ARENA PHARMACEUTICALS INC
Form 10-Q
August 08, 2017

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended June 30, 2017

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 Number: 000-31161

ARENA PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	23-2908305 (I.R.S. Employer Identification No.)
6154 Nancy Ridge Drive, San Diego, CA (Address of principal executive offices)	92121 (Zip Code)

858.453.7200

(Registrant’s telephone number, including area code)

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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		Accelerated filer
Non-accelerated filer	(Do not check if a small reporting company)	Small 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 is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

The number of shares of common stock outstanding as of the close of business on August 4, 2017:

Class	Number of Shares Outstanding
Common Stock, $0.0001 par value	39,220,245

ARENA PHARMACEUTICALS, INC.

INDEX

TRADEMARKS AND CERTAIN TERMS

Arena Pharmaceuticals ® and Arena ® are registered service marks of Arena. Any other brand names or trademarks appearing in this Quarterly Report on Form 10-Q are the property of their respective holders.

In this Quarterly Report on Form 10-Q, "Arena Pharmaceuticals," "Arena," "we," "us" and "our" refer to Arena Pharmaceuticals, Inc., and our wholly owned subsidiaries on a consolidated basis, unless the context otherwise provides. "APD" is an abbreviation for Arena Pharmaceuticals Development.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements.

ARENA PHARMACEUTICALS, INC.

Condensed Consolidated Balance Sheets

(In thousands)

(Unaudited)

	June 30, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$130,763	$90,712
Accounts receivable	2,404	20,162
Inventory	7,058	6,708
Prepaid expenses and other current assets	3,373	2,307
Total current assets	143,598	119,889
Land, property and equipment, net	40,997	43,828
Intangibles, net	1,880	2,357
Other non-current assets	2,890	2,936
Total assets	$189,365	$169,010
Liabilities and Equity		
Current liabilities:		
Accounts payable and other accrued liabilities	$5,816	$12,116
Accrued clinical and preclinical study fees	4,097	3,883
Payable to Eisai	—	9,074
Current portion of deferred revenues	30,975	35,288
Current portion of lease financing obligations	3,810	3,518
Total current liabilities	44,698	63,879
Other long-term liabilities	904	821
Deferred revenues, less current portion	1,467	2,167
Lease financing obligations, less current portion	59,773	61,748
Commitments and contingencies		
Equity:		
Common stock	3	2
Additional paid-in capital	1,527,306	1,441,737
Accumulated other comprehensive loss	(385)	(3,099)
Accumulated deficit	(1,444,149)	(1,398,736)
Total equity attributable to stockholders of Arena	82,775	39,904
Equity attributable to noncontrolling interest in consolidated variable interest entity	(252)	491
Total equity	82,523	40,395
Total liabilities and equity	$189,365	$169,010

See accompanying notes to unaudited condensed consolidated financial statements.

ARENA PHARMACEUTICALS, INC.

Condensed Consolidated Statements of Operations and Comprehensive Loss

(In thousands, except per share data)

(Unaudited)

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Revenues:				
Net product sales	$2,059	$4,263	$4,770	$7,781
Other Eisai collaboration revenue	1,781	1,975	3,316	5,201
Other collaboration revenue	1,898	2,249	3,558	4,329
Toll manufacturing	754	1,025	1,472	2,048
Total revenues	6,492	9,512	13,116	19,359
Operating Costs and Expenses:				
Cost of product sales	1,497	851	4,029	3,279
Cost of toll manufacturing	1,074	1,758	1,993	2,946
Research and development	17,922	18,546	33,433	37,048
General and administrative	7,236	8,465	15,400	15,389
Restructuring charges	—	6,115	—	6,115
Total operating costs and expenses	27,729	35,735	54,855	64,777
Loss from operations	(21,237)	(26,223)	(41,739)	(45,418)
Interest and Other Income (Expense):				
Interest income	16	105	50	193
Interest expense	(1,538)	(1,619)	(3,108)	(3,298)
Other	(857)	554	(1,316)	(208)
Total interest and other expense, net	(2,379)	(960)	(4,374)	(3,313)
Net loss	(23,616)	(27,183)	(46,113)	(48,731)
Less net loss attributable to noncontrolling interest in consolidated variable interest entity	299	—	743	—
Net loss attributable to stockholders of Arena	$(23,317)	$(27,183)	$(45,370)	$(48,731)
Net loss attributable to stockholders of Arena per share:				
Basic	$(0.77)	$(1.12)	$(1.66)	$(2.01)
Diluted	$(0.77)	$(1.12)	$(1.66)	$(2.01)
Shares used in calculating net loss attributable to stockholders of Arena per share:				
Basic	30,229	24,308	27,371	24,298
Diluted	30,229	24,308	27,371	24,298
Comprehensive Loss:				
Net loss	$(23,616)	$(27,183)	$(46,113)	$(48,731)

Foreign currency translation gain (loss)	1,910	(1,239)	2,714	1,352
Comprehensive loss	(21,706)	(28,422)	(43,399)	(47,379)
Less comprehensive loss attributable to noncontrolling interest in consolidated variable interest entity	299	—	743	—
Comprehensive loss attributable to stockholders of Arena	$(21,407)	$(28,422)	$(42,656)	$(47,379)

See accompanying notes to unaudited condensed consolidated financial statements.

ARENA PHARMACEUTICALS, INC.

Condensed Consolidated Statements of Cash Flows

(In thousands)

(Unaudited)

	Six Months Ended June 30,	
	June 30, 2017	2016
Operating Activities:		
Net loss	$(46,113)	$(48,731)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	3,033	4,709
Amortization of intangibles	607	104
Share-based compensation	3,968	7,080
Amortization of prepaid financing costs	68	68
Gain on disposal of property and equipment	(393)	(161)
Changes in operating assets and liabilities:		
Accounts receivable	18,954	1,665
Inventory	76	545
Prepaid expenses and other assets	(990)	(720)
Payables and accrued liabilities	(15,709)	5,516
Deferred revenues	(5,658)	(4,206)
Other long-term liabilities	(28)	365
Net cash used in operating activities	(42,185)	(33,766)
Investing Activities:		
Purchases of property and equipment	(90)	(377)
Proceeds from sale of property and equipment	—	161
Other non-current assets	90	—
Net cash used in investing activities	—	(216)
Financing Activities:		
Principal payments on lease financing obligations	(1,684)	(1,421)
Proceeds from issuance of common stock, net	81,496	230
Net cash provided by (used in) financing activities	79,812	(1,191)
Effect of exchange rate changes on cash	2,424	975
Net increase (decrease) in cash and cash equivalents	40,051	(34,198)
Cash and cash equivalents at beginning of period	90,712	156,184
Cash and cash equivalents at end of period	$130,763	$121,986

See accompanying notes to unaudited condensed consolidated financial statements.

3

ARENA PHARMACEUTICALS, INC.

Notes to Unaudited Condensed Consolidated Financial Statements

1. Basis of Presentation

The accompanying unaudited condensed consolidated financial statements of Arena Pharmaceuticals, Inc. should be read in conjunction with the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2016, as filed with the Securities and Exchange Commission, or SEC, from which we derived our condensed consolidated balance sheet as of December 31, 2016. The accompanying condensed consolidated financial statements have been prepared in accordance with US generally accepted accounting principles, or GAAP, for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, since they are interim statements, the accompanying condensed consolidated financial statements do not include all of the information and notes required by GAAP for complete financial statements. The accompanying condensed consolidated financial statements reflect all adjustments, consisting of normal recurring adjustments, that are, in the opinion of our management, necessary to a fair statement of the results for the interim periods presented. Interim results are not necessarily indicative of results for a full year.

The accompanying consolidated financial statements include the balances and activity of our wholly owned subsidiaries and Beacon Discovery, Inc., or Beacon, a variable interest entity in which we have the controlling financial interest (see Note 12). The equity attributable to the noncontrolling interest in Beacon is presented as a separate component from the equity attributable to stockholders of Arena in the equity section of the condensed consolidated balance sheets. The results of operations and comprehensive loss attributable to the noncontrolling interest in Beacon are presented as separate components from the results of operations and comprehensive loss attributable to the stockholders of Arena in the condensed consolidated statements of operations and comprehensive loss.

On June 14, 2017, we filed a certificate of amendment to our certificate of incorporation with the Secretary of State of the state of Delaware to effect a one-for-ten reverse stock split of our issued and outstanding common stock. The accompanying condensed consolidated financial statements and notes thereto give retrospective effect to the reverse stock split for all periods presented. All issued and outstanding common stock, options exercisable for common stock, restricted stock units, performance restricted stock units, and per share amounts contained in the condensed consolidated financial statements have been retroactively adjusted to reflect this reverse stock split for all periods presented. Concurrent with the reverse stock split we effected a reduction in the number of authorized shares of common stock from 367,500,000 shares to 73,500,000 shares.

Liquidity.

As of June 30, 2017, we had cash and cash equivalents of approximately $130.8 million. In July 2017, we raised approximately $162.0 million of proceeds from sales of our common stock (see Note 7). We believe our cash and cash equivalents will be sufficient to fund our operations for at least the next 12 months.

It will require substantial cash to achieve our objectives of discovering, developing and commercializing drugs, and this process typically takes many years and potentially hundreds of millions of dollars for an individual drug. We may not have adequate available cash, or assets that could be readily turned into cash, to meet these objectives in the long

term. We will need to obtain significant funds under our existing collaborations, under new collaboration, licensing or other commercial agreements for one or more of our drug candidates and programs or patent portfolios, or from other potential sources of liquidity, which may include the sale of equity, issuance of debt or other transactions.

Recent Accounting Pronouncements

Revenue Recognition.

In May 2014, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, No. 2014-09, Revenue from Contracts with Customers. ASU No. 2014-09 supersedes most current revenue recognition guidance and establishes a comprehensive revenue recognition model with a broad principle that would require an entity to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To achieve this principle, an entity identifies the contract with a customer, identifies the separate performance obligations in the contract, determines the transaction price, allocates the transaction price to the separate performance obligations and recognizes revenue when each separate performance obligation is satisfied. FASB has subsequently issued additional ASUs to clarify certain elements of the new revenue recognition guidance.

The new guidance allows for two methods of adoption: (a) “full retrospective” adoption, meaning the standard is applied to all periods presented, or (b) “modified retrospective” adoption, meaning the cumulative effect of applying the new guidance is recognized as an adjustment to the opening retained earnings balance for the year of implementation. We plan to adopt the new revenue standard effective January 1, 2018, on a modified retrospective method with the cumulative effect of the change reflected in retained earnings as of January 1, 2018.

We have continued to monitor FASB activity to assess certain interpretative issues and the associated implementation of the new standard. We are in the process of reviewing our revenue arrangements, which we expect to include product sales, manufacturing support payments, royalty payments, other collaboration payments and toll manufacturing, and are not yet able to estimate the anticipated impact to our consolidated financial statements from the implementation of the new standard as we continue to interpret the principles of the new standard.

Other.

In January 2016, the FASB issued ASU No. 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities. ASU No. 2016-01 supersedes and amends the guidance to classify equity securities with readily determinable fair values into different categories (that is, trading or available-for-sale) and require equity securities to be measured at fair value with changes in the fair value recognized through net income. The amendments allow equity investments that do not have readily determinable fair values to be remeasured at fair value either upon the occurrence of an observable price change or upon identification of an impairment. The amendments also require enhanced disclosures about those investments. ASU No. 2016-01 is effective for annual reporting periods, and interim periods within those periods, beginning after December 15, 2017, and calls for prospective application, with early application permitted. We do not expect the adoption of ASU No. 2016-01 to have a material impact on our consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, Leases. ASU No. 2016-02 amends the accounting guidance for leases. The amendments contain principles that will require lessees to recognize most leases on the balance sheet by recording a right-of-use asset and a lease liability, unless the lease is a short-term lease that has an accounting lease term of 12 months or less. The amendments also contain other changes to the current lease guidance that may result in changes to how entities determine which contractual arrangements qualify as a lease, the accounting for executory costs (such as property taxes and insurance), as well as which lease origination costs will be capitalizable. The new standard also requires expanded quantitative and qualitative disclosures. ASU No. 2016-02 is effective for annual reporting periods, and interim periods within those periods, beginning after December 15, 2018, with early adoption permitted. ASU No. 2016-02 requires the use of the modified retrospective transition method, whereby the new guidance will be applied at the beginning of the earliest period presented in the financial statements of the period of adoption. We are currently evaluating the impact of ASU No. 2016-02 on our consolidated financial statements.

In May 2017, the FASB issued ASU No. 2017-09, Scope of Modification Accounting. ASU No. 2016-02 clarifies which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting. This guidance is to be applied prospectively to awards modified on or after the adoption date and is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017, with early adoption permitted. We do not anticipate that the adoption of ASU 2017-09 will have a material impact on our consolidated financial statements unless there are significant changes to our outstanding share based payment awards at which time we would assess the impact of the standard.

Use of Estimates.

The preparation of financial statements in accordance with GAAP requires our management to make estimates and assumptions that affect the reported amounts (including assets, liabilities, revenues and expenses) and related

disclosures. The amounts reported could differ under different estimates and assumptions.

2. Fair Value Disclosures

We measure our financial assets and liabilities at fair value, which is defined as the exit price, or the amount that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

We use the following three-level valuation hierarchy that maximizes the use of observable inputs and minimizes the use of unobservable inputs to value our financial assets and liabilities:

Level 1 - Observable inputs such as unadjusted quoted prices in active markets for identical instruments.

Level 2 - Quoted prices for similar instruments in active markets or inputs that are observable for the asset or liability, either directly or indirectly.

Level 3 - Significant unobservable inputs based on our assumptions.

The following tables present our valuation hierarchy for our financial assets and liabilities that are measured at fair value on a recurring basis, in thousands:

	Fair Value Measurements at June 30, 2017			
	Balance	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Money market funds[1]	$6,419	$ 6,419	$ —	$ —

	Fair Value Measurements at December 31, 2016			
	Balance	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Money market funds[1]	$46,371	$ 46,371	$ —	$ —

(1) Included in cash and cash equivalents in our condensed consolidated balance sheets.

3. Inventory

Inventory consisted of the following, in thousands:

	June 30, 2017	December 31, 2016
Raw materials	$ 2,913	$ 2,553
Work in process	3,361	3,943
Finished goods	784	212
Total inventory	$ 7,058	$ 6,708

4. Land, Property and Equipment

Land, property and equipment consisted of the following, in thousands:

	June 30, 2017	December 31, 2016
Cost	$ 103,892	$ 108,356
Less accumulated depreciation and amortization	(62,895)	(64,528)
Land, property and equipment, net	$ 40,997	$ 43,828

5. Accounts Payable and Other Accrued Liabilities

Accounts payable and other accrued liabilities consisted of the following, in thousands:

	June 30, 2017	December 31, 2016
Accounts payable	$ 1,475	$ 5,977
Accrued compensation	3,424	4,820
Other accrued liabilities	917	1,319
Total accounts payable and other accrued liabilities	$ 5,816	$ 12,116

6. Collaborations

Please refer to our Annual Report on Form 10-K for the year ended December 31, 2016, for additional information regarding the collaborations described below.

Eisai.

In July 2010, we granted Eisai exclusive commercialization rights for lorcaserin solely in the United States and its territories and possessions. In May 2012, we and Eisai entered into the first amended and restated agreement, which expanded Eisai's exclusive commercialization rights to include most of North and South America. In November 2013, we and Eisai entered into the second amended and restated agreement, or Second Amended Agreement, which expanded Eisai's exclusive commercialization rights for lorcaserin to all of the countries in the world, except for South Korea, Taiwan, Australia, New Zealand and Israel.

On December 28, 2016, we and Eisai amended and restated the terms of the Second Amended Agreement by entering into the Eisai Agreement, which was determined to be a material modification of the Second Amended Agreement. Under the Eisai Agreement, we identified the following significant deliverables to Eisai which each qualify as a separate unit of accounting:

- An exclusive royalty-bearing license or transfer of intellectual property, or License, to commercialize lorcaserin world-wide relating to certain patents, regulatory approvals, samples, records, know-how related to lorcaserin, trademarks and domain names related to the lorcaserin brand names. We also assigned to Eisai our rights under the commercial lorcaserin distribution agreements with Ildong for South Korea, CYB for Taiwan and Teva for Israel. This is collectively referred to as the License Deliverable.
- A manufacturing and supply commitment for two years commencing December 28, 2016, or Manufacturing and Supply Commitment Deliverable.
- Bulk inventory and precursor material for manufacturing lorcaserin, or Inventory Deliverable.

Royalty payments.

Pursuant to the Eisai Agreement, we are eligible to receive royalty payments from Eisai based on the global net sales of lorcaserin. The royalty rates are as follows:

- 9.5% on annual net sales less than or equal to $175.0 million

- 13.5% on annual net sales greater than $175.0 million but less than or equal to $500.0 million
- 18.5% of annual net sales greater than $500.0 million

Manufacturing and supply commitment and inventory purchase.

We manufacture lorcaserin at our facility in Zofingen, Switzerland. Under the Eisai Agreement, we have agreed to manufacture and supply, and Eisai has agreed to purchase from us, all of Eisai's requirements (or specified minimum quantities if such quantities are greater than Eisai's requirements), subject to certain exceptions, for lorcaserin for development and commercial use for an initial two-year period. The initial period may be extended by Eisai for an additional six months upon payment of an extension fee of CHF 2.0 million. Eisai will pay us agreed upon prices to deliver finished drug product during this time. Additionally, Eisai has agreed to pay up to CHF 13.0 million in manufacturing support payments during the initial two-year period supply period, and pay up to CHF 6.0 million in manufacturing support payments during the six-month extension period, if the extension option is exercised by Eisai.

On December 28, 2016, Eisai paid us $10.0 million to acquire our entire inventory of bulk lorcaserin and the precursor materials for manufacturing lorcaserin. This payment was included in the arrangement consideration allocated to the units of accounting under

the Eisai Agreement. We expect this inventory will remain at our Zofingen, Switzerland facility for us to use to manufacture finished drug product in order to meet Eisai's requirements during the initial two-year period and, if applicable, the six-month extension period. The inventory that is not expected to be used to manufacture finished drug product will be physically transferred to Eisai upon the earlier of Eisai's request to transfer or the end of the manufacturing and supply commitment period.

Allocation of Eisai Agreement arrangement consideration to the units of accounting.

The total arrangement consideration of $115.6 million primarily consists of (i) the December 28, 2016, balances of deferred revenues from the upfront payments received under the prior Eisai agreements and the distribution agreements with Ildong, CYB and Teva, which were assigned to Eisai; (ii) the $10.0 million payment received from Eisai on December 28, 2016; and (iii) the product purchase payments and manufacturing support payments we expect to receive from Eisai for the initial two-year manufacturing and supply commitment period.

All of the deliverables were determined to have standalone value and to meet the criteria to be accounted for as separate units of accounting. Factors considered in the determination included, among other things, for the license, the manufacturing experience and capabilities of Eisai and their sublicense rights, and for the remaining deliverables the fact that they are not proprietary and can be provided by other vendors. The total arrangement consideration was allocated to the units of accounting on the basis of their relative estimated selling prices as follows:

- $64.0 million was allocated to the License Deliverable. As the License Deliverable was delivered on December 28, 2016, this amount was recognized as revenue in 2016.
- $30.8 million was allocated to the Inventory Deliverable. Title to this entire inventory passed to Eisai on December 28, 2016. However, none of this inventory was physically transferred from the manufacturing facility, and there is no fixed schedule for delivery given some will be delivered on a continuous basis as we perform under the manufacturing commitment while the rest will be physically transferred to Eisai upon request by Eisai or upon the end of the manufacturing and supply commitment period. Also, the risks of ownership for this inventory have not been fully passed to Eisai as we will continue to have financial responsibility for loss, damage or destruction which occurs while in our possession. Therefore, none of the arrangement consideration allocated to this deliverable was recognized as revenue and none of the carrying value of this inventory was recognized as cost of product sales for the year ended December 31, 2016. For the three months ended June 30, 2017, we recognized revenue from net product sales related to the Inventory Deliverable of $1.8 million and cost of product sales of $0.4 million related to this inventory. For the six months ended June 30, 2017, we recognized revenue from net product sales related to the Inventory Deliverable of $4.0 million and cost of product sales of $1.0 million related to this inventory.
- $20.8 million was allocated to the Manufacturing and Supply Commitment Deliverable. This deliverable will be provided over 2017 and 2018 as product is shipped to Eisai. For the three months ended June 30, 2017, we recognized $2.0 million as revenue for the arrangement consideration allocated to this deliverable, of which $0.3 million is classified as net product sales and $1.7 million of manufacturing support payments is classified as other Eisai collaboration revenue. For the six months ended June 30, 2017, we recognized $4.1 million as revenue for the arrangement consideration allocated to this deliverable, of which $0.8 million is classified as net product sales and $3.4 million of manufacturing support payments is classified as other Eisai collaboration revenue

The condensed consolidated balance sheet at June 30, 2017, includes deferred revenues of $28.1 million relating to the Eisai Agreement (primarily comprised of the deferred portion of the previously received upfront payments and the $10.0 million payment received from Eisai on December 28, 2016). Included in our ending inventory balance at June 30, 2017 of $7.1 million is $4.0 million related to the carrying value of the remaining product on-hand under the Inventory Deliverable. These balances are expected to be recognized in subsequent periods as this inventory is used in the manufacture and supply of lorcaserin to Eisai over the commitment period.

Axovant Sciences Ltd.

We and Axovant Sciences, Ltd., or Axovant, have an exclusive agreement, or Axovant Agreement, under which Axovant has exclusive worldwide rights to develop and commercialize nelotanserin, subject to regulatory approval. We also provide certain services and will manufacture and sell nelotanserin to Axovant.

Under the Axovant Agreement, we received an upfront payment of $4.0 million in May 2015, which was recorded as deferred revenues and is being recognized as revenue ratably over approximately five years, which is the period in which we expect to provide services under the arrangement. We will receive payments from sales of nelotanserin under the Axovant Agreement and are eligible to receive purchase price adjustment payments based on Axovant's annual net product sales. We are eligible to receive up to an

aggregate of $41.5 million in success milestones in case of full development and regulatory success of nelotanserin. Of these payments, two development milestones totaling $4.0 million are substantive and four regulatory milestones totaling $37.5 million are substantive.

For the three and six months ended June 30, 2017, we recorded revenue of $0.5 million and $1.0 million, respectively related to the Axovant Agreement. For the three and six months ended June 30, 2016, we recorded revenue of $0.6 million and $1.2 million, respectively related to the Axovant Agreement.

Boehringer Ingelheim International GmbH.

We and Boehringer Ingelheim GmbH, or Boehringer Ingelheim, have an exclusive agreement, or Boehringer Ingelheim Agreement, to conduct joint research to identify drug candidates targeting an undisclosed G protein-coupled receptor, or GPCR, that belongs to the group of orphan central nervous system, or CNS, receptors.

In part consideration of the rights to our intellectual property necessary or useful to conduct the joint research under the Boehringer Ingelheim Agreement, we received from Boehringer Ingelheim an upfront payment of $7.5 million in January 2016, less $1.2 million of withholding taxes which was refunded to us in October 2016. Revenues from this upfront payment were deferred, as we determined that the exclusive rights did not have standalone value without our ongoing participation in the joint research, and are being recognized ratably as revenues over the period in which we expect the services to be rendered, which is approximately two years.

Under the Boehringer Ingelheim Agreement, we are eligible to receive up to an aggregate of $251.0 million in success milestones in case of full commercial success of multiple drug products. Of these payments, three development milestones totaling $7.0 million are substantive, three development milestones totaling $30.0 million are non-substantive, nine regulatory milestones totaling $84.0 million are non-substantive and four commercial milestones totaling $130.0 million are non-substantive.

For the three and six months ended June 30, 2017, we recorded revenue of $1.3 million and $2.5 million, respectively related to the Boehringer Ingelheim Agreement. For the three and six months ended June 30, 2016, we recorded revenue of $1.5 million and $2.8 million, respectively related to the Boehringer Ingelheim Agreement.

7. Stockholders’ Equity

In January 2017, we entered into an Equity Distribution Agreement, or the ATM, with Citigroup Global Markets, Inc., or the Sales Agent, under which we may offer and sell common stock having an aggregate offering price of up to $50.0 million from time to time though our Sales Agent. Sales of the shares under the ATM were made in transactions that are deemed to be “at-the-market” equity offerings as defined in Rule 415 under the Securities Act of 1933, as amended, including sales made by means of ordinary brokers’ transactions, including on the NASDAQ Stock Market. During the six months ended June 30, 2017, we sold 489,023 shares of our common stock at an average market price of $15.05 per share under the ATM for aggregate gross proceeds of approximately $7.4 million before deducting commissions and expenses.

In April 2017, we completed the sale of an aggregate of 6,900,000 shares of our common stock under the underwritten public offering. Net proceeds from the offering were approximately $74.5 million after deducting underwriting discounts and commissions, and offering expenses payable by us.

In July 2017, we completed the sale of additional 7,187,500 shares of our common stock under the underwritten public offering. Net proceeds from the offering were $162.0 million after deducting underwriting discounts and commissions, and offering expenses payable by us.

8. Share-based Compensation

We recognized share-based compensation expense as follows, in thousands:

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Cost of product sales	$6	$—	$57	$20
Research and development	576	1,977	955	3,740
General and administrative	1,548	1,262	2,956	2,288
Restructuring charges	—	1,032	—	1,032
Total share-based compensation expense	$2,130	$4,271	$3,968	$7,080
Total share-based compensation expense capitalized into inventory	$—	$48	$—	$85

The following table summarizes our stock option activity during the six months ended June 30, 2017, in thousands (except per share data):

	Options	Weighted-Average Exercise Price
Outstanding at January 1, 2017	2,520	$ 29.77
Granted	1,871	14.59
Exercised	(6)	14.80
Forfeited/cancelled/expired	(191)	72.89
Outstanding at June 30, 2017	4,194	$ 21.46

The following table summarizes activity with respect to our time-based restricted stock unit awards, or RSUs, during the six months ended June 30, 2017, in thousands (except per share data):

	RSUs	Weighted-Average Grant-Date

		Fair Value
Unvested at January 1, 2017	3	$ 42.56
Granted	—	
Vested	—	
Forfeited/cancelled	—	
Unvested at June 30, 2017	3	$ 42.56

During the six months ended June 30, 2017, the remaining Total Stockholder Return, or TSR, performance restricted stock unit, or PRSU, awards that we granted to our executive officers in March 2014 were forfeited without any earnout based on the TSR of our common stock relative to the TSR of the NASDAQ Biotechnology Index over the three-year performance period that began on March 1, 2014. In the aggregate, the target number of shares of common stock that could have been earned under the PRSUs granted in March 2014 was 69,498.

Of the target number of shares of 74,498 for PRSUs granted in March 2015, 35,554 have been cancelled due to management changes. All other PRSUs granted in March 2015 were outstanding and unvested at June 30, 2017.

9. Concentrations of Credit Risk and Major Customers

Financial instruments, which potentially subject us to concentrations of credit risk, consist primarily of cash and cash equivalents. We limit our exposure to credit loss by holding our cash primarily in US dollars or, from time to time, placing our cash and investments in US government, agency and government-sponsored enterprise obligations and in corporate debt instruments that are rated investment grade, in accordance with an investment policy approved by our Board of Directors.

The United States and South Korea are the only jurisdictions for which BELVIQ has been commercially sold. We also produce drug products for Siegfried AG, or Siegfried, and, to a lesser extent, another third party under toll manufacturing agreements.

Percentages of our total revenues are as follows:

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Eisai Agreement (See Note 6)	59.2 %	50.7 %	61.7 %	54.3 %
Boehringer Ingelheim Agreement (See Note 6)	20.2 %	15.3 %	19.2 %	14.4 %
Toll manufacturing agreements	11.6 %	10.8 %	11.2 %	10.6 %
Axovant Agreement (See Note 6)	8.9 %	6.5 %	7.7 %	6.3 %
Other collaboration agreements	0.1 %	16.7 %	0.2 %	14.4 %
Total percentage of revenues	100.0%	100.0%	100.0%	100.0%

10. Net Loss Per Share

We calculate basic and diluted net loss attributable to stockholders of Arena per share using the weighted-average number of shares of common stock outstanding during the period.

Since we are in a net loss position, in addition to excluding potentially dilutive out-of-the money securities, we exclude from our calculation of diluted net loss attributable to stockholders of Arena per share all potentially dilutive in-the-money (i) stock options, (ii) RSUs, (iii) PRSUs and (iv) unvested restricted stock in our deferred compensation plan, and our diluted net loss per share is the same as our basic net loss per share.

The following table presents the weighted-average number of potentially dilutive securities that were excluded from our calculation of diluted net loss attributable to stockholders of Arena per share, in thousands:

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Stock options	4,002	2,668	3,567	2,289
RSUs and unvested restricted stock	3	24	3	28
Total	4,005	2,692	3,570	2,317

Because the market conditions for the PRSUs were not satisfied at June 30, 2017, or June 30, 2016, such securities are excluded from the table above.

11. Legal Proceedings

Beginning on September 20, 2010, a number of complaints were filed in the US District Court for the Southern District of California, or District Court, against us and certain of our current and former employees and directors on behalf of certain purchasers of our common stock. The complaints were brought as purported stockholder class actions, and, in general, include allegations that we and certain of our current and former employees and directors violated federal securities laws by making materially false and misleading statements regarding our BELVIQ program, thereby artificially inflating the price of our common stock. The plaintiffs sought unspecified monetary damages and other relief. On August 8, 2011, the District Court consolidated the actions and appointed a lead plaintiff and lead counsel. On November 1, 2011, the lead plaintiff filed a consolidated amended complaint. On March 28, 2013, the District Court dismissed the consolidated amended complaint without prejudice. On May 13, 2013, the lead plaintiff filed a second consolidated amended complaint. On November 5, 2013, the District Court dismissed the second consolidated amended complaint without prejudice as to all parties except for Robert E. Hoffman, who was dismissed from the action with prejudice. On November 27, 2013, the lead plaintiff filed a motion for leave to amend the second consolidated amended complaint. On March 20, 2014, the District Court denied plaintiff's motion and dismissed the second consolidated amended complaint with prejudice. On April 18, 2014, the lead plaintiff filed a notice of appeal, and on August 27, 2014, the lead plaintiff filed his appellate brief in the US Court of Appeals for the Ninth Circuit, or Ninth Circuit. On October 24, 2014, we filed our answering brief in response to the lead plaintiff's appeal. On December 5, 2014, the lead plaintiff filed his reply brief. A panel of the Ninth Circuit heard oral argument on the appeal on May 4, 2016. On October 26, 2016, the Ninth Circuit panel reversed the District Court's dismissal of the second consolidated amended complaint and remanded the case back to the District Court for further proceedings. On January 25, 2017, the District Court permitted us to submit a renewed motion to dismiss the second consolidated amended complaint. On February 2, 2017, we filed the renewed motion to dismiss. On February 23, 2017, the lead plaintiff filed his opposition, and on March 2, 2017, we filed our reply. On April 28, 2017, the District Court denied our renewed motion to dismiss. Due to the stage of these proceedings, we are not able to predict or reasonably estimate the ultimate outcome or possible losses relating to these claims.

On September 30, 2016, we and Eisai Inc. filed a patent infringement lawsuit against Lupin Limited and Lupin Pharmaceuticals, Inc. (collectively, Lupin) in the U.S. District Court for the District of Delaware. The lawsuit relates to a "Paragraph IV certification" notification that we and Eisai Inc. received regarding an abbreviated new drug application, or ANDA, submitted to the FDA by Lupin requesting approval to engage in the commercial manufacture, use, importation, offer for sale or sale of a generic version of BELVIQ® (lorcaserin hydrochloride tablets, 10 mg). In its notification, Lupin alleged that no valid, enforceable claim of any of the patents that are listed in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, or Orange Book, for BELVIQ® will be infringed by Lupin's manufacture, importation, use, sale or offer for sale of the product described in its ANDA. Lupin is accused of infringing U.S. Patent Nos. 6,953,787; 7,514,422; 7,977,329; 8,207,158; 8,273,734; 8,999,970 and 9,169,213. In accordance with the Hatch-Waxman Act, as a result of filing a patent infringement lawsuit within 45 days of receipt of Lupin's notification, the FDA cannot approve Lupin's ANDA any earlier than 7.5 years from NDA approval unless a District Court finds that all of the asserted claims of the patents-in-suit are invalid, unenforceable or not infringed. On January 11, 2017, Lupin filed an answer, defenses and counterclaims to the September 30, 2016 complaint. We and Eisai Inc. filed an answer to Lupin's counterclaims on February 1, 2017. We and Eisai Inc. are seeking a determination from the court that, among other things, Lupin has infringed our patents, Lupin's ANDA should not be approved until the expiration date of our patents, and Lupin should be enjoined from commercializing a product that infringes our patents. Trial is currently scheduled for April 15, 2019. The parties are currently in the fact discovery phase of the case. We cannot predict the ultimate outcome of any proceeding.

On March 6, 2017, we and Eisai Inc. filed a patent infringement lawsuit against Teva Pharmaceuticals USA, Inc. and Teva Pharmaceutical Industries Ltd. (collectively, Teva) in the U.S. District Court for the District of Delaware. The lawsuit also relates to a "Paragraph IV certification" notification that we and Eisai Inc. received regarding an ANDA submitted to the FDA by Teva requesting approval to engage in the commercial manufacture, use, importation, offer for sale or sale of a generic version of BELVIQ XR® (lorcaserin hydrochloride extended-release tablets, 20 mg). In its notification, Teva alleged that no valid, enforceable claim of any of the patents that are listed in the Orange Book for BELVIQ XR® will be infringed by Teva's manufacture, importation, use, sale or offer for sale of the product described in its ANDA. Teva is accused of infringing U.S. Patent Nos. 6,953,787; 7,514,422; 7,977,329; 8,207,158; 8,273,734; 8,999,970 and 9,169,213. In accordance with the Hatch-Waxman Act, as a result of filing a patent infringement lawsuit within 45 days of receipt of Teva's notification, the FDA cannot approve Teva's ANDA any earlier than 7.5 years from NDA approval unless a District Court finds that all of the asserted claims of the patents-in-suit are invalid, unenforceable or not infringed. On April 18, 2017, Teva filed an amended answer, defenses and counterclaims to the March 6, 2017 complaint. On May 1, 2017, the Teva and Lupin actions were consolidated for all purposes and will follow the case schedule that was previously entered in the Lupin action. We and Eisai Inc. filed an answer to Teva's amended counterclaims on May 3, 2017. We and Eisai Inc. are seeking a determination from the court that, among other things, Teva has infringed our patents, Teva's ANDA should not be approved until the expiration date of our patents, and Teva should be enjoined from commercializing a product that infringes our patents. We cannot predict the ultimate outcome of any proceeding.

12. Beacon Discovery, Inc.

In September 2016, we entered into a series of agreements with Beacon. Beacon is a privately-held drug discovery incubator that focuses on identifying and advancing molecules targeting GCPRs. Beacon was founded and is owned by several of our former employees.

As Beacon would not be able to finance its activities without the financial support we are providing pursuant to agreements it has with us, Beacon is a variable interest entity. Arena does not own any equity in Beacon; however, as these agreements provide us the controlling financial interest in Beacon, we consolidate Beacon's balances and activity within our condensed consolidated financial statements. The noncontrolling interest attributable to Beacon presented on our condensed consolidated financial statements is comprised of Beacon's equity ownership interests as we do not own any voting interest in Beacon.

The following table presents a reconciliation of the equity attributable to the stockholders of Arena and the equity attributable to Beacon, in thousands:

	Equity Attributable to Stockholders of Arena	Equity Attributable to Noncontrolling Interest in Consolidated Variable Interest Entity	Total Equity
Balance at January 1, 2017	$ 39,904	$ 491	$40,395
Net loss	(45,370)	(743)	(46,113)
Translation gain	2,714	—	2,714
Other	85,527	—	85,527
Balance at June 30, 2017	$ 82,775	$ (252)	$82,523

The following table presents the assets and liabilities of Beacon which are included in our condensed consolidated balance sheet at June 30, 2017, in thousands. The assets include only those assets that can be used to settle obligations of Beacon. The liabilities include third party liabilities of Beacon. As of June 30, 2017, Beacon had no creditors with recourse to the general credit of Arena. The assets and liabilities exclude intercompany balances that eliminate in consolidation:

Assets of Beacon that can only be used to settle obligations of Beacon	
Cash and cash equivalents	$211
Accounts receivable	4
Prepaid expense and other current assets	56
Land, property and equipment, net	528
Total assets of Beacon that can only be used to settle obligations of Beacon	$799
Liabilities of Beacon for which creditors do not have recourse to the general credit of Arena	
Accounts payable and other accrued liabilities	$176
Total liabilities of Beacon for which creditors do not have recourse to the general credit of Arena	$176

13. Subsequent Events

See Note 7 regarding the sale of shares of our common stock and Note 11 for the update to our legal proceedings, which occurred subsequent to June 30, 2017.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

General

This discussion and analysis should be read in conjunction with our financial statements and notes thereto included in this quarterly report on Form 10-Q, or Quarterly Report, and the audited consolidated financial statements and notes thereto included in our annual report on Form 10-K for the year ended December 31, 2016, or 2016 Annual Report, as filed with the Securities and Exchange Commission, or SEC. Operating results are not necessarily indicative of results that may occur in future periods.

This Quarterly Report includes forward-looking statements that involve a number of risks, uncertainties and assumptions. These forward-looking statements can generally be identified as such because the context of the statement will include words such as "may," "will," "intend," "plan," "believe," "anticipate," "expect," "estimate," "predict," "continue," "likely," or "opportunity," the negative of these words or other similar words. Similarly, statements that describe our plans, strategies, intentions, expectations, objectives, goals or prospects and other statements that are not historical facts are also forward-looking statements. For such statements, we claim the protection of the Private Securities Litigation Reform Act of 1995. Readers of this Quarterly Report are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the time this Quarterly Report was filed with the SEC. These forward-looking statements are based largely on our expectations and projections about future events and future trends affecting our business, and are subject to risks and uncertainties that could cause actual results to differ materially from those anticipated in the forward-looking statements. These risks and uncertainties include, without limitation, the risk factors identified in our SEC reports, including this Quarterly Report. In addition, past financial or operating performance is not necessarily a reliable indicator of future performance, and you should not use our historical performance to anticipate results or future period trends. We can give no assurances that any of the events anticipated by the forward-looking statements will occur or, if any of them do, what impact they will have on our results of operations and financial condition. Except as required by law, we undertake no obligation to update publicly or revise our forward-looking statements.

OVERVIEW AND RECENT DEVELOPMENTS

We are a biopharmaceutical company focused on developing novel, small-molecule drugs with optimized receptor pharmacology designed to deliver broad clinical utility across multiple therapeutic areas. Our proprietary pipeline includes potentially first or best in class programs for which we own global commercial rights.

Our three most advanced investigational clinical programs are:

- Ralinepag (formerly APD811) - an oral, next generation, selective IP receptor agonist targeting the prostacyclin pathway, for which we have reported positive topline results from our completed Phase 2 trial for pulmonary arterial hypertension, or PAH. Phase 3 trial preparations are ongoing.
- Etrasimod (formerly APD334) - an oral, next generation, selective sphingosine 1-phosphate, or S1P, receptor modulator targeting the S1P receptor subtypes 1, 4 and 5, which we are evaluating in multiple ongoing Phase 2 clinical trials for:
    - Ulcerative Colitis, or UC
    - Dermatological Extra-Intestinal Manifestations, or Derm EIMs, in Inflammatory Bowel Disease, or IBD
    - Pyoderma Gangrenosum, or PG, with and without co-morbidities including IBD

We also intend to initiate an additional trial in Primary Biliary Cholangitis, or PBC, in 2017.

-

- APD371 - a highly selective, peripherally restricted, orally available, full agonist of the cannabinoid-2 receptor, which we are evaluating in an ongoing Phase 2 clinical trial for pain associated with Crohn's disease

We continue to explore additional indications for all of our clinical-stage programs. Additionally, we have collaborations with the following pharmaceutical companies:

- Eisai Inc. and Eisai Co., Ltd., or collectively, Eisai, in their efforts with respect to BELVIQ®,
- Axovant Sciences Ltd., or Axovant, in its efforts with respect to nelotanserin, an orally available inverse agonist of the serotonin 2A receptor, which is in (i) a Phase 2 clinical trial in Lewy body dementia patients who experience frequent visual hallucinations, and (ii) a separate Phase 2 clinical trial to evaluate nelotanserin as a potential treatment for rapid-eye-movement, or REM, behavior disorder in patients with dementia with Lewy bodies, and
- Boehringer Ingelheim International GmbH, or Boehringer Ingelheim, targeting a G protein-coupled receptor that belongs to the group of orphan central nervous system receptors, which is in preclinical development.

In July 2017, we completed the sale of an aggregate of 7,187,500 shares of our common in an underwritten public offering. The Company's net proceeds from the offering were approximately $162.0 million after deducting underwriting discounts and commissions, and offering expenses payable by us. We anticipate using the net proceeds from the offering for clinical and preclinical development of drug candidates, including our planned Phase 3 clinical trial of ralinepag for the treatment of pulmonary arterial hypertension, for general corporate purposes, including working capital and costs associated with manufacturing services, and for capital expenditures.

In June 2017, we filed a certificate of amendment to our certificate of incorporation with the Secretary of State of the state of Delaware to effect a one-for-ten reverse stock split of our issued and outstanding common stock. The accompanying condensed consolidated financial statements and notes thereto give retrospective effect to the reverse stock split for all periods presented. All issued and outstanding common stock, options exercisable for common stock, restricted stock units, performance restricted stock units, and per share amounts contained in this report have been retroactively adjusted to reflect this reverse stock split for all periods presented. Concurrent with the reverse stock split we effected a reduction in the number of authorized shares of common stock from 367,500,000 shares to 73,500,000 shares.

In December 2016, we amended and restated the terms of the marketing and supply agreement for lorcaserin with Eisai by entering into a new Transaction Agreement and a new Supply Agreement (collectively with the Transaction Agreement, the Eisai Agreement) with Eisai. Under the Eisai Agreement, Eisai acquired global commercialization and manufacturing rights to lorcaserin, including in the territories retained by us under the prior agreement, with control over global development and commercialization decisions. Eisai is responsible for all lorcaserin development expenses going forward. We also assigned to Eisai our rights under the commercial lorcaserin distribution agreements with Ildong Pharmaceutical Co., Ltd., or Ildong, for South Korea; CY Biotech Company Limited, or CYB, for Taiwan; and Teva Pharmaceuticals Ltd.'s Israeli subsidiary, Abic Marketing Limited, or Teva, for Israel.

In general, developing drugs and obtaining marketing approval is a long, uncertain and expensive process, and our ability to execute on our plans and achieve our goals depends on numerous factors, many of which we do not control. To date, we have generated limited revenues. We expect to continue to incur substantial net losses for at least the short term as we advance our clinical development programs, support our collaborators, and manufacture lorcaserin for Eisai.

RESULTS OF OPERATIONS

We are providing the following summary of our revenues, research and development expenses and general and administrative expenses to supplement the more detailed discussion below. The dollar values in the following tables are in millions.

Revenues

	Three months ended June 30,		Six months ended June 30,	
Source of revenue	2017	2016	2017	2016
Net product sales	$2.1	$4.2	$4.8	$7.8
Other Eisai collaboration revenue	1.8	2.0	3.3	5.2
Collaboration agreement with Boehringer Ingelheim	1.3	1.5	2.5	2.8

Toll manufacturing agreements	0.8	1.0	1.5	2.0
Collaboration agreement with Axovant	0.5	0.6	1.0	1.2
Other collaboration revenue	0.0	0.2	0.0	0.4
Total revenues	$6.5	$9.5	$13.1	$19.4

Research and development expenses

Type of expense	Three months ended June 30, 2017	2016	Six months ended June 30, 2017	2016
External clinical and preclinical study fees and internal non-commercial manufacturing costs	$11.3	$7.2	$20.3	$15.6
Salary and other personnel costs (excluding non-cash share-based compensation)	3.6	5.9	7.4	10.8
Facility and equipment costs	1.2	2.3	2.6	4.7
Non-cash share-based compensation	0.6	1.9	1.0	3.7
Research supply costs	0.2	0.9	0.4	1.7
Other	1.0	0.3	1.7	0.5
Total research and development expenses	$17.9	$18.5	$33.4	$37.0

General and administrative expenses

Type of expense	Three months ended June 30, 2017	2016	Six months ended June 30, 2017	2016
Salary and other personnel costs (excluding non-cash share-based compensation)	$2.2	$3.4	$4.9	$6.3
Legal, accounting and other professional fees	1.6	2.4	3.8	4.1
Facility and equipment costs	1.3	1.1	2.8	2.1
Non-cash, share-based compensation	1.6	1.3	3.0	2.3
Other	0.5	0.3	0.9	0.6
Total general and administrative expenses	$7.2	$8.5	$15.4	$15.4

THREE MONTHS ENDED JUNE 30, 2017, AND 2016

Revenues. We recognized revenues of $6.5 million for the three months ended June 30, 2017, compared to $9.5 million for the three months ended June 30, 2016. This decrease was primarily due to (i) $2.0 million of revenue recorded for the three months ended June 30, 2016, from the amortization of previously received upfront payments from the BELVIQ distributors for regulatory and development services performed while no similar services were performed for the three months ended June 30, 2017, pursuant to the Eisai Agreement, and (ii) a decrease of $2.1 million in net product sales primarily due to changes in the prices at which we sell BELVIQ to Eisai pursuant to the Eisai Agreement. This decrease was partially offset by $1.8 million of manufacturing support payments we received

for the three months ended June 30, 2017, pursuant to the Eisai Agreement while we received no similar payments for the three months ended June 30, 2016.

At June 30, 2017, we had a total of $32.4 million in deferred revenues. Under the Eisai Agreement, we have agreed to manufacture and supply, and Eisai has agreed to purchase from us, all of Eisai's requirements (or specified minimum quantities if such quantities are greater than Eisai's requirements), subject to certain exceptions, for lorcaserin for development and commercial use for an initial two-year period. The initial period may be extended by Eisai for an additional six months. Eisai will pay us agreed upon prices to deliver finished drug product during this time and also pay us manufacturing support payments. Of the $32.4 million in deferred revenues at June 30, 2017, $28.1 million relates to the Eisai Agreement which we expect to recognize as revenue as we manufacture and supply lorcaserin to Eisai over this period. The remaining amount of revenues is primarily attributable to the upfront payments we received under our collaboration agreements with Axovant and Boehringer Ingelheim which we expect to recognize as the services are performed under these agreements.

Absent any new collaborations, we expect our 2017 revenues will primarily consist of (i) product payments for manufacturing and supply of BELVIQ to Eisai, (ii) manufacturing support payments from Eisai (iii) royalty payments from Eisai based upon Eisai's sales of BELVIQ to its distributors, (iv) toll manufacturing, (v) amortization of the upfront payments we have received from our collaborators and (vi) reimbursements from collaborators for research funding.

Revenues from royalties based on sales of BELVIQ are difficult to predict, and our overall revenues will likely vary from quarter to quarter and year to year. In the short term, we expect the amount of BELVIQ-related revenue we earn to decrease significantly due to the change in terms of the Eisai Agreement.

Cost of product sales. Cost of product sales consists primarily of direct and indirect costs related to manufacturing BELVIQ, including, among other costs, salaries, share-based compensation and other personnel costs, machinery depreciation costs and amortization expense related to our manufacturing facility production licenses. Cost of products sold was $1.5 million for the three months ended June 30, 2017, compared to $0.9 million for the three months ended June 30, 2016.

Cost of toll manufacturing. Cost of toll manufacturing consists of direct and indirect costs associated with manufacturing drug products, primarily for Siegfried AG, or Siegfried, under toll manufacturing agreements, including related salaries, other personnel costs, machinery depreciation costs, amortization expense related to our manufacturing facility production licenses, and material costs. Cost of toll manufacturing decreased by $0.7 million to $1.1 million for the three months ended June 30, 2017, from $1.8 million for the three months ended June 30, 2016, primarily due to decreased costs incurred on toll manufacturing performed for Siegfried.

Research and development expenses. Research and development expenses, which account for the majority of our expenses, consist primarily of salaries and other personnel costs, clinical trial costs (including payments to contract research organizations, or CROs), preclinical study fees, manufacturing costs for non-commercial products, costs for the development of our earlier-stage programs, research supply costs and facility and equipment costs. We expense research and development costs as they are incurred when these expenditures have no alternative future uses. We generally do not track our earlier-stage, internal research and development expenses by project; rather, we track such expenses by the type of cost incurred.

Research and development expenses decreased by $0.6 million to $17.9 million for the three months ended June 30, 2017, from $18.5 million for the three months ended June 30, 2016. This decrease was primarily due to decreases of $2.2 million in salary and other personnel costs, $1.4 million in non-cash, share-based compensation expense, $1.2 million in facility and equipment costs and $0.7 million in research supply costs, primarily due to workforce reductions we initiated in June 2016. This decrease was partially offset by an increase of $4.2 million in external clinical and preclinical study fees and internal non-commercial manufacturing costs primarily attributed to increased expenses related to etrasimod and completion of ralinepag Phase 2 clinical trials in the second quarter of 2017 offset by the reduced expenses related to the lorcaserin program.

We expect to incur substantial research and development expenses in the second half of 2017 and for the aggregate amount in 2017 to be potentially greater than the amount incurred in 2016. While we expect our internal costs to be lower primarily due to our workforce reductions in prior years, we expect to incur higher external clinical trial costs. Our actual expenses may be higher or lower than anticipated due to various factors, including our focus, progress and results. For example, patient enrollment in our Phase 2 clinical trials remains competitive and challenging and has taken longer than originally projected, which has resulted in our related external expenses being lower at this point than anticipated.

Included in the $11.3 million of total external clinical and preclinical study fees and internal non-commercial manufacturing costs noted in the table above for the three months ended June 30, 2017, were the following:

- $7.9 million related to etrasimod,
- $2.0 million related to ralinepag, and
- $0.6 million related to the APD371 program.

Included in the $7.2 million of total external clinical and preclinical study fees and internal non-commercial manufacturing costs noted in the table above for the three months ended June 30, 2016, were the following:

- $2.6 million related to lorcaserin and non-commercial manufacturing costs,
- $2.9 million related to etrasimod, and

- $1.1 million related to ralinepag.

General and administrative expenses. General and administrative expenses decreased by $1.2 million to $7.2 million for the three months ended June 30, 2017, from $8.5 million for the three months ended June 30, 2016. This decrease was primarily due to a $1.3 million decrease in salaries and other personnel costs primarily due to the recent reductions in the number of our employees and a decrease of $0.8 million in legal, accounting and other professional fees. This decrease was partially offset by an increase of $0.3 million in facility and equipment costs and of $0.3 million in non-cash share-based compensation expenses. We expect that our 2017 general and administrative expenses will be lower than in 2016, primarily due to our workforce reductions in prior years and other cost control initiatives.

Restructuring Charges. We recognized $6.1 million of restructuring charges for the three months ended June 30, 2016, in connection with employee termination costs, including severance and other benefits, related to the workforce reductions to which we committed in the second quarter of 2016, compared to no similar restructuring charges for the three months ended June 30, 2017.

Interest and other expense, net. Interest and other expense, net, increased by $1.4 million to $2.4 million for the three months ended June 30, 2017, from $1.0 million for the three months ended June 30, 2016. This increase was primarily due to an increase of $1.9 million in net foreign currency transaction losses.

SIX MONTHS ENDED JUNE 30, 2017, AND 2016

Revenues. We recognized revenues of $13.1 million for the six months ended June 30, 2017, compared to $19.4 million for the six months ended June 30, 2016. This decrease was primarily due to (i) $4.0 million of revenue recorded for the six months ended June 30, 2016, from the amortization of previously received upfront payments from the BELVIQ distributors for regulatory and development services performed while no similar services were performed for the six months ended June 30, 2017, pursuant to the Eisai Agreement, (ii) $1.4 million of revenue recorded for the six months ended June 30, 2016, from reimbursements of development expenses and patent and trademark expenses from Eisai while no similar reimbursements were received for the six month ended June 30, 2017, pursuant to the Eisai Agreement, and (iii) a decrease of $3.0 million in net product sales primarily due to changes in the prices at which we sell BELVIQ to Eisai pursuant to the Eisai Agreement. This decrease was partially offset by $3.4 million of manufacturing support payments we received for the six months ended June 30, 2017, pursuant to the Eisai Agreement while we received no similar payments for the six months ended June 30, 2017.

Cost of product sales. Cost of products sold was $4.0 million for the six months ended June 30, 2017, compared to $3.3 million for the six months ended June 30, 2016.

Cost of toll manufacturing. Cost of toll manufacturing decreased by $0.9 million to $2.0 million for the six months ended June 30, 2017, from $2.9 million for the six months ended June 30, 2016, primarily due to decreased costs incurred on toll manufacturing performed for Siegfried.

Research and development expenses. Research and development expenses decreased by $3.6 million to $33.4 million for the six months ended June 30, 2017, from $37.0 million for the six months ended June 30, 2016. This decrease was primarily due to decreases of $3.4 million in salary and other personnel costs, $2.8 million in non-cash, share-based compensation expense, $2.1 million in facility and equipment costs and $1.2 million in research supply costs, primarily due to workforce reductions we initiated in June 2016. This decrease was partially offset by an increase of $4.8 million in external clinical and preclinical study fees and internal non-commercial manufacturing costs primarily attributed to increased expenses related to etrasimod and completion of ralinepag Phase 2 clinical trials in the second quarter of 2017 offset by the reduced expenses related to the lorcaserin program.

Included in the $20.3 million of total external clinical and preclinical study fees and internal non-commercial manufacturing costs noted in the table above for the six months ended June 30, 2017, were the following:

- $14.1 million related to etrasimod,
- $4.2 million related to ralinepag, and
- $0.9 million related to the APD371 program.

Included in the $15.6 million of total external clinical and preclinical study fees and internal non-commercial manufacturing costs noted in the table above for the six months ended June 30, 2016, were the following:

- $6.6 million related to lorcaserin and non-commercial manufacturing costs,

- $5.7 million related to etrasimod, and
- $2.0 million related to ralinepag.

General and administrative expenses. General and administrative expenses were $15.4 million for the six months ended June 30, 2017 compared to $15.4 million for the six months ended June 30, 2016. Compared to six months ended June 30, 2016, there was an increase of $0.8 million in facility and equipment costs and an increase of $0.7 million in non-cash share-based compensation expenses. These increases were offset by a $1.4 million decrease in salaries and other personnel costs primarily due to the recent reductions in the number of our employees. We expect that our 2017 general and administrative expenses will be lower than in 2016, primarily due to our workforce reductions in prior years and other cost control initiatives.

Restructuring Charges. We recognized $6.1 million of restructuring charges for the six months ended June 30, 2016, in connection with employee termination costs, including severance and other benefits, related to the workforce reductions to which we committed in the second quarter of 2016, compared to no similar restructuring charges for the six months ended June 30, 2017.

Interest and other expense, net. Interest and other expense, net, increased by $1.1 million to $4.4 million for the six months ended June 30, 2017, from $3.3 million for the six months ended June 30, 2016. This increase was primarily due to an increase of $1.7 million in net foreign currency transaction losses.

LIQUIDITY AND CAPITAL RESOURCES

We have accumulated a large deficit since our inception that has primarily resulted from the significant research and development expenditures we incurred seeking to develop compounds that could become marketed drugs. We expect to continue to incur substantial losses for at least the short term.

To date, we have obtained cash and funded our operations primarily through equity financings, payments from collaborators, the issuance of debt and related financial instruments, sale leaseback transactions and the sale of available-for-sale securities. We expect to continue to evaluate various funding alternatives on an ongoing basis. If we determine it is advisable to raise additional funds, there is no assurance that adequate funding will be available to us or, if available, that such funding will be available on terms that we or our stockholders view as favorable.

We may not have sufficient cash to meet all of our objectives beyond the next 12 months, which include advancing certain of our clinical- and earlier-stage programs and maintaining our manufacturing capabilities. If we do not generate sufficient funding or if we change our focus, we may determine to eliminate, postpone or scale back some or all of our research and development programs and further reduce our expenses.

Short term liquidity.

At June 30, 2017, we had $130.8 million in cash and cash equivalents. In July 2017, we raised approximately $162.0 million of net proceeds from sales of our common stock. We expect that our short-term operating expenses will be substantial as we continue to advance certain of our research and development programs, and operate our manufacturing facility.

In addition to payments expected from Eisai for royalties, manufacturing support and purchases of product supply of BELVIQ, our other potential sources of liquidity in the short term include (i) milestone and other payments from collaborators, (ii) entering into new collaboration, licensing or commercial agreements for one or more of our drug candidates or programs, (iii) the sale or lease of our existing facilities or other assets and (iv) sale of equity, issuance of debt or other financing transactions.

Long term liquidity.

It will require substantial cash to achieve our objectives of discovering, developing and commercializing drugs, and this process typically takes many years and potentially several hundreds of millions of dollars for an individual drug. We may not have adequate available cash, or assets that could be readily turned into cash, to meet these objectives in the long term. We will need to obtain significant funds under our existing collaborations, under new collaborations, licensing or other commercial agreements for one or more of our drug candidates and programs or patent portfolios, or from other potential sources of liquidity, which may include the sale of equity, issuance of debt or other financing transactions.

In addition to potential payments from our current collaborators, as well as funding from public and private financial markets, potential sources of liquidity in the long term include (i) upfront, milestone, royalty and other payments from any future collaborators or licensees and (ii) revenues from sales of any drugs we obtain regulatory approval to commercialize on our own. The length of time that our current cash and cash equivalents and any available borrowings will sustain our operations will be based on, among other things, the rate of adoption and commercial success of BELVIQ and any other drug we or our collaborators obtain regulatory approval to market, regulatory decisions affecting our and our collaborator's drug candidates, prioritization decisions regarding funding for our programs, progress in our clinical and earlier-stage programs, the time and costs related to current and future clinical trials and nonclinical studies, our research, development, manufacturing and commercialization costs (including personnel costs), our progress in any programs under collaborations, costs associated with intellectual property, our capital expenditures, and costs associated with securing any in-licensing opportunities. Any significant shortfall in funding may result in us reducing our development and/or research activities, which, in turn, would affect our development pipeline and ability to obtain funding in the future.

We evaluate from time to time potential acquisitions, in-licensing and other opportunities. Any such transaction may impact our liquidity as well as affect our expenses if, for example, our operating expenses increase as a result of such acquisition or license or we use our cash to finance the acquisition or license.

Sources and uses of our cash.

Net cash used in operating activities increased by $8.4 million to $42.2 million in the six months ended June 30, 2017, compared to $33.8 million in the six months ended June 30, 2016. This increase was primarily the result of (i) the $7.5 million payment we received from Boehringer Ingelheim, less $1.2 million of withholding taxes (which were refunded to us in October 2016), in February 2016 upon entering into the Boehringer Ingelheim Agreement, while we did not receive any similar upfront payment in the six months ended June 30, 2017, and (ii) an increase of $11.4 million in payments made for external clinical study fees. These increases in net cash used in operating activities were partially offset by (i) an increase of $4.5 million in net payments we received from Eisai and other Belviq distributors, from $5.5 million in the six months ended June 30, 2016, to $9.7 million in the six months ended June 30, 2017 (primarily consisting of $5.2 million in net settlement payments related to the prior agreement and $3.8 million of manufacturing support payments related to the Eisai Agreement), (ii) decreased cash expenditures of approximately $5.4 million for personnel costs primarily resulting from the workforce reductions payments in 2016, and reduced cash expenditures for research supply costs and facility and equipment costs primarily resulting from workforce reductions.

Net cash of $79.8 million was provided by financing activities in the six months ended June 30, 2017, as a result of net proceeds of $74.5 million from secondary public offering of our common stock and $7.0 million from our ATM, which were partially offset by payments of $1.7 million on our lease financing obligations. Net cash of $1.2 million was used in financing activities in the six months ended June 30, 2016, as a result of payments of $1.4 million on our lease financing obligations, which were partially offset by net proceeds of $0.2 million from stock option exercises and purchases under our employee stock purchase plan.

CRITICAL ACCOUNTING POLICIES AND MANAGEMENT ESTIMATES

The SEC defines critical accounting policies as those that are, in management’s view, important to the portrayal of our financial condition and results of operations and demanding of management’s judgment. Our discussion and analysis of financial condition and results of operations is based on our condensed consolidated financial statements, which have been prepared in accordance with US generally accepted accounting principles, or GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosures. We base our estimates on historical experience and on various assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ significantly from those estimates.

Our critical accounting policies and management estimates are discussed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, and there have been no material changes during the six months ended June 30, 2017.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

There have been no material changes from the information we included in this section of our Annual Report on Form 10-K for the year ended December 31, 2016.

Item 4. Controls and Procedures.

Based on an evaluation carried out as of the end of the period covered by this Quarterly Report, under the supervision and with the participation of our management, including our President and Chief Executive Officer and our Executive Vice President and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures, our President and Chief Executive Officer and our Executive Vice President and Chief Financial Officer have concluded that, as of the end of such period, our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934) were effective at the reasonable assurance level. There was no change in our internal control over financial reporting that occurred during the quarter covered by this Quarterly Report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings.

Beginning on September 20, 2010, a number of complaints were filed in the US District Court for the Southern District of California, or District Court, against us and certain of our current and former employees and directors on behalf of certain purchasers of our common stock. The complaints were brought as purported stockholder class actions, and, in general, include allegations that we and certain of our current and former employees and directors violated federal securities laws by making materially false and misleading statements regarding our BELVIQ program, thereby artificially inflating the price of our common stock. The plaintiffs sought unspecified monetary damages and other relief. On August 8, 2011, the District Court consolidated the actions and appointed a lead plaintiff and lead counsel. On November 1, 2011, the lead plaintiff filed a consolidated amended complaint. On March 28, 2013, the District Court dismissed the consolidated amended complaint without prejudice. On May 13, 2013, the lead plaintiff filed a second consolidated amended complaint. On November 5, 2013, the District Court dismissed the second consolidated amended complaint without prejudice as to all parties except for Robert E. Hoffman, who was dismissed from the action with prejudice. On November 27, 2013, the lead plaintiff filed a motion for leave to amend the second consolidated amended complaint. On March 20, 2014, the District Court denied plaintiff's motion and dismissed the second consolidated amended complaint with prejudice. On April 18, 2014, the lead plaintiff filed a notice of appeal, and on August 27, 2014, the lead plaintiff filed his appellate brief in the US Court of Appeals for the Ninth Circuit, or Ninth Circuit. On October 24, 2014, we filed our answering brief in response to the lead plaintiff's appeal. On December 5, 2014, the lead plaintiff filed his reply brief. A panel of the Ninth Circuit heard oral argument on the appeal on May 4, 2016. On October 26, 2016, the Ninth Circuit panel reversed the District Court's dismissal of the second consolidated amended complaint and remanded the case back to the District Court for further proceedings. On January 25, 2017, the District Court permitted us to submit a renewed motion to dismiss the second consolidated amended complaint. On February 2, 2017, we filed the renewed motion to dismiss. On February 23, 2017, the lead plaintiff filed his opposition, and on March 2, 2017, we filed our reply. On April 28, 2017, the District Court denied our renewed motion to dismiss. Due to the stage of these proceedings, we are not able to predict or reasonably estimate the ultimate outcome or possible losses relating to these claims.

On September 30, 2016, we and Eisai Inc. filed a patent infringement lawsuit against Lupin Limited and Lupin Pharmaceuticals, Inc. (collectively, Lupin) in the U.S. District Court for the District of Delaware. The lawsuit relates to a "Paragraph IV certification" notification that we and Eisai Inc. received regarding an abbreviated new drug application, or ANDA, submitted to the FDA by Lupin requesting approval to engage in the commercial manufacture, use, importation, offer for sale or sale of a generic version of BELVIQ® (lorcaserin hydrochloride tablets, 10 mg). In its notification, Lupin alleged that no valid, enforceable claim of any of the patents that are listed in the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations, or Orange Book, for BELVIQ® will be infringed by Lupin's manufacture, importation, use, sale or offer for sale of the product described in its ANDA. Lupin is accused of infringing U.S. Patent Nos. 6,953,787; 7,514,422; 7,977,329; 8,207,158; 8,273,734; 8,999,970 and 9,169,213. In accordance with the Hatch-Waxman Act, as a result of filing a patent infringement lawsuit within 45 days of receipt of Lupin's notification, the FDA cannot approve Lupin's ANDA any earlier than 7.5 years from NDA approval unless a District Court finds that all of the asserted claims of the patents-in-suit are invalid, unenforceable or not infringed. On January 11, 2017, Lupin filed an answer, defenses and counterclaims to the September 30, 2016 complaint. We and Eisai Inc. filed an answer to Lupin's counterclaims on February 1, 2017. We and Eisai Inc. are seeking a determination from the court that, among other things, Lupin has infringed our patents, Lupin's ANDA should not be approved until the expiration date of our patents, and Lupin should be enjoined from commercializing a product that infringes our patents. Trial is currently scheduled for April 15, 2019. The parties are currently in the fact discovery phase of the case. We cannot predict the ultimate outcome of any proceeding.

On March 6, 2017, we and Eisai Inc. filed a patent infringement lawsuit against Teva Pharmaceuticals USA, Inc. and Teva Pharmaceutical Industries Ltd. (collectively, Teva) in the U.S. District Court for the District of Delaware. The lawsuit also relates to a "Paragraph IV certification" notification that we and Eisai Inc. received regarding an ANDA submitted to the FDA by Teva requesting approval to engage in the commercial manufacture, use, importation, offer for sale or sale of a generic version of BELVIQ XR® (lorcaserin hydrochloride extended-release tablets, 20 mg). In its notification, Teva alleged that no valid, enforceable claim of any of the patents that are listed in the Orange Book for BELVIQ XR® will be infringed by Teva's manufacture, importation, use, sale or offer for sale of the product described in its ANDA. Teva is accused of infringing U.S. Patent Nos. 6,953,787; 7,514,422; 7,977,329; 8,207,158; 8,273,734; 8,999,970 and 9,169,213. In accordance with the Hatch-Waxman Act, as a result of filing a patent infringement lawsuit within 45 days of receipt of Teva's notification, the FDA cannot approve Teva's ANDA any earlier than 7.5 years from NDA approval unless a District Court finds that all of the asserted claims of the patents-in-suit are invalid, unenforceable or not infringed. On April 18, 2017, Teva filed an amended answer, defenses and counterclaims to the March 6, 2017 complaint. On May 1, 2017, the Teva and Lupin actions were consolidated for all purposes and will follow the case schedule that was previously entered in the Lupin action. We and Eisai Inc. filed an answer to Teva's amended counterclaims on May 3, 2017.We and Eisai Inc. are seeking a determination from the court that, among other things, Teva has infringed our patents, Teva's ANDA should not be approved until the expiration date of our patents, and Teva should be enjoined from commercializing a product that infringes our patents. We cannot predict the ultimate outcome of any proceeding.

Item 1A. Risk Factors.

RISK FACTORS

General

Investment in our stock involves a high degree of risk. You should consider carefully the risks described below, together with other information in this Quarterly Report on Form 10-Q and other public filings, before making investment decisions regarding our stock. If any of the following events actually occur, our business, operating results, prospects or financial condition could be materially and adversely affected. This could cause the trading price of our common stock to decline and you may lose all or part of your investment. Moreover, the risks described below are not the only ones that we face. Additional risks not presently known to us or that we currently deem immaterial may also affect our business, operating results, prospects or financial condition.

The risk factors set forth below with an asterisk (*) before the title are new risk factors or ones containing substantive changes, including any material changes, from the risk factors previously disclosed in Item 1A to Part I of our Annual Report on Form 10-K for the year ended December 31, 2016, as filed with the Securities and Exchange Commission, or SEC.

Risks Relating to Our Business

* We will need to obtain additional funds or enter into collaboration agreements to execute on our corporate strategy, and we may not be able to do so at all or on terms you view as favorable; your ownership may be substantially diluted if we do obtain additional funds; you may not agree with the manner in which we allocate our available resources; and we may not be profitable.

It takes many years and potentially hundreds of millions of dollars to successfully develop a compound into a marketed drug. We have accumulated a large deficit that has primarily resulted from the significant expenditures we have made in research and development since our inception. We expect that our losses and operating expenses will continue to be substantial.

All of our current active development programs are in the development stage, and we currently do not have, and we may not have in the future, adequate funds to develop any of our compounds into marketed drugs.

We may enter into collaboration or other agreements with other entities to continue to develop and, if successful, commercialize one or more of our drug candidates. We may not be able to enter into any such agreement on terms that we or third parties, including investors or analysts, view as favorable, if at all. Our ability to enter into any such agreement for any of our programs or drug candidates depends on many factors, potentially including the outcomes of additional testing (including clinical trial results) or regulatory applications for marketing approval, and we do not control these outcomes.

We may seek to obtain additional funding through the capital markets or other financing sources, or we may eliminate, scale back or delay some or all of our research and development programs. Any such additional funding may dilute or otherwise negatively impact your ownership interest, and any such reductions or failure to apply our resources effectively may narrow, slow or otherwise adversely impact the development and commercialization of one or more of our drug candidates, which we believe may reduce our opportunities for success and have a material adverse effect on our business and prospects.

We may allocate our resources in ways that do not improve our results of operations or enhance the value of our assets, and our stockholders and others may also not agree with the manner in which we choose to allocate our resources or obtain additional funding. Any failure to apply our resources effectively or obtain additional funding could have a material adverse effect on our business or the development of our drug candidates and cause the market price of our common stock to decline.

In addition, we cannot assure you that we will be profitable or, if we are profitable for any particular time period, that we will be profitable in the future.

We are executing a revised strategy, and we may not be successful in transitioning from a company with a broad research and development focus and a commercial stage drug to a company focused on developing its clinical-stage pipeline.

In June 2016, we initiated a strategic shifting of priorities to emphasize our proprietary clinical-stage pipeline, and the implementation of cost reductions that included a substantial reduction of our workforce, primarily in areas of research, manufacturing and general and administrative. In January 2017, we announced we had amended our agreements relating to lorcaserin, a drug we had internally discovered and developed and that is being marketed for weight management under the tradenames BELVIQ and BELVIQ XR, in an effort to further reduce our expenses. In order to execute our revised strategy, we are also hiring new personnel, primarily to support development of our pipeline, and revising our systems, processes and vendors. We cannot guarantee that we will be able to realize any cost savings or other anticipated benefits from the actions we have taken to date or may take in the future, or that our efforts will not interfere with our ability to achieve our business objectives or have other negative consequences.

Drug development programs are expensive, time consuming, uncertain and susceptible to change, interruption, delay or termination.

Drug development programs are very expensive, time consuming and difficult to design and implement. Our drug candidates are in various stages of clinical and preclinical development and are prone to the risks of failure inherent in research and development. Clinical trials and preclinical studies are needed to demonstrate that drug candidates are safe and effective to the satisfaction of the US Food and Drug Administration, or FDA, and similar non-US regulatory authorities, and the FDA or other regulatory authority may require us to, or we or others may decide to, conduct additional research and development even after a drug is approved. The commencement or completion of our clinical trials or preclinical studies could be substantially delayed or prevented by several factors, including the following:

- limited number of, and competition for, suitable patients required for enrollment in our clinical trials or animals to conduct our preclinical studies;
- limited number of, and competition for, suitable sites to conduct our clinical trials or preclinical studies;
- delay or failure to obtain approval or agreement from the applicable regulatory authority to commence a clinical trial or approval of a study protocol;
- delay or failure to obtain sufficient supplies of drug candidates, drugs or other materials for the trial or study;
- delay or failure to reach agreement on acceptable agreement terms or protocols; and
- delay or failure to obtain institutional review board, or IRB, approval to conduct a clinical trial at a prospective site.

For example, recruitment for ulcerative colitis studies is competitive and challenging, and led us to make changes to our internal staffing, external vendors and trial design relating to our etrasimod program. It is not known how such changes, or any future changes we may implement, will impact clinical trials for our drug candidates, and it is difficult to predict when ongoing trials will be fully enrolled or when data will be available. Recruitment for trials for other indications, such as our ralinepag for pulmonary arterial hypertension, or PAH, can also be competitive and challenging.

In addition, the FDA, other regulatory authorities, collaborators, or we may suspend, delay or terminate our development programs at any time for various reasons, including those listed above affecting the commencement or completion of trials and the following:

- lack of effectiveness of any drug candidate during clinical trials;
- side effects experienced by study participants or other safety issues;
- slower than expected rates of patient recruitment and enrollment or lower than expected patient retention rates;
- inadequacy of or changes in our manufacturing process or compound formulation;
- delays in obtaining regulatory approvals to commence a study, or “clinical holds,” or delays requiring suspension or termination of a study by a regulatory authority, such as the FDA, after a study is commenced;
- changes in applicable regulatory policies and regulations;
- delays in identifying and reaching agreement on acceptable terms with prospective clinical trial sites;
- uncertainty regarding proper dosing;
- unfavorable results from ongoing clinical trials or preclinical studies;
- failure of our clinical research organizations to comply with all regulatory and contractual requirements or otherwise perform their services in a timely or acceptable manner;
- scheduling conflicts with participating clinicians and clinical institutions;
- failure to design appropriate clinical trial protocols;
- insufficient data to support regulatory approval;
- termination of clinical trials at one or more clinical trial sites;
- inability or unwillingness of medical investigators to follow our clinical protocols;
- difficulty in maintaining contact with subjects during or after treatment, which may result in incomplete data;
- lack of sufficient funding to continue clinical trials or preclinical studies; or

changes in business priorities or perceptions of the value of the program.

There is typically a high rate of attrition from the failure of drug candidates proceeding through clinical trials, and many companies have experienced significant setbacks in advanced development programs even after promising results in earlier studies or trials. We have experienced setbacks in our internal and partnered development programs and expect to experience additional setbacks from time to time in the future. In addition, even if the earlier-stage results of our development programs are favorable, these programs may take significantly longer than expected to complete or may not be completed at all. If we or our collaborators abandon or are delayed in our development efforts related to any drug or drug candidate, we may not be able to generate sufficient revenues to continue our operations at the current level or be profitable, our reputation in the industry and in the investment community would likely be significantly damaged, additional funding may not be available to us or may not be available on terms we or others believe are favorable, and our stock price may decrease significantly.

We may not be successful in initiating or completing our studies or trials or advancing our programs on our projected timetable, if at all. Any failure to initiate or delays in our studies, trials or development programs, or unfavorable results or decisions or negative perceptions regarding any of our programs, could cause our stock price to decline significantly. This is particularly the case with respect to our clinical programs.

Our efforts will be seriously jeopardized if we are unable to retain and attract key and other employees.

Our success depends on the continued contributions of our principal management, development and scientific personnel, and the ability to hire and retain key and other personnel. We face competition for such personnel, and we believe that risks and uncertainties related to our business may impact our ability to hire and retain key and other personnel. If we do not recruit and retain effective management and other key employees, particularly our executive officers, our operations, ability to generate or raise additional capital, and our business in general may be adversely impacted. For example, to execute our clinical programs, our strategy is to maintain a sufficient and robust clinical expertise and program management function. We are in the process of modifying and building this function, and we may not be able to establish the function we believe necessary to support our clinical goals and meet our corporate objectives.

Our business may be negatively impacted based on the clinical trials and preclinical studies of, and decisions affecting, one or more of our drug candidates.

The results and timing of clinical trials and preclinical studies, as well as related decisions by us, collaborators and regulators, can affect our stock price. Results of clinical trials and preclinical studies are uncertain and subject to different interpretations by regulatory agencies, us or others. The design of these trials and studies (which may change significantly and be more expensive than anticipated depending on results and regulatory decisions), as well as related analyses of such results, including adverse effects, may not be viewed favorably by us or third parties, including investors, analysts, current or potential collaborators, the academic and medical communities, and regulators, which could adversely impact the development and opportunities for regulatory approval of drug candidates and commercialization (and even result in withdrawal from the market) of approved drugs. The same may be true of decisions regarding the focus and prioritization of our research and development efforts. Stock prices of companies in our industry have declined significantly when such results and decisions were unfavorable or perceived negatively or when a drug candidate or product did not otherwise meet expectations.

The development, approval or commercialization of any of our drug candidates could be negatively affected by circumstances related to other drug candidates or approved products.

Information on our drug candidates in clinical development is preliminary and incomplete, and for such drug candidates, particularly in the earlier stages of development, information on approved products in the same or related drug classes may indicate potential risks related to the development of our drug candidates. For example, etrasimod is

an orally available modulator of the S1P receptors. An approved drug that is also an orally available modulator of the S1P receptors, Gilenya, is associated with risks such as adverse cardiovascular effects, including lowering of the heart rate and heart blocks, infection, macular edema, respiratory effects, fetal risk, a rare brain infection, and elevations in liver enzymes. These adverse reactions and risks may be associated with S1P receptor modulation and could be found to be associated with the use of etrasimod. Such adverse reactions and risks, either actual or perceived, could negatively impact its development, approval or commercialization, or our ability to enter into a collaboration on acceptable terms.

Top-line data may not accurately reflect the complete results of a particular study or trial.

We may publicly disclose top-line or interim data from time to time, which is based on a preliminary analysis of then-available efficacy and safety data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and others, including regulatory agencies, may not accept or agree with our assumptions, estimations, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular drug candidate or drug and our company in general. In addition, the information we may publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure, and any information we determine not to disclose may ultimately be deemed significant with respect to future decisions, conclusions, views, activities or otherwise regarding a particular drug, drug candidate or our business.

Our hypothesis that selectively targeting receptors can lead to more efficacious or safer drugs may not be correct.

In general, we have designed and optimized our drug candidates (including etrasimod, ralinepag and APD371) to selectively target certain receptors found on cells in humans. Our hypothesis is that selectivity may allow our drug candidates to address diseases more efficaciously or without some of the negative effects associated with less selective drugs. In certain cases, we believe early research and, if available, early clinical testing, provides preliminary support for our hypothesis. However, our hypothesis may not be correct, early research and early phase clinical testing may not be predictive of efficacy or safety in later trials, and our drug candidates may not be approved or, if approved, have the desired efficacy or safety profile.

* The results of preclinical studies and completed clinical trials are not necessarily predictive of future results, and our current drug candidates or any approved drugs may not be further developed or have favorable results in later studies or trials.

Preclinical studies and Phase 1 and Phase 2 clinical trials are not primarily designed to test the efficacy of a drug candidate, but rather to test safety, to study pharmacokinetics and pharmacodynamics, and to understand the drug candidate’s side effects at various doses and schedules. Favorable results in early studies or trials may not be confirmed in later studies or trials, including preclinical studies that continue or that are initiated after earlier clinical trials and large-scale clinical trials, and our drug candidates or drugs in subsequent trials or studies may fail to show desired safety and efficacy despite having progressed through earlier-stage trials. For example, we recently announced positive topline Phase 2 results for ralinepag in patients with PAH, but these results may not be confirmed in any subsequent Phase 3 study. Unfavorable results from clinical trials or preclinical studies could result in delays, modifications or abandonment of ongoing or future clinical trials, or abandonment of a program. Clinical and preclinical results are frequently susceptible to varying interpretations that may delay, limit or prevent regulatory approvals or commercialization. Negative or inconclusive results or adverse medical events during such trials or studies could cause a clinical trial to be delayed, repeated or terminated; a program to be abandoned; or negatively impact a related marketed drug, which could have a material adverse effect on our business, financial condition and results of operations.

Drug discovery and development is intensely competitive in the therapeutic areas on which we focus. If the number of our competitors increase or they develop treatments that are approved faster, marketed better, less expensive or demonstrated to be more effective or safer than our drugs or drug candidates, our commercial opportunities will be reduced or eliminated.

Many of the drugs we or our collaborators are attempting or may attempt to discover and develop may compete with existing therapies in the United States and other territories. In addition, many companies are pursuing the development of new drugs that target the same diseases and conditions that we target.

For example, with regard to etrasimod, there are other drugs that have a similar mechanism of action already in Phase 3 clinical development for the same indications that we are pursuing, such as ulcerative colitis. By way of another example, with regard to ralinepag, a competitor with the same mechanism of action, selexipag is already currently approved in the United States, Europe and other countries. Our competitors, particularly large pharmaceutical companies, may have substantially greater research, development and marketing and sales capabilities and greater financial, scientific and human resources than we do. Companies that complete clinical trials, obtain required regulatory agency approvals and commence commercial sale of their drugs before we do for the same indication may achieve a significant competitive advantage, including certain patent and marketing exclusivity rights. In addition, our competitors' drugs may have fewer side effects, more desirable characteristics (such as efficacy, route of administration or frequency of dosing), or be viewed more favorably by patients, healthcare providers, healthcare payers, the medical community, the media or others than our drug candidates or drugs, if any, for the same indication. Our competitors may also market generic or other drugs that compete with our drugs at a lower price than our drugs, which may negatively impact our drug sales, if any. Any results from our research and development efforts, or from our joint efforts with our existing or any future collaborators, may not compete successfully with existing or newly discovered products or therapies.

Our revenues in the future will be substantially dependent on the success of our or our collaborators' marketing of drugs we have discovered or developed. To the extent such drugs are not commercially successful, our business, financial condition and results of operations may be materially adversely affected and the price of our common stock may decline.

We believe our revenues will be substantially dependent on the success of the drugs we or our collaborators successfully develop. We do not know whether or when such drug candidates will be approved by regulatory authorities for sale or commercialized. Even if approved and commercialization begins, we do not know if such commercialization will be successful or otherwise meet our, your, analysts' or others' expectations, and the market price of our common stock could decline significantly. For example, sales of lorcaserin to date have been less than we and others initially anticipated, and, because lorcaserin is the only approved and marketed drug in which we have a financial interest, our revenue for the near-term is substantially dependent on our licensing agreement with Eisai and sales of lorcaserin.

We cannot guarantee future product sales or achievement of any other milestones. In addition, our licensing agreement with Eisai for lorcaserin, and any of our other collaborations, may be terminated early in certain circumstances, which may result in us not receiving additional milestone or other payments under the terminated agreement.

The degree of market acceptance and commercial success of a drug will depend on a number of factors, including the following, as well as risks identified in other risk factors:

- the number of patients treated with the drug and their results;
- market acceptance and use of the drug, which may depend on the public's view of the drug, economic changes, national and world events, potentially seasonal and other fluctuations in demand, the timing and impact of current or new competition, and the drug's perceived advantages or disadvantages over alternative treatments (including relative convenience, ease of administration, and prevalence and severity of any adverse events, including any unexpected adverse events);
- the actual and perceived safety and efficacy of the drug on both a short- and long-term basis among actual or potential patients, healthcare providers and others in the medical community, regulatory agencies and insurers and other payers, including related decisions by any such entity or individual;
- incidence and severity of any side effects, including as a result of off-label use or in combination with one or more drugs;
- new data relating to the drug, including as a result of additional studies, trials or analyses of the drug or related drugs or drug candidates;
- the willingness of physicians to prescribe and of patients to use the drug;
- the claims, limitations, warnings and other information in the drug's current or future labeling;
- any current or future scheduling designation for the drug by the US Drug Enforcement Administration, or DEA, or any comparable foreign authorities;
- our or our collaborators' maintenance of an effective sales force, marketing team, strategy and program, and medical affairs group and related functions, as well as its sales, marketing and other representatives accurately describing the drug consistent with its approved labeling;
- the price and perceived cost-effectiveness of the drug, including as compared to possible alternatives;
- the ability of patients and physicians and other providers to obtain and maintain coverage and adequate reimbursement, if any, by third-party payers, including government payers;
- the ability and desire of group purchasing organizations, or GPOs, including distributors and other network providers, to sell the drug to their constituencies;
- introduction of counterfeit or unauthorized versions of the drug;
- to the extent the drug is approved and marketed in a jurisdiction with a significantly lower price than in another jurisdiction, the impact of the lower pricing in the higher-priced territory, including on the pricing of reimbursement,

if available, and by the diversion of lower-priced of the drug into the higher-priced territory; and

- the availability of adequate commercial manufacturing and supply chain for the drug.

Our drugs may not be commercially successful if not widely covered and adequately reimbursed by third-party payers, and we may depend on others to obtain and maintain third-party payer access; inadequate third-party coverage and reimbursement could make entering into agreements with pharmaceutical companies to collaborate or commercialize our drugs more difficult and diminish our revenues.

Our and our collaborators' ability to successfully commercialize any of our drugs that have been or may be approved will depend, in part, on government regulation and the availability of coverage and adequate reimbursement from third-party payers, including private health insurers and government payers, such as the Medicaid and Medicare programs, increases in government-run, single-payer health insurance plans and compulsory licenses of drugs. We expect government and third-party payers will continue their efforts to contain healthcare costs by limiting coverage and reimbursement levels for new drugs. In addition, many countries outside of the United States have nationalized healthcare systems in which the government pays for all such products and services and must approve product pricing. A government or third-party payer decision not to approve pricing, or provide adequate coverage and reimbursements, for our drugs, if any, could limit market acceptance of and demand for our drugs.

It is increasingly difficult to obtain coverage and adequate reimbursement levels from third-party payers, and significant uncertainty exists as to the coverage and reimbursement of newly approved prescription drug products. We or our collaborators also face competition in negotiating for coverage from pharmaceutical companies and others with competitive drugs or other treatment, and these competitors may have significantly more negotiating leverage or success with respect to individual payers than we or our collaborators may have.

We expect that the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively, the ACA, its potential repeal, as well as other federal and state healthcare reform measures that have been or may be implemented in the future, may result in more rigorous coverage criteria, more limited coverage and downward pressure on the price that we may receive for any approved product, which could seriously decrease our future revenues. Any reduction in reimbursement from Medicare, Medicaid or other government programs may result in a similar reduction in payments from private payers. For example, reimbursement has been challenging for BELVIQ, including because Medicare explicitly excludes coverage for drugs for weight loss. The implementation of cost containment measures or other healthcare reforms may also limit our commercial opportunities by reducing the amount a potential collaborator is willing to pay to license our programs or drug candidates in the future, which may prevent us from being able to generate revenue, attain profitability, commercialize our products or establish and maintain collaborations.

Forecasting potential sales for drugs will be difficult, and if our projections are inaccurate, our business may be harmed and our stock price may be adversely affected.

Our business planning requires us to forecast or make assumptions regarding demand and revenues for our drugs if they are approved despite numerous uncertainties. These uncertainties may be increased if we rely on our collaborators to conduct commercial activities and provide us with accurate and timely information. Actual results may deviate materially from projected results for various reasons, including the following, as well as risks identified in other risk factors:

- the rate of adoption in the particular market, including fluctuations in demand for various reasons, such as fluctuations related to economic changes, national and world events, holidays and seasonal changes;
- pricing (including discounting or other promotions), reimbursement, product returns or recalls, competition, labeling, DEA scheduling, adverse events and other items that impact commercialization;
- lack of patient and physician familiarity with the drug;
- lack of patient use and physician prescribing history;
- lack of commercialization experience with the drug;

- actual sales to patients may significantly differ from expectations based on sales to wholesalers; and
- uncertainty relating to when the drug may become commercially available to patients and rate of adoption in other territories.

We expect that our revenues from drug sales will continue to be based in part on estimates, judgment and accounting policies, and incorrect estimates or regulators' or others' disagreement regarding such estimates or accounting policies may result in changes to guidance, projections or previously reported results. Expected and actual product sales and quarterly and other results may greatly fluctuate, including in the near-term, and such fluctuations can adversely affect the market price of our common stock, perceptions of our ability to forecast demand and revenues, and our ability to maintain and fund our operations.

Data generated or analyzed with respect to product use in the market or required postmarketing or other studies or trials may result in decreased demand, lower sales, product recall, regulatory action or litigation.

A New Drug Application, or NDA, holder (or the equivalent outside the United States) is responsible for assessing and monitoring the safety of a drug that has been approved for marketing, including reviewing reports of adverse safety events. In addition, NDA holders often conduct additional studies or trials or analyze new or previous data related to an approved drug, including with respect to required postmarketing studies and in connection with seeking additional regulatory approvals in new territories.

For example, as a condition to obtaining FDA approval of lorcaserin, the FDA required the conduct of postmarketing studies, including evaluation of the effect of long-term treatment with lorcaserin on the incidence of major adverse cardiovascular events, or MACE (non-fatal myocardial infarction, non-fatal stroke and cardiovascular death), in overweight and obese subjects with cardiovascular disease or multiple cardiovascular risk factors (otherwise known as the cardiovascular outcomes trial, or CVOT). The FDA-required portion of the trial is designed to evaluate lorcaserin's effect on the incidence of major adverse cardiovascular events compared to placebo, with a non-inferiority margin for the hazard ratio of 1.4. The trial also includes FDA-required echocardiographic assessments. Along with the FDA-required portion of the trial, we expect that the trial will include the non-FDA required evaluation of whether lorcaserin reduces the incidence of conversion to type 2 diabetes in patients without type 2 diabetes at baseline and the incidence of MACE+ (MACE or hospitalization for unstable angina or heart failure, or any coronary revascularization), both as compared to placebo. We expect that the trial (including the non-FDA required portion) will run for up to several more years, but the duration could be longer or shorter depending on the actual number of events observed. New data relating to lorcaserin, including from adverse event reports or required postmarketing, registration or other studies or trials, may result in label changes, may adversely affect sales or development, result in withdrawal of lorcaserin from the market, or result in litigation. In addition, analyses of previous data can have similar risks. We expect Eisai to continue to generate data from new studies and trials, as well as to continue analyzing existing data from previously conducted studies and trials, including for potential use in applications for the marketing approval of lorcaserin. Regulatory agencies may consider the new data or analyses in reviewing marketing applications for lorcaserin in their territories or impose post-approval requirements that require significant additional expenditures. Furthermore, the discovery of significant problems with a product or class of products similar to lorcaserin could have an adverse effect on the lorcaserin program, including commercialization.

The commercialization and continuing development of lorcaserin may be adversely impacted by cardiovascular side effects associated with drugs used for the treatment of obesity.

We developed lorcaserin to more selectively stimulate the serotonin 2C receptor than did fenfluramine or dexfenfluramine because we believe this may avoid the cardiovascular side effects associated with fenfluramine and dexfenfluramine (often used in combination with phentermine, the combination of which was commonly referred to as "fen-phen"). These two drugs were serotonin-releasing agents and non-selective serotonin receptor agonists, and were withdrawn from the market in 1997 after reported incidences of heart valve disease and pulmonary hypertension associated with their usage. In in vitro studies examining affinity, activity and serotonin receptor subtype specificity, lorcaserin demonstrated affinity for, and activity at, serotonin 2A, 2B and 2C receptors, but demonstrated greater affinity, activity and selectivity for the serotonin 2C receptor than for the serotonin 2A and 2B receptors. Activation of the latter two receptors has been associated with undesirable effects. Activation of the 2A receptor has been associated with central nervous system, or CNS, effects, including altered perception, mood and abuse potential, and activation of the 2B receptor has been associated with cardiac valvulopathy.

We may not be correct in our belief that more selectively stimulating the serotonin 2C receptor will avoid these undesired side effects, or lorcaserin's selectivity profile may not be adequate to avoid these side effects. Lorcaserin's selectivity profile and the potential relationship between the activity of lorcaserin and the activity of fenfluramine and

dexfenfluramine may result in increased regulatory scrutiny of the safety of lorcaserin, may raise potential adverse publicity and may affect product sales or result in litigation.

If we license or otherwise partner our drugs, our failure to maintain such agreements or poor performance under such agreements could negatively impact our business.

Our collaborators may have primary responsibility for the regulatory approval and, ultimately, marketing and distribution of our drug candidate in the territory or territories under the applicable collaboration. We may have limited or no control over the amount and timing of resources that any of these collaborators will dedicate to such activities. This is the case with lorcaserin and our license agreement with Eisai.

When we enter collaboration agreements, we are subject to a number of other risks, including:

- our collaborators may not comply with applicable regulatory guidelines, which could adversely impact the commercialization or development of the drug candidate;
    - there could be disagreements regarding the agreements or the study or development that delay or terminate the commercialization, research, study or development, delay or eliminate potential payments under the agreements or increase our costs under or outside of the agreements;
- our collaborators may not effectively allocate adequate resources or may have limited experience in a particular territory; and
- our collaborators may not perform as expected, including with regard to making any required payments, and the agreements may not provide adequate protection or may not be effectively enforced.

We or our collaborators might terminate our agreements in certain circumstances or amend the terms of our agreement, and investors and analysts may not view any termination or amendments as favorable.

We are responsible for manufacturing lorcaserin and certain other drugs. We also rely on other companies, including third-party manufacturers and sole-source suppliers, and we or such other companies may encounter failures or difficulties or not receive or provide adequate supply, which could adversely affect development or commercialization.

Our drug product manufacturing facility in Switzerland is currently the only source for finished drug product of lorcaserin.

In addition, we do not own or operate manufacturing facilities that can produce active pharmaceutical ingredient, or API, intermediates and other material required to make our drug candidates or lorcaserin. Instead, we currently contract with other companies to supply API, intermediates and other materials. Certain of these materials are available from only one or a small number of suppliers, and using a new supplier, if available, could result in substantial delay and greater cost. Our dependence on single or limited sources of materials may adversely affect our ability to develop and deliver drug products on a timely and competitive basis, or at all.

Any performance failure on the part of us or a third-party manufacturer could result in a product recall or seizure, delay or otherwise adversely affect sales of an approved product or the clinical development or regulatory approval of lorcaserin or one or more of our other drug candidates. We or third-party manufacturers may encounter difficulties involving production yields, regulatory compliance, lot release, quality control and quality assurance, as well as shortages of qualified personnel. For example, in December 2014, Eisai and we discovered that a small number of bottles of lorcaserin in a limited number of lots had a missing or incomplete label, and, as a precautionary measure, Eisai voluntarily initiated a recall from wholesalers of the involved lots for inspection.

The ability to adequately and timely manufacture and supply drug product is dependent on the uninterrupted and efficient operation of the manufacturing facilities, which is impacted by many manufacturing variables, including:

- availability or contamination of raw materials and components used in the manufacturing process, particularly those for which we have no other source or supplier;
- capacity of our facilities or those of our contract manufacturers;
- having the ability to adjust to changes in actual or anticipated use of the facility, including with respect to having sufficient capacity and a sufficient number of qualified personnel;
- facility contamination by microorganisms or viruses or cross contamination;
- compliance with regulatory requirements, including inspectional notices of violation and warning letters;
- maintenance and renewal of any required licenses or certifications;
- changes in actual or forecasted demand;

- timing and number of production runs;
- production success rates and bulk drug yields; and
- timing and outcome of product quality testing.

In addition, we or our third-party manufacturers may encounter delays and problems in manufacturing our drug candidates or drugs for a variety of reasons, including accidents during operation, failure of equipment, delays in receiving materials, natural or other disasters, political or governmental unrest or changes, social unrest, intentional misconduct or other factors inherent in operating complex manufacturing facilities. Commercially available starting materials, reagents and excipients may be or become scarce or more expensive to procure, and we may not be able to obtain favorable terms in agreements with subcontractors. We or our third-party manufacturers may not be able to operate our respective manufacturing facilities in a cost-effective manner or in a time frame that is consistent with our expected future manufacturing needs. If we or our third-party manufacturers cease or interrupt production or if our third-party manufacturers and other service providers fail to supply materials, products or services to us for any reason, such interruption could delay progress on our programs, or interrupt the commercial supply, with the potential for additional costs and lost revenues. If this were to occur, we may also need to seek alternative means to fulfill our manufacturing needs.

We may not be able to enter into or maintain agreements with manufacturers whose facilities and procedures comply with applicable law. Manufacturers are subject to ongoing periodic inspection (which may be unannounced) by the FDA, the DEA, corresponding state and foreign authorities and other regulatory authorities to ensure strict compliance with Current Good Manufacturing Practices, or cGMPs, regulations and other applicable government regulations and corresponding foreign standards. We do not have control over a third-party manufacturer's compliance with these regulations and standards. In addition, we have contracted with Siegfried to provide to us certain business and technical services, including safety, health and environmental services. We are, therefore, relying at least in part on Siegfried's judgment, experience and expertise. We intend to reduce or eliminate our dependence on Siegfried for such business and technical services, and any changes may result in increased cost, additional risk or otherwise negatively impact our operations. If we or one of our manufacturers or other company in the supply chain fail to maintain compliance or otherwise experience setbacks, we or they could be subject to civil or criminal penalties, the production of one or more of our drug candidates or lorcaserin could be interrupted or suspended, or our product could be recalled or withdrawn, resulting in delays, additional costs and potentially lost revenues.

Our drug candidates are subject to extensive regulation, and we may not receive required regulatory approvals, or timely approvals, for any of our drug candidates.

Preclinical and clinical development, manufacturing, labeling, packaging, storage, recordkeeping, advertising, promotion, export, marketing and distribution, and other activities relating to developing and manufacturing drugs are subject to extensive regulation by the FDA and other regulatory agencies. We are subject to periodic inspections (which may be unannounced) by the FDA, the DEA and other regulatory agencies, including inspections at our Swiss manufacturing facility. Failure to comply with applicable regulatory requirements may, either before or after product approval, subject us to administrative or judicially imposed sanctions that may negatively impact research and development or commercialization, or otherwise negatively impact our business. Regulatory agencies have in the past inspected certain aspects of our business in the United States and Switzerland, and we were provided with observations of objectionable conditions or practices with respect to our business in the United States. There is no assurance that regulatory agencies will not provide us with observations in future inspections or that we satisfactorily addressed observations provided to us in past inspections.

Regulatory approval of a drug candidate is not guaranteed, and our business and reputation may be harmed by any failure or significant delay in receiving regulatory approval. The number and types of preclinical studies and clinical trials that will be required for FDA approval varies depending on the drug candidate, the disease or condition that the drug candidate is designed to target and the regulations applicable to any particular drug candidate. Despite the time and expense exerted in preclinical and clinical studies, failure can occur at any stage, and we could encounter problems that cause us to abandon clinical trials or to repeat or perform additional preclinical studies and clinical trials.

We cannot predict when or whether, or assure you that, our collaborators' or our past or any future regulatory submissions or responses will be sufficient to the applicable regulatory authority or others, that the applicable regulatory authority or others will consider data or our analyses, interpretations or procedures related to any of our drug candidates as sufficient or persuasive, or that any regulatory authority will ever approve any of our drug candidates in the future.

To market any drugs outside of the United States, we and our current or future collaborators must comply with numerous and varying regulatory requirements of other countries. Approval procedures vary among countries and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries might differ from that required to obtain FDA approval. The regulatory approval process in other countries may include all of the risks associated with FDA approval as well as additional risks, some of which may be unanticipated. The approval by the FDA or any other regulatory authority does not assure or predict with any certainty that any other regulatory authority will approve the drug.

In addition, existing regulatory policies and laws may change. We cannot predict the likelihood, nature or extent of new government regulation, either in the United States or in other countries, or the impact on our drug candidates or drugs. For example, new FDA regulation could delay or prevent marketing approvals, increase the cost of research and development, and result in narrower product labeling and expensive post-marketing requirements.

Our activities and drugs will still be subject to extensive postmarketing regulation if approved.

Following regulatory approval of any of our drug candidates, we and our collaborators will be subject to ongoing obligations and continued regulatory review from the FDA and other applicable regulatory agencies, such as continued adverse event reporting requirements. There may also be additional postmarketing obligations imposed by the FDA or other regulatory agencies. These obligations may result in significant expense and limit the ability to commercialize such drugs.

The FDA or other regulatory agencies may also require that the sponsor of the NDA or foreign equivalent, as applicable, conduct additional clinical trials to further assess approved drugs after approval under a post-approval commitment. Such additional studies may be costly and may impact the commercialization of the drug. For example, as part of the approval of BELVIQ, the FDA required the conduct of the CVOT described above as well as postmarketing studies to assess the safety and efficacy of BELVIQ for weight management in obese pediatric and adolescent patients. Along with being costly and time consuming, a delay or unfavorable results from these trials could negatively impact market acceptance of BELVIQ; limit the revenues we generate from sales; result in BELVIQ's withdrawal from the market; negatively impact the potential approval of lorcaserin in other territories for weight management, for other indications, in combination with other agents or using different formulations; and result in litigation.

The FDA or other regulatory agencies may also impose significant restrictions on the indicated uses for which a drug may be marketed. Additionally, the FDA may require a Risk Evaluation and Mitigation Strategies, or REMS, study, including in connection with a drug's approval, to help ensure that the benefits of the drug outweigh its risks. A REMS may be required to include various elements, such as a medication guide or patient package insert, a communication plan to educate healthcare providers of the drug's risks, limitations on who may prescribe or dispense the drug, requirements that patients enroll in a registry or undergo certain health evaluations or other measures that the FDA deems necessary to ensure the safe use of the drug.

With regard to any of drug that receives regulatory approval, the labeling, packaging, adverse event reporting, storage, advertising and promotion for the drug will be subject to extensive regulatory requirements. We and the manufacturers of our products are also required to comply with cGMP regulations, which include requirements relating to quality control and quality assurance, as well as the corresponding maintenance of records and documentation. Further, regulatory agencies must approve these manufacturing facilities before they can be used to manufacture our products, and these facilities are subject to ongoing regulatory inspections. In addition, regulatory agencies subject a drug, its manufacturer and the manufacturer's facilities to continual review and inspections. The subsequent discovery of previously unknown problems with a drug, including adverse events of unanticipated severity or frequency, or problems with the facility where the drug is manufactured, may result in restrictions on the marketing of that drug, up to and including withdrawal of the drug from the market. In the United States, the DEA and comparable state-level agencies also heavily regulate the manufacturing, holding, processing, security, recordkeeping and distribution of drugs that are considered controlled substances, and the DEA periodically inspects facilities for compliance with its rules and regulations.

Our ability to generate revenues from any of our drugs that receive regulatory approval will be subject to a variety of risks, many of which are out of our control.

Any drug that may be approved for marketing may not gain market acceptance among patients, healthcare providers, healthcare payers or the medical community. We believe that the degree of market acceptance and our ability to generate revenues from such products will depend on a number of factors, including:

- timing of market introduction of our drugs and competitive drugs and alternative treatments;

- actual and perceived efficacy and safety of our drugs;
- incidence and severity of any side effects;
- potential or perceived advantages or disadvantages as compared to alternative treatments;
- effectiveness of sales, marketing and distribution support;
- price of our future products, both in absolute terms and relative to alternative treatments;
- the general marketplace for the particular drug;
- the effect of current and future healthcare laws on our drug candidates;
- availability of coverage and adequate reimbursement from government and other third-party payers; and
- product labeling or product insert requirements of the FDA or other regulatory authorities.

If our approved drugs fail to achieve market acceptance, we may not be able to generate significant revenues to be profitable.

Collaboration relationships may lead to disputes and delays in drug development and commercialization, and we may not realize the full commercial potential of our drug candidates or drugs.

We may have conflicts with our prospective, current or past collaborators, such as conflicts concerning rights and obligations under our agreements, the interpretation of preclinical or clinical data, the achievement of milestone or other payments, the ownership of intellectual property, or research and development, regulatory, commercialization or other strategy. Collaborators may stop supporting our drug candidates or drugs, including if they no longer view the program as in their best financial or other interests or they develop or obtain rights to competing drug candidates or drugs. In addition, collaborators may fail to effectively develop, obtain approval for or commercialize our drugs, which may result in us not realizing their full commercial potential. If any conflicts arise with any of our current, past or prospective collaborators, the other party may act in a manner that is adverse to our interests. Any such disagreement could result in one or more of the following, each of which could delay, or lead to termination of, development or commercialization of our drug candidates or drugs, and in turn prevent us from generating revenues:

- unwillingness on the part of a collaborator to pay for studies or other research, milestones, royalties or other payments that we believe are due to us under a collaboration;
- uncertainty regarding ownership of intellectual property rights arising from our collaboration activities, which could prevent us from entering into additional collaborations;
- unwillingness on the part of a collaborator to keep us informed regarding the progress of its development, regulatory, commercialization, pharmacovigilance or other activities or to permit public disclosure of the results of those activities;
- slowing or cessation of a collaborator's research, development, regulatory or commercialization efforts with respect to our drug candidates or drugs; or
- litigation or arbitration.

We have obtained orphan drug designation from the FDA for ralinepag for the treatment of PAH, but we may be unable to maintain the benefits associated with orphan drug designation, including the potential for market exclusivity.

Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug intended to treat a rare disease or condition, which is defined as one occurring in a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. In addition, if a drug that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the drug is entitled to orphan drug exclusivity, which means that the FDA may not approve any other applications to market the same drug for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the drug with orphan drug exclusivity or where the manufacturer is unable to assure sufficient drug quantity.

Even though ralinepag has been granted orphan drug status for the treatment of PAH, exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan-designated indication or may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the drug to meet the needs of patients with the rare disease or condition. Further, even if we obtain orphan drug exclusivity for a drug, that exclusivity may not effectively protect the drug from competition because different drugs with different active moieties (which is the molecule or ion responsible for the action of the drug substance) can be approved for the same condition. Even after an orphan drug is approved, the FDA can subsequently approve the same drug with the same active moiety for the same condition if the FDA concludes that the later drug is safer, more effective, or makes a major contribution to patient care. Orphan drug designation neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process.

Setbacks and consolidation in the pharmaceutical and biotechnology industries could make entering into agreements with pharmaceutical companies to collaborate or commercialize our drugs more difficult and diminish our revenues.

Setbacks in the pharmaceutical and biotechnology industries, such as those caused by safety concerns relating to drugs or drug candidates, as well as competition from generic drugs, litigation and industry consolidation, may have an adverse effect on us, including by making it more difficult to enter into agreements with pharmaceutical companies to collaborate or commercialize our drugs and diminishing our revenues. For example, the FDA may be more cautious in approving our drug candidates based on safety concerns relating to these or other drugs or drug candidates, or pharmaceutical companies may be less willing to enter into new collaborations or continue existing collaborations if they are integrating a new operation as a result of a merger or acquisition or if their therapeutic areas of focus change following a merger.

We and our collaborators may from time to time rely on third parties to conduct clinical trials and preclinical studies. If those parties do not comply with regulatory and contractual requirements, successfully carry out their contractual obligations or meet expected deadlines, our drug candidates may not advance in a timely manner or at all.

In the course of our discovery, preclinical testing and clinical trials, we and our collaborators may from time to time rely on third parties, including laboratories, investigators, clinical research organizations and manufacturers, to perform critical services. For example, we rely on third parties to conduct our clinical trials and many of our preclinical studies. Clinical research organizations are responsible for many aspects of the trials, including finding and enrolling subjects for testing and administering the trials. Although we rely on these third parties to conduct our clinical trials, we are responsible for ensuring that each of our clinical trials is conducted in accordance with its investigational plan and protocol. Moreover, the FDA and foreign regulatory authorities require us to comply with regulations and standards, commonly referred to as Good Clinical Practices, or GCPs, for conducting, monitoring, recording and reporting the results of clinical trials to ensure that the data and results are scientifically credible and accurate and that the trial subjects are adequately informed of the potential risks of participating in clinical trials. Our reliance on third parties does not relieve us of these responsibilities and requirements. These third parties may not be available when we need them or, if they are available, may not comply with all regulatory and contractual requirements or may not otherwise perform their services in a timely or acceptable manner, and we may need to enter into new arrangements with alternative third parties and our preclinical studies or clinical trials may be extended, delayed or terminated. These independent third parties may also have relationships with other commercial entities, some of which may compete with us. In addition, if such third parties fail to perform their obligations in compliance with regulatory requirements and our protocols, our preclinical studies or clinical trials may not meet regulatory requirements or may need to be repeated. As a result of our dependence on third parties, we may face delays or failures outside of our direct control. These risks also apply to the development activities of collaborators, and we do not control their research and development, clinical trial or regulatory activities.

We may participate in new strategic transactions that could impact our liquidity, increase our expenses, present significant distractions to our management and be viewed as unfavorable.

From time to time we consider strategic transactions, such as out-licensing or in-licensing of compounds or technologies, acquisitions of companies and asset purchases. Additional potential transactions we may consider include a variety of different business arrangements, such as strategic collaborations, joint ventures, spin-offs, restructurings, divestitures, business combinations and investments. In addition, another entity may pursue us as an acquisition target. Any such transaction may be viewed as unfavorable by our stockholders or others and may require us to incur non-recurring or other charges, may create potential liabilities, may increase our near- and long-term expenditures and may pose significant integration challenges, require additional expertise or disrupt our management or business, which could harm our operations and financial results.

As part of an effort to enter into significant transactions, we conduct business, legal and financial due diligence with the goal of identifying and evaluating material risks involved in the transaction. Despite our efforts, we ultimately may be unsuccessful in ascertaining or evaluating all such risks and, as a result, might not realize the intended advantages of the transaction. If we fail to realize the expected benefits from any transaction we may consummate, whether as a result of unidentified risks, integration difficulties, regulatory setbacks or other events, our business, results of operations and financial condition could be adversely affected.

We may incur substantial liabilities for any product liability claims or otherwise as a drug product manufacturer.

We develop, test, manufacture and expect to commercialize drugs for use by humans. We face an inherent risk of product liability exposure related to the testing of our drug candidates in clinical trials, and face an even greater risk with the commercialization of lorcaserin as well as any other drug that may be approved for marketing. In addition,

under our agreement with Eisai, Arena GmbH and Eisai will, for a limited period of time, in general share equally in losses resulting from third-party product liability claims relating to lorcaserin, with certain limited exceptions.

Whether or not we are ultimately successful in any product liability or related litigation, such litigation would consume substantial amounts of our financial and managerial resources, and might result in adverse publicity, all of which would impair our business. In addition, damages awarded in a product liability action could be substantial and could have a negative impact on our financial condition.

An individual may bring a liability claim against us if one of our drugs or drug candidates causes, or merely appears to have caused, an injury. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for our drug;
- injury to our reputation;
- increased difficulty to attract, or withdrawal of, clinical trial subjects;
- costs of related litigation;
- substantial monetary awards to subjects or other claimants;
- loss of revenues; and
- the inability to commercialize our drug candidates.

We will have limited product liability insurance that covers our clinical trials and products. We may not be able to maintain or obtain insurance coverage at a reasonable cost, and we may not have insurance coverage that will be adequate to satisfy any liability that may arise, which could have an adverse effect on our results of operations and financial condition.

We expect that Arena GmbH will, from time to time, manufacture BELVIQ for commercialization and lorcaserin and other drug candidates for clinical trials or other studies and potentially commercialization. Arena GmbH will also, from time to time, manufacture certain drug products for other companies. Arena GmbH is subject to liability for non-performance, product recalls and breaches of the agreements with our collaborators and other third parties.

We have significant contractual obligations, which may adversely affect our cash flow, cash position and stock price.

We have long-term leases on real properties and other contractual obligations. If we are unable to generate cash from operations sufficient to meet our financial obligations, we will need to obtain additional funds from other sources, which may include one or more financings. However, we may be unable to obtain sufficient additional funds when we need them on favorable terms or at all. The sale of equity or convertible debt securities or other financing transaction in the future may be dilutive to our stockholders, and some financing arrangements may require us to enter into covenants that would further restrict certain business activities or our ability to incur additional indebtedness or conduct other financing transactions, and may contain other terms that are not favorable to our stockholders or us.

Also, if we are unable to generate cash from operations or obtain additional funds from other sources sufficient to meet our contractual obligations, or we need to use existing cash to fund our contractual obligations, we may have to delay or curtail some or all of our development and commercialization programs, sell or license some or all of our assets on terms that you or others may view as unfavorable, or default under our agreements. Our contractual obligations could have significant additional negative consequences, including, without limitation:

- increasing our vulnerability to general adverse economic conditions;
- limiting our ability to obtain additional funds;
- placing us at a possible competitive disadvantage to less leveraged competitors and competitors that have better access to capital resources; and
- litigation or other disagreements.

We may be subject, directly or indirectly, to federal and state healthcare laws, including but not limited to fraud and abuse and false claims laws. If we are unable to comply, or have not fully complied, with such laws, we could face substantial penalties and prosecution.

In the United States, drug manufacturers and marketers are subject to various state and federal fraud and abuse laws, including, without limitation, the Federal Anti-Kickback Statute and Federal False Claims Act. There are similar laws in other countries. These laws may impact, among other things, the research, manufacturing, sales, marketing and education programs for our drugs.

34

The Federal Anti-Kickback Statute prohibits persons and entities from knowingly and willingly soliciting, offering, receiving or providing any remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual, or the purchase, lease, order or the furnishing or arranging for, a good, item, facility or service, for which payment may be made, in whole or in part, under a federal healthcare program such as the Medicare and Medicaid programs. Several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the statute has been violated. The Federal Anti-Kickback Statute is broad and, despite a series of narrow statutory exceptions and regulatory safe harbors, prohibits many arrangements and practices that are lawful in businesses outside of the healthcare industry. Moreover, the ACA, among other things, amended the intent requirement of the Federal Anti-Kickback Statute and certain criminal healthcare fraud statutes. A person or entity no longer needs to have actual knowledge of these statutes or specific intent to violate them. The ACA also provides that the government may assert that a claim including items or services resulting from a violation of the Federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the Federal Civil False Claims Act. Many states have also adopted laws similar to the Federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare items or services reimbursed by any source, not only the Medicare and Medicaid programs.

The Federal Civil False Claims Act prohibits, among other things, persons or entities from knowingly presenting, or causing to be presented, a false claim to, or the knowing use of false statements to obtain payment from the federal government. Suits filed under the Federal Civil False Claims Act can be brought by any individual on behalf of the government, known as "qui tam" actions, and such individuals, commonly known as "whistleblowers," may share in any amounts paid by the entity to the government in fines or settlement. The filing of qui tam actions has caused a number of pharmaceutical, medical device and other healthcare companies to have to defend a Federal Civil False Claims Act action. When an entity is determined to have violated the Federal Civil False Claims Act, it may be required to pay up to three times the actual damages sustained by the government, plus civil penalties for each separate false claim, in addition to other penalties that may apply. Various states have also enacted laws modeled after the Federal Civil False Claims Act, some of which are broader in scope and may apply regardless of payer.

The Federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, created federal criminal statutes that prohibit, among other actions, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payers, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Additionally, the civil monetary penalties statute imposes penalties against any person or entity that, among other things, is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent.

The Federal Physician Payment Sunshine Act, created under the ACA, and its implementing regulations requires certain manufacturers of drugs, devices, biologicals 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, or HHS, information related to payments or other transfers of value made 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.

We may be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and their respective implementing regulations, impose specified requirements relating to the privacy, security and transmission of individually identifiable health information.

Additionally, the Drug Supply Chain Security Act imposes obligations on manufacturers of pharmaceutical products, among others, related to product tracking and tracing. Among the requirements, manufacturers will be required to provide certain information regarding the drug product to individuals and entities to which product ownership is transferred, label drug product with a product identifier, and keep certain records regarding the drug product. The transfer of information to subsequent product owners by manufacturers will eventually be required to be done electronically. Manufacturers will also be required to verify that purchasers of the manufacturers' products are appropriately licensed. Further, manufacturers will have drug product investigation, quarantine, disposition, and notification responsibilities related to counterfeit, diverted, stolen, and intentionally adulterated products, as well as products that are the subject of fraudulent transactions or which are otherwise unfit for distribution such that they would be reasonably likely to result in serious health consequences or death.

We are unable to predict whether we could be subject to actions under any of these fraud and abuse or other laws, or the impact of such actions. If we are found to be in violation of any of the laws described above and other applicable state and federal fraud and abuse laws, we may be subject to penalties, including civil, criminal and/or administrative penalties, damages, fines, individual imprisonment, disgorgement, possible exclusion from government healthcare reimbursement programs and the curtailment or restructuring of our operations, all of which could have a material adverse effect on our business and results of operations.

We may not be able to effectively integrate, manage or maintain our international operations, and such difficulty could adversely affect our business operations, financial condition, results of operations and stock price.

The headquarters of our operations outside of the United States is in Switzerland. Activities conducted in Switzerland include clinical operations and regulatory, manufacturing, quality control, quality assurance, development of manufacturing processes, qualifying suppliers and otherwise managing aspects of the supply chain, regulatory compliance, distribution of finished products, alliance management, and strategic planning and development. We also have drug candidates in clinical trials outside of the United States. There are significant risks associated with foreign operations, including, but not limited to, compliance with local laws and regulations, the protection of our intellectual property, the ability to integrate our corporate culture with local customs and cultures, the distraction to our management, foreign currency exchange rates and the impact of shifts in the United States and local economies on those rates, and integration of our policies and procedures, including disclosure controls and procedures and internal control over financial reporting, with our international operations.

With respect to local laws and regulations, the European Union, Switzerland and certain other foreign territories have restrictions on the transfer, use and maintenance of certain personal data, including providing that transfers of personal data outside of their territories may only take place if the country to which the personal data is transferred ensures an "adequate" level of privacy protection. The European Commission has previously found that the United States did not provide adequate levels of protection. Any restrictions on our data transfers may negatively impact our ability and increase our costs to maintain international operations, including our Swiss manufacturing facility and clinical trials and other studies.

In October 2015 and July 2016, we initiated measures to reduce our expenditures and streamline our operations in Switzerland, including changes with respect to the staffing, process, procedures and strategy relating our Swiss manufacturing facility and our ongoing Phase 2 clinical trials. These staffing and other changes may increase risks related to our international operations as well as our operations in general.

We use biological materials, hazardous materials, chemicals and radioactive compounds.

Our activities involve the use of potentially harmful biological materials, as well as materials, chemicals and various radioactive compounds that could be hazardous to human health and safety or the environment. These materials and various wastes resulting from their use are stored at our facility pending ultimate use and disposal. We cannot completely eliminate the risk of contamination, which could cause:

- interruption of our development or manufacturing efforts;
- injury to our employees and others;
- environmental damage resulting in costly clean up; and
- liabilities under domestic or foreign laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products.

In such an event, we may be held liable for any resulting damages, and any such liability could exceed our resources. Although we carry insurance in amounts and type that we consider commercially reasonable, we cannot be certain that the coverage or coverage limits of our insurance policies will be adequate, and we do not have insurance coverage for losses relating to an interruption of our research and development efforts caused by contamination.

Our business and operations might be adversely affected by business disruptions and security breaches, including any cybersecurity incidents.

Our US operations are located in a business park in San Diego, and our clinical operations outside the US are located in single building in Zug, Switzerland. We also have a drug product manufacturing facility in Zofingen, Switzerland,

and we expect that, at least for the near-term, this facility will be the sole location for the manufacturing of lorcaserin finished drug product. We depend on our facilities and on collaborators, contractors and vendors for the continued operation of our business, some of whom are located in Europe and Asia. Natural disasters or other catastrophic events, including interruptions in the supply of natural resources, political and governmental changes, disruption in transportation networks or delivery services, severe weather conditions, wildfires and other fires, explosions, actions of animal rights activists, terrorist attacks, earthquakes and wars could disrupt our operations or those of our collaborators, contractors and vendors.

We depend on the efficient and uninterrupted operation of our computer and communications systems, which we use for, among other things, sensitive company data, including our financial data, intellectual property and other proprietary business information.

While certain of our operations have business continuity and disaster recovery plans and other security measures intended to prevent and minimize the impact of IT-related interruptions, our IT infrastructure and the IT infrastructure of our current and any future collaborators, contractors and vendors are vulnerable to damage from cyberattacks, computer viruses, unauthorized access, electrical failures and natural disasters or other catastrophic events. We could experience failures in our information systems and computer servers, which could result in an interruption of our normal business operations and require substantial expenditure of financial and administrative resources to remedy. System failures, accidents or security breaches can cause interruptions in our operations and can result in a material disruption of our research and development programs, manufacturing or commercialization activities and other business operations. The loss of data from completed or future studies or clinical trials could result in delays in our research, development or regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Similarly, we rely on third parties to supply materials for the manufacture of our drug candidates and lorcaserin, conduct studies and clinical trials of our drug candidates and warehouse, market and distribute lorcaserin, and similar events relating to their computer systems could also have a material adverse effect on our business. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liabilities and the development of any of our other drug candidates and the commercialization of drugs could be delayed or otherwise adversely affected.

Even though we believe we carry commercially reasonable business interruption and liability insurance, and our contractors may carry liability insurance that protect us in certain events, we might suffer losses as a result of business interruptions that exceed the coverage available under our and our contractors' insurance policies or for which we or our contractors do not have coverage. For example, we are not insured against a terrorist attack. Any natural disaster or catastrophic event could have a significant negative impact on our operations and financial results. Moreover, any such event could delay our research and development programs and adversely affect, which may include stopping, our commercial production.

We and certain of our current and former employees and directors have been named as defendants in litigation that could result in substantial costs and divert management's attention.

Beginning in September 2010, a number of lawsuits were filed against us and certain of our employees and directors on behalf of certain purchasers of our common stock. The lawsuits in general include allegations that we and certain of our employees and directors violated laws by making materially false and misleading statements regarding our BELVIQ trials, thereby artificially inflating the price of our common stock. The plaintiffs are seeking unspecified monetary damages and other relief.

There is no guarantee that we will be successful in defending these lawsuits. Also, our insurance coverage may be insufficient, our assets may be insufficient to cover any amounts that exceed our insurance coverage, and we may have to pay damage awards or otherwise may enter into settlement arrangements in connection with such claims. A settlement of any of these lawsuits could involve the issuance of common stock or other equity, which may dilute your ownership interest. Any payments or settlement arrangements could have material adverse effects on our business, operating results, financial condition or your ownership interest. Even if the plaintiffs' claims are not successful, this litigation could result in substantial costs and significantly and adversely impact our reputation and divert management's attention and resources, which could have a material adverse effect on our business, operating results or financial condition. In addition, such lawsuits may make it more difficult to finance our operations, obtain certain types of insurance (including directors' and officers' liability insurance), and attract and retain qualified executive officers, other employees and directors.

Our executive officers and directors may sell shares of their stock, and these sales could adversely affect our stock price.

Sales of our stock by our executive officers and directors, or the perception that such sales may occur, could adversely affect the market price of our stock. Our executive officers and directors may sell stock in the future, either as part, or outside, of trading plans under Rule 10b5-1 of the US Securities and Exchange Commission, or SEC.

Negative US and global economic conditions may pose challenges to our business strategy, which relies on funding from collaborators or the financial markets, and creates other financial risks for us.

Negative conditions in the US or global economy, including financial markets, may adversely affect our business and the business of our current and prospective collaborators, distributors and licensees, which we sometimes refer to generally as our collaborators, and others with which we do or may conduct business. The duration and severity of these conditions is uncertain. If negative economic conditions persist or worsen, we may be unable to secure funding to sustain our operations or to find suitable collaborators to advance our internal programs, even if we achieve positive results from our research and development or business development efforts. Such negative conditions could also impact commercialization of BELVIQ or any other drugs we develop as well as our financial condition.

From time to time, we may maintain a portfolio of investments in marketable debt securities, which are recorded at fair value. Although we have established investment guidelines relative to diversification and maturity with the objectives of maintaining safety of principal and liquidity, we rely on credit rating agencies to help evaluate the riskiness of investments, and such agencies may not accurately predict such risk. In addition, such agencies may reduce the credit quality of our individual holdings, which could adversely affect their value. Lower credit quality and other market events, such as changes in interest rates and further deterioration in the credit markets, may have an adverse effect on the fair value of our investment holdings and cash position.

Currency fluctuations may negatively affect our financial condition.

We primarily spend and generate cash in US dollars, and present our consolidated financial statements in US dollars. However, a portion of our expected and potential payments and receipts under our agreements are in foreign currencies, including Swiss francs. For example, payments and receipts under our agreements with Siegfried are required to be paid in Swiss francs. A fluctuation of the exchange rates of foreign currencies versus the US dollar may, thus, adversely affect our financial results, including cash balances, expenses and revenues. We may in the future enter into hedging transactions to try to reduce our foreign currency exposure, but there is no assurance that such transactions will occur or be successful.

Laws, rules and regulations relating to public companies may be costly and impact our ability to attract and retain directors and executive officers; our disclosure controls and procedures and our internal control over financial reporting may not prevent potential errors and fraud.

Laws and regulations affecting public companies, including rules adopted by the SEC and by NASDAQ, as well as the laws and regulations of foreign governments, may result in increased costs to us, particularly as we continue to develop the required capabilities in the United States and abroad to commercialize our products. These laws, rules and regulations could make it more difficult or costly for us to obtain certain types of insurance, including directors' and officers' liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, on our board committees or as executive officers. We cannot estimate accurately the amount or timing of additional costs we may incur to respond to these laws, rules and regulations.

Our management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all potential errors and 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. There are inherent limitations in all control systems, and no system of controls can provide absolute assurance that all control issues and instances of fraud, if any, or misstatements due to error, if any, within the company have been detected. While we believe that our disclosure controls and procedures and internal control over financial reporting are and have been effective at the reasonable assurance level, we intend to continue to examine and refine our disclosure controls and procedures and internal control over financial reporting and to monitor ongoing developments in these areas.

Risks Relating to Our Intellectual Property

Our success is dependent on intellectual property rights held by us and third parties and our interest in these rights is complex and uncertain.

Our success will depend on our own and on current or future collaborators' abilities to obtain, maintain and defend patents. In particular, the patents directed to our drug candidates and drugs are important to developing and commercializing drugs and our revenue. We have numerous US and foreign patents issued and patent applications

pending for our technologies. There is no assurance that any of our patent applications will issue, or that any of the patents will be enforceable or will cover a drug or other commercially significant technology or method, or that the patents will be held to be valid for their expected terms.

The procedures for obtaining a patent are complex. These procedures require an analysis of the scientific technology related to the invention and many sophisticated legal issues. Obtaining patent rights outside the United States often requires the translation of highly technical documents and an improper translation may jeopardize our patent protection. Ensuring adequate quality of translators and foreign patent attorneys is often very challenging. Consequently, the process for having our pending patent applications issue as patents will be difficult, complex and time consuming. Our patent position is very uncertain and we do not know when, or if, we will obtain additional patents, or if the scope of the patents obtained will be sufficient to protect our drugs, or be considered sufficient by parties reviewing our patent positions pursuant to a potential marketing, licensing or financing transaction.

In addition, other entities may challenge the validity or enforceability of our patents in litigation or administrative proceedings. We cannot make assurances as to how much protection, if any, our patents will provide if we attempt to enforce them or they are challenged. It is possible that a competitor or a generic pharmaceutical provider may successfully challenge our patents and those challenges may result in reduction or elimination of our patent coverage.

We also rely on confidentiality agreements and trade secrets to protect our technologies. However, such information is difficult to protect. We require our employees to contractually agree not to improperly use our confidential information or disclose it to others, but we may be unable to determine if our employees have conformed or will conform to their legal obligations under these agreements. We also enter into confidentiality agreements with prospective collaborators, collaborators, service providers and consultants, but we may not be able to adequately protect our trade secrets or other proprietary information in the event of any unauthorized use or disclosure or the lawful development by others of this information. Many of our employees and consultants were, and many of them may currently be, parties to confidentiality agreements with other pharmaceutical and biotechnology companies, and the use of our technologies could violate these agreements. In addition, third parties may independently discover our trade secrets or other proprietary information.

Some of our research and development collaborators and scientific consultants have rights to publish data and information to which we have rights. We generally seek to prevent our collaborators and consultants from disclosing scientific discoveries before we have the opportunity to file patent applications on such discoveries. In some of our collaborations, we do not control our collaborators' ability to disclose their own discoveries under the collaboration and in some of our academic relationships we are limited to relatively short periods to review a proposed publication and file a patent application. If we cannot maintain confidentiality in connection with our collaborations and relationships, our ability to receive patent protection or protect our proprietary information will be impaired.

We believe that the United States is by far the largest single market for pharmaceuticals in the world. Because of the critical nature of patent rights to our industry, changes in US patent laws could have a profound effect on our future profits, if any. It is unknown which, if any, patent laws will change, how changes to the patent laws will ultimately be enforced by the courts and the impact on our business.

A dispute regarding the infringement or misappropriation of our proprietary rights or the proprietary rights of others could be costly and result in delays or termination of our future research, development, manufacturing and sales activities.

Our commercial success depends upon our ability to develop and manufacture our drugs and drug candidates, market and sell drugs, and conduct our research and development activities without infringing or misappropriating the proprietary rights of others. There are many issued patents and pending patent applications owned by others relating to research and development programs that could be determined to be similar, identical or superior to ours or our licensors or collaborators. We may be exposed to future litigation by others based on claims that our drugs, drug candidates, technologies or activities infringe the intellectual property rights of others. Numerous issued patents and pending patent applications owned by others exist in the areas of our research and development, including some which purport to allow the patent holder to control the use of all drugs that modulate a particular drug target regardless of whether the infringing drug bears any structural resemblance to a chemical compound known to the patent holder at the time of patent filing. Numerous issued patents and pending patent applications owned by others also exist in the therapeutic areas in which we are developing drugs. There are also numerous issued patents and pending patent applications owned by others that are directed to chemical compounds or synthetic processes that may be necessary or useful to use in our research, development, manufacturing or commercialization activities. These could materially affect our ability to develop our drug candidates or manufacture, import or sell drugs, and our activities, or those of our licensors or collaborators, could be determined to infringe these patents. Because patent applications can take many years to issue, there may be currently pending applications, unknown to us, which may later result in issued

patents that our drugs, drug candidates or technologies may infringe. There also may be existing patents owned by others, of which we are not aware, that our drug candidates or technologies may infringe. Further, there may be issued patents or pending patent applications owned by others in fields relevant to our business, of which we are or may become aware, that we believe (i) are invalid, unenforceable, or we do not infringe; (ii) relate to immaterial portions of our overall research and development, manufacturing and commercialization efforts; or (iii) in the case of pending patent applications, the resulting patent would not be granted or, if granted, would not likely be enforced in a manner that would materially impact such efforts. We cannot assure you that others holding any of these patents or patent applications will not assert infringement claims against us and seek damages or enjoinment of our activities. We also cannot assure you that, in the event of litigation, we will be able to successfully assert non-infringement, unenforceability, invalidity or immateriality, or that any infringement claims will be resolved in our favor.

In addition, others may infringe or misappropriate our proprietary rights. We may have to institute costly legal action to protect our intellectual property rights, or may not be able to afford the costs of enforcing or defending our intellectual property rights.

There could be significant litigation and other administrative proceedings in our industry that affect us regarding patent and other intellectual property rights. Any legal action or administrative action against us, or our collaborators, claiming damages or seeking to enjoin commercial activities relating to our research and development, manufacturing and commercialization activities could:

- require us, or our collaborators, to obtain a license which may not be available on commercially reasonable terms, if at all;
- prevent us from importing, making, using, selling or offering to sell the subject matter claimed in patents held by others and subject us to potential liability for damages;
- consume a substantial portion of our managerial, scientific and financial resources; or
- be costly, regardless of the outcome.

Furthermore, because of the substantial amount of pre-trial document and witness discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised. In addition, during the course of intellectual property litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the trading price of our common stock.

We are aware of third-party patents, as well as third-party patent applications, that could adversely affect the potential commercialization of etrasimod. For example, we are aware of a third-party patent, as well as third-party patent applications, with broad claims to administering an S1P modulators by starting with a lower dose and then increasing to a higher, standard daily dose. While we do not believe that any such claims that would cover the potential commercialization of etrasimod are valid and enforceable, we may be incorrect in this belief. In addition, other patents may issue from third-party patent applications with respect to certain dosing regimens, which could also adversely affect the potential commercialization of etrasimod, if etrasimod is approved with a specific dosing regimen.

We have been contacted from time to time by third parties regarding their intellectual property rights, sometimes asserting that we may need a license to use their technologies. For example, a third party has communicated that it believes its issued US patents (one of which has subsequently expired) include patent claims that cover lorcaserin or its use. If we fail to obtain any required licenses or make any necessary changes to our technologies, we may become involved in expensive and time-consuming litigation or we may be unable to develop or commercialize some or all of our drugs or drug candidates.

We and Eisai have filed a patent infringement lawsuit against an ANDA filer relating to a “Paragraph IV certification.” While we intend to vigorously enforce our intellectual property rights relating to lorcaserin, we cannot predict the outcome of any litigation matter. For example, our existing patents could be invalidated, found unenforceable or found not to cover a generic form of lorcaserin. If an ANDA filer were to prevail in patent litigation and/or receive approval to sell a generic version of lorcaserin, lorcaserin would become subject to increased competition and our revenue would be adversely affected.

We cannot protect our intellectual property rights throughout the world.

Filing, prosecuting, defending and enforcing patents on all of our drug candidates throughout the world would be prohibitively expensive. The laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. Many countries, including certain countries in Europe, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties (for example, the patent owner has failed to “work” the invention in that country or the third party has patented improvements). In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of the patent.

Compulsory licensing of life-saving drugs is also becoming increasingly popular in developing countries either through direct legislation or international initiatives. Such compulsory licenses could be extended to include some of our drug candidates, which could limit our potential revenue opportunities. Moreover, the legal systems of certain countries, particularly certain developing countries, do not favor the aggressive enforcement of patents and other intellectual property protection, particularly those relating to pharmaceuticals, which makes it difficult for us to stop the infringement of our patents. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

Risks Relating to Our Securities

* Our stock price will likely be volatile, and your investment in our stock could decline in value.

Our stock price has fluctuated historically. From January 1, 2015, to August 4, 2017, the market price of our stock was as low as $11.30 per share and as high as $62.80 per share.

Very few drug candidates being tested will ultimately receive regulatory approval, and companies in our industry sometimes experience significant volatility in their stock price. Our stock price may fluctuate significantly depending on a variety of factors, including:

- regulatory actions or decisions or legislation affecting drugs or drug candidates, including ours and those of our competitors;
- the commercial availability and success or failure of any of our drug candidates or lorcaserin;
- the development and implementation of our continuing development and research plans, including outcome studies for lorcaserin;
- the entrance into, or failure to enter into, a new collaboration or the modification or termination of an existing collaboration or other material transaction;
- the timing and receipt by us of milestone and other payments or failing to achieve and receive the same;
- fluctuation in prescriptions, sales or financial results (including with respect to revenue recognition) or inaccurate sales or cash forecasting;
- accounting restatements and changes;
- supply chain or manufacturing issues;
- discussions or recommendations affecting our drugs or drug candidates by FDA advisory committees or other reviewers of preclinical or clinical data or other information related to lorcaserin, drug candidates or other drugs;
- results or decisions affecting the development or commercialization of any of our drug candidates or lorcaserin, including the results of studies, trials and other analyses;
- the timing of the development of our drug candidates;
- changes in our research and development budget or the research and development budgets of our existing or potential collaborators;
- the introduction, development or withdrawal of drug candidates or drugs by others that target the same diseases and conditions that we or our collaborators target or the introduction of new drug discovery techniques;
- the success, failure or setbacks of our or a perceived competitor’s drugs or drug candidates;
- expenses related to, and the results of, litigation, other disputes and other proceedings;
- financing strategy or decisions;
- the allocation of our resources;
- our ability, or the perception by investors of our ability, to continue to meet all applicable requirements for continued listing of our common stock on The NASDAQ Stock Market, and the possible delisting of our common stock if we are unable to do so;
- developments in intellectual property rights or related announcements; and
- capital market conditions.

We are not able to control many of these factors. If our financial or scientific results in a particular period do not meet stockholders’ or analysts’ expectations, our stock price may decline and such decline could be significant.

* We may be unable to comply with the applicable continued listing requirements of the NASDAQ Global Select Market.

Our common stock is currently listed on the NASDAQ Global Select Market, or NASDAQ. In order to maintain this listing, we must satisfy minimum financial and other continued listing requirements and standards. There can be no assurance that we will be able to comply with the applicable listing standards. If we were not able to comply with applicable listing standards, our shares of common stock would be subject to delisting. In the event that our common stock is delisted from NASDAQ and is not eligible for quotation or listing on another market or exchange, trading of our common stock could be conducted only in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board. In such event, it could become more difficult to dispose of, or obtain accurate price quotations for, our common stock, and there would likely also be a reduction in our coverage by securities analysts and the news media, which could cause the price of our common stock to decline further.

* Any future equity or debt issuances or other financing transactions may have dilutive or adverse effects on our existing stockholders.

We have been opportunistic in our efforts to obtain cash, and we expect to continue to evaluate various funding alternatives from time to time. We have primarily financed our operations, and we may continue to finance our operations, by issuing and selling our common stock or securities convertible into or exercisable for shares of our common stock. We may issue additional shares of common stock or convertible securities that could dilute your ownership in our company and may include terms that give new investors rights that are superior to yours. We have effective registration statements to sell shares of our common stock and certain other securities, and we may elect to sell shares pursuant to such registration from time to time, including pursuant to an Equity Distribution Agreement that we put in place in January 2017 with Citigroup Global Markets Inc. Through August 4, 2017, we had sold 489,023 shares for aggregate gross proceeds of $7.4 million under the Equity Distribution Agreement, which permits total sales of up to $50.0 million in the aggregate.

Moreover, any issuances by us of equity securities may be at or below the prevailing market price of our common stock and in any event may have a dilutive impact on your ownership interest, which could cause the market price of our common stock to decline. In addition, we may also raise additional funds through the incurrence of debt or other financing transaction, and the investors may have rights superior to your rights in the event we are not successful and are forced to seek the protection of bankruptcy laws or the transaction may otherwise adversely affect our business prospects and existing stockholders.

* There are a substantial number of shares of our common stock that may become eligible for future sale in the public market, and the sale of our common stock could cause the market price of our common stock to fall.

As of August 4, 2017, there were (i) options to purchase 3,763,958 shares of our common stock outstanding under our equity incentive plans at a weighted-average exercise price of $21.97 per share, (ii) 22,595 restricted stock unit awards outstanding under our equity incentive plans, (iii) performance restricted stock unit awards outstanding under our equity incentive plans targeted at 38,944 shares (however, the actual number of shares that may be awarded ranges from 0% to 200% of such amount), and (iv) 2,985,452 additional shares of common stock remaining issuable under our 2017 Long-Term Incentive Plan.

Once issued, the shares described above will be available for immediate resale in the public market. The market price of our common stock could decline as a result of such resales due to the increased number of shares available for sale in the market. As of August 4, 2017, there were 39,220,245 shares of our common stock outstanding.

The holders of our common stock and other securities may take actions that are contrary to your interests, including selling their stock.

A small number of stockholders may hold or acquire a significant amount of our outstanding stock. From time to time, there is a large short interest in our stock. These holders of such stock or positions may seek control of us, support transactions that we or you do not believe are favorable, and have interests that are different from yours. In addition, sales of a large number of shares of our stock by these large stockholders or other stockholders within a short period of time could adversely affect our stock price.

We may also be involved in disagreements with the holders of our stock, warrants or other securities in the future. Such disagreements may lead to proxy contests or litigation, which may be expensive and consume management's time, involve settlements, the terms of which may not be favorable to us, or result in other negative consequences to our business.

Certain of our agreements, provisions in our charter documents, possible future agreements and Delaware law could delay or prevent a change in management or a takeover attempt that you may consider to be in your best interests.

There is a standstill provision in our marketing and supply agreement with Eisai, and we may enter into agreements with similar provisions. In addition, we may in the future adopt a stockholders' rights agreement, which would cause substantial dilution to any person who attempts to acquire us in a manner or on terms not approved by our board of directors. These provisions or agreements, as well as other provisions in our certificate of incorporation and bylaws and under Delaware law, could delay or prevent the removal of directors and other management and could make more difficult a merger, tender offer or proxy contest involving us that you may consider to be in your best interests. For example, our charter provisions:

- allow our board of directors to issue preferred stock without stockholder approval;
- limit who can call a special meeting of stockholders;
- eliminate stockholder action by written consent; and
- establish advance notice requirements for nomination for election to the board of directors or for proposing matters to be acted upon at stockholders' meetings.

* We cannot assure you that our reverse stock split will have a positive impact on our stock price.

Our June 16, 2017 one-for-ten (1:10) reverse split of our common stock has increased the market price of our common stock. However, the continued, long-term effect of the reverse stock split on the market price of our common stock cannot be predicted with any certainty, and the history of reverse stock splits for other companies in our industry is varied, particularly since some investors may view a reverse stock split negatively. It is possible that the per share price of our common stock will decrease, and the reverse stock split may not result in a per share price that would attract brokers and investors who do not trade in lower priced stocks. In addition, we cannot assure you that the reverse stock split has made our common stock more attractive to institutional or other long term investors. In any case, the market price of our common stock may also be based on other factors which may be unrelated to the number of shares outstanding, including our future performance. If the trading price of the common stock declines after the reverse stock split, the percentage decline as an absolute number and as a percentage of our overall market capitalization may be greater than would have occurred in the absence of the reverse stock split.

* Our reverse stock split may decrease the liquidity of our common stock and result in higher transaction costs.

The liquidity of our common stock may be negatively impacted by our June 16, 2017 reverse stock split, given the reduced number of shares outstanding after the reverse stock split. In addition, the reverse stock split increased the number of our stockholders who own "odd lots" of fewer than 100 shares of common stock. Brokerage commission and other costs of transactions in odd lots are generally higher than the costs of transactions of more than 100 shares of common stock. Accordingly, the reverse stock split may not achieve the desired results of increasing marketability and liquidity of our common stock.

* The effective increase in the authorized number of shares of our common stock in connection with our reverse stock split could have anti-takeover implications.

In addition to our reverse stock split, we also effected a reduction in the total number of authorized shares of our common stock on June 16, 2017. The reduction in our authorized shares of common stock was 50% of the reduction in the issued and outstanding shares immediately following the reverse stock split; as a result, the combination of the reverse stock split and reduction in our authorized shares effectively increased our authorized shares relative to our issued and outstanding shares. This effective increase in the authorized number of shares of our common stock could, under certain circumstances, have anti-takeover implications. The additional shares of common stock that became available for issuance could be used by us to oppose a hostile takeover attempt or to delay or prevent changes in

control or our management. For example, without further stockholder approval, our Board of Directors could adopt a "poison pill" which would, under certain circumstances related to an acquisition of our securities that is not approved by our Board of Directors, give certain holders the right to acquire additional shares of our common stock at a low price. Our Board also could strategically sell shares of common stock in a private transaction to purchasers who would oppose a takeover or favor the current Board of Directors. Although our implementation of a reverse stock split and effective increase in authorized common stock was prompted by business and financial considerations and not by the threat of any hostile takeover attempt (nor is our Board of Directors currently aware of any such attempts directed at us), stockholders should be aware that these actions could facilitate future efforts by us to deter or prevent changes in control, including those in which our stockholders might otherwise receive a premium for their shares over then current market prices.

Item 6. Exhibits.

EXHIBIT NO.	DESCRIPTION
3.1	Fifth Amended and Restated Certificate of Incorporation of Arena (incorporated by reference to Exhibit 3.1 to Arena's quarterly report on Form 10-Q for the quarter ended June 30, 2002, filed with the Securities and Exchange Commission on August 14, 2002, Commission File No. 000-31161)
3.2	Certificate of Amendment of the Fifth Amended and Restated Certificate of Incorporation of Arena (incorporated by reference to Exhibit 4.2 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 28, 2006, Commission File No. 333-135398)
3.3	Certificate of Amendment No. 2 of the Fifth Amended and Restated Certificate of Incorporation of Arena, as amended (incorporated by reference to Exhibit 4.3 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 30, 2009, Commission File No. 333-160329)
3.4	Certificate of Amendment No. 3 of the Fifth Amended and Restated Certificate of Incorporation of Arena, as amended (incorporated by reference to Exhibit 3.4 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 20, 2012, Commission File No. 333-182238)
3.5	Certificate of Amendment No. 4 of the Fifth Amended and Restated Certificate of Incorporation of Arena, as amended (incorporated by reference to Exhibit 3.1 to Arena's current report on Form 8-K filed with the Securities and Exchange Commission on June 13, 2017, Commission File No. 000-31161)
3.6	Amended and Restated Bylaws of Arena (incorporated by reference to Exhibit 3.1 to Arena's current report on Form 8-K filed with the Securities and Exchange Commission on October 9, 2014, Commission File No. 000-31161)
0	
4.1	Form of common stock certificate (incorporated by reference to Exhibit 4.7 to Arena's registration statement on Form S-8, filed with the Securities and Exchange Commission on June 22, 2017, Commission File No. 333-218905)
10.1*	Arena's 2017 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.1 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 22, 2017, Commission File No. 333-218905)
10.2*	Form of Nonqualified Stock Option Grant Agreement for Employees and Consultants under the Arena 2017 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.2 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 22, 2017, Commission File No. 333-218905)
10.3*	Form of Incentive Stock Option Grant Agreement under the Arena 2017 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.3 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 22, 2017, Commission File No. 333-218905)

10.4*	Form of Restricted Stock Unit Grant Agreement (other than for non-employee directors) under the Arena 2017 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.4 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 22, 2017, Commission File No. 333-218905)
10.5*	Form of Restricted Stock Unit Grant Agreement for Non-Employee Directors under the Arena 2017 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.5 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 22, 2017, Commission File No. 333-218905)
10.6*	Form of Nonqualified Stock Option Grant Agreement for Non-Employee Directors under the Arena 2017 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.6 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 22, 2017, Commission File No. 333-218905)
10.7*	Summary of compensation for Arena's non-employee directors
10.8	Equity Distribution Agreement, dated as of January 4, 2017, by and between Arena and Citigroup Global Markets Inc. (incorporated by reference to Exhibit 10.1 to Arena's current report on Form 8-K filed with the Securities and Exchange Commission on January 4, 2017, Commission File No. 000-31161)
31.1	Certification of principal executive officer pursuant to Rule 13a-14(A) promulgated under the Securities Exchange Act of 1934
31.2	Certification of principal financial officer pursuant to Rule 13a-14(A) promulgated under the Securities Exchange Act of 1934
32.1	Certification of principal executive officer and principal financial officer pursuant to 18 U.S.C. Section 1350 and Rule 13a-14(B) promulgated under the Securities Exchange Act of 1934
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

* Management contract or compensatory plan or arrangement.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: August 8, 2017 ARENA PHARMACEUTICALS, INC.

By: /s/ Amit D. Munshi
Amit D. Munshi
President and Chief Executive Officer (principal executive officer)

By: /s/ Kevin R. Lind
Kevin R. Lind
Executive Vice President and Chief Financial Officer (principal financial and accounting officer)

EXHIBIT INDEX

EXHIBIT NO.	DESCRIPTION
3.1	Fifth Amended and Restated Certificate of Incorporation of Arena (incorporated by reference to Exhibit 3.1 to Arena's quarterly report on Form 10-Q for the quarter ended June 30, 2002, filed with the Securities and Exchange Commission on August 14, 2002, Commission File No. 000-31161)
3.2	Certificate of Amendment of the Fifth Amended and Restated Certificate of Incorporation of Arena (incorporated by reference to Exhibit 4.2 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 28, 2006, Commission File No. 333-135398)
3.3	Certificate of Amendment No. 2 of the Fifth Amended and Restated Certificate of Incorporation of Arena, as amended (incorporated by reference to Exhibit 4.3 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 30, 2009, Commission File No. 333-160329)
3.4	Certificate of Amendment No. 3 of the Fifth Amended and Restated Certificate of Incorporation of Arena, as amended (incorporated by reference to Exhibit 3.4 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 20, 2012, Commission File No. 333-182238)
3.5	Certificate of Amendment No. 4 of the Fifth Amended and Restated Certificate of Incorporation of Arena, as amended (incorporated by reference to Exhibit 3.1 to Arena's current report on Form 8-K filed with the Securities and Exchange Commission on June 13, 2017, Commission File No. 000-31161)
3.6	Amended and Restated Bylaws of Arena (incorporated by reference to Exhibit 3.1 to Arena's current report on Form 8-K filed with the Securities and Exchange Commission on October 9, 2014, Commission File No. 000-31161)
4.1	Form of common stock certificate (incorporated by reference to Exhibit 4.7 to Arena's registration statement on Form S-8, filed with the Securities and Exchange Commission on June 22, 2017, Commission File No. 333-218905)
10.1*	Arena's 2017 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.1 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 22, 2017, Commission File No. 333-218905)
10.2*	Form of Nonqualified Stock Option Grant Agreement for Employees and Consultants under the Arena 2017 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.2 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 22, 2017, Commission File No. 333-218905)
10.3*	Form of Incentive Stock Option Grant Agreement under the Arena 2017 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.3 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 22, 2017, Commission File No. 333-218905)

10.4*	Form of Restricted Stock Unit Grant Agreement (other than for non-employee directors) under the Arena 2017 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.4 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 22, 2017, Commission File No. 333-218905)
10.5*	Form of Restricted Stock Unit Grant Agreement for Non-Employee Directors under the Arena 2017 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.5 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 22, 2017, Commission File No. 333-218905)
10.6*	Form of Nonqualified Stock Option Grant Agreement for Non-Employee Directors under the Arena 2017 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.6 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 22, 2017, Commission File No. 333-218905)
10.7*	Summary of compensation for Arena's non-employee directors
10.8	Equity Distribution Agreement, dated as of January 4, 2017, by and between Arena and Citigroup Global Markets Inc. (incorporated by reference to Exhibit 10.1 to Arena's current report on Form 8-K filed with the Securities and Exchange Commission on January 4, 2017, Commission File No. 000-31161)
31.1	Certification of principal executive officer pursuant to Rule 13a-14(A) promulgated under the Securities Exchange Act of 1934
31.2	Certification of principal financial officer pursuant to Rule 13a-14(A) promulgated under the Securities Exchange Act of 1934
32.1	Certification of principal executive officer and principal financial officer pursuant to 18 U.S.C. Section 1350 and Rule 13a-14(B) promulgated under the Securities Exchange Act of 1934
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

* Management contract or compensatory plan or arrangement.