have a material impact on our income tax expense and deferred tax balances.

Taxing authorities may challenge our structure and transfer pricing arrangements.

We are incorporated in the Cayman Islands, maintain subsidiaries in the Cayman Islands (until December 2020), the US, the UK and Ireland, and effective July 1, 2015, we migrated our tax residency from the Cayman Islands to Ireland. Due to economic and political conditions, various countries are actively considering changes to existing tax laws. We cannot predict the form or timing of potential legislative changes that could have a material adverse impact on our results of operations. Ireland has implemented further tax law changes through the Finance Act 2021 to comply with the European Union Anti-Tax Avoidance Directives. Changes to date, including reverse-hybrid mismatch and interest limitation rules, are not expected to have a material impact on the Company's tax position.

In April 2020, we became aware of a withholding tax regulation that could be interpreted to apply to certain of our previous intra-group transactions. Additional draft guidance on this withholding tax regime was released in late 2020 and early 2021, and based on our analysis of this guidance, we do not believe the exposure to be material. We continue to monitor the evolving legislation relating to this matter and will consider its impact on our consolidated financial statements.

In addition, significant judgment is required in determining our worldwide provision for income taxes. Various factors may have favorable or unfavorable effects on our income tax rate including, but not limited to the performance of certain functions and ownership of certain assets in tax-efficient jurisdictions such as the Cayman Islands and Ireland, together with intra-group transfer pricing agreements. Taxing authorities may challenge our structure and transfer pricing arrangements through an audit or lawsuit. Responding to or defending such a challenge could be expensive and consume time and other resources, and divert management's time and focus from operating our business. We cannot predict whether taxing authorities will conduct an audit or file a lawsuit challenging this structure, the cost involved in responding to any such audit or lawsuit, or the outcome. We may be required to pay taxes for prior periods, interest, fines or penalties, and may be obligated to pay increased taxes in the future which could result in reduced cash flows and have a material adverse effect on our business, financial condition and growth prospects.

We were a passive foreign investment company, or "PFIC," for 2014, but we were not a PFIC from 2015 through 2021, and we do not expect to be a PFIC for the foreseeable future.

For US 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 average 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 is at least 50%. In addition, whether our Company 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.

Based upon our assets and income during the course of 2014, we believe that our Company and one of our Company's wholly-owned subsidiaries, Theravance Biopharma R&D, Inc. was a PFIC for 2014. Based upon our assets and income from 2015 through 2022, we do not believe that our Company is a PFIC since 2015. Based on existing tax law, we do not expect to be a PFIC for the foreseeable future based on our current business plans and current business

model. For any taxable year (or portion thereof) in which our Company is a PFIC that is included in the holding period of a US holder, the US holder is generally subject to additional US federal income taxes plus an interest charge with respect to certain distributions from Theravance Biopharma or gain recognized on a sale of Theravance Biopharma shares. Similar rules would apply with respect to distributions from or gain recognized on an indirect sale of Theravance Biopharma Ireland Limited. US holders of our ordinary shares may have filed an election with respect to Company shares held at any time during 2014 to be treated as owning an interest in a “qualified electing fund” (“QEF”) or to “mark to market” their ordinary shares to avoid the otherwise applicable interest charge consequences of PFIC treatment with respect to our ordinary shares. A foreign corporation will not be treated as a QEF for any taxable year in which such foreign corporation is not treated as a PFIC. QEF and mark to market elections generally apply to the taxable year for which the election is made and all subsequent taxable years unless the election is revoked with consent of the Secretary of Treasury. US holders of our ordinary shares should consult their tax advisers regarding the tax reporting implications with respect to any QEF and mark to market elections made with respect to our Company and with respect to their indirect interests in Theravance Biopharma R&D, Inc.

If we are unable to maintain effective internal controls, our business, financial position and results of operations could be adversely affected.

If we are unable to maintain effective internal controls, our business, financial position and results of operations could be adversely affected. We are subject to the reporting and other obligations under the Exchange Act, including the requirements of Section 404 of the Sarbanes-Oxley Act of 2002, which require annual management assessments of the effectiveness of our internal control over financial reporting. Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) under the Exchange Act. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the US. Any failure to achieve and maintain effective internal controls could have an adverse effect on our business, financial position and results of operations. In addition, our independent registered public accounting firm is required to attest to the effectiveness of our internal control over financial reporting annually. If our independent registered public accounting firm is unable to attest to the effectiveness of our internal control over financial reporting, investor confidence in our reported results will be harmed and the price of our securities may fall. These reporting and other obligations place significant demands on our management and administrative and operational resources, including accounting resources.

RISKS RELATED TO LEGAL AND REGULATORY UNCERTAINTY

If our efforts to protect the proprietary nature of the intellectual property related to our technologies are not adequate, we may not be able to compete effectively in our current or future markets.

We rely upon a combination of patents, patent applications, trade secret protection and confidentiality agreements to protect the intellectual property related to our technologies. Any involuntary disclosure to or misappropriation by third parties of this proprietary information could enable competitors to quickly duplicate or surpass our technological achievements, thus eroding our competitive position in our market. The status of patents in the biotechnology and pharmaceutical field involves complex legal and scientific questions and is very uncertain. As of December 31, 2022, we owned a total of 235 issued US patents and 1,491 granted foreign patents, as well as additional pending US and foreign patent applications. Our patent applications may be challenged or fail to result in issued patents and our existing or future patents may be invalidated or be too narrow to prevent third parties from developing or designing around these patents, including the patents that relate to YUPELRI. If the sufficiency of the breadth or strength of protection provided by our patents with respect to a product candidate is threatened, it could dissuade companies from collaborating with us to develop product candidates and threaten our ability to commercialize products. Further, if we encounter delays in our clinical trials or in obtaining regulatory approval of our product candidates, the effective patent lives of the related product candidates could be reduced.

In addition, we rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable, for processes for which patents are difficult to enforce and for any other elements of our drug discovery and development processes that involve proprietary know-how, information and technology that is not covered by patent applications. Although we require our employees, consultants, advisors and any third parties who have access to our proprietary know-how, information and technology to enter into confidentiality agreements, we cannot be certain

that this know-how, information and technology will not be misappropriated, disclosed or used for unauthorized purposes or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Further, the laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the US. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the US and abroad. If we are unable to prevent material disclosure of the intellectual property related to our technologies to third parties, we will not be able to establish or, if established, maintain a competitive advantage in our market, which could materially adversely affect our business, financial condition and results of operations, which could cause the price of our securities to fall.

Litigation to protect or defend our intellectual property or third-party claims of intellectual property infringement will require us to divert resources and may prevent or delay our drug discovery and development efforts.

Our commercial success depends in part on us and our partners not infringing the patents and proprietary rights of third parties. Third parties may assert that we or our partners are using their proprietary rights without authorization. There are third-party patents that may cover materials or methods for treatment related to our product candidates. At present, we are not aware of any patent infringement claims that would adversely and materially affect our ability to develop our product candidates, but nevertheless the possibility of third-party allegations cannot be ruled out. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. Furthermore, parties making claims against us or our partners may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our product candidates. Defense against these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business.

In the event of a successful claim of infringement against us, we may have to pay substantial damages, obtain one or more licenses from third parties or pay royalties. In addition, even in the absence of litigation, we may need to obtain licenses from third parties to advance our research or allow commercialization of our product candidates, and we have done so from time to time. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we would be unable to further develop and commercialize one or more of our product candidates, which could harm our business significantly.

In addition, we have initiated, and in the future we could again be required to initiate, litigation to enforce our proprietary rights against infringement by third parties, prevent the unauthorized use or disclosure of our trade secrets and confidential information, or defend the validity of our patents. For example, in 2017, we filed a lawsuit against a former employee for misappropriation of certain of our confidential, proprietary and trade secret information. While this litigation has since been resolved, prosecution of claims to enforce or defend our rights against others involve substantial litigation expenses and divert substantial employee resources from our business but may not result in adequate remedy to us or sufficiently mitigate the harm to our business caused by any intellectual property infringement, unauthorized access, use or disclosure of trade secrets. For example, in February 2023, we filed patent infringement lawsuits against seven companies and certain of their affiliates seeking to market a generic version of YUPELRI. If these companies are found not to infringe one or more of our patents or the litigation results in one or more of our patents being invalidated, the generic companies may be able to launch their products prior to the expiration of the patents, which range from 2030 to 2039. Our collaboration partner, Viatrix, is responsible for enforcing our Orange Book patents relating to YUPELRI, in consultation with us, and their views on the ongoing litigation, process or strategy may differ from ours, and we have a reduced ability to control the outcome of the litigation. For additional discussion of risks related to partnering programs, please see the risk factor entitled “*If we are unable to enter into future collaboration arrangements or if any such collaborations with third parties are unsuccessful, we may be unable to fully develop and commercialize certain product candidates and our business will be adversely affected.*” If we fail to effectively enforce our proprietary rights against others, our business will be harmed and the price of our securities could fall.

If the efforts of our partners or future partners to protect the proprietary nature of the intellectual property related to collaboration assets are not adequate, the future commercialization of any medicines resulting from collaborations could be negatively impacted, which would materially harm our business and could cause the price of our securities to fall.

The risks identified in the two preceding risk factors may also apply to the intellectual property protection efforts of our partners or future partners and to GSK with respect to TRELEGY in which we maintain the Ongoing Economic Interest. To the extent the intellectual property protection of any partnered assets is successfully challenged or encounters problems with the US Patent and Trademark Office or other comparable agencies throughout the world, the future commercialization of these potential medicines could no longer be economically feasible. Any challenge to the intellectual property protection of a late-stage development or commercial-stage asset, particularly those of TRELEGY, could harm our business and cause the price of our securities to fall.

Product liability and other lawsuits could divert our resources, result in substantial liabilities and reduce the commercial potential of our medicines.

The risk that we may be sued on product liability claims is inherent in the development and commercialization of pharmaceutical products. Side effects of, or manufacturing defects in, products that we or our partners develop or commercialize could result in the deterioration of a patient's condition, injury or even death. Once a product is approved for sale and commercialized, the likelihood of product liability lawsuits tends to increase. Claims may be brought by individuals seeking relief for themselves or by individuals or groups seeking to represent a class, asserting injuries based both on potential adverse effects described in the label as well as adverse events not yet observed. We also face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials. In addition, changes in laws outside the US are expanding our potential liability for injuries that occur during clinical trials. Product liability claims could harm our reputation, regardless of the merit or ultimate success of the claim, which may adversely affect our and our partners' ability to commercialize our products and cause the price of our securities to fall. These lawsuits may divert our management from pursuing our business strategy and may be costly to defend. In addition, if we are held liable in any of these lawsuits, we may incur substantial liabilities and may be forced to limit or forgo further commercialization of the applicable products.

Although we maintain general liability and product liability insurance, this insurance may not fully cover potential liabilities and we cannot be sure that our insurer will not disclaim coverage as to a future claim. In addition, inability to obtain or maintain sufficient insurance coverage at an acceptable cost or to otherwise protect against potential product liability claims could prevent or inhibit the commercial production and sale of our products, which could adversely affect our business.

We may also be required to prosecute or defend general commercial, intellectual property, securities and other lawsuits. Litigation typically involves substantial expenses and diverts substantial employee resources from our business. The cost of defending any product liability litigation or engaging in any other legal proceeding, even if resolved in our favor, could be substantial and uncertainties resulting from the initiation and continuation of the litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace and achieve our business goals.

If we fail to comply with data protection laws and regulations, we could be subject to government enforcement actions (which could include civil or criminal penalties), private litigation and/or adverse publicity, which could negatively affect our operating results and business.

We are subject to data protection laws and regulations (i.e., laws and regulations that address privacy and data security). In the US, numerous federal and state laws and regulations, including state data breach notification laws, state health information and/or genetic privacy laws, and federal and state consumer protection laws (e.g., Section 5 of the FTC Act), govern the collection, use, disclosure, and protection of health related and other personal information. In California, the California Consumer Privacy Act ("CCPA") establishes certain requirements for data use and sharing transparency, and provides California residents certain rights concerning the use, disclosure, and retention of their personal data. The California Privacy Rights Act ("CPRA") currently in effect, significantly amends the CCPA. Virginia, Colorado, Utah, and Connecticut have enacted privacy laws similar to the CCPA that impose new obligations or limitations in areas affecting our business. These laws and regulations are evolving and subject to interpretation and

may impose limitations on our activities or otherwise adversely affect our business. The obligations to comply with the CCPA and evolving legislation involve, among other things, updates to our notices and the development of new processes internally and with our partners. We may be subject to fines, penalties, or private actions in the event of non-compliance with such laws.

In addition, we may obtain health information from third parties (e.g., healthcare providers who prescribe our products) that are subject to privacy and security requirements under the Health Insurance Portability and Accountability Act of 1996, the Health Information Technology for Economic and Clinical Health Act, and their implementing regulations, (collectively, “HIPAA”). HIPAA imposes privacy and security obligations on covered entity health care providers, health plans, and health care clearinghouses, as well as their “business associates”—certain persons or entities that create, receive, maintain, or transmit protected health information in connection with providing a specified service or performing a function on behalf of a covered entity. Although we are not directly subject to HIPAA, we could be subject to criminal penalties if we knowingly receive individually identifiable health information maintained by a HIPAA covered entity in a manner that is not authorized or permitted by HIPAA.

Further at the federal level, the Federal Trade Commission (“FTC”) also sets expectations for failing to take appropriate steps to keep consumers’ personal information secure, or failing to provide a level of security commensurate to promises made to individual about the security of their personal information (such as in a privacy notice) may constitute unfair or deceptive acts or practices in violation of Section 5(a) of the Federal Trade Commission Act (“FTC Act”). The FTC expects a company’s data security measures to be reasonable and appropriate in light of the sensitivity and volume of consumer information it holds, the size and complexity of its business, and the cost of available tools to improve security and reduce vulnerabilities. Individually identifiable health information is considered sensitive data that merits stronger safeguards. With respect to privacy, the FTC also sets expectations that companies honor the privacy promises made to individuals about how the company handles consumers’ personal information; any failure to honor promises, such as the statements made in a privacy policy or on a website, may also constitute unfair or deceptive acts or practices in violation of the FTC Act. While we do not intend to engage in unfair or deceptive acts or practices, the FTC has the power to enforce promises as it interprets them, and events that we cannot fully control, such as data breaches, may be result in FTC enforcement. Enforcement by the FTC under the FTC Act can result in civil penalties or enforcement actions.

EU Member States and other jurisdictions where we operate have adopted data protection laws and regulations, which impose significant compliance obligations. For example, the General Data Protection Regulation (“GDPR”), imposes strict obligations and restrictions on the ability to collect, analyze and transfer personal data, including health data from clinical trials and adverse event reporting. Switzerland has adopted laws that impose restrictions and obligations similar to the GDPR. The obligations and restrictions under the GDPR and Switzerland’s laws concern, in particular, in some instances the consent of the individuals to whom the personal data relate, the processing details disclosed to the individuals, the sharing of personal data with third parties, the transfer of personal data out of the European Economic Area (“EEA”) or Switzerland, contracting requirements (such as with clinical trial sites and vendors), and security breach notifications, as well as substantial potential fines, in some cases up to 4% of annual global turnover, for breaches of the data protection obligations. Data protection authorities from the different EU Member States and the EEA may interpret the GDPR and applicable related national laws differently which could effectively result in requirements additional to those currently understood to apply under the GDPR. In addition, guidance on implementation and compliance practices may be updated or otherwise revised, which adds to the complexity of processing personal data in the EU. When processing personal data of subjects in the EU, we have to comply with applicable data protection and electronic communications laws. In particular, as we rely on service providers processing personal data of subjects in the EU, we have to enter into suitable contract terms with such providers and receive sufficient guarantees that such providers meet the requirements of the applicable data protection laws, particularly the GDPR which imposes specific and relevant obligations. Enforcement by EU and UK regulators is active, and failure to comply with the GDPR or applicable Member State law may result in substantial fines.

Legal mechanisms to allow for the transfer of personal data from the EEA or UK to the US may impact our ability to transfer personal data or otherwise may cause us to incur significant costs to do so legally. On July 16, 2020, the European Court of Justice ruled that the Privacy Shield is an invalid data transfer mechanism and confirmed that the Standard Contractual Clauses remain valid. If companies are relying on the Standard Contractual Clauses as their transfer mechanism to transfer personal information from the EEA to the US (or to other jurisdictions not recognized as

adequate by the EU), they must be incorporated into new and existing agreements within prescribed timeframes. The UK adopted versions of their own SCCs. Updating agreements to incorporate these new SCCs for the EEA and UK may require significant time and resources to implement, including through adjusting our operations, conducting requisite data transfer assessments, and revising our contracts. Companies that have not taken steps to demonstrate that their SCCs and personal data recipients in the US or other non-adequate jurisdictions are suitable to receive the personal data may be subject to enforcement actions by competent authorities in the EU for failure to comply with related data privacy rules.

Additionally, the European Commission adopted a draft adequacy decision for the EU-US Data Privacy Framework, which reflects the assessment by the European Commission of the US legal framework. The draft decision concludes that the United States ensures an adequate level of protection for personal data transferred from the EU to US companies. After an approval process, the European Commission is expected to adopt the final adequacy decision, which will allow data to flow freely from the EU to the US.

If we or our vendors fail to comply with applicable data privacy laws concerning, or if the legal mechanisms we or our vendors rely upon to allow, the transfer of personal data from the EEA or Switzerland to the US (or other countries not considered by the European Commission to provide an adequate level of data protection) are not considered adequate, we could be subject to government enforcement actions, including an order to stop transferring the personal data outside of the EEA and significant penalties against us. Moreover, our business could be adversely impacted if our ability to transfer personal data out of the EEA or Switzerland to the US is restricted, which could adversely impact our operating results.

Failure to comply with data protection laws and regulations could result in unfavorable outcomes, including increased compliance costs, delays or impediments in the development of new products, increased operating costs, diversion of management time and attention, government enforcement actions and create liability for us (which could include civil, administrative, and/or criminal penalties), private litigation and/or adverse publicity that could negatively affect our operating results and business.

Changes in healthcare law and implementing regulations, including government restrictions on pricing and reimbursement, as well as healthcare policy and other healthcare payor cost-containment initiatives, may negatively impact us, our collaboration partners, or those commercializing products with respect to which we have an economic interest or right to receive royalties.

The continuing efforts of the government, insurance companies, managed care organizations and other payors of health care costs to contain or reduce costs of health care may adversely affect us, our collaboration partners, or those commercializing products with respect to which we have an economic interest or right to receive royalties in regard to one or more of the following:

- the ability to set and collect a price believed to be reasonable for products;
- the ability to generate revenues and achieve profitability; and
- the availability of capital.

The pricing and reimbursement environment for products may change in the future and become more challenging due to, among other reasons, policies advanced by the presidential administration, federal agencies, new healthcare legislation passed by Congress or fiscal challenges faced by all levels of government health administration authorities. Among policy makers and payors in the US and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and expanding access to healthcare. In the US, the pharmaceutical industry has been a particular focus of these efforts and has been and may in the future be significantly affected by major regulatory or legislative initiatives, including those related to pricing of or reimbursement for prescription drugs. We expect we, our collaboration partners or those commercializing products with respect to which we have an economic interest or right to receive royalties may experience pricing pressures in connection with the sale of drug products, due to the trend toward managed healthcare, the increasing influence of health maintenance organizations and additional legislative enactments and administrative policies.

The Patient Protection and Affordable Care Act, as amended (the “Healthcare Reform Act”), contains a number of provisions that impact our business and operations, including those governing enrollment in federal healthcare programs, reimbursement changes, benefits for patients within a coverage gap in the Medicare Part D prescription drug program (commonly known as the “donut hole”; the coverage gap has been eliminated effective 2025 under the Inflation Reduction Act (IRA)), rules regarding prescription drug benefits under the health insurance exchanges, changes to the Medicare Drug Rebate program, expansion of the Public Health Service Act’s 340B drug pricing program, fraud and abuse and enforcement. These changes have impacted previously existing government healthcare programs and have resulted in the development of new programs, including Medicare payment for performance initiatives and improvements to the physician quality reporting system and feedback program.

Certain provisions of the Healthcare Reform Act have been subject to judicial challenges as well as efforts to modify them or to alter their interpretation or implementation and additional legislative changes to and regulatory changes under the Healthcare Reform Act remain possible, but the nature and extent of such potential additional changes are uncertain at this time. We expect that the Healthcare Reform Act, its implementation, efforts to modify, or invalidate the Healthcare Reform Act, or portions thereof, or its implementation, and other healthcare reform measures including those that may be adopted in the future, could have a material adverse effect on our industry generally and on the ability of us, our collaboration partners, or those commercializing products with respect to which we have an economic interest or right to receive royalties to maintain or increase sales of existing products or to successfully commercialize product candidates, if approved.

The Bipartisan Budget Act of 2018, among other things, amended the Healthcare Reform Act to increase the point-of-sale discounts that manufacturers must agree to offer under the Medicare Part D coverage discount program from 50% to 70% off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer’s outpatient drugs to be covered under Medicare Part D. Civil monetary penalties can be applied if a manufacturer fails to provide these discounts in the amount of 125 percent of the discount that was due (the coverage gap has been eliminated effective 2025 under the IRA).

The Budget Control Act of 2011, among other things, and in concert with subsequent legislation, has resulted in aggregate reductions to Medicare payments to providers of, on average, 2% per fiscal year through 2031. Sequestration is currently set at 2% and will increase to 2.25% for the first half of fiscal year 2030, to 3% for the second half of fiscal year 2030, and to 4% for the remainder of the sequestration period that lasts through the first six months of fiscal year 2031. As long as these cuts remain in effect, they could adversely impact payment for any products that are reimbursed under Medicare.

On August 16, 2022, President Biden signed into law the Inflation Reduction Act of 2022 (the “IRA”). The IRA sunsets the coverage gap discount program starting in 2025 and replaces it with a new manufacturer discount program and establishes Part B and Part D inflation rebates. The IRA also creates a Drug Price Negotiation Program under which the prices for Medicare units of certain high Medicare spend drugs and biologics without generic or biosimilar competition will be capped by reference to, among other things, a specified non-federal average manufacturer price, with negotiated prices set to take effect starting in 2026. Failure to comply with requirements under the drug price negotiation program is subject to an excise tax and/or a civil monetary penalty. Whether any of our products are selected for negotiation for a given year will depend on whether they are at least 7 years post-approval/licensure; whether they meet any of the exclusions from eligibility for selection for negotiation, such as the exclusion of certain orphan drugs; their expenditures under Medicare Part B or Part D during a statutorily specified period; and whether a generic of the product has been determined to have come to market. At least one of our pipeline products, amprelosetine, could receive an orphan drug designation, which could mean it will not be selected for negotiation. Our understanding of whether and when our products are likely to be subject to selection for negotiation could evolve as the Drug Price Negotiation Program is implemented. These or any other legislative change could impact the market conditions for our products. We further expect continued scrutiny on pricing from Congress, agencies, and other bodies with respect to drug pricing.

Individual states in the US have also increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement limitations, marketing cost disclosure and transparency measures, and, in some cases, measures designed to encourage importation from other countries and bulk purchasing. For example, California has enacted a prescription drug price transparency law requiring prescription drug manufacturers to provide advance notice and explanation for price increases of certain drugs with

prices that exceed a specified threshold, and to report new prescription drugs introduced to the market at a wholesale acquisition cost exceeding the Medicare Part D specialty drug threshold.

We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for product or additional pricing pressures for our collaboration partners, or those commercializing products with respect to which we have an economic interest or right to receive royalties, which could impact our revenues.

If we failed to comply with our reporting and payment obligations under the Medicaid Drug Rebate program or other governmental pricing programs, we could be subject to additional reimbursement requirements, penalties, sanctions and fines, which could have a material adverse effect on our business, financial condition, results of operations and growth prospects.

Prior to the sale of VIBATIV to Cumberland Pharmaceuticals Inc. (“Cumberland”) in November 2018, we had certain price reporting obligations to the Medicaid Drug Rebate program and other governmental pricing programs, and we had obligations to report average sales price under the Medicare program. Following the consummation of the transaction with Cumberland, our price reporting obligations related to VIBATIV have been transitioned to Cumberland, and price reporting obligations for YUPELRI reside with Viatriis. We retain certain obligations with respect to record retention for these programs. These programs included the following:

- The Medicaid Drug Rebate program, under which a manufacturer is required to pay a rebate based on reported pricing data to each state Medicaid program for its covered outpatient drugs that are dispensed to Medicaid beneficiaries and paid for by a state Medicaid program as a condition of having federal funds made available to the states for the manufacturer’s drugs under Medicaid and Medicare Part B.
- The 340B Program, in which manufacturers must participate in order for federal funds to be available for the manufacturer’s drugs under Medicaid and Medicare Part B. The 340B program requires participating manufacturers to agree to charge no more than the 340B “ceiling price” for the manufacturer’s covered outpatient drugs to certain entities, and that price is calculated based on the information reported under the Medicaid Drug Rebate program.
- Reporting of average sales price, which manufacturers report for certain categories of drugs that are paid under the Medicare Part B program to CMS on a quarterly basis and which CMS uses in determining payment rates for drugs under Medicare Part B.

A manufacturer that becomes aware that its Medicaid reporting for a prior quarter was incorrect, or has changed as a result of recalculation of the pricing data, is obligated to resubmit the corrected data for up to three years after those data originally were due. Such restatements and recalculations increase the costs for complying with the laws and regulations governing the Medicaid Drug Rebate program and could result in an overage or underage in our rebate liability for past quarters. Price recalculations also may affect the 340B ceiling price and the average sales price. Manufacturers may need to make additional restatements beyond the three-year period.

We may be liable for errors associated with our submission of pricing data for VIBATIV for historic periods, and we may retain some liability for price reporting by Cumberland for VIBATIV sold under our labeler code. In addition to retroactive rebates and the potential for 340B program refunds, if we are found to have knowingly submitted any false price information to the government, we may be liable for significant civil monetary penalties per item of false information. If we are found to have made a misrepresentation in the reporting of our average sales price, the Medicare statute provides for significant civil monetary penalties for each misrepresentation for each day in which the misrepresentation was applied. If we are found to have charged 340B covered entities more than the statutorily mandated ceiling price, we could be subject to significant civil monetary penalties and/or such failure also could be grounds for HRSA to terminate a manufacturer’s agreement to participate in the 340B program, in which case covered outpatient drugs under our labeler code may no longer be eligible for federal payment under the Medicaid or Medicare Part B program. If we are found to have not submitted required price data on a timely basis, that could result in a significant civil monetary penalty per day for each day the information is late beyond the due date.

In order to be eligible to have its products paid for with federal funds under the Medicaid and Medicare Part B programs and purchased by the Department of Veterans Affairs (“VA”), Department of Defense (“DoD”), Public Health Service, and Coast Guard (the “Big Four agencies”) and certain federal grantees, a manufacturer is required to list its innovator products on a VA Federal Supply Schedule (“FSS”) contract and charge a price to the Big Four agencies that is no higher than the Federal Ceiling Price (“FCP”), which is a price calculated pursuant to a statutory formula. In addition, manufacturers must submit to the VA quarterly and annual “non-federal average manufacturer price” (“Non-FAMP”) calculations for each NDC-11 of their innovator drugs. Under Section 703 of the National Defense Authorization Act for FY 2008, the manufacturer is required to pay quarterly rebates to DoD on utilization of its innovator products that are dispensed through DoD’s Tricare network pharmacies to Tricare beneficiaries.

Individual states in the US, as noted, have also passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including marketing cost disclosure and transparency measures. Some states require the submission of reports related to pricing information, including based on the introduction of new prescription drugs, certain increases in wholesale acquisition cost of prescription drugs, marketing of prescription drugs within the state, and sales of prescription drugs in or into the state. Some states may pursue available enforcement measures, including imposition of civil monetary penalties, for a manufacturer’s failure to report such information.

Our relationships with customers and third-party payors are subject to applicable anti-kickback, fraud and abuse, transparency and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, exclusion, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare providers, physicians, distributors and third-party payors play a primary role in the distribution, recommendation and prescription of any pharmaceutical product for which we obtain marketing approval. Our arrangements with third-party payors and customers expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements through which we market, sell and distribute any products for which we have obtained or may obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations include the following:

- The US federal healthcare Anti-Kickback Statute prohibits any person from, among other things, knowingly and willfully offering, paying, soliciting, or receiving remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchasing, leasing, ordering or arranging for or recommending of any good or service for which payment may be made, in whole or in part, under federal and state healthcare programs such as Medicare and Medicaid. The term “remuneration” has been broadly interpreted to include anything of value. The Anti-Kickback Statute is subject to evolving interpretation and has been applied by government enforcement officials to a number of common business arrangements in the pharmaceutical industry. The government can establish a violation of the Anti-Kickback Statute without proving that a person or entity had actual knowledge of the statute or specific intent to violate it. There are a number of statutory exemptions and regulatory safe harbors protecting some common activities from prosecution; however, those exceptions and safe harbors are drawn narrowly. Failure to meet all of the requirements of a particular statutory exception or regulatory safe harbor does not make the conduct per se illegal under the Anti-Kickback Statute, but the legality of the arrangement will be evaluated on a case-by-case basis based on the totality of the facts and circumstances. We seek to comply with the available statutory exemptions and safe harbors whenever possible, but our practices may not in all cases meet all of the criteria for safe harbor protection from anti-kickback liability. Moreover, there are no safe harbors for many common practices, such as educational and research grants or patient or product assistance programs.
- The federal civil False Claims Act prohibits, among other things, knowingly presenting, or causing to be presented, claims for payment of government funds that are false or fraudulent, or knowingly making, or using or causing to be made or used, a false record or statement material to a false or fraudulent claim to avoid, decrease, or conceal an obligation to pay money to the federal government. Private individuals, commonly known as “whistleblowers,” can bring civil False Claims Act *qui tam* actions, on behalf of the government and such individuals and may share in amounts paid by the entity to the government in recovery or settlement. In recent years, several pharmaceutical and other healthcare companies have faced enforcement actions under the federal False Claims Act for, among other things, allegedly submitting false

or misleading pricing information to government health care programs and providing free product to customers with the expectation that the customers would bill federal programs for the product. Federal enforcement agencies also have showed increased interest in pharmaceutical companies' product and patient assistance programs, including reimbursement and co-pay support services, and a number of investigations into these programs have resulted in significant civil and criminal settlements. Other companies have faced enforcement actions for causing false claims to be submitted because of the companies' marketing the product for unapproved, and thus non-reimbursable, uses. In addition, a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act. False Claims Act liability is potentially significant in the healthcare industry because the statute provides for treble damages and significant mandatory penalties per false claim or statement for violations. Because of the potential for large monetary exposure, healthcare and pharmaceutical companies often resolve allegations without admissions of liability for significant and material amounts to avoid the uncertainty of treble damages and per claim penalties that may be awarded in litigation proceedings. As part of these resolutions, Companies may enter into corporate integrity agreements with the government, which may impose substantial costs on companies to ensure compliance. Criminal penalties, including imprisonment and criminal fines, are also possible for making or presenting a false, fictitious or fraudulent claim to the federal government.

- HIPAA, among other things, imposes criminal and civil liability for knowingly and willfully executing a scheme to defraud any healthcare benefit program, including private third-party payors, and also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information. HIPAA also prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement or representation, or making or using any false writing or document knowing the same to contain any materially false fictitious or fraudulent statement or entry in connection with the delivery of or payment for healthcare benefits, items or services. Similar to the federal healthcare Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it to have committed a violation.
- The federal Physician Payment Sunshine Act, implemented as the Open Payments Program, requires certain manufacturers of drugs, devices, biologics, and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to the US Department of Health and Human Services, Centers for Medicare and Medicaid Services, information related to payments and other transfers of value, directly or indirectly, to physicians (defined to include doctors, dentists, optometrists, podiatrists, and chiropractors) and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Beginning in 2022, applicable manufacturers also will be required to report information regarding payments and transfers of value provided to physician assistants, nurse practitioners, clinical nurse specialists, certified nurse anesthetists, and certified nurse-midwives. A manufacturer's failure to submit timely, accurately and completely the required information for all payments, transfers of value or ownership or investment interests may result in civil monetary penalties.
- Analogous state laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by any third-party payors, including private insurers or patients. Several states also require pharmaceutical companies to report expenses relating to the marketing and promotion of pharmaceutical products in those states and to report gifts and payments to individual health care providers in those states. Some of these states also prohibit certain marketing-related activities, including the provision of gifts, meals, or other items to certain health care providers, and restrict the ability of manufacturers to offer co-pay support to patients for certain prescription drugs. Some states require the posting of information relating to clinical studies and their outcomes. Some states and cities require identification or licensing of sales representatives. In addition, several states require pharmaceutical companies to implement compliance programs or marketing codes.

- Similar restrictions are imposed on the promotion and marketing of medicinal products in the EU Member States and other countries, including the restrictions prohibiting the promotion of a compound prior to its approval. Laws (including those governing promotion, marketing and anti-kickback provisions), industry regulations and professional codes of conduct often are strictly enforced. Even in those countries where we may decide not to directly promote or market our products, inappropriate activity by our international distribution partners could have implications for us.

The shifting commercial compliance environment and the need to build and maintain robust and expandable systems to comply with different compliance or reporting requirements in multiple jurisdictions increase the possibility that we or our partners may fail to comply fully with one or more of these requirements. Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations may involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with applicable fraud and abuse or other healthcare laws and regulations or guidance. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, disgorgement, exclusion from government funded healthcare programs, such as Medicare and Medicaid in the US and similar programs outside the US, contractual damages, diminished profits and future earnings, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our financial results. If any of the physicians or other providers or entities with whom we do or expect to do business are found to not be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs. Even if we are not determined to have violated these laws, government investigations into these issues typically require the expenditure of significant resources and generate negative publicity, which could harm our financial condition and divert resources and the attention of our management from operating our business.

Our business and operations, including the use of hazardous and biological materials may result in liabilities with respect to environmental, health and safety matters.

Our research and development activities involve the controlled use of potentially hazardous substances, including chemical, biological and radioactive materials. In addition, our operations produce hazardous waste products, including hazardous waste. Federal, state and local laws and regulations govern the use, manufacture, management, storage, handling and disposal of hazardous materials and wastes. We may incur significant additional costs or liabilities to comply with, or for violations of, these and other applicable laws in the future. Also, even if we are in compliance with applicable laws, we cannot completely eliminate the risk of contamination or injury resulting from hazardous materials and we may incur liability as a result of any such contamination or injury. Further, in the event of a release of or exposure to hazardous materials, including at the sites we currently or formerly operate or at sites such as landfills where we send wastes for disposal, we could be held liable for cleanup costs or damages or subject to other costs or penalties and such liability could exceed our resources. We do not have any insurance for liabilities arising from hazardous materials or under environmental laws. Compliance with or liability under applicable environmental laws and regulations or with respect to hazardous materials may be expensive, and current or future environmental regulations may impair our research, development and production efforts, which could harm our business, which could cause the price of our securities to fall.

RISKS RELATING TO OUR ORDINARY SHARES

The market price for our shares has and may continue to fluctuate widely and may result in substantial losses for purchasers of our ordinary shares.

The market price for our shares has fluctuated and may continue to fluctuate and may result in substantial losses for purchasers of our ordinary shares. For example, in the year ended December 31, 2022, the last reported sales price of our ordinary shares on Nasdaq fluctuated between a low of \$8.33 per share and a high of \$12.96 per share. To the extent that low trading volumes for our ordinary shares continues, our stock price may fluctuate significantly more than the stock market as a whole or the stock prices of similar companies. Without a larger public float of actively traded shares, our ordinary shares are likely to be more sensitive to changes in sales volumes, market fluctuations and events or perceived events with respect to our business, than the shares of common stock of companies with broader public ownership, and as a result, the trading prices for our ordinary shares may be more volatile. Among other things, trading

of a relatively small volume of ordinary shares may have a greater effect on the trading price than would be the case if our public float of actively traded shares were larger. In addition, as further described below under the risk factor entitled “— *Concentration of ownership will limit your ability to influence corporate matters,*” a number of shareholders hold large concentrations of our shares which, if sold to third parties within a relatively short timeframe, could cause the price of our shares to drop significantly.

Market prices for securities of biotechnology and biopharmaceutical companies have been highly volatile, and we expect such volatility to continue for the foreseeable future, so that investment in our ordinary shares involves substantial risk. Additionally, the stock market from time to time has experienced significant price and volume fluctuations unrelated to the operating performance of particular companies.

The following are some of the factors that may have a significant effect on the market price of our ordinary shares:

- any adverse developments or results or perceived adverse developments or results with respect to YUPELRI, including without limitation, lower than expected sales of YUPELRI, difficulties or delays encountered with regard to the FDA or other regulatory authorities in this program or any indication from clinical or non-clinical studies that YUPELRI is not safe or efficacious;
- any adverse developments or results or perceived adverse developments or results with respect to TRELEGY;
- any adverse developments or results or perceived adverse developments or results with respect to our clinical development programs, including, without limitation, any delays in development in these programs, any halting of development in these programs, any difficulties or delays encountered with regard to the FDA or other regulatory authorities in these programs (including any class-based risks that emerge as a FDA or other regulatory agency focus), or any indication from clinical or non-clinical studies that the compounds in such programs are not safe or efficacious;
- any announcements of developments with, or comments by, the FDA or other regulatory authorities with respect to products we or our partners have under development, are manufacturing or have commercialized;
- any adverse developments or disagreements or perceived adverse developments or disagreements with respect to our relationship with Royalty Pharma, or the relationship of Royalty Pharma and GSK;
- any adverse developments or perceived adverse developments with respect to our relationship with any of our research, development or commercialization partners, including, without limitation, disagreements that may arise between us and any of those partners;
- any adverse developments or perceived adverse developments in our programs with respect to partnering efforts or otherwise;
- announcements of patent issuances or denials, technological innovations or new commercial products by us or our competitors;
- publicity regarding actual or potential study results or the outcome of regulatory review relating to products under development by us, our partners or our competitors;
- regulatory developments in the US and foreign countries;
- announcements with respect to governmental or private insurer reimbursement policies;
- announcements of equity or debt financings;

- possible impairment charges on non-marketable equity securities;
- economic and other external factors beyond our control, such as the COVID-19 pandemic and fluctuations in interest rates;
- loss of key personnel;
- likelihood of our ordinary shares to be more sensitive to changes in sales volume, market fluctuations and events or perceived events with respect to our business due to our small public float;
- low public market trading volumes for our ordinary shares;
- the sale of large concentrations of our shares to third parties, which may be more likely to occur due to the concentration of ownership of our shares, such as what we experienced when our largest shareholder, Woodford Investment Management Limited, divested its holdings in 2019;
- developments or disputes as to patent or other proprietary rights;
- approval or introduction of competing products and technologies;
- results of clinical trials;
- failures or unexpected delays in timelines for our potential products in development, including the obtaining of regulatory approvals;
- delays in manufacturing adversely affecting clinical or commercial operations;
- fluctuations in our operating results;
- market reaction to announcements by other biotechnology or pharmaceutical companies;
- initiation, termination or modification of agreements with our collaborators or disputes or disagreements with collaborators;
- litigation or the threat of litigation;
- public concern as to the safety of product candidates or medicines developed by us; and
- comments and expectations of results made by securities analysts or investors.

If any of these factors causes us to fail to meet the expectations of securities analysts or investors, or if adverse conditions prevail or are perceived to prevail with respect to our business, the price of the ordinary shares would likely drop significantly. For example, our stock price dropped significantly when we announced that izencitinib did not meet its primary endpoint in our Phase 2b/3 induction and maintenance study of izencitinib in ulcerative colitis. In addition, though none has been filed to our knowledge, a significant drop in the price of a company's securities often leads to the filing of securities class action litigation against the company. This type of litigation against us could result in substantial costs and a diversion of management's attention and resources.

Activist shareholders could negatively impact our business and cause disruptions.

We value constructive input from investors and regularly engage in dialogue with our shareholders regarding strategy and performance. While our board of directors and management team welcome their views and opinions with the goal of enhancing value for all shareholders, we may be subject to actions or proposals from activist shareholders that may not align with our business strategies or the best interests of all of our shareholders.

For example, on February 27, 2023, Irenic Capital Management LP released a public letter communicating its opinions regarding actions that it believes we should take and made public statements critical of our board of directors and management. Irenic may continue to make and/or other activist shareholders may make such public communications in the future.

In the event of such shareholder activism – particularly with respect to matters which our board of directors, in exercising their fiduciary duties, disagree with or have determined not to pursue – our business could be adversely affected because responding to such actions by activist shareholders can be costly and time-consuming, disruptive to our operations and divert the attention of management, our board of directors and our employees, and our ability to execute our strategic plan could also be impaired as a result. Such an activist campaign could require us to incur substantial legal, public relations and other advisory fees and proxy solicitation expenses. Further, we may become subject to, or we may initiate, litigation as a result of proposals by activist shareholders or matters relating thereto, which could be a further distraction to our board of directors and management and could require us to incur significant additional costs. In addition, perceived uncertainties as to our future direction, strategy, or leadership created as a consequence of activist shareholders may result in the loss of potential business opportunities, harm our ability to attract new or retain existing investors, customers, directors, employees, collaborators or other partners, harm or impair our ability to accrue patients to clinical trials because of concerns the study may be disrupted, disrupt relationships with the Company, and the market price of our ordinary shares could also experience periods of increased volatility as a result.

Concentration of ownership will limit your ability to influence corporate matters.

Based solely on our review of publicly available filings, as of December 31, 2022, our three largest shareholders collectively owned 42.8% of our outstanding ordinary shares. These shareholders could control the outcome of actions taken by us that require shareholder approval, including a transaction in which shareholders might receive a premium over the prevailing market price for their shares. The beneficial ownership percentage of any of our shareholders would increase if they do not participate in our ongoing open market purchase program.

Certain provisions in our constitutional and other documents may discourage our acquisition by a third-party, which could limit your opportunity to sell shares at a premium.

Our constitutional documents include provisions that could limit the ability of others to acquire control of us, modify our structure or cause us to engage in change-of-control transactions, including, among other things, provisions that:

- require supermajority shareholder voting to effect certain amendments to our amended and restated memorandum and articles of association;
- establish a classified board of directors;
- restrict our shareholders from calling meetings or acting by written consent in lieu of a meeting;
- limit the ability of our shareholders to propose actions at duly convened meetings; and
- authorize our board of directors, without action by our shareholders, to issue preferred shares and additional ordinary shares.

In addition, in May 2018, our shareholders approved a resolution authorizing our board of directors to adopt a shareholder rights plan in the future intended to deter any person from acquiring more than 19.9% of our outstanding ordinary shares without the approval of our board of directors.

These provisions could have the effect of depriving you of an opportunity to sell your ordinary shares at a premium over prevailing market prices by discouraging third parties from seeking to acquire control of us in a tender offer or similar transaction.

Our shareholders may face difficulties in protecting their interests because we are incorporated under Cayman Islands law.

Our corporate affairs are governed by our amended and restated memorandum and articles of association, by the Companies Law (2020 Revision) of the Cayman Islands and by the common law of the Cayman Islands. The rights of our shareholders and the fiduciary responsibilities of our directors under the laws of the Cayman Islands are different from those under statutes or judicial precedent in existence in jurisdictions in the US. Therefore, you may have more difficulty in protecting your interests than would shareholders of a corporation incorporated in a jurisdiction in the US, due to the different nature of Cayman Islands law in this area.

Shareholders of Cayman Islands exempted companies such as our company have no general rights under Cayman Islands law to inspect corporate records and accounts or to obtain copies of lists of shareholders. Our directors have discretion under our amended and restated memorandum and articles of association to determine whether or not, and under what conditions, our corporate records may be inspected by our shareholders, but are not obliged to make them available to our shareholders. This may make it more difficult for you to obtain the information needed to establish any facts necessary for a shareholder motion or to solicit proxies from other shareholders in connection with a proxy contest.

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) our 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.

There is uncertainty as to shareholders’ ability to enforce certain foreign civil liabilities in the Cayman Islands.

We are incorporated as an exempted company limited by shares with limited liability under the laws of the Cayman Islands. A material portion of our assets are located outside of the US. As a result, it may be difficult for our shareholders to enforce judgments against us or judgments obtained in US courts predicated upon the civil liability provisions of the federal securities laws of the US or any state of the US.

We understand that the courts of the Cayman Islands are unlikely (i) to recognize or enforce against Theravance Biopharma judgments of courts of the US predicated upon the civil liability provisions of the securities laws of the US or any State; and (ii) in original actions brought in the Cayman Islands, to impose liabilities against Theravance Biopharma predicated upon the civil liability provisions of the securities laws of the US or any State, on the grounds that such provisions are penal in nature. However, in the case of laws that are not penal in nature, although there is no statutory enforcement in the Cayman Islands of judgments obtained in the US, the courts of the Cayman Islands will recognize and enforce a foreign money judgment of a foreign court of competent jurisdiction without retrial on the merits based on the principle that a judgment of a competent foreign court imposes upon the judgment debtor an obligation to pay the sum for which judgment has been given provided certain conditions are met. For a foreign judgment to be enforced in the Cayman Islands, such judgment must be final and conclusive and for a liquidated sum, and must not be in respect of taxes or a fine or penalty, inconsistent with a Cayman Islands’ judgment in respect of the same matter, impeachable on the grounds of fraud or obtained in a manner, and or be of a kind the enforcement of which is, contrary to natural justice or the public policy of the Cayman Islands (awards of punitive or multiple damages may well be held to be contrary to

public policy). A Cayman Islands court, including the Grand Court of the Cayman Islands, may stay proceedings if concurrent proceedings are being brought elsewhere, which would delay proceedings and make it more difficult for our shareholders to bring action against us.

If securities or industry analysts cease coverage of us or do not publish research, or publish inaccurate or unfavorable research, about our business, the price of our ordinary shares and trading volume could decline.

The trading market for our ordinary shares depends in part on the research and reports that securities or industry analysts publish about us or our business. If few securities analysts commence coverage of us, or if industry analysts cease coverage of us, the trading price for our ordinary shares could be negatively affected. If one or more of the analysts who cover us downgrade our ordinary shares or publish inaccurate or unfavorable research about our business or if our results fail to meet the expectations of these analysts, the price of our ordinary shares would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, demand for our ordinary shares could decrease, which might cause our share price and trading volume to decline.

We are in the process of implementing a strategy to return capital to our shareholders. But there is no guarantee that it will be fully implemented; as a result, capital appreciation, if any, of our ordinary shares may be your sole source of gain for the foreseeable future.

We have never declared or paid cash dividends on our capital shares. In September 2022, however, our board of directors authorized a \$250.0 million capital return program. On February 27, 2023, we announced that our board of directors had authorized an increase of \$75.0 million to the existing \$250.0 million capital return program initiated in September 2022, bringing the total capital return program to \$325.0 million. As of February 27, 2023, we have repurchased \$155.3 million of shares, and we have approximately \$170.0 million remaining in the capital return program which is expected to be completed by the end of 2023. There is no guarantee that any of the remaining approximately \$170.0 million of our ongoing \$325.0 million capital return program will be spent or that this overall capital return program will be fully implemented on a timely basis or at all or that shareholders will participate at the rates they expect. As a result, capital appreciation, if any, of our ordinary shares may be your sole source of gain for the foreseeable future.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

Our principal physical properties in the US consist of approximately 162,000 square feet of office and laboratory space leased in two buildings in South San Francisco, California. Of this office and laboratory space, 99,000 square feet was subleased as of December 31, 2022. The South San Francisco lease expires in May 2030 and our subleases expire in September 2028 and May 2030. Our Irish subsidiary operates from approximately 700 square feet of leased office space in Dublin, Ireland, that expires in May 2024.

ITEM 3. LEGAL PROCEEDINGS

During January 2023, we received notice from Accord Healthcare, Inc.; Cipla USA, Inc. and Cipla Limited; Eugia Pharma Specialties Ltd.; Lupin Inc.; Mankind Pharma Ltd.; Orbicular Pharmaceutical Technologies Private Limited; and Teva Pharmaceuticals, Inc. (collectively, the “generic companies”), that they have each filed with FDA an abbreviated new drug application (“ANDA”), for a generic version of YUPELRI (revefenacin) inhalation solution. The notices from the generic companies each included a paragraph IV certification with respect to five of our patents listed in FDA’s Orange Book for YUPELRI on the date of our receipt of the notice. The asserted patents relate generally to polymorphic forms of and a method of treatment using YUPELRI. In February 2023, we filed patent infringement suits against the generic companies in federal district courts, including the United States District Court for the District of New Jersey, the U.S. District Court for the District of Delaware, and the U.S. District Court for the Middle District of North Carolina. The complaint alleges that by filing the ANDAs, the generic companies have infringed five of our Orange Book listed patents. We are seeking a permanent injunction to prevent the generic companies from introducing a generic version of YUPELRI that would infringe our patents. As a result of this lawsuit, a stay of approval through May 2026 will be imposed by FDA on the generic companies’ ANDAs pending any adverse court decision. Please also see “Business – Patents and Proprietary Rights -- Patent Term Restoration, Regulatory Exclusivities, and Hatch-Waxman Litigation” for additional information. In addition, this litigation and the related risks are described in greater detail under the risk factor “*Litigation to protect or defend our intellectual property or third party claims of intellectual property infringement would require us to divert resources and may prevent or delay our drug discovery and development efforts*” of this Annual Report on Form 10-K.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II**ITEM 5. MARKET FOR THE REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES**

Our ordinary shares have traded on The Nasdaq Global Market under the symbol “TBPH” since June 3, 2014. As of February 21, 2023, there were 46 shareholders of record of our ordinary shares. As many of our ordinary shares are held by brokers and other institutions on behalf of shareholders, we are unable to estimate the total number of underlying shareholders represented by these shareholders of record.

Dividend Policy

We currently intend to retain any future earnings to finance our research and development efforts. We have never declared or paid cash dividends on our ordinary shares and do not intend to declare or pay cash dividends on our ordinary shares in the foreseeable future.

Issuer Purchases of Equity Securities

On September 19, 2022, we announced that our board of directors had approved a \$250.0 million share repurchase program. The table below summarizes information about the Company’s purchases of its equity securities registered pursuant to Section 12 of the Exchange Act during the year ended December 31, 2022 and through February 27, 2023. All shares purchased to date under the repurchase program were cancelled and ceased to be outstanding.

On February 27, 2023, we announced that our board of directors had authorized a \$75.0 million increase to the existing \$250.0 million capital return program initiated in September 2022, bringing the total capital return program to \$325.0 million. As of February 27, 2023, we have repurchased \$155.3 million of shares, and we have approximately \$170.0 million remaining in the capital return program which is expected to be completed by the end of 2023.

Period	Total Number of Shares Purchased	Average Price Per Share (1)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (in thousands)
September 22, 2022 - Privately negotiated purchase with GSK	9,644,807	\$ 9.75	—	\$ —
November 22, 2022 - Modified Dutch Tender Offer (2)	115,967	10.50	115,967	—
December 13, 2022 to December 31, 2022 - Open market share purchases	2,978,341	11.06	2,978,341	—
2023 - Open market share purchases	2,461,000	10.99	2,461,000	169,746
Total	15,200,115	\$ 10.21	5,555,308	\$ 169,746

(1) The weighted average price paid per ordinary share does not include the cost of commissions.

(2) The Modified Dutch Tender Offer expired on November 17, 2022 and was settled on November 22, 2022.

Equity Compensation Plans

The following table provides certain information with respect to all of our equity compensation plans in effect as of December 31, 2022:

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in column (a))
Options	2,337,733	\$ 19.65	7,079,233
Restricted shares	4,109,847	n/a	n/a
Employee share purchase plan	n/a	n/a	2,540,151
Equity compensation plans approved by security holders	6,447,580	\$ 19.65	9,619,384
Options	74,160	\$ 15.62	345,861
Equity compensation plans not approved by security holders	74,160	\$ 15.62	345,861
Total	6,521,740	\$ 19.53	9,965,245

We have three equity compensation plans — our 2013 Equity Incentive Plan (the “2013 EIP”), our 2013 Employee Share Purchase Plan (the “2013 ESPP”), and our 2014 New Employee Equity Incentive Plan (the “2014 NEEIP”). At inception of the plans, we were authorized to issue 5,428,571 ordinary shares under the 2013 EIP and 857,142 ordinary shares under the 2013 ESPP, and 750,000 ordinary shares under the 2014 NEEIP.

The 2013 EIP provides for the issuance of share-based awards, including restricted shares, restricted share units, options, share appreciation rights (“SARs”) and other equity-based awards, to our employees, officers, directors and consultants. As of January 1 of each year, commencing on January 1, 2015 and ending on (and including) January 1, 2023, subject to extension by shareholder approval, the aggregate number of ordinary shares that may be issued under the 2013 EIP shall automatically increase by a number equal to the least of (i) 5% of the total number of ordinary shares outstanding on December 31 of the prior year; (ii) 3,428,571 ordinary shares; or (iii) a number of ordinary shares determined by our board of directors. Options may be granted with an exercise price not less than the fair market value of the ordinary shares on the grant date. Under the terms of our 2013 EIP, options granted to employees generally have a maximum term of 10 years and vest over a four-year period from the date of grant; 25% vest at the end of one year, and 75% vest monthly over the remaining three years. We may grant options with different vesting terms from time to time. Unless an employee’s termination of service is due to disability or death, upon termination of service, any unexercised vested options will generally be forfeited at the end of three months or the expiration of the option, whichever is earlier.

Under the 2013 ESPP, our officers and employees may purchase ordinary shares through payroll deductions at a price equal to 85% of the lower of the fair market value of the ordinary share at the beginning of the offering period or at the end of each applicable purchase period. As of January 1 of each year, commencing on January 1, 2015 and ending on (and including) January 1, 2033, the aggregate number of ordinary shares that may be issued under the 2013 ESPP shall automatically increase by a number equal to the least of (i) 1% of the total number of ordinary shares outstanding on December 31 of the prior year; (ii) 857,142 ordinary shares; or (iii) a number of ordinary shares determined by our board of directors. The ESPP generally provides for consecutive and overlapping offering periods of 24 months in duration, with each offering period generally composed of four consecutive six-month purchase periods. The purchase periods end on either May 15 or November 15. ESPP contributions are limited to a maximum of 15% of an employee’s eligible compensation. Our 2013 ESPP also includes a feature that provides for the existing offering period to terminate and for participants in that offering period to automatically be enrolled in a new offering period when the fair market value of an ordinary share at the beginning of a subsequent offering period falls below the fair market value of an ordinary share on the first day of such offering period.

The 2014 NEEIP provides for the issuance of share-based awards, including restricted shares, restricted share units, non-qualified options and SARs, to our employees. Options may be granted with an exercise price not less than the fair market value of the ordinary shares on the grant date. Under the terms of our 2014 NEEIP, options granted to employees generally have a maximum term of 10 years and vest over a four-year period from the date of grant; 25% vest at the end of one year, and 75% vest monthly over the remaining three years. We may grant options with different vesting terms from time to time. Unless an employee’s termination of service is due to disability or death, upon termination of service, any unexercised vested options will generally be forfeited at the end of three months or the expiration of the option, whichever is earlier.

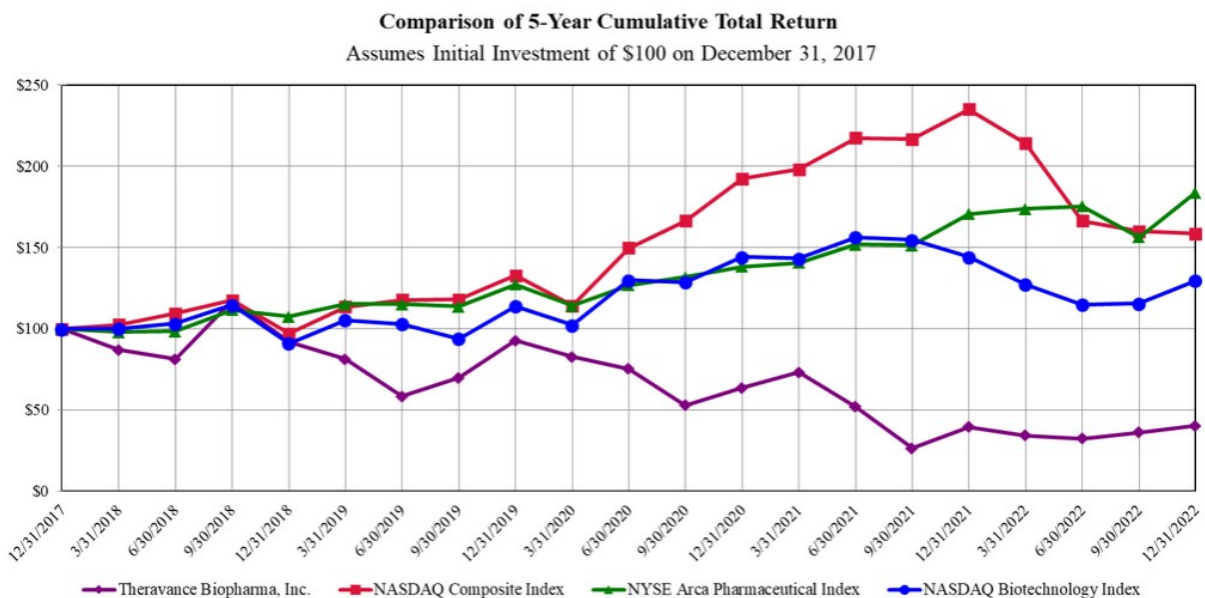
Additional information regarding share-based compensation is included in “Item 8, Note 1. Organization and Summary of Significant Accounting Policies,” and “Item 8, Note 12. Share-Based Compensation,” to the consolidated financial statements appearing in this Annual Report on Form 10-K.

Share Performance Graph

The graph set forth below compares the cumulative total shareholder return on our ordinary shares from December 31, 2017 through December 31, 2022, with the cumulative total return of (i) the NASDAQ Composite Index, (ii) the NYSE Arca Pharmaceutical Index and (iii) the NASDAQ Biotechnology Index over the same period. This graph assumes the investment of \$100 on December 31, 2017 in each of (1) our ordinary shares, (2) the Nasdaq Composite Index, (3) the NYSE Arca Pharmaceutical Index and (4) the Nasdaq Biotechnology Index, and assumes the reinvestment of dividends, if any, although dividends have never been declared on our ordinary shares.

The comparisons shown in the graph below are based upon historical data. We caution that the price performance shown in the graph below is not necessarily indicative of, nor is it intended to forecast, the potential future performance of our ordinary shares.

Notwithstanding anything to the contrary set forth in any of our previous or future filings under the Securities Act or the Exchange Act that might incorporate this Annual Report on Form 10-K or future filings made by us under those statutes, this Performance Graph section shall not be deemed filed with the SEC and shall not be deemed incorporated by reference into any of those prior filings or into any future filings made by us under those statutes.



<u>\$100 Investment in TBPH Shares or Index</u>	<u>TBPH</u>	<u>NASDAQ Composite Index</u>	<u>NYSE Arca Pharmaceutical Index</u>	<u>NASDAQ Biotechnology Index</u>
December 31, 2017	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00
December 31, 2018	91.74	97.16	107.49	91.14
December 31, 2019	92.80	132.81	127.25	114.02
December 31, 2020	63.69	192.47	138.37	144.15
December 31, 2021	39.60	235.15	170.72	144.18
December 31, 2022	40.20	158.65	183.92	129.59

ITEM 6. [RESERVED]

ITEM 7. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Our Management’s Discussion and Analysis (“MD&A”) is intended to facilitate an understanding of our results of operations, as well as our liquidity and capital resources. Additionally, it describes accounting policies and estimates that management has deemed as “critical accounting policies and estimates.” This MD&A should be read in conjunction with our consolidated financial statements and notes included in this Annual Report on Form 10-K. The information contained in this MD&A or set forth elsewhere in this Annual Report on Form 10-K, including information with respect to our plans and strategy for our business, our operating expenses, and future payments under our collaboration agreements, includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934 (the “Exchange Act”). Such statements are based upon current expectations that involve risks and uncertainties. You should review the section entitled “*Risk Factors*” in Item 1A of Part I above for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis. See the section entitled “*Special Note regarding Forward-Looking Statements*” on page 3 for more information.

Management Overview

Theravance Biopharma, Inc. (“we,” “our,” “Theravance Biopharma” or the “Company”) is a biopharmaceutical company primarily focused on the discovery, development, and commercialization of medicines. Our core purpose is to create *medicines that make a difference*[®] in people’s lives.

In pursuit of our purpose, we leverage decades of expertise, which has led to the development of FDA approved YUPELRI[®] (revefenacin) inhalation solution indicated for the maintenance treatment of patients with chronic obstructive pulmonary disease (“COPD”). Our pipeline of internally discovered programs is targeted to address significant unmet patient needs.

Sale of Theravance Respiratory Company, LLC

On July 20, 2022, we completed the sale of all of our equity interests in Theravance Respiratory Company, LLC (“TRC”) representing our 85% economic interest in the sales-based royalty rights on worldwide net sales of GSK’s TRELEGY ELLIPTA (“TRELEGY”) to Royalty Pharma Investments 2019 ICAV (“Royalty Pharma”) for over \$1.5 billion in potential total value (the “TRELEGY Royalty Transaction”). The TRELEGY Royalty Transaction is intended to provide us near-, mid- and long-term value with (i) an upfront cash payment of approximately \$1.1 billion received on July 20, 2022, (ii) up to \$250.0 million in additional milestone payments contingent on the achievement of certain TRELEGY net sales thresholds between 2023 and 2026 and (iii) outer year royalties.

Debt Paydown and Capital Return Program

Immediately after announcing the TRELEGY Royalty Transaction, we initiated a multi-step process to eliminate our outstanding debt and return capital to shareholders. The first step in this process was the repayment of our 9.5% non-recourse TRELEGY notes due 2035 for approximately \$420.0 million, which was completed on July 20, 2022. The second step of the process was a tender offer to retire \$230.0 million in principal amount of our 3.25% convertible senior notes due 2023, at par, which was completed on August 25, 2022. Following the completion of our debt paydown, our board of directors authorized \$250.0 million capital return program consisting of three elements as summarized below:

GSK Share Repurchase

On September 20, 2022, we completed a share repurchase transaction of 9,644,807 of our ordinary shares from GSK Finance (No.3) plc (“GSK Finance”), representing all of the shares owned by GSK Finance or its affiliates. The purchase price under the Share Repurchase Agreement was \$9.75 per share, resulting in a total consideration of \$94.0 million.

Modified Dutch Auction Tender Offer

On November 22, 2022, we completed our “modified Dutch auction” tender offer (the “Offer”) to purchase up to \$95.0 million of our ordinary shares, at a purchase price not greater than \$10.50 nor less than \$9.75 per share, in cash, less any applicable withholding taxes and without interest. A “modified Dutch auction” tender offer allows shareholders to indicate how many shares and at what price or within the range described above they wish to tender their shares. Based on the number of shares tendered and the prices specified by the tendering shareholders, we determined the lowest per-share price that enabled us to purchase all of the shares that were validly tendered. All shares accepted in the Offer were purchased at the same price even if tendered at a lower price.

We accepted a total of 115,967 ordinary shares at a price of \$10.50 per share, for an aggregate cost of \$1.2 million, excluding fees and expenses relating to the Offer. The total of 115,967 ordinary shares that we accepted for purchase represented approximately 0.2% of the total number of ordinary shares outstanding as of November 21, 2022. We intend to use the unused portion of the Offer to enlarge our previously announced, planned open market share repurchase plan which is described below.

Open Market Share Repurchase Plan

On December 13, 2022, we initiated our open market repurchase plan. As of February 27, 2023, we repurchased 5,439,341 shares on the open market at an average cost of \$11.03 per share for an aggregate cost of \$60.0 million, excluding fees and expenses.

2021- 2022 Corporate Restructuring Completion

As previously announced in September 2021, our board of directors approved a plan to focus our resources on our most promising programs and reduce the size of the Company in order to maximize shareholder value. The corporate restructuring (the “Restructuring”) resulted in us reducing headcount by approximately 75%. A majority of the total reduction in workforce occurred at the end of November 2021, and the remainder was completed at the end of February 2022. Since the Restructuring was announced and through its completion in the third quarter of 2022, we incurred \$33.0 million in Restructuring and related expenses, which was consistent with our expectations.

As a result of the Restructuring and reduction in workforce, in May 2022, we assigned our Dublin, Ireland, office lease to an unaffiliated company and moved into a smaller office in Dublin, which we estimate will result in approximately \$1.4 million cumulative cash savings through March 2027, or approximately \$0.3 million annually. In addition, in June 2022, we subleased approximately 78,000 square feet of our South San Francisco office and laboratory space to an unaffiliated company. As a result of the sublease, we expect to realize cumulative cash savings of approximately \$52.7 million through May 2030, or approximately \$6.7 million annually.

2023 Strategic Actions

On February 27, 2023, we announced additional strategic actions to sharpen the Company’s focus and deliver on its commitment to create shareholder value:

- *Capital Return Program increased to \$325.0 million* – Our board of directors authorized a \$75.0 million increase to the existing \$250.0 million capital return program initiated in September 2022, bringing the total capital return program to \$325.0 million. As of February 27, 2023, we have repurchased \$155.3 million of shares, including \$27.1 million in 2023, and we have approximately \$170.0 million remaining in the capital return program which is expected to be completed by the end of 2023.
- *Discontinuing investments in research* – We plan to prioritize resource allocation toward the amprelosetine Phase 3 study and completion of the YUPELRI Peak Inspiratory Flow Rate (PIFR) Phase 4 study and discontinue our research activities including the inhaled Janus kinase (JAK) inhibitor program. As a result of halting further research investment, our headcount is being reduced by approximately 17% with the reductions planned for completion by the end of March 2023. We also plan to seek a partnership to continue progression of our inhaled JAK inhibitor program.

- *Appointed independent director to the board and commit to governance change* – We appointed a new independent director as part of our ongoing commitment to board refreshment, and we intend to put forth a proposal to declassify the board of the directors over time at the May 2, 2023, Annual General Meeting of Shareholders.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with US Generally Accepted Accounting Principles (“GAAP”). The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of revenues, expenses, assets, liabilities, and other related disclosures. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. The extent to which the COVID-19 pandemic will continue to directly or indirectly impact our business, results of operations and financial condition, including these estimates, will depend on future developments that are uncertain and may be impacted by the emergence of new information concerning the COVID-19 pandemic, new variants or sub-variants of the COVID-19 virus, and the actions taken to manage or treat the disease, including vaccine availability, distribution, acceptance and effectiveness. Actual results may differ from these estimates under different assumptions or conditions. We believe that the accounting policies and estimates discussed below are essential to understanding our operating results and financial condition, as these policies and estimates relate to the more significant areas involving management’s judgments.

Future Contingent Milestone and Royalty Assets

The fair value of consideration received in connection with TRELEGY Royalty Transaction in July 2022 included an estimated \$194.2 million in future contingent milestone and royalties that was recorded as a contingent consideration asset (“Contingent Consideration”) on our consolidated balance sheets on the transaction date. The Contingent Consideration was initially measured at fair value utilizing a Monte Carlo simulation model to calculate the present value of the risk-adjusted cash flows estimated to be received from the Contingent Consideration. The fair value model involved significant unobservable inputs derived using our estimates. Our estimates were based in part on external data and reflected our judgements and forecasts. The primary significant unobservable input was the estimate of forecasted TRELEGY net revenues which is considered a Level 3 fair value input. We periodically reassess the carrying value of the Contingent Consideration when indicators of impairment are identified, and we will recognize an impairment loss if the carry value materially exceeds the reassessed fair value. We recognize any increases in the carrying value of the Contingent Consideration only when such contingent gains are realized.

Results of Operations

The following tables set forth our results of operations for the periods presented. Management’s commentary for the 2022 results compared to 2021 results are presented in the paragraphs below, and management’s commentary for the 2021 results compared to the 2020 results are included in our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on February 28, 2022.

Revenue

Our implied 35% YUPELRI revenue, as compared to the prior years, was as follows:

(In thousands)	Year Ended December 31,			Change			
	2022	2021	2020	2022		2021	
				\$	%	\$	%
YUPELRI net sales (implied 35%)	\$ 70,653	\$ 56,678	\$ 49,979	\$ 13,975	25 %	\$ 6,699	13 %

While Viatrix records the total net sales of YUPELRI within its own financial statements, Viatrix collaboration agreement revenue in our financial statements includes our implied 35% share of aggregate net sales of YUPELRI of \$70.7 million and \$56.7 million for 2022 and 2021, respectively, which represented increases of 25% and 13% over the respective prior year periods. However, under applicable accounting guidance, our Viatrix collaboration agreement revenue increased by only 11% in 2022 (see table below). This increase was due to overall lower costs incurred by

Theravance Biopharma as a result of the Restructuring, which improved YUPELRI profitability, but lowered our Viatriis collaboration agreement revenue. Additionally, there were higher costs incurred by Viatriis in 2022, which also reduced our Viatriis collaboration agreement revenue.

Our recognized revenue, as compared to the prior years, was as follows:

(In thousands)	Year Ended December 31,			Change			
	2022	2021	2020	2022		2021	
				\$	%	\$	%
Viatriis collaboration agreement	\$ 48,624	\$ 43,848	\$ 43,893	\$ 4,776	11 %	\$ (45)	(0.1)%
Viatriis royalties (Non-US)	30	—	—	30	NM	—	—
Collaboration revenue	192	11,463	26,464	(11,271)	(98)	(15,001)	(57)
Licensing revenue	2,500	—	1,500	2,500	NM	(1,500)	NM
Total revenue	\$ 51,346	\$ 55,311	\$ 71,857	\$ (3,965)	(7)%	\$ (16,546)	(23)%

NM: Not Meaningful

We are entitled to a share of US profits and losses (65% to Viatriis; 35% to Theravance Biopharma) received in connection with commercialization of YUPELRI. In accordance with the applicable accounting guidance, amounts receivable from Viatriis in connection with the commercialization of YUPELRI are recorded within the consolidated statements of operations as revenue from “Viatriis collaboration agreement” irrespective of whether the overall collaboration is profitable. Amounts payable to Viatriis in connection with the commercialization of YUPELRI, if any, are recorded within the consolidated statements of operations as a collaboration loss within selling, general and administrative expenses. Any reimbursement from Viatriis attributed to the 65% cost-sharing of our R&D expenses is characterized as a reduction of R&D expense, as we do not consider performing R&D services for reimbursement to be a part of our ordinary operations.

In 2022 and 2021, we recognized \$48.6 million and \$43.8 million, respectively, in revenue from the Viatriis collaboration agreement, which represented the receivables due from Viatriis related to YUPELRI. In addition to a 11% increase in revenue over the period, YUPELRI continued to increase its share of the long-acting nebulized COPD market and continued to be profitable for us on a brand basis. In the fourth quarter of 2022, we recognized our first revenue associated with non-US YUPELRI royalties in the amount of \$30,000.

Our other collaboration revenue was \$0.2 million in 2022, which represented a \$11.3 million decrease from 2021. The decrease was primarily due to the full recognition of the remaining non-cash Janssen collaboration revenue in the fourth quarter of 2021 which resulted from the planned close-out of the icencitinib program in that period.

Licensing revenue was \$2.5 million in 2022 and was related to a development milestone payment from Pfizer for the first patient dosed in a Phase 1 clinical trial of the skin-selective pan-JAK inhibitor program.

Research and Development

Our R&D expenses consist primarily of employee-related costs, external costs, and various allocable expenses. We budget total R&D expenses on an internal department level basis, and we manage and report our R&D activities across the following four cost categories:

- 1) Employee-related costs, which include salaries, wages, and benefits;
- 2) Share-based compensation, which includes expenses associated with our equity plans;
- 3) External-related costs, which include clinical trial related expenses, other contract research fees, consulting fees, and contract manufacturing fees; and
- 4) Facilities and other, which include laboratory and office supplies, depreciation, and other allocated expenses, which include general and administrative support functions, insurance, and general supplies.

The following table summarizes our R&D expenses incurred, net of any reimbursements from collaboration partners, as compared to the prior years:

(In thousands)	Year Ended December 31,			Change			
	2022	2021	2020	2022		2021	
				\$	%	\$	%
Employee-related	\$ 17,924	\$ 48,612	\$ 60,557	\$ (30,688)	(63)%	\$ (11,945)	(20)%
Share-based compensation	12,888	25,634	31,294	(12,746)	(50)	(5,660)	(18)
External-related	18,200	90,194	135,114	(71,994)	(80)	(44,920)	(33)
Facilities, depreciation, and other allocated expenses	14,380	29,217	33,988	(14,837)	(51)	(4,771)	(14)
Total research & development	\$ 63,392	\$ 193,657	\$ 260,953	\$ (130,265)	(67)%	\$ (67,296)	(26)%

R&D expenses decreased significantly by \$130.3 million in 2022 compared to 2021, and the decrease was across all R&D categories. External-related expenses decreased by \$72.0 million in 2022 and was the largest contributor to the total R&D expense decrease. The decrease in external-related expenses was primarily due to the near completion of expenses related to the izencitinib program and the SEQUOIA and REDWOOD amprelosetine studies. The decrease in external-related expenses was partially offset by expenses incurred in the fourth quarter of 2022 associated with the new amprelosetine Phase 3 clinical study (CYPRESS) for MSA patients with symptomatic nOH. The decreases across the remaining R&D categories were primarily due to the Restructuring originally announced in September 2021 and completed in the third quarter of 2022. As anticipated, the Restructuring resulted in significant savings in 2022 R&D expenses, including (i) \$30.7 million in employee-related expenses; (ii) \$12.7 million in share-based compensation expenses; and (iii) \$14.8 million in facilities, depreciation, and other allocated expenses. Severance and other costs that were directly attributed to the Restructuring are included in the *Restructuring and Related Expenses* section below.

Under certain of our collaborative arrangements, we receive partial reimbursement of employee-related costs and external costs, which have been reflected as a reduction of R&D expenses of \$6.7 million, \$7.9 million, and \$10.1 million for 2022, 2021, and 2020, respectively.

Selling, General and Administrative

Selling, general and administrative expenses, as compared to the prior years, were as follows:

(In thousands)	Year Ended December 31,			Change			
	2022	2021	2020	2022		2021	
				\$	%	\$	%
Selling, general and administrative	\$ 67,073	\$ 99,296	\$ 108,531	\$ (32,223)	(32)%	\$ (9,235)	(9)%

Selling, general and administrative expenses also decreased significantly by \$32.2 million in 2022 compared to 2021. The decrease was attributed to a (i) \$17.7 million reduction in employee-related expenses; (ii) \$9.4 million reduction in external-related expenses; (iii) \$8.2 million reduction in share-based compensation expense; and (iv) \$6.2 million reduction in facilities, depreciation, and other expenses. These decreases were partially offset by a \$9.3 million decrease in expenses allocated to research and development primarily related to the Restructuring. Severance and other costs that were directly attributed to the Restructuring are included in the *Restructuring and Related Expenses* section below.

Share-based compensation expense related to selling, general and administrative expenses was \$19.8 million, \$28.1 million, and \$31.7 million in 2022, 2021, and 2020, respectively.

As a result of our Restructuring and the related reduction in workforce, in May 2022, we assigned our Dublin, Ireland, office lease to an unaffiliated company and moved into a smaller office in Dublin, which we estimate will result in approximately \$1.4 million cumulative cash savings through March 2027, or approximately \$0.3 million annually. In addition, in June 2022, we subleased approximately 78,000 square feet of our South San Francisco office and laboratory

space to an unaffiliated company. As a result of the sublease, we expect to realize cumulative cash savings of approximately \$52.7 million through May 2030, or approximately \$6.7 million annually.

Restructuring and Related Expenses

Restructuring and related expenses, as compared to the prior years, were as follows:

(In thousands)	Year Ended December 31,			Change			
	2022	2021	2020	2022		2021	
				\$	%	\$	%
Restructuring and related expenses	\$ 5,840	\$ 11,780	\$—	\$(5,940)	(50)%	\$ 11,780	NM %
Share-based compensation expense (Non-cash)	6,998	8,362	—	(1,364)	(16)	8,362	NM
Total restructuring and related expenses	<u>\$ 12,838</u>	<u>\$ 20,142</u>	<u>\$—</u>	<u>\$(7,304)</u>	<u>(36)%</u>	<u>\$ 20,142</u>	<u>NM %</u>

NM: Not Meaningful

The Restructuring and related expenses were primarily comprised of one-time severance payments, employee-related separation costs, retention costs, and other Restructuring-related expenses. Of the total \$12.8 million in Restructuring and related expenses recognized in 2022, \$5.9 million were related to R&D expenses and \$6.9 million were related to selling, general and administrative expenses. The total Restructuring-related expenses of \$12.8 million also included non-cash share-based compensation expense of \$7.0 million which was primarily related to the modification of equity awards for employees affected by the Restructuring and certain related awards for other employees.

Since the Restructuring was announced and through its completion in the third quarter of 2022, we incurred \$33.0 million in Restructuring and related expenses, which was consistent with our expectations. The \$33.0 million was comprised of \$17.4 million in cash expenses associated with employee termination benefits and related costs and \$15.6 million in non-cash expenses primarily relating to share-based compensation expense.

Interest Expense

Interest expense, as compared to the prior years, was as follows:

(In thousands)	Year Ended December 31,			Change			
	2022	2021	2020	2022		2021	
				\$	%	\$	%
3.25% Convertible senior notes due 2023	\$ (5,395)	\$ (8,547)	\$ (8,547)	\$ 3,152	(37)%	—	—
Amprexetine royalty contingency (non-cash)	(974)	—	—	(974)	NM	—	—
Total interest expense	<u>\$ (6,369)</u>	<u>\$ (8,547)</u>	<u>\$ (8,547)</u>	<u>\$ 2,178</u>	<u>(25)%</u>	<u>\$ —</u>	<u>— %</u>

NM: Not Meaningful

Interest expense, related to continuing operations, was \$6.4 million in 2022 compared to \$8.5 million in 2021. The \$2.2 million decrease in interest expense was due to the retirement of our 3.25% convertible senior notes in August 2022 which was partially offset by the implied (non-cash) interest expense associated with the \$25.0 million funding for ampreloxetine received from Royalty Pharma in July 2022. We do not anticipate having any cash interest expense in the foreseeable future.

Loss on Extinguishment of Debt

Loss on extinguishment of debt, as compared to the prior years, was as follows:

(In thousands)	Year Ended December 31,			Change			
	2022	2021	2020	2022		2021	
	\$	\$	\$	\$	%	\$	%
Loss on extinguishment of debt	\$ (3,034)	\$ —	\$ —	\$ (3,034)	NM %	\$ —	— %

NM: Not Meaningful

In 2022, we incurred a \$3.0 million loss on the extinguishment of our 3.25% convertible senior notes due 2023, at par, that was completed in August 2022. The \$3.0 million loss was comprised of transaction costs related to the extinguishment and the write-off of the remaining debt issuance cost.

Interest and Other Income, net

Interest and other income, net, as compared to the prior years, was as follows:

(In thousands)	Year Ended December 31,			Change			
	2022	2021	2020	2022		2021	
	\$	\$	\$	\$	%	\$	%
Interest income and other income, net	\$ 8,545	\$ 1,109	\$ 4,441	\$ 7,436	671 %	\$ (3,332)	(75)%
Costs related to GSK offering	—	—	(1,610)	—	—	1,610	NM
Total interest and other income, net	\$ 8,545	\$ 1,109	\$ 2,831	\$ 7,436	671 %	\$ (1,722)	(61)%

NM: Not Meaningful

Interest income and other income, net, increased by \$7.4 million in 2022 compared to 2021. The increase was primarily due to (i) higher interest income related to an increase in investment yields, as well as investment balances resulting from the TRELEGY Royalty Transaction; and (ii) the sale of velusetrag to Alfasigma in June 2022 which resulted in a net gain of approximately \$2.7 million.

Provision for Income Tax Benefit (Expense) – Continuing Operations

The provision for income tax benefit (expense) related to continuing operations, as compared to the prior years, was as follows:

(In thousands)	Year Ended December 31,			Change			
	2022	2021	2020	2022		2021	
	\$	\$	\$	\$	%	\$	%
Provision for income tax benefit (expense) - Continuing operations	\$ (9)	\$ 151	\$ 8,520	\$ (160)	(106)%	\$ (8,369)	(98)%

We were recently under Internal Revenue Service (“IRS”) examination for the tax year ended December 31, 2018. The examination was completed in the third quarter of 2022 with minimal adjustments to the 2018 federal tax return.

Net Income from Discontinued Operations (After tax)

Net income from discontinued operations, after tax, as compared to the prior years, was as follows:

(In thousands)	Year Ended December 31,			Change			
	2022	2021	2020	2022		2021	
	\$	\$	\$	\$	%	\$	%
Net income from discontinued operations	\$ 964,959	\$ 65,645	\$ 16,806	\$ 899,314	1,370 %	\$ 48,839	291 %

In 2022, the TRELEGY Royalty Transaction resulted in (i) income from our investment in TRC; (ii) interest expense related to our Non-Recourse 2035 Notes; and (iii) the net gain from the sale of our equity interests in TRC to be reclassified as net income from discontinued operations for all of the periods presented above.

The \$965.0 million in net income from discontinued operations for 2022 was primarily attributed to the \$1,141.1 million net realized gain from the sale of our equity interests in TRC. This net gain was partially offset by a \$24.0 million loss on the extinguishment of our Non-Recourse 2035 Notes and a \$179.0 million provision for income tax expense in 2022. The income tax expense was primarily attributed to the net gain from the sale of our equity interests in TRC and was partially offset by the release of the Company's valuation allowance on its US federal deferred tax assets.

Liquidity and Capital Resources

As a result of the approximate \$1.1 billion in cash proceeds received from the TRELEGY Royalty Transaction completed in July 2022, our cash position increased significantly during the second half of 2022. In connection with TRELEGY Royalty Transaction, we also repaid our Non-Recourse 2035 Notes for approximately \$420.0 million and subsequently repaid our convertible senior notes due 2023, at par, for approximately \$230.0 million.

Following the completion of the paydown of all of our long-term debt, our board of directors authorized a \$250.0 million capital return program consisting of the three elements listed below:

- (i) Completion of a \$94.0 million repurchase of our shares previously held by GSK Finance and its affiliates in September 2022;
- (ii) Completion of a modified Dutch auction tender offer pursuant to which we repurchased \$1.2 million of our ordinary shares in November 2022; and
- (iii) The initiation of an open market stock repurchase in which we repurchased \$32.9 million of our shares on the open market in December 2022 and another \$27.1 million through February 27, 2023.

As of December 31, 2022, we had approximately \$327.5 million in cash, cash equivalents, and investments in marketable securities (excluding restricted cash) and a streamlined balance sheet with no long-term debt.

2021 – 2022 Corporate Restructuring Completion

As previously announced in September 2021, our board of directors approved a plan to focus our resources on our most promising programs and reduce the size of the Company in order to maximize shareholder value. The Restructuring resulted in us reducing headcount by approximately 75%. A majority of the total reduction in workforce occurred at the end of November 2021, and the remainder was completed at the end of February 2022. Since the Restructuring was announced and through its completion in the third quarter of 2022, we incurred \$33.0 million in Restructuring and related expenses, which was consistent with our expectations.

2023 Strategic Actions

As discussed above, on February 27, 2023, we announced additional strategic actions to sharpen the Company's focus and deliver on its commitment to create shareholder value. These new strategic actions include a \$75.0 million increase to the existing \$250.0 million capital return program initiated in September 2022, bringing the total capital return program to \$325.0 million. As of February 27, 2023, we have repurchased \$155.3 million of shares, including \$27.1 million in 2023, and we have approximately \$170.0 million remaining in the capital return program which is expected to be completed by the end of 2023.

Our strategic business plan is subject to significant uncertainties and risks as a result of, among other factors, the COVID-19 pandemic, clinical program outcomes, whether, when and on what terms we are able to enter into new collaboration arrangements, expenses being higher than anticipated, the sales levels of our approved product, unplanned expenses, cash receipts being lower than anticipated, and the need to satisfy contingent liabilities, including litigation matters and indemnification obligations.

Adequacy of cash resources to meet future needs

We expect our cash, cash equivalents and marketable securities will be sufficient to fund our capital return program and our operations for at least the next twelve months from the issuance date of these consolidated financial statements based on current operating plans and financial forecasts.

Cash Flows

Cash flows, as compared to the prior years, were as follows:

(In thousands)	Year Ended December 31,			Change	
	2022	2021	2020	2022	2021
Net cash used in operating activities	\$ (186,991)	\$(207,858)	\$(250,403)	\$ 20,867	\$ 42,545
Net cash provided by investing activities	1,154,009	124,494	10,721	1,029,515	113,773
Net cash (used in) provided by financing activities	(758,806)	91,860	263,085	(850,666)	(171,225)

Net cash flows used in operating activities

Net cash used in operating activities was \$187.0 million in 2022, of which \$2.4 million was used in continuing operations and \$184.6 million was used in discontinued operations, consisting of net income of \$872.1 million, adjustments for non-cash expenses and other reconciling items of (\$1,098.8) million, primarily related to the net gain from the sale of our equity interests in TRC, and a net increase in cash resulting from changes in operating assets and liabilities of \$39.7 million.

Net cash used in operating activities was \$207.9 million in 2021, of which \$235.8 million was used in continuing operations and \$27.9 million was provided by discontinued operations, consisting of a net loss of \$199.4 million, a net increase in cash resulting from adjustments for non-cash and other reconciling items of \$31.2 million and a net decrease in cash resulting from changes in operating assets and liabilities of \$39.6 million.

Net cash flows provided by investing activities

Net cash provided by investing activities was \$1,154.0 million in 2022, of which \$58.9 million was from continuing operations and \$1,095.1 million was from discontinued operations, consisting primarily of \$54.9 million in net cash inflow from the purchase and maturities of marketable securities and \$1,095.1 million in net proceeds related to the sale of our equity interests in TRC.

Net cash provided by investing activities was \$124.5 million in 2021, all of which was provided by continuing operations, and consisting of cash inflows from the net purchase and maturities of marketable securities of \$127.9 million and partially offset by \$3.4 million used for the purchase of property and equipment.

Net cash flows (used in) provided by financing activities

Net cash used in financing activities was \$758.8 million in 2022, of which \$738.6 million was used in continuing operations and \$20.2 million was used in discontinued operations, consisting primarily of a \$128.8 million cash outflow related to the repurchase of ordinary shares, a \$631.6 million cash outflow related to the extinguishment of our debt, and a \$20.2 million cash outflow related to the debt redemption premium associated with the Non-Recourse 2035 Notes. These cash outflows were partially offset by a \$24.5 million cash inflow related to the funding of an additional Phase 3 study for the ampreloxadetine program.

Net cash provided by financing activities was \$91.9 million in 2021, all of which was provided by continuing operations, and consisting of the sale of 7,705,000 ordinary shares for total net proceeds of \$108.2 million and \$3.5 million in proceeds from ESPP and share option purchases. These proceeds were partially offset by \$10.7 million in principal payments on our formerly outstanding Non-Recourse 2035 Notes and \$9.1 million related to the repurchase of shares to satisfy tax withholding obligations.

Contractual Obligations

In the table below, we set forth our significant contractual obligations, as well as obligations related to contracts that we are likely to continue, regardless of the fact that some were cancelable as of December 31, 2022. Some of the amounts that we include in this table are based on management's estimate and assumptions about these obligations, including their duration. Because these estimates and assumptions are necessarily subjective, the amount of the obligations that we will pay in future periods may vary from those reflected in the table.

(In thousands)	Years				
	Total	Within 1	1 to 3	3 to 5	After 5
Facility operating leases	\$ 82,598	\$ 9,947	\$ 21,451	\$ 22,624	\$ 28,576
Purchase obligations ⁽¹⁾	37,167	31,044	6,124	—	—
Total	<u>\$ 119,765</u>	<u>\$ 40,991</u>	<u>\$ 27,575</u>	<u>\$ 22,624</u>	<u>\$ 28,576</u>

(1) Substantially all of this amount was comprised of open purchase orders, as of December 31, 2022, that were issued under existing contracts. This amount does not represent any minimum contract termination liabilities related to our existing contracts.

Commitments and Contingencies

We indemnify our officers and directors for certain events or occurrences, subject to certain limits. We maintain insurance policies that may limit our exposure, and therefore, we believe the fair value of these indemnification agreements is minimal. Accordingly, we have not recognized any liabilities relating to these agreements as of December 31, 2022. However, no assurances can be given regarding the amounts that may ultimately be covered by the insurers, and we may incur substantial liabilities because of these indemnification obligations.

Performance-Contingent Awards

We periodically grant performance-contingent awards to our employees. For the year ended December 31, 2022, we recognized \$0.2 million of share-based compensation expense related to these types of awards. As of December 31, 2022, the maximum remaining expense related to outstanding performance-contingent awards was \$0.4 million which had performance expiration dates through February 2024.

Recent Accounting Pronouncements

The information required by this item is included in "Item 8, Note 1. Organization and Summary of Significant Accounting Policies," in our consolidated financial statements included in this Annual Report on Form 10-K.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risks in the ordinary course of our business. Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily the result of fluctuations in interest rates and foreign currency exchange rates.

We do not believe that inflation has had a material effect on our business, results of operations or financial condition. Nonetheless, if our costs were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs. Our inability or failure to do so could harm our business, results of operations or financial condition.

Interest Rate Risks

We have invested primarily in money market funds, federal agency notes, corporate debt securities, commercial paper and US treasury bills. To reduce the volatility relating to these exposures, we have put investment and risk management policies and procedures in place. The securities in our investment portfolio are not leveraged and are classified as available-for-sale due to their short-term nature. We currently do not engage in hedging activities.

We performed a sensitivity analysis to determine the impact a change in interest rates would have on the value of our investment portfolio. As of December 31, 2022 and 2021, we have estimated that a hypothetical 100 basis point increase in interest rates would have resulted in a decrease in the fair market value of our investment portfolio of \$0.1 million and \$0.2 million, respectively. Such losses would only be realized if we sold the investments prior to maturity.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of Theravance Biopharma, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Theravance Biopharma, Inc. (the “Company”) as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive income (loss), shareholders' equity (deficit), and cash flows for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with U.S. generally accepted accounting principles.

We did not audit the 2021 financial statements of Theravance Respiratory Company, LLC (“TRC”), an entity in which the Company had an 85% economic interest. The Company’s equity in net assets of TRC and amounts due from TRC totaled \$111.1 million at December 31, 2021, and the Company’s equity in the net income of TRC was \$104.0 million for 2021. The 2021 financial statements of TRC were audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to the 2021 amounts included for TRC, is based solely on the report of the other auditors.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the Company’s internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated March 1, 2023 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements, and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Management's Estimates of the Amount and Timing of TRELEGY Sales

Description of the matter

As more fully described in Note 9 to the consolidated financial statements, on July 20, 2022, the Company entered into an Equity Purchase and Funding Agreement to sell to Royalty Pharma Investments 2019 ICAV (RPI), its equity interests in Theravance Respiratory Company (TRC), including the rights to future royalties due from Glaxo Group Limited (GSK) for sales of TRELEGY. The Company concluded the transaction met the definition of a sale under ASC860 Transfers and Servicing of Financial Assets and recognized a \$1.1 billion gain, which consisted of approximately \$1.1 billion of cash received from RPI upon entering into the sale agreement and the \$194.2 million fair value of contingent consideration payable by RPI upon sales of TRELEGY attaining certain levels in future periods, less transaction costs and the carrying value of the Company's interest in TRC. The fair value of the contingent consideration asset at December 31, 2022 was \$194.2 million.

Auditing management's accounting for the sale of its equity interests in TRC was complex due to the significant judgment required by management when estimating the amount and timing of future sales of TRELEGY, which is a key input into the Monte Carlo simulation management utilized to estimate the fair value of the contingent consideration payable by RPI. There are a number of factors that could materially affect the amount and timing of future sales of TRELEGY, virtually all of which are not within the Company's control and management's estimates of the amount and timing of TRELEGY sales require the use of significant unobservable inputs. These inputs are derived using internal management estimates developed based on third-party data and reflect management's judgements, current market conditions surrounding competing products, and forecasts. The significant unobservable inputs can include, to the extent applicable, estimates of patient populations, selling price, and the timing of peak sales. A significant change in unobservable inputs could result in a material increase or decrease to the amount and timing of TRELEGY sales.

How we addressed the matter in our audit

We obtained an understanding, evaluated the design, and tested the operating effectiveness of internal controls that address the identified risks related to the Company's process for estimating the amount and timing of future sales of TRELEGY. We also tested controls over the recognition and measurement of contingent consideration, including controls used in estimating key inputs and the completeness and accuracy of data used in management's valuation models.

To test the fair value of the contingent consideration, we performed audit procedures that included, among others, assessing the terms of the arrangement, including the conditions that must be met for the contingent consideration to become due. We also involved our valuation specialists to assist in evaluating the Company's use of a Monte Carlo simulation and testing the significant assumptions used in the model, including the completeness and accuracy of the underlying data. Our valuation specialists also performed corroborative calculations.

We also involved our research specialists to assist in our evaluation of the significant assumptions used by management to estimate the amount and timing of future sales of TRELEGY, including estimates such as patient populations, peak sales, and sales growth rate. Evaluating the reasonableness of management's assumptions included, among others, consideration of (i) relevant industry forecasts, (ii) consistency with external market research and industry data, and (iii) whether the assumptions were consistent with evidence obtained in other areas of the audit. We also reviewed analyst reports, press releases, and other relevant third-party data for contrary evidence.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2013.

San Mateo, California
March 1, 2023

THERAVANCE BIOPHARMA, INC.
CONSOLIDATED BALANCE SHEETS
(In thousands, except per share data)

	December 31, 2022	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	\$ 298,172	\$ 89,959
Short-term marketable securities	29,312	83,506
Receivables from collaborative arrangements	16,785	14,065
Prepaid clinical and development services	1,513	10,245
Other prepaid and current assets	7,682	8,561
Amounts due from TRC, LLC (Discontinued operations)	—	43,534
Total current assets	353,464	249,870
Property and equipment, net	11,875	13,657
Operating lease assets	40,126	39,690
Future contingent milestone and royalty assets	194,200	—
Restricted cash	836	837
Other assets	6,899	3,228
Equity in net assets of TRC, LLC (Discontinued operations)	—	67,537
Total assets	\$ 607,400	\$ 374,819
Liabilities and Shareholders' Equity (Deficit)		
Current liabilities:		
Accounts payable	\$ 1,554	\$ 3,098
Accrued personnel-related expenses	10,314	12,796
Accrued clinical and development expenses	4,932	17,010
Accrued general and administrative expenses	4,020	2,898
Operating lease liabilities	6,753	503
Deferred revenue	24	98
Other accrued liabilities	1,118	1,304
Accrued interest payable	—	1,246
Current portion of non-recourse notes due 2035, net (Discontinued operations)	—	16,940
Accrued interest payable (Discontinued operations)	—	2,694
Total current liabilities	28,715	58,587
Long-term operating lease liabilities	45,407	52,681
Future royalty payment contingency	25,438	—
Long-term deferred revenue	192	310
Unrecognized tax benefits	64,191	240
Other long-term liabilities	1,657	2,180
Convertible senior notes due 2023, net	—	228,035
Non-recourse notes due 2035, net	—	371,359
Commitments and contingencies		
Shareholders' Equity (Deficit)		
Preferred shares, \$0.00001 par value: 230 shares authorized, no shares issued or outstanding	—	—
Ordinary shares, \$0.00001 par value: 200,000 shares authorized; 65,227 and 74,435 shares issued and outstanding at December 31, 2022 and December 31, 2021, respectively	1	1
Additional paid-in capital	1,295,725	1,387,469
Accumulated other comprehensive loss	(15)	—
Accumulated deficit	(853,911)	(1,726,043)
Total shareholders' equity (deficit)	441,800	(338,573)
Total liabilities and shareholders' equity (deficit)	\$ 607,400	\$ 374,819

See accompanying notes to consolidated financial statements

THERAVANCE BIOPHARMA, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share data)

	Year Ended December 31,		
	2022	2021	2020
Revenue:			
Viatrix collaboration agreement	\$ 48,624	\$ 43,848	43,893
Viatrix royalties (Non-US)	30	—	—
Collaboration revenue	192	11,463	\$ 26,464
Licensing revenue	2,500	—	1,500
Total revenue	<u>51,346</u>	<u>55,311</u>	<u>71,857</u>
Expenses:			
Research and development (1)	63,392	193,657	260,953
Selling, general and administrative (1)	67,073	99,296	108,531
Restructuring and related expenses (1)	12,838	20,142	—
Total expenses	<u>143,303</u>	<u>313,095</u>	<u>369,484</u>
Loss from operations	(91,957)	(257,784)	(297,627)
Interest expense	(6,369)	(8,547)	(8,547)
Loss on extinguishment of debt	(3,034)	—	—
Interest income and other income, net	8,545	1,109	2,831
Loss from continuing operations before income taxes	(92,815)	(265,222)	(303,343)
Provision for income tax (expense) benefit	(9)	151	8,520
Net loss from continuing operations	(92,824)	(265,071)	(294,823)
Income from discontinued operations before income taxes	1,143,930	65,645	16,806
Provision for income tax expense	(178,974)	—	—
Net income from discontinued operations	964,956	65,645	16,806
Net income (loss)	<u>\$ 872,132</u>	<u>\$ (199,426)</u>	<u>\$ (278,017)</u>
Net income (loss) per share:			
Continuing operations - basic and diluted	<u>\$ (1.26)</u>	<u>\$ (3.82)</u>	<u>\$ (4.73)</u>
Discontinued operations - basic and diluted	<u>\$ 13.11</u>	<u>\$ 0.95</u>	<u>\$ 0.27</u>
Net income (loss) - basis and diluted	<u>\$ 11.85</u>	<u>\$ (2.87)</u>	<u>\$ (4.46)</u>
Shares used to compute basis and diluted net income (loss) per share	<u>73,591</u>	<u>69,461</u>	<u>62,345</u>

(1) Amounts include share-based compensation expense as follows:

(In thousands)	Year Ended December 31,		
	2022	2021	2020
Research and development	\$ 12,888	\$ 25,634	\$ 31,294
Selling, general and administrative	19,848	28,065	31,682
Restructuring and related expenses	6,998	8,362	—
Total share-based compensation expense	<u>\$ 39,734</u>	<u>\$ 62,061</u>	<u>\$ 62,976</u>

See accompanying notes to consolidated financial statements.

THERAVANCE BIOPHARMA, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(In thousands)

	Year Ended December 31,		
	2022	2021	2020
Net income (loss)	\$ 872,132	\$ (199,426)	\$ (278,017)
Other comprehensive income (loss):			
Net unrealized loss on available-for-sale investments, net of tax	(15)	(47)	(98)
Comprehensive income (loss)	\$ 872,117	\$ (199,473)	\$ (278,115)

See accompanying notes to consolidated financial statements.

THERAVANCE BIOPHARMA, INC.
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (DEFICIT)
(In thousands)

	Ordinary Shares		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Shareholders' Deficit
	Shares	Amount				
Balances at December 31, 2019	57,015	\$ 1	\$ 1,024,614	\$ 145	\$ (1,248,600)	\$ (223,840)
Net proceeds from sale of ordinary shares	5,500	—	139,915	—	—	139,915
Proceeds from ESPP purchases	245	—	3,701	—	—	3,701
Employee share-based compensation expense	—	—	62,976	—	—	62,976
Issuance of restricted shares	1,907	—	—	—	—	—
Option exercises	68	—	1,361	—	—	1,361
Repurchase of shares to satisfy tax withholding	(407)	—	(9,749)	—	—	(9,749)
Net unrealized loss on marketable securities	—	—	—	(98)	—	(98)
Net loss	—	—	—	—	(278,017)	(278,017)
Balances at December 31, 2020	<u>64,328</u>	<u>\$ 1</u>	<u>\$ 1,222,818</u>	<u>\$ 47</u>	<u>\$ (1,526,617)</u>	<u>\$ (303,751)</u>

	Ordinary Shares		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Shareholders' Deficit
	Shares	Amount				
Balances at December 31, 2020	64,328	\$ 1	\$ 1,222,818	\$ 47	\$ (1,526,617)	\$ (303,751)
Net proceeds from sale of ordinary shares	7,705	—	108,180	—	—	108,180
Proceeds from ESPP purchases	275	—	3,466	—	—	3,466
Employee share-based compensation expense	—	—	62,061	—	—	62,061
Issuance of restricted shares	2,682	—	—	—	—	—
Option exercises	—	—	5	—	—	5
Repurchase of shares to satisfy tax withholding	(555)	—	(9,061)	—	—	(9,061)
Net unrealized loss on marketable securities	—	—	—	(47)	—	(47)
Net loss	—	—	—	—	(199,426)	(199,426)
Balances at December 31, 2021	<u>74,435</u>	<u>\$ 1</u>	<u>\$ 1,387,469</u>	<u>\$ —</u>	<u>\$ (1,726,043)</u>	<u>\$ (338,573)</u>

	Ordinary Shares		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Shareholders' Equity
	Shares	Amount				
Balances at December 31, 2021	74,435	\$ 1	\$ 1,387,469	\$ —	\$ (1,726,043)	\$ (338,573)
Repurchase of ordinary shares, net of transaction costs	(12,739)	—	(128,830)	—	—	(128,830)
Proceeds from ESPP purchases	118	—	802	—	—	802
Employee share-based compensation expense	—	—	39,734	—	—	39,734
Issuance of restricted shares	3,764	—	—	—	—	—
Option exercises	—	—	—	—	—	—
Repurchase of shares to satisfy tax withholding	(351)	—	(3,450)	—	—	(3,450)
Net unrealized loss on marketable securities	—	—	—	(15)	—	(15)
Net income	—	—	—	—	872,132	872,132
Balances at December 31, 2022	<u>65,227</u>	<u>\$ 1</u>	<u>\$ 1,295,725</u>	<u>\$ (15)</u>	<u>\$ (853,911)</u>	<u>\$ 441,800</u>

See accompanying notes to consolidated financial statements.

THERAVANCE BIOPHARMA, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Year Ended December 31,		
	2022	2021	2020
Operating activities			
Net income (loss)	\$ 872,132	\$ (199,426)	\$ (278,017)
Less: Net income from discontinued operations	(964,956)	(65,645)	(16,806)
Net loss from continuing operations	(92,824)	(265,071)	(294,823)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation and amortization	3,716	4,802	4,707
Amortization and accretion income, net	(681)	10	(1,079)
Amprelosetine interest accretion	974	—	—
Share-based compensation	39,734	62,061	62,976
(Gain) loss on disposal of property and equipment	(8)	39	—
Gain on sale of Velusetrag	(2,709)	—	—
Amortization of right-of-use assets	3,989	3,786	3,344
Gain from lease modification	—	(1,863)	—
Loss on extinguishment of debt	3,034	—	—
Other	—	10	(95)
Changes in operating assets and liabilities:			
Receivables from collaborative and licensing arrangements	(2,720)	1,803	6,128
Prepaid clinical and development services	8,733	10,129	(17,638)
Other prepaid and current assets	(704)	2,867	(2,327)
Right-of-use lease assets	(4,424)	—	—
Other assets	(3,802)	(972)	(1,110)
Accounts payable	(1,612)	(3,534)	3,658
Accrued personnel-related expenses, accrued clinical and development expenses, and other accrued liabilities	(14,086)	(37,225)	5,983
Accrued interest payable	(1,246)	—	—
Deferred revenue	(192)	(11,463)	(26,465)
Operating lease liabilities	(1,024)	(1,742)	1,600
Unrecognized tax benefits	63,952	(189)	(8,542)
Other long-term liabilities	(525)	777	936
Net cash used in operating activities - continuing operations	(2,425)	(235,775)	(262,747)
Net cash (used in) provided by operating activities - discontinued operations	(184,566)	27,917	12,344
Net cash used in operating activities	(186,991)	(207,858)	(250,403)
Investing activities			
Purchases of property and equipment	(572)	(3,406)	(6,616)
Purchases of marketable securities	(103,145)	(158,305)	(401,987)
Maturities of marketable securities	158,000	286,199	399,318
Sale of short-term investments and marketable securities	17	—	19,942
Proceeds from the sale of Velusetrag	2,709	—	—
Proceeds from the sale of property and equipment	1,866	6	64
Net cash provided by investing activities - continuing operations	58,875	124,494	10,721
Net cash provided by investing activities - discontinued operations	1,095,134	—	—
Net cash provided by investing activities	1,154,009	124,494	10,721
Financing activities			
Ordinary share repurchases	(128,830)	—	—
Proceeds from the sale of ordinary shares, net	—	108,180	139,915
Proceeds from amprelosetine funding, net	24,464	—	—
Proceed from issuance of 2035 notes	—	—	380,000
Principal payment on 2035 notes, net	(399,998)	(10,730)	(235,347)
Principal payment on 2023 notes	(231,605)	—	—
Proceeds from ESPP purchases	802	3,466	3,701
Proceeds from option exercises	—	5	1,361
Repurchase of shares to satisfy tax withholding	(3,450)	(9,061)	(9,749)
Net cash (used in) provided by financing activities - continuing operations	(738,617)	91,860	279,881
Net cash used in financing activities - discontinued operations	(20,189)	—	(16,796)
Net cash (used in) provided by financing activities	(758,806)	91,860	263,085
Net increase in cash, cash equivalents, and restricted cash	208,212	8,496	23,403
Cash, cash equivalents, and restricted cash at beginning of period	90,796	82,300	58,897
Cash, cash equivalents, and restricted cash at end of period	\$ 299,008	\$ 90,796	\$ 82,300
Supplemental disclosure of cash flow information			
Cash paid for interest	\$ 22,244	\$ 39,029	\$ 24,024
Cash paid (received) for income taxes, net	\$ 117,966	\$ (4,089)	\$ 14

See accompanying notes to consolidated financial statements.

THERAVANCE BIOPHARMA, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Summary of Significant Accounting Policies

Theravance Biopharma, Inc. (“Theravance Biopharma” or the “Company”) is a biopharmaceutical company primarily focused on the discovery, development, and commercialization of medicines. The Company’s core purpose is to create *medicines that make a difference*[®] in people's lives.

Basis of Presentation

The Company’s consolidated financial statements as of December 31, 2022 and 2021, and for the year ended December 31, 2022, 2021, and 2020 have been prepared in conformity with United States (“US”) Generally Accepted Accounting Principles (“GAAP”), and the US Securities and Exchange (“SEC”) regulations for annual reporting.

On July 20, 2022, the Company completed a monetization of its ownership interests in a significant equity method investment which had a major effect on the Company’s financial results for the year ended December 31, 2022 (see “*Note 9. Sale of Equity Interests in Theravance Respiratory Company, LLC*”). In accordance with GAAP, the transaction was accounted for as a sale of a financial asset. For all periods presented, the results of the sale have been included as discontinued operations on these consolidated financial statements.

Principles of Consolidation

The consolidated financial statements include the accounts of Theravance Biopharma and its wholly-owned subsidiaries, all of which are denominated in US dollars. All intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses, and related disclosures in the consolidated financial statements and accompanying notes. Management bases its estimates on historical experience and on assumptions believed to be reasonable under the circumstances. Actual results could differ materially from those estimates.

Segment Reporting

The Company operates in a single segment, which is the discovery (research), development, and commercialization of human therapeutics. The Company’s business offerings have similar economics and other characteristics, including the nature of products and manufacturing processes, types of customers, distribution methods and regulatory environment. The Company is comprehensively managed as one business segment by the Company’s Chief Executive Officer and the management team. Revenue from collaborative arrangements, including royalty revenue, are attributed to regions based on the location of the collaboration partner. Revenue from profit sharing-type arrangements is attributed to the geographic market in which the products are sold. Capitalized property and equipment is predominantly located in the US.

Cash and Cash Equivalents

The Company considers all highly-liquid investments purchased with a maturity of three months or less on the date of purchase to be cash equivalents. Cash equivalents are carried at fair value.

Restricted Cash

The Company maintains restricted cash for certain lease agreements and letters of credit by which the Company has pledged cash and cash equivalents as collateral. The Company may also maintain restricted cash for debt servicing of its non-recourse notes. See “*Note 5. Cash, Cash Equivalents, and Restricted Cash*” for more information.

Investments in Marketable Securities

The Company invests in marketable securities, primarily commercial paper, corporate notes, government bonds and government agency bonds. The Company classifies its marketable securities as available-for-sale securities and reports them at fair value in cash and cash equivalents or marketable securities on the consolidated balance sheets with related unrealized gains and losses included as a component of shareholders' equity (deficit). The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity, which is included in interest and other income (loss) on the consolidated statements of operations.

The cost of securities sold is based on the specific identification method. Realized gains and losses and interest and dividends on securities are included in interest and other income (loss). In circumstances where the Company intends to sell, or is more likely than not required to sell, the security before it recovers its amortized cost basis, the difference between fair value and amortized cost is recognized as a loss in the consolidated statements of operations, with a corresponding write-down of the security's amortized cost.

The Company accounts for credit losses on available-for-sale debt securities in accordance with Accounting Standards Codification ("ASC"), Topic 326, *Financial Instruments – Credit Losses* ("ASC 326"). Under ASC 326, the Company regularly reviews its investments for declines in estimated fair value below amortized cost. The factors considered in determining whether a credit loss exists include the creditworthiness of the security issuers, the number of securities in unrealized loss positions, the severity and duration of the unrealized losses, whether the Company has the intent to sell the securities and whether it is more likely than not that the Company will be required to sell the securities before the recovery of the security's amortized cost basis. The Company did not recognize any credit losses on available-for-sale debt securities for the year ended December 31, 2022, 2021, and 2020.

Fair Value of Financial Instruments

The Company defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date.

The Company's valuation techniques are based on observable and unobservable inputs. Observable inputs reflect readily obtainable data from independent sources, while unobservable inputs reflect the Company's market assumptions. The Company classifies these inputs into the following hierarchy:

Level 1 — Quoted prices for identical instruments in active markets.

Level 2 — Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations whose inputs are observable or whose significant value drivers are observable.

Level 3 — Unobservable inputs and little, if any, market activity for the assets.

Financial instruments include cash equivalents, marketable securities, accounts receivable, accounts payable, accrued liabilities, and formerly outstanding debt. The Company's cash equivalents and marketable securities are carried at estimated fair value and remeasured on a recurring basis. The carrying value of accounts receivable, receivables from collaborative arrangements, accounts payable, and accrued liabilities approximate their estimated fair value due to the relatively short-term nature of these instruments. The fair value of the Company's formerly outstanding debt was classified as a level 2 financial instrument.

Receivables from Collaborative Arrangements

For the periods presented, the Company's receivables from collaborative arrangements relate to amounts due arising from its collaboration (and licensing) agreements. When appropriate, the Company provides for an allowance for credit losses. The Company performs periodic credit evaluations of its customers and generally does not require

collateral. For the periods presented, the Company did not have any material write-offs of receivables from collaborative arrangements.

Concentration of Credit Risks

The Company invests in a variety of financial instruments and, based on its policy, limits the amount of credit exposure with any one issuer, industry or geographic area for investments other than instruments backed by the US federal government.

The Company's future contingent milestone and royalty assets and receivables primarily relate to amounts due under its collaboration and other agreements. Accordingly, the Company may be exposed to credit risk generally associated with pharmaceutical companies or specific to its collaboration agreements. The Company performs periodic evaluations of its customers and generally does not require collateral. For the year ended December 31, 2022, 2021, and 2020, the Company did not experience any material losses related to its receivables.

Property and Equipment

Property, equipment and leasehold improvements are stated at cost, net of accumulated depreciation, and amortized using the straight-line method as follows:

Leasehold improvements	Shorter of remaining lease terms or useful life
Equipment, furniture and fixtures	5 - 7 years
Software and computer equipment	3 - 5 years

Leases

The Company determines whether a contract is or contains a lease at inception of the arrangement. In evaluating whether a contract is indicative of a lease, the Company considers all relevant facts and circumstances to assess whether the arrangement has extended to the Company the right to both (i) obtain substantially all the economic benefits from use of an identified asset and (ii) direct the use of the identified asset. To the extent that the Company determines a contract represents a lease, the arrangement is classified as either an operating lease or a finance lease, with the classification affecting the presentation and pattern of expense recognition in the consolidated statements of operations. The Company did not have any finance leases at either December 31, 2022 or 2021.

Operating lease assets represent the Company's right to use an underlying asset for the lease term and operating lease liabilities represent the Company's obligation to make lease payments arising from the leasing arrangement. The Company records operating leases on the consolidated balance sheets through an operating lease asset and a corresponding short-term and long-term operating lease liability, as applicable. Lease liabilities are measured based on the present value of lease payments over the lease term discounted at the implicit interest rate, when readily available or using the Company's incremental borrowing rate, if the implicit rate is not determinable. The incremental borrowing rate is considered the rate of interest that the Company would have to pay to borrow, on a collateralized basis over a similar term, an amount equal to the lease payments in a similar economic environment. The Company measures its operating lease assets based on the corresponding operating lease liabilities adjusted for (i) prepayments made to the lessor at or before the commencement date, (ii) any initial direct costs incurred, and (iii) tenant incentives granted under the lease contract.

In calculating operating lease assets and liabilities, the Company may elect to combine lease and non-lease components based on the asset type. The Company's lease terms may include options to extend the lease only when it is reasonably certain that such options will be exercised, and the Company recognizes lease expense on a straight-line basis over the lease term. Operating lease assets are evaluated for possible impairment in accordance with the Company's long-lived assets policy.

The Company does not recognize operating lease assets or liabilities for leases that have a lease term of 12 months or less at commencement date, and the lease expense related to these short-term lease arrangements is recognized on a straight-line basis over the term of the lease.

Future Contingent Milestone and Royalty Assets

The fair value of consideration received in connection with TRC Transaction in July 2022 (see “*Note 9. Sale of Equity Interests in Theravance Respiratory Company, LLC and Discontinued Operations*”) included an estimated \$194.2 million in future contingent milestone and royalties that was recorded as a contingent consideration asset (“Contingent Consideration”) on the Company’s consolidated balance sheets on the TRC Transaction date. The Contingent Consideration was initially measured at fair value utilizing a Monte Carlo simulation model to calculate the present value of the risk-adjusted cash flows estimated to be received from the Contingent Consideration. The fair value model involved significant unobservable inputs derived using Company estimates. The Company’s estimates were based in part on external data and reflected its judgements and forecasts. The primary significant unobservable input was the estimate of forecasted TRELEGY net revenues which is considered a Level 3 fair value input. The Company periodically reassesses the carrying value of the Contingent Consideration when indicators of impairment are identified, and the Company will recognize an impairment loss if the carry value materially exceeds the reassessed fair value. The Company recognizes any increases in the carrying value of the Contingent Consideration only when such contingent gains are realized.

Future Royalty Payment Contingency

The Company treats contingent liabilities related to sale of future royalties (see “*Note 10. Amprexetine Funding*”) as debt financings, amortized under the effective interest rate method over the estimated life of the related expected royalty stream. The contingent liabilities related to sale of future royalties and the debt amortization are based on current estimates of future royalty payments, including the potential for any future funding milestones. The Company periodically reassesses the amount and timing of estimated royalty payments based on internal sales projections and external information from market data sources, which are considered Level 3 inputs. To the extent the Company’s estimates of future royalty payments are materially greater or less than previous estimates or the estimated timing of such payments is materially different than previous estimates, the Company will prospectively adjust the amortization of the contingent liability and effective interest rate.

Revenue Recognition

The Company recognizes revenue under ASC Topic 606, *Revenue from Contracts with Customers* (“ASC 606”). Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, an entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation.

At contract inception, once the contract is determined to be within the scope of ASC 606, the Company identifies the performance obligations in the contract by assessing whether the goods or services promised within each contract are distinct. The Company then recognizes revenue for the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

Collaborative Arrangements under ASC 606

The Company enters into collaborative arrangements with partners that fall under the scope of ASC Topic 808, *Collaborative Arrangements* (“ASC 808”). While these arrangements are in the scope of ASC 808, the Company may analogize to ASC 606 for some aspects of these arrangements. The Company analogizes to ASC 606 for certain activities within collaborative arrangements for the delivery of a good or service (i.e., a unit of account) that is part of its ongoing major or central operations. Revenue recognized by analogizing to ASC 606 is recorded as “collaboration revenue” or “licensing revenue” whereas, revenue recognized in accordance with ASC 808 is recorded on a separate collaboration revenue line on the consolidated statements of operations.

The terms of the Company’s collaborative arrangements typically include one or more of the following: (i) up-front fees; (ii) milestone payments related to the achievement of development, regulatory, or commercial goals; (iii) royalties on net sales of licensed products; (iv) reimbursements or cost-sharing of research and development expenses;

and (v) profit/loss sharing arising from co-promotion arrangements. Each of these payments results in collaboration revenues or an offset against research and development expense. Where a portion of non-refundable up-front fees or other payments received is allocated to continuing performance obligations under the terms of a collaborative arrangement, they are recorded as deferred revenue and recognized as collaboration revenue when (or as) the underlying performance obligation is satisfied.

As part of the accounting for these arrangements, the Company must develop estimates and assumptions that require judgment to determine the underlying stand-alone selling price for each performance obligation which determines how the transaction price is allocated among the performance obligations. The estimation of the stand-alone selling price may include such estimates as, forecasted revenues or costs, development timelines, discount rates, and probabilities of technical and regulatory success. The Company evaluates each performance obligation to determine if they can be satisfied at a point in time or over time, and it measures the services delivered to the collaborative partner which are periodically reviewed based on the progress of the related program. The effect of any change made to an estimated input component and, therefore revenue or expense recognized, would be recorded as a change in estimate. In addition, variable consideration (e.g., milestone payments) must be evaluated to determine if it is constrained and, therefore, excluded from the transaction price.

Up-front Fees: If a license to the Company's intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, the Company recognizes collaboration revenues from the transaction price allocated to the license when the license is transferred to the licensee and the licensee is able to use and benefit from the license. For licenses that are bundled with other promises, the Company utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing collaboration revenue from the allocated transaction price. For example, when the Company receives up-front fees for the performance of research and development services, or when research and development services are not considered to be distinct from a license, the Company recognizes collaboration revenue for those units of account over time using a measure of progress. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue or expense recognition as a change in estimate.

Milestone Payments: At the inception of each arrangement that includes milestone payments (variable consideration), the Company evaluates whether the milestones are considered probable of being reached and estimates the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within the Company's or the collaborative partner's control, such as non-operational developmental and regulatory approvals, are generally not considered probable of being achieved until those approvals are received. At the end of each reporting period, the Company re-evaluates the probability of achievement of milestones that are within its or the collaborative partner's control, such as operational developmental milestones and any related constraint, and if necessary, adjusts its estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect collaboration revenues and earnings in the period of adjustment. Revisions to the Company's estimate of the transaction price may also result in negative collaboration revenues and earnings in the period of adjustment.

Royalties: For arrangements that include sales-based royalties, including commercial milestone payments based on the level of sales, and the license is deemed to be the predominant item to which the royalties relate, the Company recognizes revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied).

Reimbursement, cost-sharing and profit-sharing payments: Under certain collaborative arrangements, the Company has been reimbursed for a portion of its research and development expenses or participates in the cost-sharing of such research and development expenses. Such reimbursements and cost-sharing arrangements have been reflected as a reduction of research and development expense in the Company's consolidated statements of operations, as the Company does not consider performing research and development services for reimbursement to be a part of its ongoing major or central operations.

Research and Development Expenses

Research and development (“R&D”) expenses are recorded in the period that services are rendered or goods are received. R&D expenses consist of salaries and benefits, laboratory supplies, and facility costs, as well as fees paid to third parties that conduct certain R&D activities on behalf of the Company, net of certain external R&D expenses reimbursed under the Company’s collaborative arrangements.

As part of the process of preparing its consolidated financial statements, the Company is required to estimate and accrue certain R&D expenses. This process involves the following:

- identifying services that have been performed on the Company’s behalf and estimating the level of service performed and the associated cost incurred for the service when the Company has not yet been invoiced or otherwise notified of actual cost;
- estimating and accruing expenses in the Company’s consolidated financial statements as of each balance sheet date based on facts and circumstances known to it at the time; and
- periodically confirming the accuracy of the Company’s estimates with selected service providers and making adjustments, if necessary.

Examples of estimated R&D expenses that the Company may accrue include:

- fees paid to clinical research organizations (“CROs”) in connection with preclinical and toxicology studies and clinical studies;
- fees paid to investigative sites in connection with clinical studies;
- fees paid to contract manufacturing organizations (“CMOs”) in connection with the production of product and clinical study materials; and
- professional service fees for consulting and related services.

The Company bases its expense accruals related to clinical studies on its estimates of the services received and efforts expended pursuant to contracts with multiple research institutions and CROs that conduct and manage clinical studies on the Company’s behalf. The financial terms of these agreements vary from contract to contract and may result in uneven payment flows. Payments under some of these contracts depend on factors, such as the successful enrollment of patients and the completion of clinical study milestones. The Company’s service providers typically invoice it monthly in arrears for services performed. In accruing service fees, the Company estimates the time period over which services will be performed and the level of effort to be expended in each period. If the Company does not identify costs that it has begun to incur or if it underestimates or overestimates the level of services performed or the costs of these services, the Company’s actual expenses could differ from its estimates.

To date, the Company has not experienced significant changes in its estimates of accrued R&D expenses after a reporting period. However, due to the nature of estimates, there is no assurance that the Company will not make changes to its estimates in the future as it becomes aware of additional information about the status or conduct of its clinical studies and other R&D activities. Such changes in estimates will be recognized as R&D expenses in the period that the change in estimate occurs.

Advertising Expenses

The Company expenses the costs of advertising, including promotional expenses, as incurred. Advertising expenses were \$8.0 million, \$9.3 million and \$6.3 million for the year ended December 31, 2022, 2021, and 2020, respectively.

Fair Value of Share-Based Compensation Awards

The Company issues share-based awards to employees and non-employees, generally in the form of share options and restricted share units (“RSUs”). Share-based compensation expense is calculated based on awards ultimately expected to vest and is reduced for actual forfeitures as they occur. The Company expenses these share-based awards over the requisite service period on a straight-line basis, based on the grant date fair value of the awards.

The Company determines the fair value of RSUs using the closing market price of the Company's common shares on the day of grant. The Company uses the Black-Scholes-Merton option pricing model to estimate the fair value of options granted under its equity incentive plans and rights to acquire shares granted under its employee share purchase plan (“ESPP”). The Black-Scholes-Merton option pricing model requires the use of assumptions, including the expected term of the award and the expected share price volatility. The Company uses the “simplified” method as described in Staff Accounting Bulletin No. 107, *Share-Based Payment*, to estimate the expected option term and plans to transition to historical option exercise data in the near future. The expected share price volatility is based on the historical volatility.

The Company also issues performance share units that settle in the Company's shares. The fair value is determined on the date of the grant using the number of shares expected to be earned and the ending market value of the shares on grant date. The number of shares expected to vest is determined by assessing the probability that the performance criteria will be met and the associated targeted payout level that is forecasted will be achieved. For performance share units, the Company recognizes share-based compensation expense over the requisite service period using the accelerated attribution method when achievement of the performance criteria becomes probable.

Debt Instruments

Coupon interest on the Company's formerly outstanding debt instruments was accrued using the effective interest rate method over the estimated period the debt will be repaid. Debt issuance costs were capitalized as deferred financing costs and presented as a reduction of the carrying value of the financial liability on the Company's consolidated balance sheets. Debt issuance costs subsequently were amortized to interest expense over the estimated life of the related debt based on the effective interest method. The Company considered whether there were any embedded features in its debt instruments that required bifurcation and separate accounting as derivative financial instruments pursuant to ASC Topic 815, *Derivatives and Hedging*. The Company's formerly outstanding debt instruments did not include any features that require bifurcation and separate derivative accounting.

Income Taxes

The Company utilizes the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on differences between financial reporting and tax basis of assets and liabilities and are measured using enacted tax rates and laws that are anticipated to be in effect when the differences are expected to reverse. A valuation allowance is provided when it is more likely than not that some portion or all of a deferred tax asset will not be realized.

The Company's total unrecognized tax benefits of \$76.0 million and \$75.0 million, as of December 31, 2022 and December 31, 2021, respectively, may reduce the effective tax rate in the period of recognition. The Company currently has a full valuation allowance against its deferred tax assets, which would impact the timing of the effective tax rate benefit should any of the Company's uncertain positions be favorably settled in the future.

The Company assesses all material positions, including all significant uncertain positions, in all tax years that are still subject to assessment or challenge by relevant taxing authorities. Assessing an uncertain tax position begins with the initial determination of the position's sustainability and is measured at the largest amount of benefit that is greater than 50% likely to be realized upon ultimate settlement. As of each balance sheet date, unresolved uncertain tax positions must be reassessed, and the Company will determine whether the factors underlying the sustainability assertion have changed and whether the amount of the recognized tax benefit is still appropriate.

The recognition and measurement of tax benefits requires significant judgment. The Company has taken certain positions where it believes that its position is greater than 50% likely to be realized upon ultimate settlement and for which no reserve for uncertain tax positions has been recorded. If the Company does not ultimately realize the expected

benefit of these positions, it will record additional income tax expenses in future periods. Judgments concerning the recognition and measurement of a tax benefit might change as new information becomes available.

Any tax levied or credited by a governmental taxing authority that is not based on the Company's income is outside the scope of accounting for income taxes. Therefore, the Company records such items as a component of its loss before income taxes.

Net Income (Loss) per Share

Basic net income (loss) per share is computed by dividing net income (loss) by the weighted-average number of shares outstanding, less ordinary shares subject to forfeiture. Diluted net income (loss) per share is computed by dividing net income (loss) by the weighted-average number of shares outstanding, less ordinary shares subject to forfeiture, plus all additional ordinary shares that would have been outstanding, assuming dilutive potential ordinary shares had been issued for other dilutive securities.

(In thousands, except per share data)	Year Ended December 31,		
	2022	2021	2020
Numerator:			
Net loss from continuing operations	\$ (92,824)	\$ (265,071)	\$ (294,823)
Net income from discontinued operations	964,956	65,645	16,806
Net income (loss)	<u>872,132</u>	<u>(199,426)</u>	<u>(278,017)</u>
Denominator:			
Weighted-average ordinary shares outstanding	73,591	69,518	62,808
Less: weighted-average ordinary shares subject to forfeiture	—	(57)	(463)
Weighted-average ordinary shares outstanding - basic and diluted	<u>73,591</u>	<u>69,461</u>	<u>62,345</u>
Net income (loss) per ordinary share:			
Continuing operations - basic and diluted	\$ (1.26)	\$ (3.82)	\$ (4.73)
Discontinued operations - basic and diluted	<u>\$ 13.11</u>	<u>\$ 0.95</u>	<u>\$ 0.27</u>
Net income (loss) - basic and diluted	<u>\$ 11.85</u>	<u>\$ (2.87)</u>	<u>\$ (4.46)</u>

Anti-dilutive Securities

In accordance with ASC 260, *Earnings Per Share*, if a company incurred a loss related to its continuing operations, then potential ordinary shares are considered anti-dilutive for the periods in which the loss was recognized. For the year ended December 31, 2022, 2021, and 2020, the Company recognized losses from continuing operations. As a result, the following ordinary equivalent shares were not included in the computation of diluted net loss per share for both continuing operations and discontinuing operations:

(In thousands)	Year Ended December 31,		
	2022	2021	2020
Share issuances under equity incentive plans and employee share purchase plans	5,487	7,469	6,553
Share issuances upon the conversion of convertible senior notes	—	6,676	6,676
Total	<u>5,487</u>	<u>14,145</u>	<u>13,229</u>

Comprehensive Income (Loss)

Comprehensive income (loss) is comprised of net income (loss) and changes in unrealized gains and losses on the Company's available-for-sale investments.

Related Parties

See “*Note 15. Capital Return Program*” for information regarding the Company’s repurchase of all of its ordinary shares previously held by GSK Finance (No.3) plc (“GSK Finance”), a wholly-owned subsidiary of GSK, in September 2022.

Robert V. Gunderson, Jr. was a member of the Company’s board of directors until his resignation effective September 11, 2021. The Company has engaged Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP, of which Mr. Gunderson is a partner, as its primary legal counsel. Fees incurred for services provided by Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP for the year ended December 31, 2021 and 2020, were \$0.5 million for each year.

Recently Issued Accounting Pronouncements Not Yet Adopted

The Company has evaluated other recently issued accounting pronouncements and does not currently believe that any of these pronouncements will have a material impact on its consolidated financial statements and related disclosures.

2. Revenue

Revenues from Collaborative Arrangements

Viatrix

In January 2015, the Company and Viatrix Inc. (“Viatrix”) established a strategic collaboration (the “Viatrix Agreement”) for the development and commercialization of revefenacin, including YUPELRI® (revefenacin) inhalation solution. The Company entered into the collaboration to expand the breadth of its revefenacin development program and extend its commercial reach beyond the acute care setting. In November 2018, YUPELRI was approved by the US Food and Drug Administration (the “FDA”) for the maintenance treatment of patients with chronic obstructive pulmonary disease (“COPD”).

In the US, Viatrix is leading the commercialization of YUPELRI, and the Company co-promotes the product under a profit and loss sharing arrangement (65% to Viatrix; 35% to the Company). Outside the US (excluding China and adjacent territories), Viatrix is responsible for development and commercialization and will pay the Company a tiered royalty on net sales at percentage royalty rates ranging from low double-digits to mid-teens. Viatrix is the principal in the sales transactions, and as a result, the Company does not reflect the product sales in its consolidated financial statements.

As of December 31, 2022, the Company is eligible to receive from Viatrix potential global development, regulatory and sales milestone payments (excluding China and adjacent territories) totaling up to \$205.0 million in the aggregate, with \$160.0 million associated with YUPELRI monotherapy, and \$45.0 million associated with future potential combination products. Of the \$160.0 million associated with monotherapy, \$150.0 million relates to sales milestones based on achieving certain levels of net sales and \$10.0 million relates to regulatory actions in the EU.

The Viatrix Agreement is considered to be within the scope of ASC 808 as the parties are active participants and exposed to the risks and rewards of the collaborative activity with a unit of account provided to Viatrix as a customer. Under the terms of the Viatrix Agreement, which included the delivery by the Company of a license to Viatrix to develop and commercialize revefenacin, Viatrix was responsible for reimbursement of the Company’s costs related to the registrational program up until the approval of the first new drug application in November 2018; thereafter, R&D expenses are shared. Performing R&D services for reimbursement is considered a collaborative activity under the scope of ASC 808. Reimbursable program costs are recognized proportionately with the performance of the underlying services and accounted for as reductions to R&D expense. For this unit of account, the Company did not recognize revenue or analogize to ASC 606 and, as such, the reimbursable program costs are excluded from the transaction price.

The future potential milestone amounts for the Viatrix Agreement were not included in the transaction price, as they were all determined to be fully constrained following the concepts of ASC 606. As part of the Company’s evaluation of the development and regulatory milestones constraint, the Company determined that the achievement of such milestones is contingent upon success in future clinical trials and regulatory approvals which are not within its

control and uncertain at this stage. The Company expects that the sales-based milestone payments and royalty arrangements will be recognized when the sales occur or the milestone is achieved.

Following the FDA approval of YUPELRI in November 2018, net amounts payable to or receivable from Viatris each quarter under the profit-sharing structure are disaggregated according to their individual components. In accordance with the applicable accounting guidance, amounts receivable from Viatris in connection with the commercialization of YUPELRI are recorded within the consolidated statements of operations as revenue from “Viatris collaboration agreement” irrespective of whether the overall collaboration is profitable. Amounts payable to Viatris, if any, in connection with the commercialization of YUPELRI are recorded within the consolidated statements of operations as a collaboration loss within selling, general and administrative expenses. Any reimbursement from Viatris attributed to the 65% cost-sharing of the Company’s R&D expenses is characterized as a reduction of R&D expense, as the Company does not consider performing research and development services for reimbursement to be a part of its ordinary activities. For the year ended December 31, 2022, YUPELRI continued to be profitable for the Company.

The following YUPELRI-related amounts were recognized within revenue in the Company’s consolidated statements of operations:

(In thousands)	Year Ended December 31,		
	2022	2021	2020
Viatris collaboration agreement - <i>Amounts receivable from Viatris</i>	\$ 48,624	\$ 43,848	\$ 43,893
Viatris royalties (Non-US)	30	—	—
Total	\$ 48,654	\$ 43,848	\$ 43,893

While Viatris records the total net sales of YUPELRI within its consolidated financial statements, Viatris collaboration agreement revenue includes the Company’s implied 35% share of net sales of YUPELRI for year ended December 31, 2022, 2021, and 2020 of \$70.7 million, \$56.7 million, and \$50.0 million, respectively, before deducting shared expenses. In the fourth quarter of 2022, the Company recognized its first revenue associated with non-US YUPELRI royalties in the amount of \$30,000.

Other Collaborative Arrangement Revenues

The Company’s other collaborative arrangement revenues consisted of:

(In thousands)	Year Ended December 31,		
	2022	2021	2020
Janssen	\$ —	\$ 11,425	\$ 26,426
Other	192	38	38
Total collaboration revenue	\$ 192	\$ 11,463	\$ 26,464

All of the recognized revenues from the Company’s other collaborative arrangements presented in the table above were included in deferred revenue at the beginning of the respective periods.

Janssen Biotech

In February 2018, the Company entered into a global co-development and commercialization agreement with Janssen Biotech, Inc. (“Janssen”) for izencitinib (formerly known as TD-1473) and related back-up compounds for inflammatory intestinal diseases, including ulcerative colitis and Crohn’s disease (the “Janssen Agreement”). The Company received an upfront payment of \$100.0 million related to the Janssen Agreement. Following unfavorable Phase 3 clinical trial results for izencitinib announced in August 2021, Janssen terminated the Janssen Agreement effective January 16, 2022. As a result, at the end of 2021, the Company recognized the remaining non-cash deferred collaboration revenue associated with the Janssen Agreement.

Reimbursement of R&D Expenses

As noted above, under certain collaborative arrangements the Company is entitled to reimbursement of certain R&D expenses. Activities under collaborative arrangements for which the Company is entitled to reimbursement are

considered to be collaborative activities under the scope of ASC 808. For these units of account, the Company does not analogize to ASC 606 or recognize revenue. The Company records reimbursement payments received from its collaboration partners as reductions to R&D expense.

The following table summarizes the reductions to R&D expenses related to reimbursement payments:

(In thousands)	Year Ended December 31,		
	2022	2021	2020
Viatriis	\$ 6,682	\$ 2,072	\$ 1,524
Janssen	—	5,819	8,554
Total reduction to R&D expense, net	\$ 6,682	\$ 7,891	\$ 10,078

Revenue from Licensing Arrangements

Viatriis

In June 2019, the Company announced the expansion of the Viatriis Agreement to grant Viatriis exclusive development and commercialization rights to nebulized revefenacin in China and adjacent territories, which include Hong Kong SAR, the Macau SAR, and Taiwan. In exchange, the Company received an upfront payment of \$18.5 million (before a required tax withholding) and is eligible to receive additional potential development and sales milestones totaling \$54.0 million and low double-digit tiered royalties on net sales of nebulized revefenacin, if approved.

In March 2020, the Company earned a \$1.5 million development milestone for the acceptance of a clinical trial application associated with the use of revefenacin monotherapy in China and adjacent territories. Viatriis is responsible for all aspects of development and commercialization in the China and adjacent territories, including pre- and post-launch activities and product registration and all associated costs.

Pfizer

In December 2019, the Company entered into a global license agreement with Pfizer Inc. (“Pfizer”) for its preclinical skin-selective, locally-acting pan-JAK inhibitor program (the “Pfizer Agreement”). The compounds in this program are designed to target validated pro-inflammatory pathways and are specifically designed to possess skin-selective activity with minimal systemic exposure.

Under the Pfizer Agreement, Pfizer has an exclusive license to develop, manufacture and commercialize certain compounds for all uses other than gastrointestinal, ophthalmic, and respiratory applications. The Company received an upfront cash payment of \$10.0 million in 2019, and in March 2022, the Company recognized \$2.5 million in licensing revenue related to a development milestone payment from Pfizer for the dosing of the first patient in the Phase 1 clinical trial.

As of December 31, 2022, the Company is eligible to receive up to an additional \$237.5 million in development and sales milestone payments from Pfizer. In addition, the Company is eligible to receive a tiered royalty on worldwide net sales of any potential products under the license at percentage royalty rates ranging from middle single-digits to low double-digits.

The Pfizer Agreement is accounted for under ASC 606. The Company identified two performance obligations primarily comprised of the delivery of the license and samples of tangible materials which were completed in December 2019. The transaction price was determined to be the upfront payment of \$10.0 million which the Company recognized as licensing revenue in December 2019.

The future potential milestones payable under the Pfizer Amendment were not included in the transaction price, as they were all determined to be fully constrained following the concepts of ASC 606. As part of the Company’s evaluation of the development milestones constraint, the Company determined that the achievement of such milestones is contingent upon success in future clinical trials and regulatory approvals which are not within its control and uncertain at this stage. The Company expects that the sales-based milestone payments will be recognized when the sales occur or

the milestone is achieved. The Company will re-evaluate the transaction price each quarter and as uncertain events are resolved or other changes in circumstances occur.

3. Segment Information

The Company operates in a single segment, which is the discovery (research), development, and commercialization of human therapeutics. The following table summarizes total revenue by geographic region based on the location of the Company's customers or collaboration partners:

(In thousands)	Year Ended December 31,		
	2022	2021	2020
US	\$ 51,124	\$ 55,273	\$ 70,319
Europe	222	38	1,538
Total revenue	\$ 51,346	\$ 55,311	\$ 71,857

The following table summarizes total revenue from each of the Company's customers or collaboration partners who individually accounted for 10% or more of total revenue (as a percentage of total revenues) during the most recent three years:

(% of total revenue)	Year Ended December 31,		
	2022	2021	2020
Viatriis	95 %	79 %	63 %
Janssen	— %	21 %	37 %

4. Sale of Velusetrag

Velusetrag is an oral, investigational medicine developed for gastrointestinal motility disorders. It is a highly selective agonist with high intrinsic activity at the human 5-HT4 receptor.

In 2012, the Company partnered with Alfasigma S.p.A. ("Alfasigma") in the development of velusetrag and its commercialization in certain countries. In April 2018, Alfasigma exercised its option to continue to develop and commercialize velusetrag, and the Company elected not to pursue further development. Global rights to develop, manufacture and commercialize velusetrag were transferred to Alfasigma under the terms of the collaboration arrangement.

On June 30, 2022, the Company entered into an Asset Purchase Agreement (the "APA") to sell all of its velusetrag assets to Alfasigma. In connection with the closing of the transaction, Alfasigma acquired, among other things, (i) intellectual property and (ii) books and records related to velusetrag. As consideration for the velusetrag sale, the Company received an upfront payment of \$2.8 million in July 2022, and pursuant to the terms of the APA, the Company is eligible to receive up to \$105.0 million in additional future developmental and sales milestones.

At the time of the sale, the velusetrag assets had no remaining book value on the Company's records, and all of the velusetrag assets were delivered to Alfasigma. For year ended December 31, 2022, the Company recognized a net gain of \$2.7 million, after transaction costs, related to the sale of velusetrag within "interest income and other income, net" on the consolidated statements of operations.

5. Cash, Cash Equivalents, and Restricted Cash

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the current period and comparable prior year period consolidated balance sheets that sum to the total of the same such amounts shown on the consolidated statements of cash flows.

(In thousands)	December 31,		
	2022	2021	2020
Cash and cash equivalents	\$ 298,172	\$ 89,959	\$ 81,467
Restricted cash	836	837	833
Total cash, cash equivalents, and restricted cash shown on the consolidated statements of cash flows	<u>\$ 299,008</u>	<u>\$ 90,796</u>	<u>\$ 82,300</u>

The Company maintains restricted cash for certain lease agreements and letters of credit by which the Company has pledged cash and cash equivalents as collateral. The cash-related amounts reported in the table above exclude the Company's investments in short and long-term marketable securities that are reported separately on the consolidated balance sheets.

The Company periodically engages in foreign exchange transactions as a part of its operations. For the year ended December 31, 2022, 2021, and 2020, the Company recognized net realized and unrealized foreign currency losses of \$0.9 million, \$0.9 million, and \$0.3 million, respectively. These amounts are included in the Company's consolidated statements of operations within "Interest income and other income, net".

6. Investments and Fair Value Measurements

Available-for-Sale Securities

The estimated fair value of marketable securities is based on quoted market prices for these or similar investments obtained from a commercial pricing service. The fair market value of marketable securities classified within Level 1 is based on quoted prices for identical instruments in active markets. The fair value of marketable securities classified within Level 2 is based on quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; or model-driven valuations whose inputs are observable or whose significant value drivers are observable. Observable inputs may include benchmark yields, reported trades, broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers and reference data including market research publications.

Available-for-sale securities are summarized below:

(In thousands)		December 31, 2022			
		Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
US government securities	Level 1	\$ 24,873	\$ 8	\$ —	\$ 24,881
US government agency securities	Level 2	20,869	4	—	20,873
Corporate notes	Level 2	—	—	—	—
Commercial paper	Level 2	37,307	—	(27)	37,280
Marketable securities		83,049	12	(27)	83,034
Money market funds	Level 1	220,508	—	—	220,508
Total		<u>\$ 303,557</u>	<u>\$ 12</u>	<u>\$ (27)</u>	<u>\$ 303,542</u>

(In thousands)		December 31, 2021			
		Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
US government securities	Level 1	\$ 29,986	\$ —	\$ (2)	\$ 29,984
Corporate notes	Level 2	5,034	—	(2)	5,032
Commercial paper	Level 2	48,490	1	(1)	48,490
Marketable securities		83,510	1	(5)	83,506
Money market funds	Level 1	50,228	—	—	50,228
Total		<u>\$ 133,738</u>	<u>\$ 1</u>	<u>\$ (5)</u>	<u>\$ 133,734</u>

As of December 31, 2022, all of the Company's available-for-sale securities had contractual maturities within three months, and the weighted-average maturity of marketable securities was less than one month. There were no transfers between Level 1 and Level 2 during the periods presented, and there have been no material changes to the Company's valuation techniques during the year ended December 31, 2022 or 2021.

Available-for-sale debt securities with unrealized losses are summarized below:

(In thousands)	December 31, 2022					
	Less than 12 Months		Greater than 12 Months		Total	
	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses
Commercial paper	\$ 37,279	\$ (27)	\$ —	\$ —	\$ 37,279	\$ (27)
Total	<u>\$ 37,279</u>	<u>\$ (27)</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 37,279</u>	<u>\$ (27)</u>

(In thousands)	December 31, 2021					
	Less than 12 Months		Greater than 12 Months		Total	
	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses
US government securities	\$ 19,991	\$ (2)	\$ —	\$ —	\$ 19,991	\$ (2)
Corporate notes	5,031	(2)	—	—	5,031	(2)
Commercial paper	9,995	(1)	—	—	9,995	(1)
Total	<u>\$ 35,017</u>	<u>\$ (5)</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 35,017</u>	<u>\$ (5)</u>

The Company invests primarily in high credit quality and short-term maturity debt securities with the intent to hold such securities until maturity at par value. The Company does not intend to sell the investments that are currently in an unrealized loss position, and it is unlikely that it will be required to sell the investments before recovery of their amortized cost basis, which may be at maturity. The Company reviewed its available-for-sale debt securities and determined that there were no credit-related losses to be recognized as of December 31, 2022.

As of December 31, 2022, the Company's accumulated other comprehensive loss on its consolidated balance sheets consisted of net unrealized gains (losses) on available-for-sale investments. For the year ended December 31, 2022 and 2021, the Company did not sell any marketable securities. For the year ended December 31, 2020, the Company sold marketable securities for total proceeds of \$19.9 million and recognized minimal net realized gains from the sales based on the specific identification method.

7. Property and Equipment

Property and equipment are held predominantly in the US and consisted of the following:

(In thousands)	December 31,	
	2022	2021
Computer equipment	\$ 1,921	\$ 2,341
Software	1,088	2,063
Furniture and fixtures	1,674	3,605
Laboratory equipment	15,445	20,087
Leasehold improvements	24,583	24,053
Subtotal	44,711	52,149
Less: accumulated depreciation	(32,836)	(38,492)
Property and equipment, net	\$ 11,875	\$ 13,657

For the year ended December 31, 2022, 2021, and 2020, depreciation expense for property and equipment was \$2.6 million, \$3.5 million, and \$3.3 million, respectively.

As a result of the Company's corporate restructuring announcement in September 2021 (see "Note 16. Corporate Restructuring Completion"), the Company completed an auction of certain property and equipment in December 2021. In January 2022, the Company received net proceeds of \$1.9 million from the auction, and the net realized loss from the sale of the property and equipment was not material.

8. Leases

South San Francisco Lease and Subleases

As of December 31, 2022, the Company leased approximately 162,000 square feet of office and laboratory space in two buildings in South San Francisco, California, under a non-cancelable operating lease that ends in May 2030 ("SSF Lease"). The lease includes a tenant improvement allowance that expires in November 2024 and had a remaining balance of \$8.9 million and \$10.2 million, as of December 31, 2022 and 2021, respectively.

In June 2022, the Company entered into a non-cancelable agreement under which it subleased approximately 78,000 square feet of its South San Francisco office and laboratory space to an unaffiliated company. The sublease term continues through May 2030, consistent with the expiration of the SSF Lease, and the subtenant has no option to extend the sublease. Under the terms of the sublease, the Company is entitled to receive an initial monthly base rent of \$0.5 million which will be subject to annual increases of 3%, as well as the subtenant's proportionate share of the property's operating expenses. As part of the sublease terms, the subtenant was allocated \$6.5 million of the Company's \$8.9 million remaining tenant improvement allowance. The Company expects to receive a total of \$51.7 million in base rent over the sublease term which represents a \$13.5 million premium (before sublease execution-related costs) over its proportionate lease payment obligations under the SSF Lease. Under the terms of the SSF Lease, 50% of the sublease premium, equal to approximately \$6.7 million, shall be shared with the landlord and 50% shall be retained by the Company which equates to a base rent savings of approximately \$0.8 million annually.

In July 2021, the Company entered into a non-cancelable agreement under which it subleased approximately 21,000 square feet of its South San Francisco office and laboratory space to another unaffiliated company. Under the terms of the sublease agreement, the sublease term continues through September 2028, and the parties have no option to extend the sublease. Either the Company or the subtenant may terminate the sublease by giving the other party ten days prior written notice. The Company is entitled to receive an initial monthly base rent of \$0.1 million, with annual base rent increases of 3% and the subtenant's proportionate share of the building's operating expenses. The Company expects to receive a total of \$13.1 million over the sublease term which represents a \$4.2 million premium (before sublease execution-related costs) over its proportionate lease payment obligations under the SSF Lease. Under the terms of the head SSF Lease, 50% of the sublease premium, equal to \$2.1 million, shall be shared with the landlord and 50% shall be retained by the Company.

The Company recognizes the sublease income on a straight-line basis over the term of its two subleases which is reflected as a reduction of R&D expense and selling, general and administrative expenses in the consolidated statements of operations. No lease modification was deemed to have occurred by entering into the sublease agreements because the Company was not released, either fully or in part, from its obligations under the SSF Lease.

Sublease income related to the sublease agreements, including base rent and certain sublease transaction cost reimbursements from the landlord, was \$5.0 million and \$0.5 million for the year ended December 31, 2022 and 2021, respectively.

Dublin Lease

In April 2017, the Company leased approximately 6,100 square feet of office space in Dublin, Ireland, under a non-cancelable operating lease that expires in April 2027 (“Dublin Lease”). In May 2022, the Company entered into an agreement under which it assigned the Dublin Lease (“Lease Assignment”) to an unaffiliated company. The Company determined that the Lease Assignment would be accounted for as a lease modification under ASC 842, *Leases*. As a result of the lease modification, the Company reduced the value of its operating lease assets and liabilities in the consolidated balance sheets by \$1.4 million and \$1.5 million, respectively, in the second quarter of 2022. Under the Lease Assignment, the Company sold furniture and equipment located in the Dublin office to the unaffiliated company and recognized a net loss of \$0.1 million from the sale.

Following the execution of the Lease Assignment, in May 2022, the Company entered into a new operating lease agreement for approximately 700 square feet of office space in Dublin, Ireland, effective June 2022. The lease has a two-year term ending in May 2024, and the Company may terminate the lease by providing three months prior written notice. Under the new lease, the Company will incur total base rent expense of approximately \$0.4 million (or \$0.2 million annually) which is recognized on straight-line basis over the two-year lease term. The Company’s annual straight-line base rent for its previous Dublin Lease was approximately \$0.4 million.

The Company has evaluated its existing leases and determined that they were all operating leases. The present values of the remaining lease payments and corresponding right-of-use assets were as follows, and the difference between the right-of-use assets and lease liabilities was primarily due to office-related deferred rent payments that are payable in future periods and tenant improvement reimbursements.

<u>(In thousands)</u>	<u>Classification</u>	<u>December 31, 2022</u>	<u>December 31, 2021</u>
<u>Assets</u>			
Operating lease assets	Operating lease assets	\$ 40,126	\$ 39,690
<u>Liabilities</u>			
<u>Current:</u>			
Operating lease liabilities	Operating lease liabilities	\$ 6,753	\$ 503
<u>Non-current:</u>			
Operating lease liabilities	Long-term operating lease liabilities	45,407	52,681
Total operating lease liabilities		\$ 52,160	\$ 53,184

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Lease expense and sublease income were included within operating expenses in the consolidated statements of operations as follows:

<u>(In thousands)</u>	<u>Classification</u>	<u>Year Ended December 31, 2022</u>	<u>Year Ended December 31, 2021</u>	<u>Year Ended December 31, 2020</u>
Operating lease expense	Selling, general and administrative expense	\$ 8,314	\$ 6,248	\$ 7,974
Operating lease expense	Research and development expense	—	1,377	758
Total operating lease expense ⁽¹⁾		<u>\$ 8,314</u>	<u>\$ 7,625</u>	<u>\$ 8,732</u>

<u>(In thousands)</u>	<u>Classification</u>	<u>Year Ended December 31, 2022</u>	<u>Year Ended December 31, 2021</u>	<u>Year Ended December 31, 2020</u>
Operating sublease income	Selling, general and administrative expense	\$ 5,420	\$ 466	\$ —

(1) Excludes short-term leases which were not material and office lease service-related charges.

Cash paid for amounts included in the measurement of lease liabilities was as follows:

<u>(In thousands)</u>	<u>Year Ended December 31, 2022</u>	<u>Year Ended December 31, 2021</u>
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	\$ 9,312	\$ 8,971

As of December 31, 2022, the maturities of the Company's lease liabilities were as follows:

<u>(In thousands)</u>	
<u>Year ending December 31:</u>	
2023	\$ 9,947
2024	10,623
2025	10,828
2026	11,145
2027	11,479
Thereafter	28,576
Total operating lease payments	<u>\$ 82,598</u>
Less: Estimated tenant improvement allowance	(8,912)
Less: Imputed interest	(21,526)
Present value of operating lease liabilities	<u>\$ 52,160</u>

As of December 31, 2022, the undiscounted cash flows to be received related to the Company's subleases were as follows:

<u>(In thousands)</u>	
<u>Year ending December 31:</u>	
2023	\$ 7,713
2024	7,944
2025	8,181
2026	8,425
2027	8,675
Thereafter	18,502
Total operating sublease receipts	<u>\$ 59,438</u>

As of December 31, 2022, the weighted-average remaining lease term was 7.4 years, and the weighted-average discount rate used to determine the lease liabilities was 8.63%. The Company's discount rate was primarily derived from the 9.0% interest rate on its previously issued Non-Recourse 2033 Notes in November 2018 and did not involve any significant assumptions.

9. Sale of Equity Interests in Theravance Respiratory Company, LLC and Discontinued Operations

Background

In May 2014, the Company entered into the TRC LLC Agreement with Innoviva, Inc. ("Innoviva") that governed the operation of Theravance Respiratory Company, LLC ("TRC"). Under the TRC LLC Agreement, Innoviva was the manager of TRC, and the business and affairs of TRC were managed exclusively by the manager, including (i) day to day management of the drug programs in accordance with the existing GSK agreements; (ii) preparing an annual operating plan for TRC; and (iii) taking all actions necessary to ensure that the formation, structure and operation of TRC complied with applicable law and partner agreements. The Company was responsible for its proportionate share of TRC's administrative expenses incurred as communicated to the Company, by Innoviva.

Through the Company's 85% equity interest in TRC, the Company was entitled to receive an 85% economic interest in any future payments made by GSK under the strategic alliance agreement and under the portion of the collaboration agreement assigned to TRC (net of TRC expenses paid and the amount of cash, if any, expected to be used by TRC pursuant to the TRC LLC Agreement over the next four fiscal quarters). The primary drug program assigned to TRC is TRELEGY.

Sale of Equity Interests in TRC

On July 20, 2022, the Company completed the sale of its 2,125 Class B Units and 6,375 Class C Units (collectively, the "Issuer II Units") of TRC to, and entered into a sale of future royalties from sales of amprelosetine (see "Note 10. Amprelosetine Funding") with, Royalty Pharma Investments 2019 ICAV, an Irish collective asset-management vehicle ("Royalty Pharma"), pursuant to the Equity Purchase and Funding Agreement, dated as of July 13, 2022 (including the schedules and exhibits thereto, the "Purchase Agreement"), by and between the Company and Royalty Pharma (collectively with the other transactions contemplated by the Purchase Agreement, the "TRC Transaction"). The Issuer II Units represent the right to receive 85% of the royalty payments on worldwide net sales of Assigned Collaboration Products (as defined in the Purchase Agreement) pursuant to the terms of that certain Collaboration Agreement, dated as of November 14, 2002, by and between Innoviva, Inc. (formerly known as Theravance, Inc.), a Delaware corporation ("Innoviva"), and Glaxo Group Limited, a private company limited by shares registered under the laws of England and Wales ("GSK") (as amended, the "Collaboration Agreement"). Assigned Collaboration Products is primarily comprised of TRELEGY ELLIPTA ("TRELEGY"). Total consideration payable by Royalty Pharma under the terms of the TRC Transaction included initial consideration with a fair value of \$1,326.6 million plus the right to receive additional payments as further described below.

At the closing of the TRC Transaction (the "Closing"), the Company received approximately \$1.1 billion in cash. From and after January 1, 2023, for any calendar year starting with the year ending December 31, 2023 and ending with the year December 31, 2026, upon certain milestone minimum royalty amounts for the Assigned Collaboration Products being met, Royalty Pharma is obligated to make certain cash payments to the Company (the "Milestone Payments"), which are not to exceed \$250.0 million in aggregate. Additionally, the Company will receive from Royalty Pharma 85% of the royalty payments on the Assigned Collaboration Products payable (a) for sales or other activities occurring on and after January 1, 2031 related to the Assigned Collaboration Products in the US, and (b) for sales or other activities occurring on and after July 1, 2029 related to the Assigned Collaboration Products outside of the US.

The Purchase Agreement contained customary representations and warranties of the Company and Royalty Pharma, including with respect to organization, authorization, intellectual property matters and tax matters, and certain covenants with respect to confidentiality, taxes and actions and conduct relating to preservation of TRC prior to the Closing. The Company and Royalty Pharma will each indemnify the other against damages arising from breaches of representations, warranties, and covenants under the Purchase Agreement.

Effective as of the Closing, the Company consented to certain amendments to the Collaboration Agreement and the Extension Agreement, dated as of March 3, 2014, by and between the Company and GSK, as well as the termination of the Master Agreement, dated as of March 3, 2014, by and between Innoviva, the Company and GSK, and further released Innoviva, Innoviva TRC Holdings LLC, a Delaware limited liability company, Royalty Pharma and TRC for claims relating to TRC or the ownership of TRC by the Company or Innoviva prior to the Closing.

The Company evaluated the TRC Transaction under ASC 860, *Transfers and Servicing of Financial Assets*, (“ASC 860”) and determined that the future potential Milestone Payments and royalty payments are considered a form of continuing involvement between the Company and Royalty Pharma. The Company further evaluated the TRC Transaction under ASC 860 and concluded that (i) the equity interests in TRC have been isolated from the Company (even in the event of bankruptcy or other receivership); (ii) Royalty Pharma has the right to pledge or exchange the TRC assets it received from the Company without constraint; and (iii) the Company had surrendered control over its equity interests in TRC to Royalty Pharma. Based on the Company’s evaluation under ASC 860, the TRC Transaction was treated as a sale, and the Company recognized a gain from the sale of its equity interests in TRC of \$1,141.1 million based on the excess of the total net consideration allocated to the sale of the Company’s equity interests (based on relative fair value) of \$1,301.6 million over the carrying value of the equity interests sold of \$136.7 million, less transaction costs of \$23.8 million. The total net consideration of \$1,301.6 million included upfront cash of \$1,107.4 million, plus an estimated \$194.2 million representing the fair value of the future Milestone Payments and royalties (collectively, “Contingent Consideration”).

The Contingent Consideration was initially measured at fair value utilizing a Monte Carlo simulation model to calculate the present value of the risk-adjusted cash flows estimated to be received from the Contingent Consideration. The discount rate utilized in the valuation model was 7.83%. The fair value model involved significant unobservable inputs derived using management’s estimates. Management’s estimates were based in part on external data and reflected management’s judgements and forecasts. The primary significant unobservable input was the estimate of forecasted TRELEGY net revenues which is considered a Level 3 fair value input. The Company reassesses the carrying value of the Contingent Consideration when indicators of impairment are identified and will recognize any increases in the carrying value of the asset when such contingent gains are realized. As of December 31, 2022, there were no changes in the carrying value of the Contingent Consideration since its initial measurement date in July 2022.

The Contingent Consideration is subject to counterparty credit risk, and the carrying value of the Contingent Consideration represents the maximum amount of potential loss due to credit risk. To date, the Company has not recorded any credit losses related to the Contingent Consideration. The Contingent Consideration is presented on the consolidated balance sheets as future contingent milestone and royalty assets.

Discontinued Operations

The TRC Transaction represented a monetization of a significant equity method investment that had a major effect on the Company’s financial results. In accordance with GAAP, the TRC Transaction was accounted for as a sale of a financial asset. For all periods presented, balances and the results related to TRC have been classified as discontinued operations on the Company’s consolidated financial statements.

The results of discontinued operations consisted of the following:

(In thousands)	Year Ended December 31,		
	2022	2021	2020
Income from investments in TRC, LLC	\$ 53,237	\$ 103,987	\$ 68,438
Transaction-related legal expenses (prior to July 20, 2022)	(5,057)	—	—
Interest expense on 9.5% Non-recourse notes due 2035	(21,312)	(38,342)	(32,193)
Interest expense on 9.0% Non-recourse notes due 2033	—	—	(3,975)
Loss on extinguishment of debt	(24,022)	—	(15,464)
Net gain from sale of equity interests in TRC, LLC	1,141,084	—	—
Provision for income tax expense	(178,974)	—	—
Net income from discontinued operations	<u>\$ 964,956</u>	<u>\$ 65,645</u>	<u>\$ 16,806</u>

TRC Financial Information

Prior to the TRC Transaction, the Company analyzed its ownership, contractual and other interests in TRC to determine if it was a variable-interest entity (“VIE”), whether the Company had a variable interest in TRC and the nature and extent of that interest. The Company determined that TRC was a VIE. The party with the controlling financial interest, the primary beneficiary, is required to consolidate the entity determined to be a VIE. Therefore, the Company also assessed whether it was the primary beneficiary of TRC based on the power to direct TRC’s activities that most significantly impact TRC’s economic performance and its obligation to absorb TRC’s losses or the right to receive benefits from TRC that could potentially be significant to TRC. Based on the Company’s assessment, the Company determined that it was not the primary beneficiary of TRC, and, as a result, the Company did not consolidate TRC in its consolidated financial statements. The Company’s maximum exposure to loss, as a result of its involvement with TRC, were the amounts recorded in the consolidated balance sheets within “Amounts due from TRC, LLC” and “Equity in net assets of TRC, LLC”. TRC was recognized in the Company’s consolidated financial statements under the equity method of accounting.

For the year ended December 31, 2022, 2021, and 2020, the Company recognized income from its investment in TRC of \$53.2 million, \$104.0 million, and \$68.4 million, respectively. At December 31, 2022 and 2021, the Company had amounts due from TRC of nil and \$43.5 million, respectively, and its investment in TRC at those dates was nil and \$67.5 million, respectively. As noted above, TRC is being recognized as a discontinued operation as a result of the TRC Transaction.

TRC’s balance sheets as of July 20, 2022 and December 31, 2021 and TRC’s statement of income for the period from January 1, 2022 to July 20, 2022 and for the year ended December 31, 2021 and 2020, including the portion of equity interest that the Company did not own, were as follows:

<u>(In thousands)</u>	<u>July 20, 2022</u>	<u>December 31, 2021</u>
Assets		
Cash and cash equivalents	\$ 29,309	\$ 50,713
Related party receivables from collaborative arrangements	42,720	42,492
Prepaid expenses and other current assets	—	71
Equity and long-term investments	—	37,695
Total assets	<u>\$ 72,029</u>	<u>\$ 130,971</u>
Liabilities and LLC Members' Equity		
Accrued liabilities	—	252
LLC members' equity	72,029	130,719
Total liabilities and LLC members' equity	<u>\$ 72,029</u>	<u>\$ 130,971</u>

<u>(In thousands)</u>	<u>Period Ended July 20, 2022</u>	<u>Year Ended December 31,</u>	
		<u>2021</u>	<u>2020</u>
Revenue			
Royalty revenue from related party	\$ 72,029	\$ 126,688	\$ 73,090
Revenue from collaborative arrangements with a related party	-	—	10,000
Total revenue	72,029	126,688	83,090
General and administrative expenses	332	3,956	2,613
Other income, net	10	—	38
Realized loss on equity and long-term investments	(39,385)		
Changes in fair value of equity and long-term investments, net	(8,884)	(1,541)	1,147
Net Income	<u>\$ 23,438</u>	<u>\$ 121,191</u>	<u>\$ 81,662</u>

10. Amprexetine Funding

Under the terms of the Purchase Agreement (see “*Note 9. Sale of Equity Interests in Theravance Respiratory Company, LLC and Discontinued Operations*”), the Company received \$25.0 million in cash from Royalty Pharma in exchange for certain royalty rights to ampreloxetine and is entitled to receive an additional \$15.0 million upon the first regulatory approval of any pharmaceutical product that contains ampreloxetine as an active pharmaceutical ingredient by either (a) the FDA or (b) the first of (i) the European Medicines Agency or (ii) all four of Germany, France, Italy and Spain. In exchange for the \$25.0 million and potential \$15.0 million in cash (the “Amprexetine Funding”), the Company will make quarterly royalty payments to Royalty Pharma equal to the amount of Amprexetine Net Sales (as defined in the Purchase Agreement) recognized during the applicable quarter multiplied by 2.5% for the first \$500.0 million in Amprexetine Net Sales and 4.5% for Amprexetine Net Sales in excess of \$500.0 million. These royalty payments from the Company to Royalty Pharma will continue until, on a country by country and product by product basis, the later of (a) the expiration of all valid and enforceable claims of any patent, or pending claim of a good faith patent application during the five (5) years from the initial filing of such application, that cover the applicable ampreloxetine product or the manufacture or use thereof in the applicable country and (b) the expiration of regulatory exclusivity granted by the FDA or equivalent organization in the applicable country. As the Amprexetine Funding and the TRC Transaction were part of the same Purchase Agreement, the Company evaluated the total consideration received from Royalty Pharma and determined that the consideration received for each of the individual transactions approximated their relative fair values.

The Company accounted for the Amprexetine Funding received from Royalty Pharma as a liability because the Company has significant continuing involvement in generating the future revenue stream from which the liability would be repaid to Royalty Pharma. If the regulatory approval milestone is achieved, the Company will recognize the \$15.0 million milestone payment as an increase to the accumulated liability. If and when ampreloxetine obtains regulatory approval and is commercially launched, the Company will recognize the royalties paid to Royalty Pharma as a decrease to the accumulated liability due to Royalty Pharma and a corresponding reduction in cash. If ampreloxetine regulatory approval is not achieved or if ampreloxetine sales are never recognized, the liability recognized would be extinguished as the Company would not be obligated to repay any of the funding amounts received from Royalty Pharma.

The carrying amount of the liability for the future royalty payment contingency was based on the upfront \$25.0 million received and management’s estimate of (i) the risk-adjusted future contingent \$15.0 million milestone; and (ii) royalties to be paid to Royalty Pharma and then discounted over the life of the arrangement using an imputed rate of interest. The excess of future estimated royalty payments over the amount of cash funding received will be recognized as interest expense using the effective interest method. The balance associated with the liability was initially recorded as \$25.0 million, net of allocated transaction costs, in July 2022 and was reported on the consolidated balance sheets as future royalty payment contingency. The imputed effective rate of interest on the unamortized portion of the liability was 8.5% as of December 31, 2022.

The Company periodically reassesses the amount and timing of estimated royalty payments. To the extent such payments are greater or less than the Company’s initial estimates or the timing of such payments is materially different than those estimates, the Company will prospectively adjust the amortization of the liability and the effective interest rate.

There are a number of factors that could materially affect the amount and timing of the contingent \$15.0 million milestone and royalty payments, some of which are not within the Company’s control. The liability was recognized using significant unobservable inputs. These inputs were derived using internal management estimates and reflect management’s judgements and forecasts. The significant unobservable inputs include the forecasted revenues, the probability and timing of the regulatory milestone, and the expected term of the royalty stream, as well as the overall probability of ampreloxetine’s success. These estimates are considered Level 3 fair value inputs. A significant change in unobservable inputs could result in a material increase or decrease to the effective interest rate of the liability.

Changes to the liability for sale of future royalties were as follows for the year ended December 31, 2022:

(In thousands)	
Beginning balance at July 20, 2022	\$ —
Consideration allocated, less transaction costs of \$0.5 million	24,464
Interest accretion	974
Balance at December 31, 2022	<u>\$ 25,438</u>

11. Extinguishment of Debt

9.5% Non-Recourse Notes Due 2035

On February 21, 2020, Theravance Biopharma R&D, Inc. (“Theravance R&D”), a wholly-owned subsidiary of the Company, and Triple Royalty Sub II LLC (the “Issuer II”), a wholly-owned subsidiary of Theravance Biopharma R&D, entered into certain note purchase agreements (“Note Purchase Agreements”) with certain note purchasers (“Note Purchasers”), relating to the private placement by Issuer II of \$400.0 million 9.5% Fixed Rate Term Notes due on or before 2035 (the “Non-Recourse 2035 Notes”). Ninety-five percent of the Non-Recourse 2035 Notes were sold to the Note Purchasers pursuant to the Note Purchase Agreements. The remaining 5% of the Non-Recourse 2035 Notes (the “Retained Notes”) were retained by the Company to comply with Regulation RR — Credit Risk Retention (17 C.F.R. Part 246) and eliminated in the Company’s consolidated financial statements.

The Non-Recourse 2035 Notes were secured by all of Issuer II’s right, title and interest as a holder of certain membership interests in TRC. TRC held the right to receive upward-tiering royalties ranging from 6.5% to 10% on worldwide net sales of TRELEGY, and, prior to the closing of the TRC Transaction (see “*Note 9. Sale of Equity Interests in Theravance Respiratory Company, LLC and Discontinued Operations*”), the Company held an 85% economic interest in TRC. In the event that the distributions received by the Issuer II from TRC in a quarter were less than the interest accrued for that quarter, the principal amount of the Non-Recourse 2035 Notes increased by the interest shortfall amount for that quarter.

In connection with the TRC Transaction, the Company redeemed the outstanding Non-Recourse 2035 Notes on July 20, 2022 and paid certain other fees and expenses in conjunction with that redemption. The total repayment was comprised of \$400.0 million of net principal, \$4.7 million of accrued interest, an early redemption premium fee of \$20.0 million, and \$0.2 million of transaction costs. The \$400.0 million of net principal included \$30.7 million of issuance-to-date net interest shortfall. The repayments resulted in a net loss on extinguishment of debt of \$24.0 million, which was included within discontinued operations in the accompanying consolidated statements of operations for the year ended December 31, 2022. The loss on extinguishment of debt was calculated as the difference between the carrying amount of the Non-Recourse 2035 Notes and the amounts paid to redeem the Non-Recourse 2035 Notes.

3.25% Convertible Senior Notes Due 2023

In November 2016, the Company completed an underwritten public offering of \$230.0 million of 3.25% convertible senior notes, due 2023 (the “Convertible Senior 2023 Notes”) for net proceeds of \$222.5 million. The Company incurred \$7.5 million in debt issuance costs, which were being amortized to interest expense over the estimated life of the Convertible Senior 2023 Notes. The Convertible Senior 2023 Notes bore an annual interest rate of 3.25%, payable semi-annually in arrears, on November 1 and May 1 of each year.

On July 26, 2022, subsequent to the closing of the TRC Transaction, the Company launched a tender offer to retire the Convertible Senior 2023 Notes (the “2023 Notes Tender Offer”). Pursuant to the terms of the 2023 Notes Tender Offer, the Company paid all accrued and unpaid interest on the purchased Convertible Senior 2023 Notes from and including the last interest payment date of May 1, 2022 up to, but not including, the settlement date for the 2023 Notes Tender Offer. The 2023 Notes Tender Offer expired on August 23, 2022 (the “Expiration Time”). As of the Expiration Time, \$230.0 million in aggregate principal amount of the Convertible Senior 2023 Notes, representing 100% of the outstanding Convertible Senior 2023 Notes, were validly tendered and not validly withdrawn pursuant to the 2023 Notes Tender Offer. The Company accepted for purchase all of the Convertible Senior 2023 Notes and settled the 2023 Notes Tender Offer on August 25, 2022.

Total payments made by the Company under the 2023 Notes Tender Offer included \$230.0 million of principal, \$2.4 million of accrued interest, and \$1.6 million of transaction costs. The repayments resulted in a net loss on extinguishment of debt of \$3.0 million, which is included within “loss on extinguishment of debt” in the accompanying consolidated statements of operations for the year ended December 31, 2022. The loss on extinguishment of debt was calculated as the difference between the carrying amount of the Convertible Senior 2023 Notes and the amounts paid to settle the Convertible Senior 2023 Notes.

As of December 31, 2021, the Company’s debt consisted of the following:

<u>(In thousands)</u>	<u>2021</u>
9.5% Non-Recourse 2035 Notes:	
Principal amount	\$ 413,291
Less: 5% retained by the Company	(20,665)
Unamortized debt issuance costs - 9.5% Non-Recourse 2035 Notes	(3,062)
Unamortized debt issuance costs - Modified 9.0% Non-Recourse 2033 Notes	(1,265)
	<u>388,299</u>
3.25% Convertible 2023 Notes:	
Principal amount	230,000
Unamortized debt issuance costs	(1,965)
	<u>228,035</u>
Total debt	<u>\$ 616,334</u>

Debt interest expense (excluding discontinued operations) consists of the following components:

<u>(In thousands)</u>	<u>Year Ended December 31,</u>		
	<u>2022</u>	<u>2021</u>	<u>2020</u>
Stated coupon interest	\$ 4,859	\$ 7,475	\$ 7,475
Amortization of debt issuance costs	536	1,072	1,072
Amprexetine royalty contingency interest accretion (non-cash)	974	—	—
Total debt interest expense	<u>\$ 6,369</u>	<u>\$ 8,547</u>	<u>\$ 8,547</u>

As of December 31, 2021, the net principal and estimated fair value of the Non-Recourse 2035 Notes were \$392.6 million and \$373.0 million, respectively. The inputs to determine fair value of the Non-Recourse 2035 Notes are categorized as Level 2 inputs. Level 2 inputs include quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations whose inputs are observable or whose significant value drivers are observable.

As of December 31, 2021, the net principal and estimated fair value of the Convertible Senior 2023 Notes were \$230.0 million and \$220.2 million, respectively. The estimated fair value was primarily based upon the underlying price of Theravance Biopharma’s publicly traded shares and other observable inputs. The inputs to determine fair value of the Convertible Senior 2023 Notes are categorized as Level 2 inputs.

12. Share-Based Compensation

Theravance Biopharma Equity Plans

The Company has three equity compensation plans — its 2013 Equity Incentive Plan (the “2013 EIP”), its 2013 Employee Share Purchase Plan (the “2013 ESPP”) and its 2014 New Employee Equity Incentive Plan (the “2014 NEEIP”). At inception, the Company was authorized to issue 5,428,571 ordinary shares under the 2013 EIP, 857,142 ordinary shares under the 2013 ESPP, and 750,000 ordinary shares under the 2014 NEEIP.

The 2013 EIP provides for the issuance of share-based awards, including restricted shares, restricted share units, options, share appreciation rights (“SARs”) and other equity-based awards, to Company employees, officers, directors and consultants. As of January 1 of each year, commencing on January 1, 2015 and ending on (and including)

January 1, 2023, subject to extension by shareholder approval, the aggregate number of ordinary shares that may be issued under the 2013 EIP shall automatically increase by a number equal to the least of 5% of the total number of ordinary shares outstanding on December 31 of the prior year, 3,428,571 ordinary shares, or a number of ordinary shares determined by the Company's board of directors. Options may be granted with an exercise price not less than the fair market value of the ordinary shares on the grant date. Under the terms of the Company's 2013 EIP, options granted to employees generally have a maximum term of 10 years and vest over a four-year period from the date of grant; 25% vest at the end of one year, and 75% vest monthly over the remaining three years. The Company may grant options with different vesting terms from time to time. Unless an employee's termination of service is due to disability or death, upon termination of service, any unexercised vested options will generally be forfeited at the end of three months or the expiration of the option, whichever is earlier.

Under the 2013 ESPP, the Company's officers and employees may purchase ordinary shares through payroll deductions at a price equal to 85% of the lower of the fair market value of the ordinary share at the beginning of the offering period or at the end of each applicable purchase period. As of January 1 of each year, commencing on January 1, 2015 and ending on (and including) January 1, 2033, the aggregate number of ordinary shares that may be issued under the 2013 ESPP shall automatically increase by a number equal to the least of 1% of the total number of ordinary shares outstanding on December 31 of the prior year, 571,428 ordinary shares or a number of ordinary shares determined by the Company's board of directors. The ESPP generally provides for consecutive and overlapping offering periods of 24 months in duration, with each offering period generally composed of four consecutive six-month purchase periods. The purchase periods end on either May 15 or November 15. ESPP contributions are limited to a maximum of 15% of an employee's eligible compensation. The 2013 ESPP also includes a feature that provides for the existing offering period to terminate and for participants in that offering period to automatically be enrolled in a new offering period when the fair market value of an ordinary share at the beginning of a subsequent offering period falls below the fair market value of an ordinary share on the first day of such offering period.

The 2014 NEEIP provides for the issuance of share-based awards, including restricted shares, restricted share units, non-qualified options and SARs, to the Company's employees. Options may be granted with an exercise price not less than the fair market value of the ordinary shares on the grant date. Under the terms of the 2014 NEEIP, options granted to employees generally have a maximum term of 10 years and vest over a four-year period from the date of grant; 25% vest at the end of one year, and 75% vest monthly over the remaining three years. The Company may grant options with different vesting terms from time to time. Unless an employee's termination of service is due to disability or death, upon termination of service, any unexercised vested options will generally be forfeited at the end of three months or the expiration of the option, whichever is earlier.

Performance-Contingent Awards

In 2016, the Compensation Committee of the Company's board of directors ("Compensation Committee") approved the grant of 1,575,000 performance-contingent restricted share awards ("RSAs") and 135,000 performance-contingent restricted share units ("RSUs") to senior management. The vesting of such awards was dependent on the Company meeting its critical operating goals and objectives during the five-year period from 2016 to December 2020, as well as, continued employment. The awards were broken into three separate tranches, and expenses associated with these awards were recognized during the years 2016 to 2020 as the performance conditions were achieved. As of the first quarter of 2020, the performance conditions associated with all three tranches were achieved. The Company recognized \$0.4 million and \$3.0 million of share-based compensation expense associated with these awards for the year ended December 31, 2021 and 2020, respectively, and the expenses associated with these awards have been fully recognized as of December 31, 2021.

Separate from the performance-contingent awards described above, the Company periodically grants performance-contingent RSUs to employees. For the year ended December 31, 2022, 2021, and 2020, the Company recognized \$0.2 million, \$0.4 million, and \$1.0 million, respectively, of share-based compensation expense related to such awards. As of December 31, 2022, there were 43,000 shares of these performance-contingent RSUs outstanding that have a maximum remaining share-based compensation expense of \$0.4 million with performance expiration dates through February 2024.

Share-Based Compensation Modifications Due to Corporate Restructuring

As a result of the Company's corporate restructuring announcement in September 2021 (see "Note 16. Corporate Restructuring Completion"), the Board of Directors' Compensation Committee approved the acceleration of certain equity awards for employees affected by the restructuring. The Company accounted for this acceleration as a Type III modification (improbable to probable). In 2021, the modification resulted in a fair value of \$5.6 million that was recorded in "Restructuring and related expenses" within the consolidated statements of operations for the year ended December 31, 2021. The total cumulative compensation cost previously recognized for these modified awards of \$2.8 million was reversed in the year ended December 31, 2021 within "Research and development" and "Selling, general and administrative" expenses. The acceleration resulted in a net incremental share-based compensation expense of \$2.8 million for the year ended December 31, 2021, and impacted approximately 160 terminated employees that met the conditions of the acceleration.

In 2022, the Company completed the second phase of the restructuring that resulted in a Type 3 modification fair value of \$2.5 million which was recorded in "Restructuring and related expenses" within the consolidated statements of operations for the year ended December 31, 2022. The total cumulative compensation cost previously recognized for these modified awards of \$0.8 million was reversed in the year ended December 31, 2022 within "Research and development" and "Selling, general and administrative" expenses. The acceleration resulted in a net incremental share-based compensation expense of \$1.7 million for the year ended December 31, 2022, and impacted approximately 40 terminated employees that met the conditions of the acceleration.

Share-Based Compensation Expense

Share-based compensation expense included in the consolidated statements of operations was recognized as follows:

(In thousands)	Year Ended December 31,		
	2022	2021	2020
Research and development	\$ 12,888	\$ 25,634	\$ 31,294
Selling, general and administrative	19,848	28,065	31,682
Restructuring and related expenses	6,998	8,362	—
Total share-based compensation expense	<u>\$ 39,734</u>	<u>\$ 62,061</u>	<u>\$ 62,976</u>

Share-based compensation expense included in the consolidated statements of operations by award type was as follows:

(In thousands)	Year Ended December 31,		
	2022	2021	2020
Options	\$ 2,998	\$ 5,473	\$ 6,536
RSUs	35,726	54,931	49,803
Performance RSAs and RSUs	237	763	3,943
ESPP	773	894	2,694
Total share-based compensation expense	<u>\$ 39,734</u>	<u>\$ 62,061</u>	<u>\$ 62,976</u>

As of December 31, 2022, the unrecognized share-based compensation cost, net of actual forfeitures, and the estimated weighted-average amortization period, using the straight-line attribution method, was as follows:

(In thousands, except amortization period)	Unrecognized Compensation Cost	Weighted-Average Amortization Period (Years)
Options	\$ 3,453	2.75
RSUs	39,721	2.50
Performance RSAs and RSUs ⁽¹⁾	—	0.64
ESPP	229	0.51
Total	<u>\$ 43,403</u>	

(1) Represents unrecognized share-based compensation cost associated with the Company's performance-contingent awards described above that are probable of vesting.

Compensation Awards

The following table summarizes option activity under the 2013 EIP and 2014 NEEIP for the year ended December 31, 2022:

	Number of Shares Subject to Outstanding Options	Weighted-Average Remaining Contractual Term (Years)	Weighted-Average Exercise Price of Outstanding Options (in dollars)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2021	2,871,568		\$ 24.62	
Granted	753,400		10.19	
Exercised	—		-	
Forfeited	(1,213,075)		25.69	
Outstanding at December 31, 2022	<u>2,411,893</u>	5.24	19.53	\$ 775
Exercisable at December 31, 2022		3.69		142
Vested and expected to vest at December 31, 2022		5.24		775

The following table summarizes additional information for options under the 2013 EIP and 2014 NEEIP.

	2022	2021	2020
Weighted average fair value of options (in dollars)	\$ 5.33	\$ 9.25	\$ 11.03
Total intrinsic value of options exercised (in thousands)	\$ —	\$ 1	\$ 384

The following table summarizes total RSU and RSA activity (including performance RSUs and RSAs) for the year ended December 31, 2022:

	Number of Shares Subject to Outstanding RSUs	Number of Shares Outstanding Subject to Performance Conditions (RSAs)
Outstanding at December 31, 2021	8,353,849	—
Granted	648,065	—
Released	(3,766,876)	—
Forfeited	(1,125,191)	—
Outstanding at December 31, 2022	<u>4,109,847</u>	<u>—</u>

The total estimated fair value of RSUs vested was \$37.2 million and \$49.3 million in 2022 and 2021, respectively.

Valuation Assumptions

The range of assumptions used to estimate the fair value of options granted and rights granted under the 2013 ESPP was as follows:

	Year Ended December 31,		
	2022	2021	2020
Options			
Risk-free interest rate	1.5% - 3.8%	0.5% - 1.2%	0.3% - 1.7%
Expected term (in years)	5.3 - 6.1	5.3 - 6.1	5.2 - 6.1
Volatility	55% - 70%	52% - 53%	50% - 53%
Dividend yield	—	—	—
Weighted-average estimated fair value	\$ 5.33	\$ 9.25	\$ 11.03
2013 ESPP			
Risk-free interest rate	1.5% - 4.57%	0.03% - 0.2%	0.1% - 0.2%
Expected term (in years)	0.5 - 2.0	0.5 - 2.0	0.5 - 2.0
Volatility	41% - 72%	40% - 79%	53% - 76%
Dividend yield	—	—	—
Weighted-average estimated fair value	\$ 3.86	\$ 3.52	\$ 8.04

13. Income Taxes

Theravance Biopharma was incorporated in the Cayman Islands in July 2013 under the name Theravance Biopharma, Inc. as a wholly-owned subsidiary of Innoviva and began operations subsequent to a spin-off with wholly-owned subsidiaries in the Cayman Islands, US, United Kingdom, and Ireland. Effective July 1, 2015, Theravance Biopharma became an Irish tax resident, therefore, the income (loss) before income taxes of Theravance Biopharma, the parent company, are included in Ireland in the tables below.

The components of the income (loss) before income taxes from continuing operations were as follows:

(In thousands)	Year Ended December 31,		
	2022	2021	2020
Income (loss) before provision for income taxes:			
Cayman Islands	\$ —	\$ —	\$ 37,567
United States	(40,556)	(82,213)	(63,306)
Ireland	(52,168)	(182,775)	(277,105)
United Kingdom	(91)	(234)	(499)
Total	<u>\$ (92,815)</u>	<u>\$ (265,222)</u>	<u>\$ (303,343)</u>

The components of provision for income tax (expense) benefit from continuing operations were as follows:

(In thousands)	Year Ended December 31,		
	2022	2021	2020
Provision for income tax (expense) benefit:			
Current:			
Cayman Islands	\$ —	\$ —	\$ —
United States	—	173	8,545
Ireland	(8)	(8)	(13)
United Kingdom	(1)	(14)	(12)
Subtotal	(9)	151	8,520
Deferred:			
Cayman Islands	—	—	—
United States	—	—	—
Ireland	—	—	—
United Kingdom	—	—	—
Subtotal	—	—	—
Total	\$ (9)	\$ 151	\$ 8,520
Effective tax rate	(0.01)%	0.06 %	2.81 %

The provision for income tax (expense) benefit from continuing operations was nil, \$0.2 million, and \$8.5 million for the year ended December 31, 2022, 2021, and 2020, respectively.

Income tax expense for the year ended December 31, 2022 of \$179.0 million was a result of the Company's gain from the TRC Transaction, which was recognized as a discontinued operation. The 2021 and 2020 net income tax benefit was primarily attributed to a reversal of previously accrued contingent tax liabilities for uncertain tax positions due to a lapse of the statute of limitations.

The Company's \$64.0 million liability for unrecognized tax benefits can be relieved only if (i) the contingency becomes legally extinguished through either payment to the taxing authority or expiration of the statute of limitations; (ii) the recognition of the benefits associated with the position meets the more-likely-than-not threshold; or (iii) the liability becomes effectively settled through the examination process. The Company considers matters to be effectively settled once the taxing authority has completed all of its required or expected examination procedures, including all appeals and administrative reviews. The Company also accrues for potential interest and penalties related to unrecognized tax benefits in its income tax expense (benefit) calculation.

As of December 31, 2022, the amount of uncertain tax benefit, that if realized would affect the effective tax rate, was \$76.0 million and is primarily due to transfer pricing adjustments related to share-based compensation.

No provision for income taxes has been recognized on undistributed earnings of the Company's foreign subsidiaries because it considers such earnings to be indefinitely reinvested. In the event of a distribution of these earnings in the form of dividends or otherwise, the Company may be liable for income taxes, subject to an adjustment, if any, for foreign tax credits and foreign withholdings taxes payable to certain foreign tax authorities. As of December 31, 2022, there were no undistributed earnings.

As a result of the Company becoming an Irish tax resident effective July 1, 2015, the tax rates reflect the Irish statutory rate of 25%. The differences between the Irish statutory income tax rate for non-trading income and the Company's effective tax rates from continuing operations were as follows:

	Year Ended December 31,		
	2022	2021	2020
Provision at statutory income tax rate	25.00 %	25.00 %	25.00 %
Foreign rate differential	(6.80)	(8.50)	(11.02)
Share-based compensation	(3.28)	(3.11)	0.71
Non-deductible executive compensation	(2.79)	(1.22)	(0.60)
Uncertain tax positions	(7.10)	(3.95)	(1.19)
Research and development tax credit carryforwards	2.65	1.79	1.73
Intangible asset	—	1.83	9.45
Change in valuation allowance	(1.01)	(11.34)	(20.62)
Other	(6.68)	(0.44)	(0.65)
Effective tax rate	<u>(0.01)%</u>	<u>0.06 %</u>	<u>2.81 %</u>

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities were as follows:

(In thousands)	December 31,	
	2022	2021
Deferred tax assets:		
Net operating loss carryforwards	\$ 104,236	\$ 115,606
Capital loss carryforwards	19,409	19,409
Research and development tax credit carryforwards	16,176	28,372
Fixed assets and intangibles	283,260	287,177
Share-based compensation	4,298	10,432
Accruals	1,795	3,590
Operating lease liabilities	11,239	11,607
Prepaid assets	304	—
Other	30	10,505
Subtotal	<u>440,747</u>	<u>486,698</u>
Valuation allowance	<u>(422,325)</u>	<u>(477,868)</u>
Total deferred tax assets	<u>18,422</u>	<u>8,830</u>
Deferred tax liabilities:		
Operating lease assets	(8,634)	(8,575)
Future contingent milestone and royalty assets	(11,725)	—
Prepaid assets	—	(255)
Total deferred tax liabilities	<u>(20,359)</u>	<u>(8,830)</u>
Net deferred tax assets (liabilities)	<u>\$ (1,937)</u>	<u>\$ —</u>

The Company follows the accounting guidance related to accounting for income taxes which requires that a company reduces its deferred tax assets by a valuation allowance if, based on the weight of available evidence, it is more likely than not that some portion or all of its deferred tax assets will not be realized. During the year ended December 31, 2022, the Company concluded that the valuation allowance related to its US federal assets was no longer needed primarily due to the current year gain and forecasted future taxable income from the TRC Transaction. As of December 31, 2022, the Company released its valuation allowance against deferred tax assets for US federal tax purposes as it is more like than not able to fully utilize such attributes. As of December 31, 2022, the Company continues to maintain a full valuation allowance in other jurisdictions.

The valuation allowance as of December 31, 2022 decreased from \$477.9 million, as of December 31, 2021, to \$422.3 million, primarily as a result of utilization of the Company's federal net operating losses and research tax credits generated in the US offset by additional tax loss generated in various jurisdictions during the current year.

As of December 31, 2022, the Company has utilized all available US federal net operating loss carryforwards and federal research and development tax credit carryforwards. As of December 31, 2022, the Company had state net operating loss carryforwards of \$102.7 million which will begin to expire in 2034 and state research and development credit carryforwards of \$25.4 million to be carried forward indefinitely.

The Company also had Irish net operating loss carryforwards of \$786.2 million with no expiration date and capital loss carryforwards of \$58.8 million to be carried forward indefinitely.

Utilization of net operating loss and tax credit carryforwards may be subject to an annual limitation due to ownership change limitations provided by the Internal Revenue Code and similar state provisions. Annual limitations may result in expiration of net operating loss and tax credit carryforwards before some or all of such amounts have been utilized.

Uncertain Tax Positions

A reconciliation of the beginning and ending balances of the total amounts of unrecognized tax benefits were as follows:

(In thousands)	
Unrecognized tax benefits as of December 31, 2020	\$ 63,447
Gross decrease in tax positions for prior years	(395)
Gross increase in tax positions for current year	11,971
Unrecognized tax benefits as of December 31, 2021	75,023
Gross decrease in tax positions for prior years	(7,395)
Gross increase in tax positions for current year	8,371
Unrecognized tax benefits as of December 31, 2022	\$ 75,999

The Company records liabilities related to uncertain tax positions in accordance with the income tax guidance which clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements by prescribing a minimum recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Resolution of one or more of these uncertain tax positions in any period may have a material impact on the results of operations for that period. The Company's policy is to recognize interest and penalties related to income tax matters in income tax expense. The amount of tax expense related to interest and penalties was not material for the year ended December 31, 2022 and 2021.

The total unrecognized tax benefits of \$76.0 million and \$75.0 million, as of December 31, 2022 and December 31, 2021, respectively, may reduce the effective tax rate in the period of recognition. The Company does not expect to record any other material reductions in the measurement of its unrecognized tax benefits within the next twelve months.

The Company is subject to taxation in Ireland, the US, and various other jurisdictions. The tax years 2015 and forward remain open to examination in Ireland, tax years 2015 and forward remain open to examination in the US, and the tax years 2012 and forward remain open to examination in other jurisdictions.

The Company was recently under Internal Revenue Service ("IRS") examination for the tax year ended December 31, 2018. On July 21, 2022, the IRS informed the Company that the examination was completed and no adjustments to its 2018 tax return were necessary.

On August 16, 2022, President Biden signed into law the Inflation Reduction Act ("IRA"). The provisions include the new Corporate Alternative Minimum Tax ("CAMT"), an excise tax on stock buybacks, and significant tax

incentives for energy and climate initiatives, and all of these provisions are effective for tax year 2023. The Company will evaluate the impact of these provisions, but it currently does not expect the enactment of these provisions to have a material impact on the Company.

The Company's future income tax expense may be affected by such factors as changes in tax laws, its business, regulations, tax rates, interpretation of existing laws or regulations, the impact of accounting for share-based compensation, the impact of accounting for business combinations and other transactions, its international organization, shifts in the amount of income before tax earned in the US as compared with other regions in the world, and changes in overall levels of income before tax.

14. Public Offering of Ordinary Shares

On June 29, 2021, the Company sold 6,700,000 ordinary shares at a price to the public of \$15.00 per share. Under the terms of the underwriting agreement, on June 29, 2021, the underwriters also exercised a 30-day option to purchase an additional 1,005,000 ordinary shares for a total of 7,705,000 ordinary shares sold. The total gross proceeds to the Company from the offering were \$115.6 million, before deducting underwriting discounts and commissions and offering expenses. The shares sold in this offering were issued pursuant to the Company's currently effective shelf registration statement on Form S-3 and an accompanying prospectus (File No. 333-235339) filed with the SEC, which became effective automatically on December 3, 2019, and a prospectus supplement filed with the SEC in connection with the offering.

15. Capital Return Program

In September 2022, the Company's board of directors authorized a \$250.0 million capital return program consisting of three elements as described below.

GSK Share Repurchase

On September 20, 2022, the Company repurchased 9,644,807 ordinary shares, par value \$0.00001 per share, of the Company from GSK Finance (No.3) plc ("GSK Finance"), representing all of the ordinary shares of the Company owned by GSK Finance or its affiliates. The purchase price under the Share Repurchase Agreement was \$9.75 per share, resulting in a total consideration of \$94.0 million. The repurchased shares were accounted for as authorized shares that are no longer issued and outstanding upon the settlement date of the repurchase transaction.

Modified Dutch Auction Tender Offer

On September 28, 2022, the Company announced a "modified Dutch auction" tender offer (the "Offer") to purchase up to \$95.0 million of its ordinary shares. Upon the terms and subject to the conditions set forth in the Company's Offer to Purchase, dated September 28, 2022 (the "Offer to Purchase"), and the related Letter of Transmittal, the Company offered to purchase up to \$95.0 million of its ordinary shares, at a purchase price not greater than \$10.50 nor less than \$9.75 per share, in cash, less any applicable withholding taxes and without interest. The Offer expired at midnight, New York City time, at the end of the day on November 17, 2022.

A "modified Dutch auction" tender offer allows shareholders to indicate how many shares and at what price or within the range described above they wish to tender their shares. Based on the number of shares tendered and the prices specified by the tendering shareholders, the Company determined the lowest per-share price that enabled it to purchase up to \$95.0 million of all shares that were validly tendered and not validly withdrawn. All shares accepted in the Offer were purchased at the same price even if tendered at a lower price.

On November 22, 2022, the Company completed the Offer and purchased a total of 115,967 ordinary shares at a price of \$10.50 per share, for an aggregate cost of \$1.2 million, excluding fees and expenses relating to the Offer. The total of 115,967 shares that were accepted for purchase represented approximately 0.2% of the total number of shares outstanding as of November 21, 2022. The purchased shares were cancelled and ceased to be outstanding. The Company intends to use the unused portion of the Offer to enlarge our previously announced, planned open market share repurchase plan which is described below.

Open Market Share Repurchase Plan

On December 13, 2022, the Company initiated its open market repurchase plan to repurchase ordinary shares. As of December 31, 2022, the Company repurchased 2,978,341 shares on the open market at an average cost of \$11.06 per share for an aggregate cost of \$32.9 million, excluding fees and expenses. From January 1, 2023 through February 27, 2023, the Company repurchased an additional 2,461,000 shares on the open market at an average cost of \$10.99 per share for an aggregate cost of \$27.1 million, excluding fees and expenses.

16. Corporate Restructuring Completion

On September 15, 2021, the Company announced a strategic update and corporate restructuring (the “Restructuring”) to focus on leveraging its expertise in developing and commercializing respiratory therapeutics. As part of the Restructuring, the Company initiated an approximate 75% reduction in workforce. A majority of the reduction in workforce occurred in November 2021, and the remainder was completed in February 2022.

For the year ended December 31, 2022, the Company incurred Restructuring and related expenses of \$12.8 million of which \$5.9 million were related to R&D expenses and \$6.9 million were related to selling, general and administrative expenses. Of the total \$12.8 million recognized for the year ended December 31, 2022, cash-related expenses were \$5.8 million and non-cash expenses were \$7.0 million which were primarily related to the modification of equity-based awards for employees affected by the Restructuring and certain related awards for other employees.

For the year ended December 31, 2021, the Company incurred Restructuring and related expenses of \$20.1 million of which \$10.6 million related R&D expenses and \$9.5 million related to selling, general and administrative expenses. Of the total \$20.1 million, cash-related expenses were \$11.5 million and non-cash expenses were \$8.6 million

In total, since the Restructuring was announced and through its completion in September 2022, the Company incurred total Restructuring and related expenses of \$33.0 million of which \$16.5 million was each related to R&D expenses and selling, general and administrative expenses. Of the total \$33.0 million, cash-related expenses were \$17.4 million and non-cash expenses were \$15.6 million. As of December 31, 2022, all Restructuring and related expenses have been fully recognized by the Company.

Selected information relating to accrued cash-related Restructuring expenses was as follows:

(In thousands)	
Balance at December 31, 2021	\$ 9,550
Net accruals	6,074
Cash paid	(15,624)
Balance at December 31, 2022	\$ —

The Company also evaluated the impact of the Restructuring on the carrying value of its long-lived assets, such as property and equipment and operating lease assets. This process included evaluating the estimated remaining lives, significant changes in the use, and potential impairment charges related to its long-lived assets. Based on its evaluation, the Company determined that its long-lived assets were not impaired as a result of the Restructuring, and it has not recognized any impairment charges related to its long-lived assets related to the Restructuring.

17. Commitments and Contingencies

Performance-Contingent Cash Awards

In 2016, the Compensation Committee granted long-term incentive cash bonus awards to certain employees. The vesting and payout of such awards was dependent on the Company meeting its critical operating goals and objectives during a five-year period from 2016 to December 2020, as well as continued employment. The awards were broken into three separate tranches, and expenses associated with these awards were recognized during the years 2016 to 2021 as the performance conditions were achieved.

The performance conditions associated with the first tranche of the cash bonus awards were completed in the second quarter of 2018, the performance conditions associated with the second tranche were completed in the first quarter of 2019, and the performance conditions associated with the third tranche were completed in the first quarter of 2020. The Company recognized \$0.4 million and \$3.3 million of cash bonus expense for the year ended December 31, 2021 and 2020, respectively, and the expenses associated with these awards were fully recognized as of December 31, 2021. The corresponding share-based compensation expense associated with these awards is discussed in “*Note 12. Share-Based Compensation*”.

Guarantees and Indemnifications

The Company indemnifies its officers and directors for certain events or occurrences, subject to certain limits. The Company maintains insurance policies that may limit its exposure, and therefore, the Company believes the fair value of these indemnification agreements is minimal. Accordingly, the Company has not recognized any liabilities relating to these agreements as of December 31, 2022. However, no assurances can be given regarding the amounts that may ultimately be covered by the insurers, and the Company may incur substantial liabilities because of these indemnification obligations.

Legal Proceedings

During January 2023, the Company received notice from Accord Healthcare, Inc.; Cipla USA, Inc. and Cipla Limited; Eugia Pharma Specialties Ltd.; Lupin Inc.; Mankind Pharma Ltd.; Orbicular Pharmaceutical Technologies Private Limited; and Teva Pharmaceuticals, Inc. (collectively, the “generic companies”), that they have each filed with FDA an abbreviated new drug application (“ANDA”), for a generic version of YUPELRI. The notices from the generic companies each included a paragraph IV certification with respect to five of the Company’s patents listed in FDA’s Orange Book for YUPELRI on the date of the Company’s receipt of the notice. The asserted patents relate generally to polymorphic forms of and a method of treatment using YUPELRI. In February 2023, the Company filed patent infringement suits against the generic companies in federal district courts, including the United States District Court for the District of New Jersey, the U.S. District Court for the District of Delaware, and the U.S. District Court for the Middle District of North Carolina. The complaint alleges that by filing the ANDAs, the generic companies have infringed five of the Company’s Orange Book listed patents. The Company is seeking a permanent injunction to prevent the generic companies from introducing a generic version of YUPELRI that would infringe its patents. As a result of this lawsuit, a stay of approval through May 2026 will be imposed by FDA on the generic companies’ ANDAs pending any adverse court decision.

18. Subsequent Events

On February 27, 2023, the Company announced the following strategic actions:

Capital Return Program Increase

The Company’s board of directors authorized a \$75.0 million increase to the existing \$250.0 million capital return program initiated in September 2022, bringing the total capital return program to \$325.0 million. As of February 27, 2023, the Company has repurchased \$155.3 million of shares, including \$27.1 million in 2023, and the Company has approximately \$170.0 million remaining in the capital return program which is expected to be completed by the end of 2023.

Discontinuing Investments in Research

The Company plans to prioritize resource allocation toward the amprelosetine Phase 3 study and completion of the YUPELRI Peak Inspiratory Flow Rate (PIFR) Phase 4 study and discontinue its research activities including the inhaled Janus kinase (JAK) inhibitor program. As a result of halting further research investment, the Company’s headcount is being reduced by approximately 17% with the reductions planned for completion by the end of March 2023. The Company also plans to seek a partnership to continue progression of its inhaled JAK inhibitor program.

SUPPLEMENTARY FINANCIAL DATA
(UNAUDITED)
(In thousands, except per share data)

The following table presents certain unaudited consolidated quarterly financial information for the eight quarters in the periods ended December 31, 2022 and 2021. This information has been prepared on the same basis as the audited consolidated financial statements and includes all adjustments (consisting only of normal recurring adjustments) necessary to present fairly the unaudited quarterly results of operations set forth herein. For all periods prior to the quarter ended September 30, 2022, the information below has been retroactively adjusted for discontinued operations presentation.

	For the Quarter Ended			
	March 31,	June 30,	September 30,	December 31,
2022				
Total revenue	\$ 13,196	\$ 11,050	\$ 12,451	\$ 14,649
Costs and expenses	51,698	37,929	21,595	32,081
Loss from operations	(38,502)	(26,879)	(9,144)	(17,432)
Net loss from continuing operations	(41,538)	(26,570)	(10,460)	(14,256)
Net income from discontinued operations	15,592	18,379	927,091	3,894
Net income (loss)	(25,946)	(8,191)	916,631	(10,362)
Net loss from continuing operations - basic and diluted per share	(0.55)	(0.35)	(0.21)	(0.21)
Net income from discontinued operations - basis and diluted per share	0.21	0.24	12.35	0.06
Net income (loss) - basis and diluted per share	\$ (0.34)	\$ (0.11)	\$ 12.14	\$ (0.15)
2021				
Total revenue	\$ 14,257	\$ 12,914	\$ 13,194	\$ 14,946
Costs and expenses	98,149	77,024	66,809	71,113
Loss from operations	(83,892)	(64,110)	(53,615)	(56,167)
Net loss from continuing operations	(86,490)	(64,856)	(55,910)	(57,814)
Net income from discontinued operations	6,811	12,451	20,602	25,780
Net loss	(79,679)	(52,405)	(35,308)	(32,034)
Net loss from continuing operations - basic and diluted per share	(1.35)	(0.99)	(0.76)	(0.78)
Net income from discontinued operations - basis and diluted per share	0.11	0.19	0.28	0.35
Net income (loss) - basis and diluted per share	\$ (1.24)	(0.80)	(0.48)	(0.43)

Share of Total YUPELRI Net Sales ⁽¹⁾

	For the Quarter Ended			
	March 31,	June 30,	September 30,	December 31,
2022	\$ 15,283	\$ 17,177	\$ 18,698	\$ 19,495
2021	\$ 12,908	\$ 14,621	\$ 13,806	\$ 15,344

(1) The Company co-promotes YUPELRI in the US under a profit and loss sharing arrangement with Viatris (65% to Viatris; 35% to Theravance Biopharma). The amounts represent the Company's implied 35% share of the total net sales of YUPELRI that were recognized within Viatris' financial statements for the periods presented.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures.

We conducted an evaluation required by paragraph (d) of Rule 13a-15 of the Exchange Act as of December 31, 2022, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined under Rule 13a-15(e) of the Exchange Act), which are controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files under the Exchange Act is recorded, processed, summarized and reported within required time periods. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) of the Exchange Act. In connection with the preparation of this Annual Report, our management, including our Chief Executive Officer and Chief Financial Officer, assessed the effectiveness of our internal control over financial reporting as of December 31, 2022 based on criteria established in *Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission* (2013 framework) (the “COSO criteria”). Based on its assessment, our management concluded that our internal control over financial reporting was effective as of December 31, 2022.

The effectiveness of our internal control over financial reporting as of December 31, 2022 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which is included herein.

Limitations on the Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefit of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within Theravance Biopharma have been detected. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act) identified in connection with the evaluation required by paragraph (d) of Rule 13a-15 of the Exchange Act, which occurred during the fourth quarter of the year ended December 31, 2022 which has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. We have not experienced any material impact to our internal control over financial reporting despite the fact that many of our employees are working remotely due to the COVID-19 pandemic. We are continually monitoring and assessing the potential impact of COVID-19 on our internal controls to minimize the impact on their design and operating effectiveness.

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of Theravance Biopharma, Inc.

Opinion on Internal Control Over Financial Reporting

We have audited Theravance Biopharma, Inc.'s internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Theravance Biopharma, Inc. (the “Company”) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the 2022 consolidated financial statements of the Company and our report dated March 1, 2023 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

San Mateo, California
March 1, 2023

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

For the information required by this Item, see “Questions and Answers About Procedural Matters”, “Election of Directors”, “Nominees”, “Audit Committee”, “Meetings of the Board of Directors”, “Code of Conduct”, “Executive Officers” and “Section 16(a) Beneficial Ownership Reporting Compliance” in the Proxy Statement to be filed with the SEC, which sections are incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

For the information required by this Item, see “Director Compensation”, “Executive Compensation” and “Compensation Committee Interlocks and Insider Participation” in the Proxy Statement to be filed with the SEC, which sections are incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

For the information required by this Item, see “Security Ownership of Certain Beneficial Owners and Management” and “Equity Compensation Plan Information” in the Proxy Statement to be filed with the SEC, which sections are incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

For the information required by this Item, see “Director Independence” and “Policies and Procedures for Related Party Transactions” in the Proxy Statement to be filed with the SEC, which sections are incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

For the information required by this Item, see “Ratification of the Appointment of Independent Registered Public Accounting Firm” and “Pre-Approval of Audit and Non-Audit Services” in the Proxy Statement to be filed with the SEC, which sections are incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this Annual Report on Form 10-K:

1. Financial Statements:

The following financial statements and schedules of the Registrant are contained in Part II, Item 8, “Financial Statements and Supplementary Data” of this Annual Report on Form 10-K:

Report of Independent Registered Public Accounting Firm (PCAOB ID: 42)	68
Consolidated Balance Sheets as of December 31, 2022 and 2021	70
Consolidated Statements of Operations for each of the three years in the period ended December 31, 2022	71
Consolidated Statements of Comprehensive Income (Loss) for each of the three years in the period ended December 31, 2022	72
Consolidated Statements of Shareholders' Equity (Deficit) for each of the three years in the period ended December 31, 2022	73
Consolidated Statements of Cash Flows for each of the three years in the period ended December 31, 2022	74
Notes to Consolidated Financial Statements	75
Supplementary Financial Data (unaudited)	108

2. Financial Statement Schedules:

All schedules have been omitted because of the absence of conditions under which they are required or because the required information, where material, is shown in the financial statements, financial notes or supplementary financial information.

(b) Exhibits required by Item 601 of Regulation S-K

The information required by this Item is set forth on the exhibit index that precedes the signature page of this report.

Exhibit Index

Exhibit Number	Description	Incorporated by Reference	
		Form	Filing Date/Period End Date
2.1	Separation and Distribution Agreement by and between Theravance Biopharma, Inc. and Innoviva, Inc., dated June 1, 2014	8-K	June 3, 2014
2.2*	Asset Purchase Agreement, dated as of November 1, 2018, by and among Cumberland Pharmaceuticals Inc., and Theravance Biopharma Ireland Limited and Theravance Biopharma US, Inc.	8-K	November 16, 2018
2.3**	Equity Purchase and Funding Agreement, dated as of July 13, 2022, by and between Theravance Biopharma, Inc. and Royalty Pharma Investments 2019 ICAV	8-K	July 14, 2022
3.1	Amended and Restated Memorandum and Articles of Association	10-12B	April 30, 2014
4.1	Specimen Share Certificate	10-12B	April 30, 2014
4.2	Registration Rights Agreement, dated March 3, 2014	10-12B	April 8, 2014
4.3	First Amendment of Registration Rights Agreement, dated February 10, 2020 by and between Theravance Biopharma, Inc. and Glaxo Group Limited	10-Q	March 31, 2020
4.4	Shelf Rights Plan Resolution	DEF 14A	March 21, 2018
4.5	Sales Agreement between Theravance Biopharma, Inc. and Cowen and Company, LLC dated December 3, 2019	S-3	December 3, 2019
4.6	Indenture, dated as of November 2, 2016, between Theravance Biopharma, Inc. and Wells Fargo Bank, National Association, as trustee	8-K	November 2, 2016
4.7	First Supplemental Indenture, dated as of November 2, 2016, between Theravance Biopharma, Inc. and Wells Fargo Bank, National Association, as trustee	8-K	November 2, 2016
4.8	Form of 3.25% Convertible Senior Note due 2023 (included in Exhibit 4.6)	8-K	November 2, 2016
4.9	Indenture, dated as of February 28, 2020, by and among Triple Royalty Sub II LLC, as issuer, U.S. Bank National Association, as initial trustee, transfer agent, paying agent, registrar and calculation agent and, solely with respect to Section 2.11(o) and Section 2.11(p) Theravance Biopharma, Inc.	8-K	March 04, 2020
4.10	Description of the Registrant's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934	10-K	December 31, 2019
4.11	Registration Rights Agreement among Theravance Biopharma, Inc., GSK Finance (No.3) plc and GlaxoSmithKline plc dated June 22, 2020.	8-K	June 25, 2020
4.12	Waiver and Assignment of Registration Rights and Voting Agreement among GSK Finance (No.3) plc, Glaxo Group Limited and Theravance Biopharma, Inc. dated as of June 22, 2020.	8-K	June 25, 2020
10.1	Transition Services Agreement by and between Theravance Biopharma, Inc. and Innoviva, Inc., dated June 2, 2014	8-K	June 3, 2014
10.2	Tax Matters Agreement by and between Theravance Biopharma, Inc. and Innoviva, Inc., dated June 2, 2014	8-K	June 3, 2014
10.3	Employee Matters Agreement by and between Theravance Biopharma, Inc. and Innoviva, Inc., dated June 1, 2014	8-K	June 3, 2014
10.4+	2013 Equity Incentive Plan	S-8	August 18, 2014
10.5+	UK Addendum to the 2013 Equity Incentive Plan	10-Q	August 14, 2014
10.6+	2014 New Employee Equity Incentive Plan	S-8	November 14, 2014
10.7+	2013 Employee Share Purchase Plan, as amended	S-8	Aug. 18, 2014
10.8+	Forms of award agreements under the 2013 Equity Incentive Plan and 2014 New Employee Equity Incentive Plan	10-Q	May 10, 2016
10.9+	Forms of Equity Award Amendment	10-12B	May 7, 2014

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Exhibit Number	Description	Incorporated by Reference	
		Form	Filing Date/Period End Date
10.10+	Form of TFIO Cash Award Amendment	10-12B	May 7, 2014
10.11+	Form of Acknowledgment for Irish Non-Employee Directors	10-K	March 11, 2016
10.12+	Irish Addendum to the 2013 Equity Incentive Plan	10-K	March 11, 2016
10.13+	Irish Addendum to the 2014 New Employee Equity Incentive Plan	10-K	March 11, 2016
10.14+	UK and Irish Addendums to the 2013 Employee Share Purchase Plan	10-K	March 11, 2016
10.15+	Theravance Biopharma, Inc. Performance Incentive Plan	8-K	May 6, 2016
10.16+	Form of Notice of Option Grant and Option Agreement under the Company's Performance Incentive Plan	10-Q	November 8, 2017
10.17+	Form of Notice of Performance Restricted Share Unit Award and Restricted Share Unit Agreement under the Company's Performance Incentive Plan	10-Q	November 8, 2017
10.18+	Change in Control Severance Plan	10-12B	April 8, 2014
10.19+	Cash Bonus Program	10-12B	November 22, 2013
10.20+	Form of Indemnity Agreement	10-12B	April 30, 2014
10.21	Amended and Restated Lease Agreement, 951 Gateway Boulevard, between Innoviva, Inc. and HMS Gateway Office L.P., dated January 1, 2001	10-12B	August 1, 2013
10.22	First Amendment to Lease for 951 Gateway Boulevard effective as of June 1, 2010 between Innoviva, Inc. and ARE-901/951 Gateway Boulevard, LLC	10-12B	August 1, 2013
10.23	Lease Agreement, 901 Gateway Boulevard, between Innoviva, Inc. and HMS Gateway Office L.P., dated January 1, 2001	10-12B	August 1, 2013
10.24	First Amendment to Lease for 901 Gateway Boulevard effective as of June 1, 2010 between Innoviva, Inc. and ARE-901/951 Gateway Boulevard, LLC	10-12B	August 1, 2013
10.25	Consent to Assignment by and among ARE-901/951 Gateway Boulevard, LLC, Innoviva, Inc. and Theravance Biopharma, Inc. and Assignment and Assumption of Lease for 901 Gateway Blvd.	10-Q	August 14, 2014
10.26	Consent to Assignment by and among ARE-901/951 Gateway Boulevard, LLC, Innoviva, Inc. and Theravance Biopharma, Inc. and Assignment and Assumption of Lease for 951 Gateway Blvd.	10-Q	August 14, 2014
10.27	Theravance Respiratory Company, LLC Limited Liability Company Agreement, dated May 31, 2014	8-K	June 3, 2014
10.28*	Technology Transfer and Supply Agreement, dated as of May 22, 2012 between Innoviva, Inc. and Hospira Worldwide, Inc.	10-12B	May 7, 2014
10.29*	First Amendment to the Technology Transfer and Supply Agreement by and between Innoviva, Inc. and Hospira Worldwide, Inc., dated May 16, 2013	10-Q	November 9, 2016
10.30*	Second Amendment to the Technology Transfer and Supply Agreement by and between Theravance Biopharma Antibiotics, Inc. and Hospira Worldwide, Inc., dated October 17, 2014	10-Q	November 9, 2016
10.31*	Third Amendment to the Technology Transfer and Supply Agreement by and between Theravance Biopharma Ireland Limited and Hospira Worldwide, Inc., dated April 14, 2016	10-Q	November 9, 2016
10.32*	Fourth Amendment to the Technology Transfer and Supply Agreement by and between Theravance Biopharma Ireland Limited and Pfizer CentreOne group of Pfizer, Inc., dated September 29, 2016	10-Q	November 9, 2016
10.33	Amendment No. 1 to the License, Development, and Commercialization Agreement by and between Theravance Biopharma Ireland Limited and Clinigen Group PLC dated August 4, 2016	10-Q	August 9, 2016
10.34	License Agreement with Janssen Pharmaceutica, dated as of May 14, 2002	10-Q	August 14, 2014
10.35	Collaboration Agreement between Innoviva, Inc. and Glaxo Group Limited, dated November 14, 2002 (1)		

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Exhibit Number	Description	Incorporated by Reference	
		Form	Filing Date/Period End Date
10.36	Strategic Alliance Agreement by and between Innoviva, Inc. and Glaxo Group Limited, dated March 30, 2004 ⁽²⁾		
10.37	Amendment to Strategic Alliance Agreement by and between Innoviva, Inc. and Glaxo Group Limited, dated October 3, 2011 ⁽³⁾		
10.38	Collaboration Agreement Amendment by and between Innoviva, Inc. and Glaxo Group Limited dated, March 3, 2014 ⁽⁴⁾		
10.39	Strategic Alliance Agreement Amendment by and between Innoviva, Inc. and Glaxo Group Limited dated, March 3, 2014 ⁽⁴⁾		
10.40	Master Agreement by and between Innoviva, Inc., Theravance Biopharma, Inc. and Glaxo Group Limited, dated March 3, 2014 ⁽⁴⁾		
10.41	Extension Agreement by and between the Company and Glaxo Group Limited, dated March 3, 2014	10-12B	April 8, 2014
10.42+	Amended Offer Letter with Rick E Winningham dated August 5, 2014	10-Q	November 12, 2014
10.43+	Offer Letter with Frank Pasqualone May 12, 2014	10-Q	August 14, 2014
10.44+	Offer Letter with Brett K. Haumann dated May 12, 2014	10-Q	August 14, 2014
10.45+	Offer Letter with Brad Shafer dated August 20, 2014	10-Q	November 12, 2014
10.46+	Offer Letter with Ken Pitzer September 15, 2014	10-Q	May 10, 2016
10.47+	Offer Letter with Phil Worboys September 9, 2014	10-Q	May 10, 2016
10.48+	Offer Letter with Richard Graham, Ph.D. dated August 12, 2015	10-Q	September 30, 2020
10.49**	Development and Commercialization Agreement by and between Theravance Biopharma R&D, Inc. and Mylan Ireland Limited, dated January 30, 2015	10-K	December 31, 2020
10.50*	License and Collaboration Agreement by and between Theravance Biopharma Ireland Limited and Millennium Pharmaceuticals, Inc. dated June 8, 2016	10-Q	August 9, 2016
10.51	Form of Note Purchase Agreement, dated February 21, 2020 by and among Theravance Biopharma R&D, Inc., Triple Royalty Sub II LLC, and the Purchasers	10-K	December 31, 2019
10.52	Sale and Contribution Agreement, dated as of February 28, 2020, among Theravance Biopharma R&D, Inc., as the transferor, Triple Royalty Sub II LLC, as the transferee, and Theravance Biopharma, Inc.	8-K	March 04, 2020
10.53	Pledge and Security Agreement, dated as of February 28, 2020, between Theravance Biopharma R&D, Inc., as the equity holder, and U.S. Bank National Association, as the trustee	8-K	March 04, 2020
10.54	Servicing Agreement, dated as of February 28, 2020, between Triple Royalty Sub II LLC and Theravance Biopharma US, Inc.	8-K	March 04, 2020
10.55	Account Control Agreement, dated as of February 28, 2020, among Triple Royalty Sub II LLC, as the grantor, Theravance Biopharma US, Inc., as the servicer, U.S. Bank National Association, as the secured party, and U.S. Bank National Association, as the financial institution	8-K	March 04, 2020
10.56	Amended and Restated Limited Liability Company Agreement of Triple Royalty Sub II LLC, dated February 28, 2020, by Theravance Biopharma R&D, Inc., as the initial sole equity member	8-K	March 04, 2020
10.57	Annex A - Rules of Construction and Defined Terms of the Amended and Restated Limited Liability Company Agreement of Triple Royalty Sub II LLC, dated February 28, 2020	8-K	March 04, 2020
10.58**	License and Collaboration Agreement by and between Theravance Biopharma Ireland Limited and Janssen Biotech, Inc. dated as of February 5, 2018	10-K	December 31, 2020
10.59+	Memorandum to Brett K. Haumann regarding Transfer to Transfer to Theravance Biopharma UK Limited, executed April 1, 2020	10-Q	March 31, 2020
10.60	Amendments to Lease for 901 Gateway Boulevard between Theravance Biopharma US, Inc. and ARE-901/951 Gateway Boulevard, LLC	10-Q	August 2, 2018

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Exhibit Number	Description	Incorporated by Reference	
		Form	Filing Date/Period End Date
10.61	Amendments to Lease for 951 Gateway Boulevard between Theravance Biopharma US, Inc. and ARE-901/951 Gateway Boulevard, LLC	10-Q	August 2, 2018
10.62+	Agreement and General Release between Theravance Biopharma US, Inc. and Shehnaaz Suliman, dated March 1, 2019	10-Q	May 10, 2019
10.63+	Offer Letter with Andrew Hindman dated May 30, 2019	10-Q	August 5, 2019
10.64*	Amendment No. 1 to the Development and Commercialization Agreement by and between Theravance Biopharma Ireland Limited and Mylan Ireland Limited, dated June 12, 2019	10-Q	August 5, 2019
10.65**	License Agreement by and between Theravance Biopharma Ireland Limited and Pfizer Inc. dated December 21, 2019	10-K	December 31, 2019
10.66+	Service Agreement by and between Brett K. Haumann and Theravance Biopharma UK Limited, dated April 1, 2020	10-Q	March 31, 2020
10.67	Cooperation Agreement among Theravance Biopharma, Inc., GSK Finance (No.3) plc and GlaxoSmithKline plc, dated June 22, 2020	8-K	June 25, 2020
10.68+	Consulting Agreement between Bradford J. Shafer and Theravance Biopharma, Inc., dated September 30, 2021	8-K	October 15, 2021
10.69+	Form of Separation Agreement and Release of Claims between California-based departing executives and Theravance Biopharma US, Inc.	10-K	February 28, 2022
10.70+	Consulting Agreement between Vijay Sabesan and Theravance Biopharma US, Inc., dated November 30, 2021	10-K	February 28, 2022
10.71+	Settlement Agreement by and between Ann Brady and Theravance Biopharma Ireland Limited, dated November 2, 2021	10-K	February 28, 2022
10.72	Audited financial statements of Theravance Respiratory Company, LLC for the year ended December 31, 2021		
10.73**	Master Consent, dated as of July 13, 2022, by and among Glaxo Group Limited, Theravance Biopharma, Inc. and Royalty Pharma Investments 2019 ICAV Release Agreement, dated as of July 13, 2022, by and among Innoviva, Inc., Innoviva TRC Holdings LLC, Royalty Pharma Investments 2019 ICAV, Theravance Respiratory Company, LLC, Theravance Biopharma, Inc., Theravance Biopharma US Holdings, Inc. and Triple Royalty Sub II LLC	8-K	July 14, 2022
10.74	Share Repurchase Agreement dated September 16, 2022, by and between Theravance Biopharma, Inc. and GSK Finance (No.3) plc	8-K	July 14, 2022
10.75**	First Amendment to the Theravance Biopharma, Inc. Change in Control Severance Plan	SC TO	September 28, 2022
10.76+**	Settlement Agreement and Release of Claims by and between Andrew Hindman and Theravance Biopharma US, Inc., dated January 10, 2023	10-Q	November, 9, 2022
10.77	Subsidiaries of Theravance Biopharma, Inc.		
21.1	Consent of Independent Registered Public Accounting Firm (Ernst & Young LLP)		
23.1	Consent of Independent Registered Public Accounting Firm (Grant Thornton LLP)		
23.2	Power of Attorney (see signature page to this Annual Report on Form 10-K)		
24.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934		
31.1	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934		
31.2	Certifications Pursuant to 18 U.S.C. Section 1350		

Exhibit Number	Description	Incorporated by Reference	
		Form	Filing Date/Period End Date
101	The following materials from Registrant's Annual Report on Form 10-K for the year ended December 31, 2022, formatted in Inline Extensible Business Reporting Language (iXBRL) includes: (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income (Loss), (iv) Consolidated Statements of Shareholders' Equity (Deficit), (v) Consolidated Statements of Cash Flows, and (vi) Notes to Consolidated Financial Statements.		
104	Cover Page Interactive Data File (Formatted as Inline XBRL and contained in Exhibit 101).		

+ Management contract or compensatory plan or arrangement required to be filed pursuant to Item 15(b) of Form 10-K.

* Portions of this exhibit have been omitted and the omitted information has been filed separately with the Securities and Exchange Commission pursuant to an order granting confidential treatment.

** Portions of this exhibit have been omitted pursuant to Items 601(a)(5), Item 601(b)(2)(ii) or 601(b)(10)(iv) of Regulation S-K.

(1) Incorporated by reference to an exhibit filed with the quarterly report on Form 10-Q of Innoviva, Inc., filed with the Securities and Exchange Commission on August 7, 2014.

(2) Incorporated by reference to an exhibit filed with the annual report on Form 10-K of Innoviva, Inc., filed with the Commission on March 3, 2014.

(3) Incorporated by reference to an exhibit filed with the annual report on Form 10-K of Innoviva, Inc., filed with the Commission on February 27, 2012.

(4) Incorporated by reference to an exhibit filed with the current report on Form 8-K/A of Innoviva, Inc., filed with the Commission on March 6, 2014.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<hr/> <u>/s/ DEAN J. MITCHELL</u> Dean J. Mitchell	Director	March 1, 2023
<hr/> <u>/s/ DEEPIKA R. PAKIANATHAN, PH.D.</u> Deepika R. Pakianathan, Ph.D.	Director	March 1, 2023
<hr/> <u>/s/ WILLIAM D. YOUNG</u> William D. Young	Director	March 1, 2023

Theravance Respiratory Company, LLC

Financial Statements as of and for the Two Years Ended
December 31, 2021 and December 31, 2020,
and Report of Independent Registered Public Accounting Firm

THERAVANCE RESPIRATORY COMPANY, LLC.
INDEX TO FINANCIAL STATEMENTS

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To the Members and the Board of Directors of Theravance Respiratory Company, LLC

Opinion on the Financial Statements

We have audited the accompanying balance sheet of Theravance Respiratory Company, LLC (a Delaware limited liability company) (the “Company”) as of December 31, 2021, the related statements of income and comprehensive income, changes in members’ equity, and cash flows for the year ended December 31, 2021, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021, and the results of its operations and its cash flows for the year ended December 31, 2021, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matters or on the accounts or disclosures to which it relates.

Consolidation of Investees

As described further in Note 3 to the financial statements, certain of the Company’s investments have complex structures and agreements which must be evaluated for consolidation, including determining whether the investee is a variable interest entity (“VIE”), and if so, whether the Company is the primary beneficiary. This assessment is performed at the inception of the investment and upon the occurrence of reconsideration events and requires significant judgment by management.

As of December 31, 2021, the Company did not have any consolidated VIEs. As of December 31, 2021, the Company’s investments in unconsolidated VIEs was \$37.7 million.

We identified the assessment of consolidation of investees as a critical audit matter. The principal consideration for our determination that the consolidation determination for the Company’s investees either at inception or upon a reconsideration event is a critical audit matter is that there is significant judgment required by management to interpret complex structures and agreements. This required a high degree of auditor judgment and an increased audit effort.

Our audit procedures related to consolidation and primary beneficiary assessment included the following, among others.

- We evaluated the design effectiveness of controls related to management’s initial accounting assessment for each investment.
- We evaluated the Company’s accounting analysis for all significant investees by performing procedures including, but not limited to:
 - Obtaining an understanding of the composition and governance of the investee, its board of directors and management.
 - Reading the purchase agreements and other related documents and evaluating the structures and terms of the agreements to verify if the investments should be classified as VIEs.
 - If an investee is determined to be a VIE, considering whether the Company appropriately determined the primary beneficiary by evaluating the investment arrangements of the entity to determine if the Company has the power to direct activities, and if the Company has the obligation to absorb losses of the entity or the right to receive benefits from the entity that could be significant to the VIE.
 - Evaluating the evidence obtained in other areas of the audit to determine if there were additional reconsideration events that had not been identified by the Company, including reading board minutes and confirming the terms of certain agreements, as applicable.

/s/ GRANT THORNTON LLP

We have served as the Company’s auditor since 2021.

San Francisco, California
February 25, 2022

THERAVANCE RESPIRATORY COMPANY, LLC.
BALANCE SHEETS
(In thousands)

	<u>December 31,</u> <u>2021</u>	<u>December 31,</u> <u>2020</u> <u>(unaudited)</u>
Assets		
Current assets:		
Cash and cash equivalents	\$ 50,713	\$ 38,081
Related party receivables from collaborative arrangements	42,492	24,946
Prepaid expenses and other current assets	71	—
Total current assets	93,276	63,027
Equity and long-term investments	37,695	16,959
Total assets	<u>\$ 130,971</u>	<u>\$ 79,986</u>
Liabilities and Equity		
Current liabilities:		
Accrued liabilities	252	508
Total current liabilities	252	508
Equity:		
Capital contribution (distributions)	(125,196)	(55,246)
Retained earnings	255,915	134,724
Total equity	130,719	79,478
Total liabilities and equity	<u>\$ 130,971</u>	<u>\$ 79,986</u>

See accompanying notes to financial statements.

THERAVANCE RESPIRATORY COMPANY, LLC.
STATEMENTS OF INCOME AND COMPREHENSIVE INCOME
(In thousands)

	Year Ended December 31,	
	2021	2020 (unaudited)
Revenue:		
Royalty revenue from a related party	\$ 126,688	\$ 73,090
Revenue from collaborative arrangements with a related party	—	10,000
Total revenue	<u>126,688</u>	<u>83,090</u>
Operating expenses:		
General and administrative	3,956	2,613
Total operating expenses	<u>3,956</u>	<u>2,613</u>
Income from operations	122,732	80,477
Interest income	—	38
Changes in fair values of equity and long-term investments, net	(1,541)	1,147
Net income	<u>\$ 121,191</u>	<u>\$ 81,662</u>
Comprehensive income	\$ 121,191	\$ 81,662

See accompanying notes to financial statements.

THERAVANCE RESPIRATORY COMPANY, LLC.
STATEMENTS OF EQUITY
(In thousands)

	<u>Innoviva (1)</u>	<u>Theravance Biopharma (2)</u>	<u>Total Equity</u>
Balance as of January 1, 2020 (unaudited)	\$ 5,051	\$ 28,617	\$ 33,668
Distributions	(5,378)	(30,474)	(35,852)
Net income	12,249	69,413	81,662
Balance as of December 31, 2020 (unaudited)	<u>\$ 11,922</u>	<u>\$ 67,556</u>	<u>\$ 79,478</u>
Distributions	(10,493)	(59,457)	(69,950)
Net income	18,179	103,012	121,191
Balance as of December 31, 2021	<u>\$ 19,608</u>	<u>\$ 111,111</u>	<u>\$ 130,719</u>

(1) Innoviva Inc. and its subsidiary (“Innoviva” collectively) own a 15% economic interest.

(2) Theravance Biopharma Inc. and its subsidiaries (“Theravance Biopharma” collectively) own the remaining 85% of the economic interests.

See accompanying notes to financial statements.

THERAVANCE RESPIRATORY COMPANY, LLC.
STATEMENT OF CASH FLOWS
(In thousands)

	Year Ended December 31,	
	2021	2020
		(unaudited)
Cash flows from operating activities		
Net income	\$ 121,191	\$ 81,662
Adjustments to reconcile net income to net cash provided by operating activities:		
Changes in fair values of equity and long-term investments, net	1,541	(1,147)
Changes in operating assets and liabilities:		
Receivables from collaborative arrangements	(17,546)	(10,558)
Prepaid expenses and other current assets	(71)	10
Accrued liabilities	(256)	(2,561)
Net cash provided by operating activities	<u>104,859</u>	<u>67,406</u>
Cash flows from investing activities		
Purchases of equity and long-term investments	(22,277)	(15,812)
Net cash used in investing activities	<u>(22,277)</u>	<u>(15,812)</u>
Cash flows from financing activities		
Distributions	(69,950)	(35,852)
Net cash used in financing activities	<u>(69,950)</u>	<u>(35,852)</u>
Net increase (decrease) in cash and cash equivalents	<u>12,632</u>	<u>15,742</u>
Cash and cash equivalents at beginning of period	<u>38,080</u>	<u>22,339</u>
Cash and cash equivalents at end of period	<u>\$ 50,712</u>	<u>\$ 38,081</u>

See accompanying notes to financial statements.

1. Description of Operations and Summary of Significant Accounting Policies

Description of Operations

Theravance Respiratory Company, LLC (referred to as “TRC”, the “Company”, or “we” and other similar pronouns) was a company with a portfolio of royalties and other healthcare assets. Our royalty portfolio primarily contained a respiratory asset, TRELEGY® ELLIPTA® (the combination FF/UMEC/VI), partnered with Glaxo Group Limited (“GSK”). The Company was set up as a limited liability company in the state of Delaware in 2014 and is owned by Innoviva Inc. (“Innoviva”), which was the managing member with a 15% economic interest, and Theravance Biopharma Inc.(Theravance Biopharma) and its subsidiaries with a 85% economic interest.

Use of Management’s Estimates

The preparation of financial statements in conformity with U.S. Generally Accepted Accounting Principles (“GAAP”) requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ materially from those estimates. Management evaluated its significant accounting policies and estimates on an ongoing basis. We based our estimates on historical experience and other relevant assumptions that we believed to be reasonable under the circumstances. These estimates also formed the basis for making judgments about the carrying values of assets and liabilities when these values were not readily apparent from other sources.

Certain Risks and Concentrations

Our financial instruments that were exposed to concentrations of credit risk consist primarily of cash and cash equivalents, marketable securities, and equity investments. Although we deposited our cash with a financial institution, our deposits, at times, may exceed federally insured limits. Refer to “Segment Reporting” below for concentrations with respect to revenues and geographic locations.

Segment Reporting

We operated in a single segment, which was to provide capital return to the Company’s owners by maximizing the potential value of our respiratory asset partnered with GSK. Revenues were generated from our collaborative arrangements and royalty payments from GSK, located in Great Britain. Our facilities were located within the United States.

Variable Interest Entities

We evaluated our ownership, contractual and other interest in entities to determine if they were variable interest entities (“VIE”). We evaluated whether we had a variable interest in those entities and the nature and extent of those interests. Based on our evaluation, if we determined we were the primary beneficiary of a VIE, we consolidated the entity in our financial statements.

Cash and Cash Equivalents

We considered all highly liquid investments purchased with a maturity of three months or less on the date of purchase to be cash equivalents. Cash equivalents were carried at cost, which approximated fair value.

Equity and Long-Term Investments

We invested from time to time in equity securities of private or public companies. If we determined that we had control over these companies under either voting or VIE models, we included them in our financial statements. If we determined that we did not have control over these companies under either voting or VIE models, we then determined if we had an ability to exercise significant influence via voting interests, board representation or other business relationships.

We may account for the equity investments where we exercised significant influence using either an equity method of accounting or at fair value by electing the fair value option under Accounting Standards Codification (“ASC”) Topic 825, *Financial Instruments*. If the fair value option was applied to an investment that would otherwise be accounted for under the equity method, we applied it to all our financial interests in the same entity (equity and debt, including guarantees) that were eligible items. All gains and losses from

fair value changes, unrealized and realized, were presented as changes in fair values of equity and long-term investments, net on the statements of income.

If we concluded that we did not have an ability to exercise significant influence over an investee, we may elect to account for an equity security without a readily determinable fair value using the measurement alternative described in ASC Topic 825. This measurement alternative allowed us to measure the equity investment at its cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer.

Fair Value of Financial Instruments

We defined fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date.

Our valuation techniques were based on observable and unobservable inputs. Observable inputs reflect readily obtainable data from independent sources, while unobservable inputs reflected our market assumptions. We classify these inputs into the following hierarchy:

Level 1—Quoted prices for identical instruments in active markets.

Level 2—Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations whose inputs are observable or whose significant value drivers are observable.

Level 3—Unobservable inputs and little, if any, market activity for the assets.

Financial instruments included cash equivalents, marketable securities, receivables from collaborative arrangements, accounts payable, and accrued liabilities. Cash equivalents and marketable securities are carried at estimated fair value. The carrying values of receivables from collaborative arrangements, accounts payable, and accrued liabilities approximate their estimated fair value due to the relatively short-term nature of these instruments.

Revenue Recognition

Revenue is recognized when our customer obtains control of promised goods or services, in an amount that reflects the consideration which we expect to receive in exchange for those goods or services. Revenue is recognized through a five-step process: (i) identify the contract with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price for the contract; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue as a performance obligation is satisfied.

We recognized the royalty revenue on net sales of products with respect to which we have contractual royalty rights in the period in which the royalties are earned. The net sales reports provided by our partner were based on its methodology and assumptions to estimate rebates and returns, which it monitors and adjusts regularly in light of contractual and legal obligations, historical trends, past experience and projected market conditions. Our partner may make significant adjustments to its sales based on actual results recorded, which could cause our royalty revenue to fluctuate. We had the ability to conduct periodic royalty audits to evaluate the information provided by our partner.

Related Parties

While GSK no longer had an ownership stake in Innoviva as of December 31, 2021, it remains as Theravance Biopharma's major stockholder. GSK is considered a related party due to our collaborative arrangement with them. Transactions with GSK are described in Note 2, "Revenue Recognition and Collaborative Arrangements."

Innoviva provides management and administrative services and support at no charge to the Company. If these amounts were charged, the reported results could be materially different.

2. Revenue Recognition and Collaborative Arrangements

We recognized royalty revenue on net sales of TRELEGY® ELLIPTA® with respect to which we had contractual royalty rights in the period in which the royalties are earned.

LABA Collaboration

In November 2002, Innoviva entered into LABA collaboration with GSK to develop and commercialize once-daily LABA products for the treatment of COPD and asthma. In connection with the spin-off of Innoviva's research and development operations to Theravance Biopharma, Inc. in 2014, the agreement was assigned to TRC for TRELEGY® ELLIPTA®. Manufacturing and commercialization of TRELEGY® ELLIPTA® are performed by GSK. TRC was entitled to receive royalties from GSK on sales of TRELEGY® ELLIPTA®. Royalties were upward tiering and range from 6.5% to 10%. Royalty revenues for the year ended December 31, 2021 and 2020 were \$126.7 million and \$73.1 million, respectively.

2004 Strategic Alliance

In March 2004, Innoviva entered into the Strategic Alliance Agreement with GSK where GSK received an option to license exclusive development and commercialization rights to product candidates from certain of Innoviva's discovery programs on predetermined terms and on an exclusive, worldwide basis. In 2005, GSK licensed Innoviva's Bifunctional Muscarinic Antagonist-Beta2 Agonist ("MABA") program for the treatment of COPD. The development program was funded by GSK. In 2014, the agreement was assigned to TRC in connection of the spin-off. In 2020, GSK terminated the MABA program and paid us a \$10.0 million termination fee.

3. Financial Instruments and Fair Value Measurements

Equity Investment in InCarda

During the third quarter of 2020, TRC purchased 20,469,432 shares of Series C preferred stock and warrants to purchase 5,117,358 additional shares of Series C preferred stock of InCarda Therapeutics, Inc. ("InCarda") for \$15.8 million, which includes \$0.8 million of transaction costs. InCarda is a privately held biopharmaceutical company focused on developing inhaled therapies for cardiovascular diseases. The investment is intended to fund the ongoing clinical development of InRhythm™ (flecainide for inhalation), the company's lead program, for the treatment of a recent-onset episode of paroxysmal atrial fibrillation. TRC has the right to designate one member to InCarda's board. As of December 31, 2021, one of InCarda's eight board members is designated by TRC. As of December 31, 2021 and 2020, TRC held 13.0% and 13.4% of InCarda equity ownership.

The investment in InCarda did not provide TRC the ability to control or have significant influence over InCarda's operations. Based on our evaluation, we determined that InCarda is a VIE, but TRC was not the primary beneficiary of the VIE. We accounted for the investment in Series C preferred shares in InCarda using the measurement alternative. Under the measurement alternative, the equity investment was initially recorded at its allocated cost, but the carrying value may be adjusted through earnings upon an impairment or when there was an observable price change involving the same or a similar investment with the same issuer. As of December 31, 2021 and 2020, we recorded \$15.8 million for our investment in InCarda's series C preferred stock as equity and long-term investments on the consolidated balance sheets. There was no impairment or other change to the value of the InCarda's Series C preferred stock as of December 31, 2021 and 2020, respectively.

The warrants were recorded at fair value and subject to remeasurement at each balance sheet date. The warrants were exercisable immediately with an exercise price of \$0.7328 per share. In September 2021, TRC and InCarda entered into an amendment to extend the expiration date of the warrants from October 6, 2021 to March 31, 2022. We used the Black-Scholes-Merton pricing model to estimate the fair value of the warrants with the following input assumptions: the exercise price of the warrants, the risk-free interest rate computed based on the U.S. Treasury yield, the remaining contractual term as the expected term, and the expected stock price volatility calculated based on the historical volatility of the common stock of its public peer companies.

As of December 31, 2021 and 2020, the fair value of InCarda's warrants was estimated at \$0.4 million and \$1.1 million, respectively, and recorded as equity and long-term investments on the consolidated balance sheets. We recorded \$0.7 million unrealized loss and \$1.1 million unrealized gains as changes in fair values of equity and long-term investments, net on the consolidated statements of income for the years ended December 31, 2021 and 2020, respectively.

Equity Investment in ImaginAb

On March 18, 2021, TRC entered into a securities purchase agreement with ImaginAb, Inc. to purchase 4,051,724 shares of ImaginAb Series C preferred stock for \$4.7 million. On the same day, TRC also entered into a securities purchase agreement with one of ImaginAb's common stockholders to purchase 4,097,157 shares of ImaginAb common stock for \$1.3 million. ImaginAb is a privately held biotechnology company focused on clinically managing cancer and autoimmune diseases via molecular imaging. \$0.4 million was incurred for investment due diligence costs and execution and recorded as part of the equity and long-term investment on the consolidated balance sheet. As of December 31, 2021, one of ImaginAb's five board members was designated by TRC, and TRC held 14.5% of ImaginAb's equity.

The investment in ImaginAb did not provide TRC the ability to control or have significant influence over ImaginAb's operations. Based on our evaluation, we determined that ImaginAb is a VIE, but TRC was not the primary beneficiary of the VIE. Because ImaginAb's equity securities were not public traded and did not have a readily determinable fair value, we accounted for our investment in ImaginAb's Series C preferred stock and common stock using the measurement alternative. Under the measurement alternative, the equity investment is initially recorded as its allocated cost, but the carrying value may be adjusted through earnings upon an impairment or when there is an observable price change involving the same or a similar investment with the same issuer. As of December 31, 2021, \$6.4 million was recorded as equity and long-term investments on the balance sheets and there was no change to the fair value of our investment.

Convertible Promissory Note in Gate Neurosciences

On November 24, 2021, TRC entered into a Convertible Promissory Note Purchase Agreement with Gate Neurosciences, Inc. ("Gate") to acquire a convertible promissory note (the "Convertible Note") with a principal amount of \$15.0 million. Gate is a privately held biopharmaceutical company focused on developing the next generation of targeted nervous system therapies, leveraging precision medicine approaches to develop breakthrough drugs for psychiatric and neurologic diseases. The investment was intended to fund its ongoing development and research. The Convertible Note bore an annual interest rate of 8% and would convert into common stock shares upon a qualified event or into shares of shadow preferred stock upon a qualified financing. A qualifying event can be a qualified initial price offering, a qualified merger, or a merger with a special-purpose acquisition company ("SPAC").

The number of common stock shares to be issued in a qualified event shall be equal to the amount due on the conversion date divided by the lesser of a capped conversion price (the "Capped Conversion Price") and the qualified event price (the "Qualified Event Price"). The Capped Conversion Price was calculated as \$50.0 million divided by the number of common stock outstanding at such time on a fully diluted basis. The Qualified Event Price was the price per share determined by the qualified event. A qualified financing is a sale or series of sales of preferred stock where (i) at least 50 percent of counterparties are not existing shareholders, (ii) net proceeds to Gate are at least \$35.0 million, and (iii) the stated or implied equity valuation of Gate is at least \$80.0 million. Shadow Preferred means preferred stock having identical rights, preferences and restrictions as the preferred stock that would be issued in a qualified financing.

The investment in Gate did not provide TRC the ability to control or have significant influence over Gate's operations. Based on our evaluation, we determined that Gate was a VIE, but TRC was not the primary beneficiary of the VIE. We accounted for the convertible debt investment as a trading security, measured at fair value. TRC had the right to designate one board member to Gate's board. Gate's board currently consists of two directors, neither of whom is designated by TRC. As of December 31, 2021, \$15.9 million, which included \$0.9 million of transaction costs, was recorded as equity and long-term investments on the balance sheets before unrealized losses. We recorded \$0.8 million unrealized loss as changes in fair values of equity and long-term investments, net on the statement of income for the year ended December 31, 2021.

Fair Value Measurements

Certain of our equity and long-term investments were measured at fair value on a recurring basis. The estimated fair values were as follows:

Types of Instruments (In thousands)	Estimated Fair Value Measurements as of December 31, 2021 Using:			
	Quoted Price in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs	Total
	Level 1	Level 2	Level 3	
Assets				
Equity investment - InCarda Warrants	—	—	411	411
Equity investment - Gate Convertible Note	—	—	15,099	15,099
Total assets measured at estimated fair value	\$ —	\$ —	\$ 15,510	\$ 15,510

Types of Instruments (In thousands)	Estimated Fair Value Measurements as of December 31, 2020 Using: (unaudited)			
	Quoted Price in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs	Total
	Level 1	Level 2	Level 3	
Assets				
Equity investment - InCarda Warrants	—	—	1,147	1,147
Total assets measured at estimated fair value	\$ —	\$ —	\$ 1,147	\$ 1,147

InCarda's warrants and Gate's convertible were classified as Level 3 financial instruments as these securities were not publicly traded and the assumptions used in the valuation model for valuing these securities are based on significant unobservable and observable inputs including those of publicly traded peer companies.

4. General and Administrative Expenses

The majority of the general and administrative expenses was legal expenses. For the year ended December 31, 2021 and 2020, legal fees incurred for the arbitrations between TRC, Innoviva and Theravance Biopharma were \$3.3 million and \$1.7 million (unaudited), respectively.

In May 2019, Theravance Biopharma initiated arbitration against Innoviva and TRC, relating to a dispute as to the determination by Innoviva (as manager of TRC) to cause TRC to explore potential reinvestment opportunities for the royalty proceeds received by GSK into initiatives that Innoviva believes will increase the value of TRC and TRELEGY® ELLIPTA®. Theravance Biopharma alleged that, in causing TRC to not distribute substantially all royalty proceeds received from GSK, Innoviva breached the limited liability company operating agreement governing TRC (the "Operating Agreement"), as well as the fiduciary duties applicable to Innoviva as manager of TRC. The hearing in respect of the arbitration was conducted from July 23, 2019 through July 25, 2019. Post-arbitration oral argument was heard on August 14, 2019. On September 26, 2019, the arbitrator issued a final decision. The arbitrator ruled that Innoviva did not breach the Operating Agreement or its fiduciary duties by withholding royalties or pursuing reinvestment opportunities. Accordingly, the Company is permitted to continue to pursue development and commercialization initiatives. The arbitrator did conclude that Innoviva breached a provision of the Operating Agreement requiring Innoviva to deliver quarterly financial plans to Theravance Biopharma. However, the arbitrator concluded that this technical breach did not cause any damages to Theravance Biopharma and the arbitrator awarded limited injunctive relief to expand and clarify the disclosure obligations under the Operating Agreement related to the delivery of financial plans and the pursuit of investment opportunities (if those opportunities related to TRELEGY® ELLIPTA®). Finally, the arbitrator ruled that Innoviva was entitled to indemnification from TRC for 95% of its fees and expenses incurred in connection with the arbitration.

On September 30, 2019, Innoviva and TRC filed a Verified Complaint in the Court of Chancery of the State of Delaware ("Court of Chancery") to confirm the arbitration award. The award was confirmed by the Court of Chancery on May 4, 2020.

On July 16, 2020, Innoviva and TRC initiated a lawsuit in the Court of Chancery against Theravance Biopharma, seeking a permanent injunction preventing Theravance Biopharma from interfering with Innoviva's ability to cause TRC to reserve cash to pursue non-Trelegy related investments opportunities and a declaration that the arbitration award conclusively established that

Innoviva, as manager of TRC, had such authority. The Court of Chancery directed the parties to obtain the arbitrator's opinion as to whether the arbitration award addressed non-Trelegy related investment opportunities. On July 31, 2020, the arbitrator found that this award did not specifically address this situation. Accordingly, on August 5, 2020, the parties stipulated to the dismissal of the Court of Chancery action.

On October 6, 2020, Theravance Biopharma initiated a new arbitration against Innoviva and TRC, challenging Innoviva's authority as manager of TRC to cause TRC to pursue non-Trelegy related investment opportunities and again alleging that Innoviva is required to cause TRC to distribute substantially all royalty proceeds from GSK. On March 30, 2021, the arbitrator issued a final decision and ruled that Innoviva did not breach the Operating Agreement or its fiduciary duties by withholding royalties to pursue non-Trelegy-related investment opportunities. Additionally, the arbitrator ruled that Innoviva was entitled to indemnification from TRC for 100% of its fees and expenses reasonably incurred in connection with the arbitration.

On April 15, 2021, Innoviva and TRC filed a Verified Complaint in the Court of Chancery to confirm the arbitration award. On May 19, 2021, Theravance Biopharma submitted an answer to the Verified Complaint and filed a Motion to Modify the Arbitral Award, alleging that it contained a mathematical error. The parties filed a proposed stipulation to remand the motion to Chancellor Chandler for his consideration, which the Court of Chancery granted. On June 25, 2021, Innoviva submitted a brief to Chancellor Chandler in opposition to the motion and on July 15, 2021, Theravance Biopharma submitted a reply brief. On August 6, 2021, Chancellor Chandler issued a modified final award, which did not affect any of his ultimate conclusions. The modified award was confirmed by the Court of Chancery on September 16, 2021.

5. Commitments and Contingencies

We indemnify our members for certain events or occurrences, subject to certain limits. We may be subject to contingencies that may arise from matters such as product liability claims, legal proceedings, shareholder suits and tax matters. As such, we are unable to estimate the potential exposure related to these indemnification agreements. We have not recognized any liabilities relating to these agreements as of December 31, 2021.

6. Subsequent Events

On February 18, 2022, TRC entered into an investment and shareholders agreement with Nanolive SA ("Nanolive") to purchase 18,750,000 shares of Series C preferred stock for \$9.8 million (equivalent to 9.0 million CHF). Nanolive SA is a Swiss privately held life sciences company focused on developing breakthrough imaging solutions that accelerate research in growth industries such as drug discovery and cell therapy. TRC owns 16.1% of Nanolive's equity and has a right to designate one board member to Nanolive's board.

The Company evaluated the subsequent events through February 25, 2022, the date the financial statements are available to be issued.

SEPARATION AGREEMENT AND RELEASE OF CLAIMS

This Separation Agreement and Release of Claims (“Agreement”) is made and entered into by and between Andrew Hindman (“Employee”) and Theravance Biopharma US, Inc. (“Theravance” or “Company”). Employee and Theravance shall be referred to herein as the “Parties.”

Employee’s employment with Theravance terminated on December 31, 2022 (the “Termination Date”). When this Agreement becomes effective as set forth in paragraph L it will constitute the agreement to provide severance benefits to Employee in exchange for Employee entering this Agreement which among other things includes a release of claims. A version of this Agreement was originally provided to Employee on December 9, 2022 and he was not eligible to accept it before December 31, 2022. Pursuant to Paragraph I Employee had until January 23, 2023 to consider whether to enter the Agreement. Following provision of the Agreement to Employee on December 9, 2022 the Parties had discussions that resulted in modifications to the Agreement. The Parties agree that the modifications to the Agreement shall not have the effect of extending the consideration period or the January 23, 2023 date by which Employee must determine whether he will enter this Agreement.

Employee acknowledges that he has been paid all earned wages including accrued PTO/vacation through December 31, 2022, whether or not he accepts Agreement.

Employee and Theravance agree as follows:

A. Severance Benefits

After this Agreement becomes effective pursuant to paragraph L Theravance shall provide Employee with the following severance benefits:

1. **Severance Payment:** Following the Termination Date, Theravance will pay Employee: 1) a lump sum equivalent of twenty-four (24) weeks of Employee’s base salary as of December 30, 2022, which equals the gross amount of \$264,003 and which will be subject to all applicable taxes, deductions, and other withholdings; and 2) a lump sum equivalent to 100% of Employee’s target cash bonus, which equals the gross amount of \$286,003 and which will be subject to all applicable taxes, deductions, and other withholdings. The severance payments provided for in this paragraph will be paid within ten (10) business days of this Agreement becoming effective pursuant to paragraph L.
2. **Health Insurance Continuation:** Provided Employee completes the required documentation to continue Employee’s health insurance coverage under COBRA Theravance will pay the cost of continuing Employee’s health insurance coverage under COBRA for up to 9 months at the level of coverage applicable to the employee on the Termination Date. COBRA coverage payment by Theravance will cease if Employee obtains other health insurance coverage during the period Employee is eligible for Theravance paid coverage under the terms of this Agreement. Employee agrees to notify Theravance in the event Employee obtains

other health insurance coverage. Employee will be responsible for making payments to continue health insurance under COBRA after the period for which Theravance is paying the cost under the terms of this Agreement. If Employee does not accept this Agreement, he still will be eligible to continue his health insurance under COBRA, but he will be responsible for paying for the coverage himself.

3. **Acceleration of Vesting:** The treatment of Employee's outstanding equity awards to acquire ordinary shares of Theravance Biopharma, Inc. shall be governed by the applicable award agreement and plan rules, including but not limited to the Theravance Biopharma, Inc. 2013 Equity Incentive Plan or other applicable equity incentive plan. To the extent permissible under the rules of any applicable plans, and subject to strict compliance by Employee with Employee's obligations hereunder, the Company will vest 20,000 of Employee's outstanding unvested restricted share units ("RSUs") as of the effective date of this Agreement (the "Vesting Acceleration"). The Vesting Acceleration will apply to the 20,000 unvested RSUs subject to Employee's 2019 performance RSU award for which the performance conditions have been achieved and which remain subject to service- based vesting. To the extent any RSUs vest pursuant to this paragraph A.3, the RSUs will be settled within ten (10) business days after the effective date of this Agreement, with the exact date or dates to be selected by the Company in its sole discretion. Upon settlement of any RSUs that vest pursuant to this paragraph A.3, the Employee's tax withholding obligations will be satisfied by having the Company withhold a number of ordinary shares that would otherwise be issued to Employee when the RSUs are settled with a fair market value equal to such tax withholding obligations. For this purpose only, the Employee's tax withholding obligations will be calculated using the federal income tax rate of 37% previously elected by Employee or if applicable using the federal supplemental rate. Employee acknowledges and agrees that except as set forth in this paragraph, vesting of Employee's outstanding equity awards will cease on the Termination Date and that no further vesting will occur other than pursuant to the Theravance Biopharma, Inc. Change in Control Severance Plan ("Severance Plan") and the applicable award agreement.
4. **Change in Control Severance Benefits:** To the extent Theravance Biopharma, Inc. is subject to a "Change in Control" (as defined in the Severance Plan) within three months after the Termination Date, Employee will be eligible for the severance benefits described in the Severance Plan on the terms and conditions set forth therein (in the case of performance RSUs, as superseded by the applicable award agreement); provided, however, that such severance benefits shall be reduced by any amounts paid to or on account of Employee pursuant to paragraphs A.1. and A.2. hereof.
5. **Internal Revenue Code 409A.**

The parties agree that this Agreement shall be interpreted to comply with or be exempt from Section 409A of the Internal Revenue Code of 1986 as amended (the "Code") and the regulations and authoritative guidance promulgated thereunder to

the extent applicable (collectively, “Section 409A”), and all provisions of this Agreement shall be construed in a manner consistent with the requirements for avoiding taxes or penalties under Section 409A. In no event whatsoever will the Company, any of its affiliates or any of their respective directors, officers, agents, attorneys, employees, executives, shareholders, investors, members, managers, trustees, fiduciaries, representatives, principals, accountants, insurers, successors or assigns be liable for any additional tax, interest or penalties that may be imposed on employee under Section 409A or any damages for failing to comply with Section 409A.

B. Release of Claims by Employee

1. General Release by Employee:

Except as set forth below, in consideration of the severance benefits provided herein, Employee on Employee’s behalf, and on behalf of Employee’s agents, heirs, beneficiaries and assigns, hereby fully and forever releases, waives, discharges and promises not to sue or otherwise maintain, institute or cause to be instituted any legal proceedings against Theravance, or its related entities and subsidiaries, or any of its or its related entities’ and subsidiaries’ current or former officers, directors, shareholders, predecessors, successors, agents, employees, contractors, insurers, representatives, joint employers, or any person or entity to which Theravance has provided services (collectively, “Releasees”), with respect to any and all liabilities, claims, demands, contracts, debts, monetary damages or other form of personal relief, of any nature, kind and description, whether at law, in equity or otherwise, whether or not now known or ascertained, which currently do or may exist, including without limitation any matter, cause or claim arising out of or related to any and all acts, events or omissions, occurring prior to the date this Agreement is executed (collectively “Released Claims”).

2. Claims Covered by General Release:

Except as set forth herein, the Released Claims include, but are not limited to, those that have been or could be asserted against any Releasee arising out of, in connection with, or in any way related to (a) Employee’s employment with, or separation from, Theravance; (b) any term or condition of Employee’s employment with Theravance, including but not limited to any and all disputed wages, compensation, salaries, commissions, pay, allowances, monies, expenses/reimbursements, employee benefits, sick/vacation pay, paid leave benefits, any other disputed wage and hour related claims, and any other benefits, penalties, interest, damages, and promises related to the same; and (c) any claims to any equity interest in Theravance, including without limitation stock options, shadow stock, restricted stock, membership units, distribution rights, partnership, stock, and all other forms of equity, except as addressed in paragraph A.3.

Without limiting the foregoing, by way of example only and except as set forth herein, the Released Claims also include any and all claims for severance benefits, attorneys’ fees, injunctive relief, breach of contract, promissory estoppel, quantum meruit, breach of the covenant of good faith and fair dealing, violation of public policy, intentional or negligent

infliction of emotional distress, intentional or negligent misrepresentation, fraud, defamation, negligent hiring/supervision, assault/battery, constructive discharge, wrongful discharge, retaliation, claims under Title VII of the Civil Rights Act of 1964, the Civil Rights Act of 1964, the Private Attorneys General Act of 2004 (“PAGA”), the Civil Rights Act of 1866, the Americans with Disabilities Act, the Unruh Act, the Family and Medical Leave Act, the Worker Adjustment and Retraining Notification Act, the Older Workers Benefit Protection Act, the Age Discrimination in Employment Act, the California Fair Employment and Housing Act, the California Labor Code, California Wage Orders, the California Business and Professions Code, the California Family Rights Act, the Pregnancy Disability Leave law, the California Constitution, and any other statutory, regulatory or common law claims relating to employment.

Except as set forth herein, all Released Claims are forever waived and barred by this Agreement regardless of the forum in which they may be brought. The Parties intend for this release to be as broad as legally permissible.

C. Waiver of Unknown Claims – Civil Code Section 1542

In furtherance of the intent to waive, release and discharge Theravance from any and all Released Claims, whether known or unknown, Employee understands and agrees that except as set forth herein the Release stated in paragraph B applies to claims known and presently unknown by Employee; and that this means that if, hereafter, Employee discovers facts different from or in addition to those which Employee now knows or believes to be true, that the release and waiver in paragraph B shall be and remain effective in all respects notwithstanding such different or additional facts or the discovery of such facts.

Accordingly, Employee hereby expressly and knowingly waives, fully and forever, any and all rights and benefits conferred upon Employee by the provisions of Section 1542 of the Civil Code of the State of California and any statutes or legal principles of like effect of any other jurisdiction. Civil Code Section 1542 states:

A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY.

D. Matters Excluded From Released Claims

Notwithstanding the terms of paragraphs B and C, nothing contained in this Agreement shall be deemed to be a release or waiver by Employee of any claim which cannot be waived or released by private agreement. In addition, the Released Claims in Paragraph B hereof shall not include: (a) any benefit entitlements vested as of the date Employee’s employment ended, including pursuant to written terms of any applicable employee benefit plan governed by the Employment Income Security Act of 1974 (“ERISA”); (b) rights under Workers’ Compensation or Unemployment Insurance law; (c) rights under the

Theravance Biopharma, Inc. Change in Control Severance Plan except as limited in paragraph A.4; (d) rights he may have to indemnification under California Labor Code Section 2802 or other provisions of law; (e) coverage as provided by Directors and Officers Liability Insurance, other insurance policies and under its corporate governing documents, as applicable, for corporate officers and Chief Financial Officer (“CFO”); or (f) rights arising under this Agreement. This Agreement shall not prohibit Employee from filing a claim with a government agency that is responsible for enforcing a law such as the Securities and Exchange Commission (“SEC”), the National Labor Relations Board (“NLRB”), the Equal Employment Opportunity Commission (“EEOC”), the Department of Fair Employment and Housing (“DFEH”), the Office of Federal Contract Compliance Programs (“OFCCP”) or the Occupational Safety and Health Administration (“OSHA”). However, unless subject to legal requirements to the contrary, if any, Employee understands that by entering this Agreement, Employee will not be entitled to recover any monetary damages or any other form of personal relief in connection with such a claim, investigation or proceeding.

This Agreement shall not be construed to prohibit Employee from providing information regarding Employee’s former employment relationship with Theravance as may be required by law or legal process, or from cooperating, participating or assisting in any government or regulatory entity investigation or proceeding.

E. Proprietary Information

Employee acknowledges that Employee signed the Theravance Biopharma US, Inc. Proprietary Information and Inventions Agreement (“PIIA”) in connection with Employee’s employment with Theravance. Employee represents that Employee has not breached the PIIA, including but not limited to by retaining possession or control of any Proprietary Information, Company Documents and/or other Theravance materials, or causing another person or persons to retain possession or control of Proprietary Information, Company documents and/or other Theravance materials, in violation of the PIIA. Employee understands that the terms of the PIIA survive the termination of Employee’s employment and shall remain binding and enforceable against Employee. Notwithstanding anything herein to the contrary, an individual shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that (A) is made (i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. An individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the attorney of the individual and use the trade secret information in the court proceeding, if the individual (A) files any document containing the trade secret under seal; and (B) does not disclose the trade secret, except pursuant to court order. Nothing herein is intended, or should be construed, to affect the immunities created by the Federal Defend Trade Secrets Act of 2016 or any similar state law.

If Employee does not possess a copy of the PIIA that Employee signed, a copy may be obtained by contacting Charissa Shaughnessy, cshaughnessy@theravance.com, (650) 465-

F. Non-disparagement

Subject to paragraphs D and E hereof, Employee agrees that he will not disparage Releasees or any of them, or the work of Theravance, its products, programs or business activities. The Company will not, and will instruct its officers, directors and its investor relations personnel not to make any disparaging statements concerning you or your performance as an executive officer of the Company. Nothing in this Agreement prevents Employee from discussing or disclosing information about unlawful acts in the workplace, such as harassment or discrimination or any other conduct that he has reason to believe is unlawful.

G. Governing Law

The Parties hereby agree that California law shall govern the construction, interpretation and enforcement of this Agreement.

H. Severability

The Parties agree that if any provision, or portion thereof, of this Agreement shall for any reason be determined to be invalid, unenforceable or contrary to public policy or any law, it shall if possible be interpreted, modified or reformed as necessary to be enforceable. If it cannot be interpreted, modified or reformed to be enforceable, such provision or portion thereof that is determined to be invalid, unenforceable, contrary to public policy or law shall be severed and deemed null and void, leaving the remainder of this Agreement in force and effect as a separation agreement and release of claims.

I. Knowing and Voluntary Waiver of Rights Under the Older Workers Benefit Protection Act

Employee understands and acknowledges that he is waiving and releasing rights he may have under the Age Discrimination in Employment Act of 1967 (“ADEA”) and the Older Workers Benefit Protection Act (“OWBPA”), and that this waiver and release is knowing and voluntary. Employee understands and agrees that this waiver and release does not apply to any rights or claims that may arise under the ADEA and the OWBPA after the Effective Date of this Agreement but does release such rights that may have existed before the Effective Date. Employee understands and acknowledges the at the consideration given for this waiver and release is in addition to anything of value to which Employee was already entitled. Employee further understands and acknowledges that he has been advised by this writing that: (1) he should consult with an attorney prior to executing this Agreement but is not required to do so; (2) he has until January 23, 2023, to consider this Agreement and to decide whether to enter it; (3) he has seven (7) days following execution of the Agreement to revoke the Agreement. To revoke, Employee must deliver a written statement of revocation to Charissa Shaughnessy, cshaughnessy@theravance.com by e-mail or mail or delivery of a physical document addressed to Charissa Shaughnessy, 901 Gateway Boulevard, South San Francisco, CA 94080, no later than midnight on the seventh (7th)

day after Employee signed this Agreement. If Employee revokes within seven (7) days, Employee will receive no benefits under this Agreement.

The offer of this Agreement may be withdrawn by Company before it becomes effective if Employee violates any Company policy while he is still employed, breaches any contractual or legal obligation in effect following his termination, engages in any act or omission reasonably determined by Theravance to be unprofessional or detrimental to Theravance, or disparages any Releasee where such activity is not legally permitted as stated in paragraphs D and E hereof.

J. Signing Agreement

If Employee decides to enter this Agreement, it must be signed electronically by completing the DocuSign process linked on the signature line on page 7. Agreements signed and accepted by the DocuSign process will be automatically forwarded to Theravance.

K. Revocation by Employee

Employee will have seven (7) days following Employee's signing of this Agreement to revoke Employee's acceptance of it. To revoke, Employee must deliver a written statement of revocation to Charissa Shaughnessy, cshaughnessy@theravance.com by e-mail or mail or delivery of a physical document addressed to Charissa Shaughnessy, 901 Gateway Boulevard, South San Francisco, CA 94080, no later than midnight on the seventh (7th) day after Employee signed this Agreement. If Employee revokes within seven (7) days, Employee will receive no benefits under this Agreement.

L. Effective Date

If Employee signs, does not exercise Employee's right to revoke this Agreement and Theravance does not withdraw it before it becomes effective, it shall become effective on the eighth day after Employee signs it which will be the Effective Date of this Agreement. The severance payments will be made as set forth in Paragraph A.1. COBRA payment and coverage will become effective retroactive to January 1, 2023, if Employee completes the required COBRA documentation. Settlement of RSUs and Vesting Acceleration will take place as set forth in Paragraph A.3. Receipt of severance benefits is expressly conditioned on Employee's compliance with the terms of this Agreement, and return of all Theravance property, except for Theravance property Employee receives written permission to retain.

M. Effect of Agreement

This Agreement, once it has been executed by Employee and has become effective and fully enforceable, will be a full and complete defense to any action or proceeding initiated or prosecuted by Employee concerning rights released and waived herein. If Employee does not sign this Agreement or revokes Employee's acceptance after signing Employee will not receive the severance benefits set forth in paragraph A.

N. Entire Agreement and Miscellaneous Terms

This Agreement constitutes the entire agreement between the Parties regarding the matters set forth herein, and no amendment or modification will be effective unless in writing and signed by the party against whom enforcement is sought. This Agreement supersedes and replaces all agreements currently in effect between Employee and Theravance regarding the subjects addressed herein, except for those agreements expressly identified herein as continuing in effect. This Agreement shall be binding upon, enforceable by, and inure to the benefit of the Parties and their heirs, executors, administrators, successors and assigns. This Agreement may be signed in counterparts, each of which shall be deemed an original and all of which shall constitute one and the same instrument.

O. Authority

The person signing this Agreement on behalf of the Employer has the authority to enter into this Agreement and bind the Employer to all of its terms and conditions.

I knowingly and voluntarily agree to the terms of this Agreement.

Dated: January 10, 2023

By: /s/ Andrew ASA Hindman
Signature

Andrew ASA Hindman

Print Name

Dated: January 10, 2023

Theravance Biopharma US, Inc.

By: /s/ Reigin Zawadzki
Reigin Zawadzki
Vice President, Human Resources

Subsidiaries

Theravance Biopharma US, Inc. (Delaware)

Theravance Biopharma UK Limited (England and Wales)

Theravance Biopharma Ireland Limited (Ireland)

Theravance Biopharma R&D IP, LLC (Delaware)

Theravance Biopharma Antibiotics IP, LLC (Delaware)

Theravance Biopharma US Holdings, Inc. (Delaware)

Triple Royalty Sub LLC (Delaware)

Triple Royalty Sub II LLC (Delaware)

Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

1. Registration Statement (Form S-3 No. 333-248534) of Theravance Biopharma, Inc.,
2. Registration Statements (Form S-8 Nos. 333-263303, 333-198206, 333-202856, 333-210225, 333-216446, 333-223470, 333-231559, 333-236868 and 333-253894) pertaining to the Theravance Biopharma, Inc. 2013 Equity Incentive Plan and the Theravance Biopharma, Inc. 2013 Employee Share Purchase Plan, and
3. Registration Statement (Form S-8 No. 333-200225) pertaining to the Theravance Biopharma, Inc. 2014 New Employee Equity Incentive Plan;

of our reports dated March 1, 2023, 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 this Annual Report (Form 10-K) of Theravance Biopharma, Inc. for the year ended December 31, 2022.

/s/Ernst & Young LLP

San Mateo, California
March 1, 2023

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our report dated February 25, 2022, with respect to the financial statements of Theravance Respiratory Company, LLC included in the Annual Report of Theravance Biopharma, Inc. on Form 10-K for the year ended December 31, 2022. We consent to the incorporation by reference of the said report in the Registration Statements of Theravance Biopharma, Inc. on Forms S-8 (File No. 333-263303, File No. 333-198206, File No. 333-202856, File No. 333-210225, File No. 333-216446, File No. 333-223470, File No. 333-231559, File No. 333-236868, File No. 333-253894, and File No. 333-200225) and on Forms S-3 (File No. 333-248534).

/s/ GRANT THORNTON LLP

San Francisco, California
March 1, 2023

**Certification of Chief Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Rick E Winningham, certify that:

1. I have reviewed this Annual Report on Form 10-K of Theravance Biopharma, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the period presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 1, 2023
(Date)

/s/ RICK E WINNINGHAM
Rick E Winningham
*Chairman of the Board and Chief Executive Officer
(Principal Executive Officer)*

**Certification of Chief Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Aziz Sawaf, certify that:

1. I have reviewed this Annual Report on Form 10-K of Theravance Biopharma, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the period presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 1, 2023
(Date)

/s/ AZIZ SAWAF
Aziz Sawaf
Senior Vice President and Chief Financial Officer
(Principal Financial Officer)
