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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2019

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: 001-35518

SUPERNUS PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware			**20-2590184**
(State or other jurisdiction of incorporation or organization)			(I.R.S. Employer Identification No.)
1550 East Gude Drive	**Rockville**	**MD**	**20850**
(Address of principal executive offices)			(Zip Code)

(301) 838-2500

(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 pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes No

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

Large accelerated filer	☒	Accelerated filer	
Non-accelerated filer	☐	Smaller reporting company	
		Emerging growth company	

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

Securities registered pursuant to Section 12(b) of the Exchange Act

Title of each class	**Outstanding at October 31, 2019**	**Trading Symbol**	**Name of each exchange on which registered**
Common Stock, $0.001 par value per share	52,462,936	SUPN	The Nasdaq Global Market

SUPERNUS PHARMACEUTICALS, INC.
FORM 10-Q — QUARTERLY REPORT
FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2019

PART I — FINANCIAL INFORMATION

Supernus Pharmaceuticals, Inc.
Condensed Consolidated Balance Sheets
(in thousands, except share data)

	September 30, 2019	December 31, 2018
	(unaudited)	
Assets		
Current assets		
Cash and cash equivalents	$ 116,889	$ 192,248
Marketable securities	179,808	163,770
Accounts receivable, net	86,699	102,922
Inventories, net	25,504	25,659
Prepaid expenses and other current assets	18,182	8,888
Total current assets	427,082	493,487
Long term marketable securities	596,442	418,798
Property and equipment, net	9,977	4,095
Intangible assets, net	26,101	31,368
Lease assets	18,780	—
Deferred income taxes	27,953	29,683
Other assets	574	380
Total assets	$ 1,106,909	$ 977,811
Liabilities and stockholders' equity		
Current liabilities		
Accounts payable	$ 3,090	$ 3,195
Accrued product returns and rebates	98,050	107,063
Accrued expenses and other current liabilities	40,800	36,535
Income taxes payable	4,818	12,377
Nonrecourse liability related to sale of future royalties, current portion	2,959	2,183
Total current liabilities	149,717	161,353
Convertible notes, net	341,163	329,462
Nonrecourse liability related to sale of future royalties, long term	20,305	22,575
Lease liabilities, long term	27,256	—
Other liabilities	11,211	11,398
Total liabilities	549,652	524,788
Stockholders' equity		
Common stock, $0.001 par value; 130,000,000 shares authorized; 52,462,936 and 52,316,583 shares issued and outstanding as of September 30, 2019 and December 31, 2018, respectively	52	52
Additional paid-in capital	383,525	369,637
Accumulated other comprehensive earnings (loss), net of tax	7,261	(3,158)
Retained earnings	166,419	86,492
Total stockholders' equity	557,257	453,023
Total liabilities and stockholders' equity	$ 1,106,909	$ 977,811

See accompanying notes.

Supernus Pharmaceuticals, Inc.
Condensed Consolidated Statements of Earnings
(in thousands, except share and per share data)

	Three Months ended September 30,		Nine Months ended September 30,	
	2019	2018	2019	2018
	(unaudited)		(unaudited)	
Revenues				
Net product sales	$ 100,034	$ 100,227	$ 285,491	$ 286,377
Royalty revenues	2,106	2,769	6,818	5,836
Licensing revenues	—	—	—	750
Total revenues	102,140	102,996	292,309	292,963
Costs and expenses				
Cost of goods sold	4,819	4,207	12,547	11,168
Research and development	16,943	20,422	49,307	59,368
Selling, general and administrative	40,649	40,892	122,700	117,838
Total costs and expenses	62,411	65,521	184,554	188,374
Operating earnings	39,729	37,475	107,755	104,589
Other income (expenses), net	(139)	(1,104)	(1,180)	(3,180)
Earnings before income taxes	39,590	36,371	106,575	101,409
Income tax expense	10,730	8,360	26,648	16,309
Net earnings	$ 28,860	$ 28,011	$ 79,927	$ 85,100
Earnings per share				
Basic	$ 0.55	$ 0.54	$ 1.53	$ 1.64
Diluted	$ 0.54	$ 0.52	$ 1.48	$ 1.57
Weighted-average shares outstanding				
Basic	52,453,384	52,227,630	52,392,232	51,897,240
Diluted	53,805,838	54,239,847	53,898,486	54,098,330

See accompanying notes.

Supernus Pharmaceuticals, Inc.
Condensed Consolidated Statements of Comprehensive Earnings
(in thousands)

	Three Months ended September 30,		Nine Months ended September 30,	
	2019	2018	2019	2018
	(unaudited)		(unaudited)	
Net earnings	$ 28,860	$ 28,011	$ 79,927	$ 85,100
Other comprehensive earnings (loss)				
Unrealized gain (loss) on marketable securities, net of tax	1,337	8	10,419	(3,364)
Other comprehensive earnings (loss)	1,337	8	10,419	(3,364)
Comprehensive earnings	$ 30,197	$ 28,019	$ 90,346	$ 81,736

See accompanying notes.

Supernus Pharmaceuticals, Inc.
Condensed Consolidated Statements of Changes in Stockholders' Equity
Three and Nine Months ended September 30, 2019
(unaudited, in thousands, except share data)

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Earnings (Loss)	Retained Earnings	Total Stockholders' Equity
	Shares	Amount				
Balance, December 31, 2018	52,316,583	$ 52	$ 369,637	$ (3,158)	$ 86,492	$ 453,023
Share-based compensation	—	—	3,287	—	—	3,287
Exercise of stock options	57,665	—	783	—	—	783
Net earnings	—	—	—	—	18,340	18,340
Unrealized gain on marketable securities, net of tax	—	—	—	4,585	—	4,585
Balance, March 31, 2019	52,374,248	52	373,707	1,427	104,832	480,018
Share-based compensation	—	—	4,022	—	—	4,022
Issuance of ESPP shares	48,950	—	1,377	—	—	1,377
Exercise of stock options	25,838	—	263	—	—	263
Net earnings	—	—	—	—	32,727	32,727
Unrealized gain on marketable securities, net of tax	—	—	—	4,497	—	4,497
Balance, June 30, 2019	52,449,036	52	379,369	5,924	137,559	522,904
Share-based compensation	—	—	3,914	—	—	3,914
Exercise of stock options	13,900	—	242	—	—	242
Net earnings	—	—	—	—	28,860	28,860
Unrealized gain on marketable securities, net of tax	—	—	—	1,337	—	1,337
Balance, September 30, 2019	52,462,936	52	383,525	7,261	166,419	557,257

See accompanying notes.

Supernus Pharmaceuticals, Inc.
Condensed Consolidated Statements of Changes in Stockholders' Equity (continued)
Three and Nine Months ended September 30, 2018
(unaudited, in thousands, except share data)

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Earnings (Loss)	Retained Earnings	Total Stockholders' Equity
	Shares	Amount				
Balance, December 31, 2017	51,314,850	$ 51	294,999	(747)	(26,823)	267,480
Cumulative-effect of adoption of ASC 606	—	—	—	—	2,322	2,322
Balance, January 1, 2018	51,314,850	51	294,999	(747)	(24,501)	269,802
Share-based compensation	—	—	2,635	—	—	2,635
Exercise of stock options	319,141	1	2,857	—	—	2,858
Equity component of convertible notes issuance, net of tax	—	—	56,215	—	—	56,215
Purchases of convertible note hedges, net of tax	—	—	(70,137)	—	—	(70,137)
Issuance of warrants	—	—	65,688	—	—	65,688
Net earnings	—	—	—	—	26,352	26,352
Unrealized loss on marketable securities, net of tax	—	—	—	(1,544)	—	(1,544)
Balance, March 31, 2018	51,633,991	52	352,257	(2,291)	1,851	351,869
Share-based compensation	—	—	3,068	—	—	3,068
Issuance of ESPP shares	34,676	—	1,184	—	—	1,184
Exercise of stock options	510,667	—	5,462	—	—	5,462
Net earnings	—	—	—	—	30,737	30,737
Unrealized loss on marketable securities, net of tax	—	—	—	(1,828)	—	(1,828)
Balance, June 30, 2018	52,179,334	52	361,971	(4,119)	32,588	390,492
Share-based compensation	—	—	2,597	—	—	2,597
Exercise of stock options	77,679	—	828	—	—	828
Net earnings	—	—	—	—	28,011	28,011
Unrealized gain on marketable securities, net of tax	—	—	—	8	—	8
Balance, September 30, 2018	52,257,013	52	365,396	(4,111)	60,599	421,936

See accompanying notes.

Supernus Pharmaceuticals, Inc.
Condensed Consolidated Statements of Cash Flows
(in thousands)

	Nine Months ended September 30,	
	2019	2018
	(unaudited)	
Cash flows from operating activities		
Net earnings	$ 79,927	$ 85,100
Adjustments to reconcile net earnings to net cash provided by operating activities:		
Depreciation and amortization	5,029	5,371
Noncash operating lease cost	2,600	—
Amortization of deferred financing costs and debt discount	11,701	8,052
Amortization of premium/discount on marketable securities	(3,189)	(1,825)
Noncash interest expense	4,331	3,096
Noncash royalty revenue	(5,028)	(4,300)
Share-based compensation expense	11,223	8,300
Deferred income tax benefit	(1,689)	(6,233)
Changes in operating assets and liabilities:		
Accounts receivable	16,344	(10,687)
Inventories	155	(6,976)
Prepaid expenses and other current assets	(4,236)	(2,778)
Other noncurrent assets	(141)	(342)
Accounts payable	(334)	3,066
Accrued product returns and rebates	(9,013)	17,627
Accrued expenses and other current liabilities	1,120	5,966
Income taxes payable	(7,559)	(7,390)
Other liabilities	(1,903)	90
Net cash provided by operating activities	99,338	96,137
Cash flows from investing activities		
Purchases of marketable securities	(361,121)	(491,654)
Sales and maturities of marketable securities	184,467	45,271
Purchases of property and equipment	(707)	(748)
Deferred legal fees	(1)	(679)
Net cash used in investing activities	(177,362)	(447,810)
Cash flows from financing activities		
Proceeds from issuance of convertible notes	—	402,500
Convertible notes issuance financing costs	—	(10,435)
Proceeds from issuance of warrants	—	65,688
Purchases of convertible note hedges	—	(92,897)
Proceeds from issuance of common stock	2,665	10,331
Net cash provided by financing activities	2,665	375,187
Net change in cash and cash equivalents	(75,359)	23,514
Cash and cash equivalents at beginning of year	192,248	100,304
Cash and cash equivalents at end of period	$ 116,889	$ 123,818
Supplemental cash flow information		
Cash paid for interest on convertible notes	$ 2,516	$ —
Income taxes paid	$ 35,933	$ 29,930
Noncash investing and financing activities		
Deferred legal fees and fixed assets included in accounts payable and accrued expenses	$ 495	$ 280
Property and equipment acquired under build-to-suit lease transaction	$ —	$ 2,304
Interest capitalized during construction period for build-to-suit lease transaction	$ —	$ 44
Facility lease financing obligation	$ —	$ 2,347

See accompanying notes.

Supernus Pharmaceuticals, Inc.
Notes to Condensed Consolidated Financial Statements (unaudited)

1. Organization and Business

Supernus Pharmaceuticals, Inc. (the Company) was incorporated in Delaware and commenced operations in 2005. The Company is a pharmaceutical company focused on developing and commercializing products for the treatment of central nervous system (CNS) diseases. The Company markets two products: Oxtellar XR for the treatment of epilepsy, and Trokendi XR for the prophylaxis of migraine headache and treatment of epilepsy. The Company has several proprietary product candidates in clinical development that address opportunities in the CNS market.

The Company launched Oxtellar XR and Trokendi XR for the treatment of epilepsy in 2013, launched Trokendi XR for the prophylaxis of migraine headache in adolescents and adults in April 2017, and launched Oxtellar XR with an expanded indication to include monotherapy for partial seizures in January 2019.

2. Summary of Significant Accounting Policies

Basis of Presentation

The Company’s condensed consolidated financial statements include the accounts of Supernus Pharmaceuticals, Inc., Supernus Europe Ltd., Biscayne Neurotherapeutics, Inc. and its wholly-owned subsidiary, Biscayne Neurotherapeutics Australia Pty Ltd., collectively referred to herein as “Supernus” or “the Company.” All significant intercompany transactions and balances have been eliminated in consolidation.

The Company’s unaudited condensed consolidated financial statements have been prepared in accordance with the requirements of the U.S. Securities and Exchange Commission (SEC) for interim financial information. As permitted under Generally Accepted Accounting Principles in the United States (U.S. GAAP), certain notes and other information have been omitted from the interim unaudited condensed consolidated financial statements presented in this Quarterly Report on Form 10-Q. Therefore, these financial statements should be read in conjunction with the Company’s most recent Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC.

In management’s opinion, the condensed consolidated financial statements include all normal and recurring adjustments necessary for a fair presentation of the Company’s financial position, results of operations and cash flows. The results of operations for any interim period are not necessarily indicative of the Company’s future quarterly or annual results.

The Company, which is primarily located in the United States (U.S.), operates inone operating segment.

Use of Estimates

The Company bases its estimates on: historical experience; various forecasts; information received from its service providers; and other assumptions that the Company believes are reasonable under the circumstances. Actual results could differ materially from the Company’s estimates. The Company evaluates the methodologies employed in its estimates on an ongoing basis.

Revenue Recognition

The Company recognizes revenue when physical control of goods or provision of services are transferred to the Company’s customers in an amount that reflects the consideration the Company expects to receive in exchange for those goods or services. The Company does not adjust revenue for any financing effects in transactions where the Company expects the period between the transfer of the goods or services and collection to be less than one year.

There were no contract assets or liabilities recorded as ofSeptember 30, 2019.

Revenue from Product Sales

The Company’s customers, who are primarily pharmaceutical wholesalers and distributors, purchase product to fulfill orders from retail pharmacy chains and independent pharmacies of varying size and purchasing power. The Company recognizes gross revenue when its products are physically received by its customers after shipment from a third party fulfillment center. Customers take control of the products, including title and ownership, upon physical receipt of our products at the customers' facilities.

Product sales are recorded net of various forms of variable consideration, including: estimated liability for rebates; an estimated liability for future product returns; and an estimated allowance for discounts. These are collectively considered "sales deductions."

As described below, variability in the net transaction price for the Company's products arises primarily from sales deductions and significant judgment is required in estimating sales deductions. In making these estimates, the Company considers: historical experience; product price increases; current contract prices under applicable programs; unbilled claims; processing time lags; and inventory levels in the distribution channel. The Company adjusts its estimates of revenue either when the most likely amount of consideration it expects to receive changes, or when the consideration becomes fixed.

If actual results in the future vary from the estimates, the Company adjusts these estimates. These adjustments could materially affect net product sales and earnings in the period that such adjustments are recorded.

Sales Deductions

The Company records product sales net of the following sales deductions:

- *Rebates:* Rebates are discounts which the Company pays under either public sector or private sector health care programs. Public sector rebate programs encompass: various Medicaid drug rebate programs; Medicare coverage gap programs; and programs covering public health service institutions and government entities. All federal employees and agencies purchase drugs under the Federal Supply Schedule. Private sector rebate programs include: contractual agreements with managed care providers, under which the Company pays fees to gain access to that provider's patient drug formulary; and Company sponsored programs, under which the Company defrays or eliminates patient co-payment charges that the patient would otherwise pay to their managed care provider.

  Rebates paid under public sector programs are generally mandated under law, whereas private sector rebates are generally contractually negotiated by the Company with managed care providers.

  Rebates are owed upon dispensing our product to a patient; i.e., filling a prescription. The accrual balance for rebates consists of three components. First, because rebates are generally invoiced and paid quarterly in arrears, the accrual balance consists of an estimate of the amount expected to be incurred for prescriptions dispensed in the current quarter. Second, the accrual balance also includes an estimate for known or estimated prior quarters' unpaid rebates, to cover prescriptions dispensed in past quarters, but for which no invoice has been received. Third, the accrual balance includes an estimate for rebates that will be prospectively owed, for prescriptions filled in future quarters. This pertains to product that has been sold to wholesalers or distributors, and which resides either as wholesaler/distributor inventory, or as inventory held at pharmacies.

  The Company's estimates of expected rebate claims vary by program and by type of customer, because the period from the date at which the prescription is filled to the date the Company receives and pays the invoice varies substantially. For each of its products, the Company bases its estimates of expected rebate claims on multiple factors, including historical levels of deductions; contractual terms with managed care providers; actual and anticipated changes in product price; prospective changes in managed care fee for service contracts; prospective changes in co-pay assistance programs; and anticipated changes in program utilization rates (i.e., patient participation rates under a specific program). The Company records an estimated liability for rebates at the time the customer takes title to the product (i.e., at the time of sale to wholesalers/distributors), and records this liability as a reduction to gross product sales and an increase in *Accrued product returns and rebates* in current liabilities on its condensed consolidated balance sheets.

  The sensitivity of the Company's estimates varies by program and by type of customer. If actual rebates vary from estimated amounts, the Company will adjust the balances of such accrued rebates to reflect actual experience with respect to these programs. These changes could materially affect the estimated liability balance, net product sales and earnings in the period of adjustment.

- *Returns*: Sale of the Company's products are not subject to a general right of return. However, the Company will accept return of product that is damaged or defective when shipped from its third party fulfillment center. In addition, the Company will accept return of expired product six months prior to and up to 12 months subsequent to the product's expiry date. Expired or defective returned product cannot be re-sold and is therefore destroyed. Product that has been used to fill patient prescriptions is no longer subject to any right of return.

  The Company records an estimated liability for product returns at the time the customer takes title to the product (i.e., at time of sale) as a reduction to gross product sales and an increase in *Accrued product returns and rebates*

in current liabilities on the condensed consolidated balance sheets. The Company estimates the liability for returns based on the actual returns experience for its two commercial products, in conjunction with industry experience for return of similar products (i.e., ambient temperature storage for oral formulations). Because the Company's products have not reached maturity, the return rate of its products has and is expected to continue to vary.

The Company's products have a shelf life of 48 months from date of manufacture. Because of the extended shelf life, coupled with its return policy, there typically is a significant time lag between the time at which the product is sold and when the Company issues credit on expired product. Because the Company's policy generally permits product returns to be processed at current wholesaler price rather than historical acquisition price, the Company's estimated liability for product returns is affected by price increases taken subsequent to the date of sale. Therefore, price increase(s) taken during the current period increase(s) the liability for product returns because they affect the estimated liability for product returns for both sales made in the current period as well as sales made in prior periods.

When the Company adjusts its estimates for product returns, either favorably or unfavorably, this adjustment affects the estimated liability, product sales and earnings in the period of adjustment.

- *Sales discounts*: Distributors and wholesalers of the Company's pharmaceutical products are generally offered various forms of consideration, including allowances, service fees and prompt payment discounts for distributing our products. Distributor and wholesaler allowances and service fees arise from contractual agreements and are estimated as a percentage of the price at which the Company sells product to them. In addition, distributor and wholesaler are offered a prompt pay discount for payment within a specified period.

The Company accounts for these discounts at the time of sale, as a reduction to gross product sales, and records these amounts as a valuation allowance against *Accounts receivable* on the condensed consolidated balance sheets.

Customer orders are generally fulfilled within a few days of receipt, resulting in minimal order backlog. There are no minimum product purchase requirements.

License Revenues

License and Collaboration Agreements

The Company has entered into collaboration agreements to commercialize both Oxtellar XR and Trokendi XR outside of the U.S., which agreements include the right to use the Company's intellectual property as a functional license. These agreements generally include an up-front license fee and ongoing milestone payments upon the achievement of specific events. These agreements may also require minimum royalty payments, based on sales of products developed from the applicable intellectual property.

Up-front license fees are recognized once the license has been executed between the Company and its licensee.

Milestones are a form of variable consideration that are recognized when either the underlying events have transpired (i.e., event-based milestone) or when the sales-based targets have been met by the collaborative partner (i.e., sales-based milestone). Both types of milestone payments are nonrefundable. The Company evaluates whether achieving the milestone is considered probable and estimates the amount of the milestone to be included in the transaction price using the most likely amount method. The value of the associated milestone is not included in the transaction price if it is probable that a significant revenue reversal would occur. This estimation is based on management's judgment, including assessing factors that are outside of the Company's influence, such as: likelihood of regulatory success; availability of third party information; and expected time period until achievement of the event. These factors are evaluated based on the specific facts and circumstances.

Event-based milestones are recognized in the period that the related event, such as regulatory approval, occurs. Milestone payments that are not within the control of the Company, such as approval from regulatory authorities, or where attainment of the specified event is dependent on the success of a third-party are not considered probable until the specified event occurs. Sales-based milestones are recognized as revenue only when the sales-based target is achieved. Revenue is recognized from the satisfaction of performance obligations in the amount billable to the customer.

No guaranteed minimum amounts are owed to the Company related to license and collaboration agreements.

Royalty Revenues

The Company recognizes noncash royalty revenue for amounts earned pursuant to a royalty agreement with United Therapeutics Corporation (United Therapeutics), which agreement includes the right to use the Company's intellectual property as a functional license. In 2014, the Company sold certain of these royalty rights to Healthcare Royalty Partners III, L.P. (HC Royalty) (see Note 17, *Commitments and Contingencies*). Accordingly, the Company records noncash royalty revenue based on estimated product sales by United Therapeutics, in which sales of United Therapeutics' product results in payments made from United Therapeutics to HC Royalty in connection with these agreements.

Royalty revenue also includes royalty amounts received from collaboration partners, including from Shire Plc (Shire, a subsidiary of Takeda Pharmaceutical Company Ltd), based on net product sales of Shire's product, Mydayis, in the current period. Royalty revenue is only recognized when the underlying product sale by Shire occurs. The Shire arrangement also includes Shire's right to use the Company's intellectual property as a functional license.

There are no guaranteed minimum amounts owed to the Company related to any royalty revenue agreement.

Research and Development Expense

Research and development expenditures are expensed as incurred. These expenses include: salaries, benefits and share-based compensation; contract research and development services provided by third parties; costs for preclinical and clinical studies; the cost of acquiring or manufacturing clinical trial material; regulatory costs; facilities costs; depreciation expense and other allocated expenses; and license fees and milestone payments related to in-licensed products and technologies. Assets acquired that are used for research and development and that have no future alternative use are expensed as in-process research and development.

Preclinical Study and Clinical Trial Accruals

The Company estimates preclinical study and clinical trial expenses based on the services performed pursuant to contracts with research institutions, clinical investigators, clinical research organizations (CROs) and other service providers that conduct activities on the Company's behalf. In recording service fees, the Company estimates the time period over which the related services are performed and compares the level of effort expended through the end of each period with the cumulative expenses recorded and payments made for such services. As appropriate, the Company accrues additional service fees, or defers any nonrefundable advance payments, until the related services are performed. If the actual timing of the performance of services or the level of effort varies from the estimate, the Company adjusts its accrued expenses, or its deferred advance payments, accordingly. If the Company subsequently determines that it no longer expects the services associated with a nonrefundable advance payment to be rendered, the remaining portion of that advance payment is charged to expense in the period in which such determination is made.

Share-Based Compensation

The Company recognizes share-based compensation expense over the service period using the straight-line method. Employee share-based compensation is measured based on estimated fair value as of the grant date. The Company uses the Black-Scholes option-pricing model in calculating the fair value of option grants as of the grant date. The Company uses the following assumptions for estimating fair value of option grants:

Fair Value of Common Stock—The fair value of the common stock underlying the option grants is determined based on observable market prices of the Company's common stock.

Expected Volatility—Volatility is a measure of the amount by which the Company's share price has fluctuated (i.e., historical volatility) or is expected to fluctuate (i.e., expected volatility) during a period. Beginning in the first quarter of 2019, the Company began using the historical volatility of its common stock to measure expected volatility for future option grants. Prior to the first quarter of 2019, volatility was estimated using the volatility of the common stock of several public entities of similar size, complexity, and stage of development, as well as taking into consideration the Company's actual volatility since the Company's IPO in 2012.

Dividend Yield—The Company has never declared or paid dividends, and has no plans to do so in the foreseeable future.

Expected Term—This is the period of time during which options are expected to remain unexercised. Options have a maximum contractual term often years. Beginning in the first quarter of 2019, the Company began estimating the average expected life of stock options using its historical experience. Prior to the first quarter of 2019, the Company determined the

average expected life of stock options according to the "simplified method", as described in Staff Accounting Bulletin 110, which is the mid-point between the vesting date and the end of the contractual term.

Risk-Free Interest Rate—This is the U.S. Treasury Note rate as of the week each option grant is issued, with a term that most closely resembles the expected term of the option.

Expected Forfeiture Rate—Forfeitures are accounted for as they occur.

Self-insurance Liabilities

As of January 1, 2019, the Company self-insures its employee medical insurance liability. The self-insurance liability is undiscounted and is determined actuarially. It is based on claims filed, historical and industry claims experience, and an estimate of claims incurred but not yet paid. The Company has established stop-loss amounts that limit the Company's further exposure after a claim reaches the designated stop-loss threshold, which effectively transfers any additional liability to a third party. The stop-loss limit for self-insured employee medical claims is $150,000 per employee per year.

The Company recorded self-insurance liability of approximately $500,000 as of September 30, 2019 in *Accrued expenses and other current liabilities* on the condensed consolidated balance sheets.

Advertising Expense

Advertising expense includes costs of promotional materials and activities, such as marketing materials, marketing programs and speaker programs. The costs of the Company's advertising efforts are expensed as incurred.

The Company incurred approximately $11.3 million and $32.5 million in advertising costs for the three and nine months ended September 30, 2019, respectively, and approximately $11.6 million and $30.5 million in advertising costs for the three and nine months ended September 30, 2018, respectively. These expenses are recorded in *Selling, general and administrative* in the condensed consolidated statements of earnings.

Recently Issued Accounting Pronouncements

Accounting Pronouncements Adopted

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-02, "*Leases (Topic 842)*" and its related amendments (New Lease Standard). The New Lease Standard requires a lessee to recognize a right-of-use lease asset and a corresponding lease liability on the balance sheet. The Company adopted the New Lease Standard on January 1, 2019 using the modified retrospective method, which applies the provision of the New Lease Standard at the effective date without adjusting comparative periods presented. In addition, the Company elected the package of practical expedients permitted under the transition guidance within the New Lease Standard which, among other things, allows the Company to carry forward the historical lease classification.

The adoption of the New Lease Standard resulted in the recognition of lease assets and lease liabilities for operating leases as of January 1, 2019 of approximately $4.0 million. Financial reporting for periods on or after January 1, 2019 are presented under the new guidance. Prior period amounts are not adjusted and continue to be reported in accordance with previous guidance. The standard did not materially impact the Company's condensed consolidated net earnings and had no impact on cash flows (see Note 14, *Leases*).

New Accounting Pronouncements Not Yet Adopted

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments—Credit Losses (Topic 326)*, which requires credit losses on financial assets measured on an amortized cost basis to be presented at the net amount expected to be collected, rather than based on incurred losses. Further, credit losses on available-for-sale debt securities should be recorded through an allowance for credit losses, limited to the amount by which fair value is below amortized cost. The new standard also requires enhanced disclosure of credit risk associated with respective assets. The standard is effective for fiscal years beginning after December 15, 2019, for interim and annual periods within those years, with early adoption permitted. The Company is currently assessing the impact of this new standard and expects the adoption of the guidance will not have a material impact on its condensed consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, *Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*, which aligns the requirements for capitalizing implementation costs incurred

in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). This ASU also requires the entity to expense the capitalized implementation costs of a hosting arrangement that is a service contract over the term of the hosting arrangement, which includes reasonably certain renewals. The standard is effective for the Company in the year ending December 31, 2020, with early adoption permitted. The Company is currently assessing the impact of this new standard and expects the adoption of the guidance will not have a material impact on its condensed consolidated financial statements.

In November 2018, the FASB issued ASU 2018-18,*Clarifying the Interaction Between Topic 808 and Topic 606*, which clarifies when transactions between participants in a collaborative arrangement are within the scope of the FASB's revenue standard, Topic 606. The standard is effective for the Company in the year ending December 31, 2020, with early adoption permitted. The Company is currently assessing the impact of this new standard and expects the adoption of the guidance will not have a material impact on its condensed consolidated financial statements.

3. Fair Value of Financial Instruments

The fair value of an asset or liability represents the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between arm's length market participants.

The Company reports assets and liabilities measured at fair value using a three level fair value hierarchy that prioritizes the inputs used to measure fair value. The three levels of inputs used to measure fair value are as follows:

- Level 1—Inputs are unadjusted quoted prices in active markets for identical assets that the Company has the ability to access as of the measurement date.
- Level 2—Inputs are: quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable for the asset or liability (e.g., interest rates; yield curves); and inputs that are derived principally from or corroborated by observable market data by correlation or other means (i.e., market corroborated inputs).
- Level 3—Unobservable inputs that reflect the Company's own assumptions, based on the best information available, including the Company's own data.

Financial Assets

The Company's financial assets that are required to be measured at fair value on a recurring basis are as follows, in thousands of dollars:

		Fair Value Measurements at September 30, 2019 (unaudited)	
	Total Fair Value at September 30, 2019	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
Assets:			
Cash and cash equivalents	$ 116,889	$ 116,889	$ —
Marketable securities			
Corporate debt securities	179,643	247	179,396
Municipal debt securities	165	—	165
Long term marketable securities			
Corporate debt securities	585,446	456	584,990
U.S. government agency debt securities	10,996	—	10,996
Other noncurrent assets			
Marketable securities - restricted (SERP)	378	1	377
Total assets at fair value	$ 893,517	$ 117,593	$ 775,924

	Total Fair Value at December 31, 2018	Fair Value Measurements at December 31, 2018	
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
Assets:			
Cash and cash equivalents	$ 192,248	$ 192,248	$ —
Marketable securities			
Corporate debt securities	163,770	245	163,525
Long term marketable securities			
Corporate debt securities	415,650	445	415,205
U.S. government agency and municipal debt securities	3,148	—	3,148
Other noncurrent assets			
Marketable securities - restricted (SERP)	326	1	325
Total assets at fair value	$ 775,142	$ 192,939	$ 582,203

Level 1 assets include cash held at banks, certificates of deposit, money market funds, and investment grade corporate debt securities.

Level 2 assets include commercial paper, investment grade corporate and U.S. government agency, state and municipal debt securities, other fixed income securities and SERP (Supplemental Executive Retirement Plan) assets. Level 2 securities are valued using third-party pricing sources that apply applicable inputs and other relevant data in their models to estimate fair value. The fair value of the restricted marketable securities is recorded in *Other assets* on the condensed consolidated balance sheets.

No amount was recorded for level 3 assets as ofSeptember 30, 2019.

The carrying amounts of other financial instruments, including accounts receivable, accounts payable and accrued expenses approximate fair value due to their short-term maturities.

Unrestricted available-for-sale marketable securities held by the Company are as follows, in thousands of dollars:

	September 30, 2019	December 31, 2018
	(unaudited)	
Corporate and U.S. government agency and municipal debt securities		
Amortized cost	$ 766,570	$ 586,726
Gross unrealized gains	9,756	55
Gross unrealized losses	(76)	(4,213)
Total fair value	$ 776,250	$ 582,568

The contractual maturities of the unrestricted available-for-sale marketable securities held by the Company are as follows, in thousands of dollars:

	September 30, 2019
	(unaudited)
Less than 1 year	$ 179,808
1 year to 2 years	194,063
2 years to 3 years	201,889
3 years to 4 years	200,490
Greater than 4 years	—
Total	$ 776,250

The Company has not experienced any other-than-temporary losses on its marketable securities.

Financial Liabilities

The following table sets forth the Company's financial liabilities that are not carried at fair value, in thousands of dollars:

	September 30, 2019 (unaudited)		December 31, 2018	
	Carrying Value	Fair Value (Level 2)	Carrying Value	Fair Value (Level 2)
2023 Notes	$ 341,163	$ 374,828	$ 329,462	$ 375,834

The fair value is estimated based on actual trade information as well as quoted prices provided by bond traders.

4. Inventories

Inventories consist of the following, in thousands of dollars:

	September 30, 2019 (unaudited)	December 31, 2018
Raw materials	$ 5,271	$ 5,742
Work in process	7,050	7,275
Finished goods	13,183	12,642
Total	$ 25,504	$ 25,659

5. Property and Equipment

Property and equipment consists of the following, in thousands of dollars:

	September 30, 2019 (unaudited)	December 31, 2018
Lab equipment and furniture	$ 9,526	$ 8,995
Leasehold improvements	8,884	2,731
Software	2,225	2,181
Computer equipment	1,334	1,313
Construction-in-progress	338	94
	22,307	15,314
Less accumulated depreciation and amortization	(12,330)	(11,219)
Total	$ 9,977	$ 4,095

Depreciation and amortization expense on property and equipment was approximately $0.4 million and $1.1 million for the three and nine months ended September 30, 2019, respectively, modestly lower than the approximately $0.6 million and $1.5 million for the three and nine months ended September 30, 2018, respectively.

The Company performs its annual impairment assessment of its property and equipment in the fourth quarter, or earlier if impairment indicators exist. As of September 30, 2019, there were no identified indicators of impairment.

6. Intangible Assets

Intangible assets consist of patent defense costs, which are legal fees incurred in conjunction with defending patents for Oxtellar XR and Trokendi XR. The Company amortizes those costs over the useful life of the respective patents.

The following sets forth the gross carrying amount and related accumulated amortization of the intangible assets, in thousands of dollars:

	Weighted-Average Life	September 30, 2019	December 31, 2018
		(unaudited)	
Capitalized patent defense costs	3.26 - 7.51 years	$ 43,375	$ 44,724
Less accumulated amortization		(17,274)	(13,356)
Total		$ 26,101	$ 31,368

Amortization expense on intangible assets was approximately $1.3 million and $3.9 million for the three and nine months ended September 30, 2019, respectively, essentially unchanged as compared to $1.3 million and $3.9 million for the three and nine months ended September 30, 2018, respectively.

The Company performs its annual impairment assessment of its intangible assets in the fourth quarter, or earlier, if impairment indicators exist. As of September 30, 2019, there were no identified indicators of impairment.

7. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following, in thousands of dollars:

	September 30, 2019	December 31, 2018
	(unaudited)	
Accrued clinical trial costs[1]	$ 17,332	$ 14,034
Accrued compensation	12,820	13,546
Accrued professional fees	4,003	3,706
Lease liabilities, current	3,145	—
Other accrued expenses	3,500	5,249
Total	$ 40,800	$ 36,535

[1] Includes clinical supply and research manufacturing costs.

8. Accrued Product Returns and Rebates

Accrued product returns and rebates consist of the following, in thousands of dollars:

	September 30, 2019	December 31, 2018
	(unaudited)	
Accrued product rebates	$ 76,758	$ 85,003
Accrued product returns	21,292	22,060
Total	$ 98,050	$ 107,063

9. Convertible Senior Notes Due 2023

The 0.625% Convertible Senior Notes Due 2023 (2023 Notes), which were issued in March 2018, bear interest at an annual rate of 0.625%, payable semi-annually in arrears on April 1 and October 1 of each year. The 2023 Notes will mature on April 1, 2023, unless earlier converted or repurchased by the Company. The Notes are being amortized to interest expense at an effective interest rate of 5.41% over the contractual term of the 2023 Notes. The Company may not redeem the 2023 Notes at its option before maturity.

The 2023 Notes were issued pursuant to an Indenture between the Company and Wilmington Trust, National Association, as trustee. The Indenture includes customary terms and covenants, including certain events of default upon which the 2023 Notes may be due and payable immediately. The Indenture does not contain any financial or operating covenants or restrictions on the payment of dividends, the issuance of other indebtedness, or the issuance or repurchase of securities by the Company.

The Company will settle conversions by paying or delivering, as applicable, cash, shares of the Company's common stock, or a combination of cash and shares of the Company's common stock, at its election, based on the applicable conversion rate. The initial conversion rate is 16.8545 shares per $1,000 principal amount of the 2023 Notes, which represents an initial conversion price of approximately $59.33 per share, and is subject to adjustment as specified in the Indenture. In the event of conversion, if converted in cash, the holders would forgo all future interest payments, any unpaid accrued interest and the possibility of further stock price appreciation.

If a "make-whole fundamental change," as defined in the Indenture, occurs, then the Company will in certain circumstances increase the conversion rate for a specified period of time. If a "fundamental change," as defined in the Indenture, occurs, then noteholders may require the Company to repurchase their 2023 Notes at a cash repurchase price equal to the principal amount of the 2023 Notes to be repurchased, plus accrued and unpaid interest, if any.

Contemporaneous with the issuance of the 2023 Notes, the Company also entered into separate privately negotiated convertible note hedge transactions (collectively, the Convertible Note Hedge Transactions) with each of the call spread counterparties. The Company issued 402,500 convertible note hedge options. In the event that shares or cash are deliverable to holders of the 2023 Notes upon conversion at limits defined in the Indenture, counterparties to the convertible note hedges will be required to deliver up to approximately 6.8 million shares of the Company's common stock, or to pay cash to the Company in a similar amount as the value that the Company delivers to the holders of the 2023 Notes, based on a conversion price of $59.33 per share.

Concurrently with entering into the Convertible Note Hedge Transactions, the Company also entered into separate privately negotiated warrant transactions (collectively, the Warrant Transactions) with each of the call spread counterparties. The Company issued a total of 6,783,939 warrants. The warrants entitle the holder to one share per warrant at the strike price through 2023. The strike price of the Warrant Transactions will initially be $80.9063 per share of the Company's common stock, and is subject to adjustment.

The Convertible Note Hedge Transactions are expected to reduce the potential dilution of the Company's common stock upon conversion of the 2023 Notes and/or offset any potential cash payments the Company is required to make in excess of the principal amount of converted 2023 Notes, as the case may be. The Warrant Transactions are intended to partially offset the cost to the Company of the purchased Convertible Note Hedge Transactions; however, the Warrant Transactions could have a dilutive effect with respect to the Company's common stock to the extent that the market price per share of the Company's common stock, as measured under the terms of the Warrant Transactions, exceeds the strike price of the warrants.

The liability component of the 2023 Notes consists of the following, in thousands of dollars:

	September 30, 2019	December 31, 2018
	(unaudited)	
Principal amount of the 2023 Notes	$ 402,500	$ 402,500
Debt discount	(76,434)	(76,434)
Deferred financing costs	(8,452)	(8,452)
Accretion of debt discount and deferred financing costs	23,549	11,848
Total carrying value	$ 341,163	$ 329,462

No 2023 Notes have been converted as of September 30, 2019.

10. Other Income (Expenses)

Other income (expenses) consist of the following, in thousands of dollars:

	Three Months ended September 30,		Nine Months ended September 30,	
	2019	2018	2019	2018
	(unaudited)		(unaudited)	
Interest income	$ 5,523	$ 4,461	$ 15,657	$ 9,331
Interest expense	(4,546)	(4,374)	(13,425)	(9,415)
Interest expense on nonrecourse liability related to sale of future royalties	(1,116)	(1,191)	(3,412)	(3,096)
Total	$ (139)	$ (1,104)	$ (1,180)	$ (3,180)

Interest expense includes noncash interest expense related to amortization of deferred financing costs and amortization of the debt discount in the amount of $4.0 million and $11.7 million for the three and nine months ended September 30, 2019, respectively, as compared to $3.7 million and $8.1 million respectively, for the three and nine months ended September 30, 2018.

11. Share-Based Payments

Share-based compensation expense is as follows, in thousands of dollars:

	Three Months ended September 30,		Nine Months ended September 30,	
	2019	2018	2019	2018
	(unaudited)		(unaudited)	
Research and development	$ 680	$ 469	$ 1,954	$ 1,421
Selling, general and administrative	3,234	2,128	9,269	6,879
Total	$ 3,914	$ 2,597	$ 11,223	$ 8,300

The following table summarizes stock option and SAR activities:

	Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)
Outstanding, December 31, 2018	3,916,963	$ 19.98	7.10
Granted	867,135	$ 36.63	
Exercised	(97,403)	$ 13.23	
Forfeited	(48,449)	$ 35.73	
Outstanding, September 30, 2019 (unaudited)	4,638,246	$ 23.07	6.91
As of December 31, 2018:			
Vested and expected to vest	3,916,963	$ 19.98	7.10
Exercisable	1,889,947	$ 12.47	5.96
As of September 30, 2019:			
Vested and expected to vest	4,638,246	$ 23.07	6.91
Exercisable	2,595,276	$ 15.52	5.73

12. Earnings per Share

Basic earnings per share (EPS) is calculated using the weighted-average number of common shares outstanding. Diluted EPS is calculated using the weighted-average number of common shares outstanding, including the dilutive effect of the Company's stock option grants, stock appreciation rights (SAR), warrants, employee stock purchase plan (ESPP) awards and the 2023 Notes, as determined per the treasury stock method.

Effect of Convertible Notes and Related Convertible Note Hedges and Warrants

In connection with the issuance of the 2023 Notes, the Company entered into Convertible Note Hedge and Warrant Transactions as described further in Note 9, *Convertible Senior Notes Due 2023*. The expected collective impact of the Convertible Note Hedge and Warrant Transactions is to reduce the potential dilution that may occur from the actual conversion of the 2023 Notes between the conversion price of $59.33 per share and the strike price of the warrants of $80.9063 per share.

The 2023 Notes and related Convertible Note Hedge and Warrant Transactions are excluded in the calculation of diluted EPS because their inclusion would be anti-dilutive. The denominator of the diluted EPS calculation excludes additional shares related to the 2023 Notes and warrants since the average price of the Company's common stock was less than the conversion price of the 2023 Notes of $59.33 per share and the strike price of the warrants of $80.9063 per share. Prior to actual conversion for

purposes of calculating diluted earnings per share, the Convertible Note Hedge Transactions are not considered as their impact would be anti-dilutive.

In addition to the above described effect of the 2023 notes and the related Convertible Note Hedge and Warrant Transactions, the Company also excluded the common stock equivalents for outstanding stock-based awards in the calculation of diluted EPS because their inclusion would be anti-dilutive:

	Three Months ended September 30,		Nine Months ended September 30,	
	2019	2018	2019	2018
	(unaudited)		(unaudited)	
Stock options	1,395,138	165,675	961,605	180,100

The following table sets forth the computation of basic and diluted EPS for thethree and nine months ended September 30, 2019 and 2018, in thousands of dollars, except share and per share amounts:

	Three Months ended September 30,		Nine Months ended September 30,	
	2019	2018	2019	2018
	(unaudited)		(unaudited)	
Numerator, in thousands:				
Net earnings	$ 28,860	$ 28,011	$ 79,927	$ 85,100
Denominator:				
Weighted average shares outstanding, basic	52,453,384	52,227,630	52,392,232	51,897,240
Effect of dilutive securities:				
Stock options and SAR	1,352,454	2,012,217	1,506,254	2,201,090
Weighted average shares outstanding, diluted	53,805,838	54,239,847	53,898,486	54,098,330
Earnings per share, basic	$ 0.55	$ 0.54	$ 1.53	$ 1.64
Earnings per share, diluted	$ 0.54	$ 0.52	$ 1.48	$ 1.57

13. Income Taxes

The following table provides information regarding the Company's income tax expense and effective tax rate for thethree and nine months ended September 30, 2019 and 2018 (dollar amounts in thousands):

	Three Months ended September 30,		Nine Months ended September 30,	
	2019	2018	2019	2018
	(unaudited)		(unaudited)	
Income tax expense	$ 10,730	$ 8,360	$ 26,648	$ 16,309
Effective tax rate	27.10%	23.00%	25.00%	16.10%

The increase in income tax expense and the increase in the effective tax rate for thethree months ended September 30, 2019, as compared to the same period in the prior year, was primarily attributable to income growth, state income tax rate changes, greater 2018 research and development credit and larger employee stock option tax benefits realized in 2018.

The increase in income tax expense and the increase in the effective tax rate for thenine months ended September 30, 2019, as compared to the same period in the prior year, was primarily attributable to the tax benefits realized in 2018 related to exercise of employee stock options.

14. Leases

The Company determines if an arrangement is a lease at its inception. Some leases include options to terminate prior to the end of the lease term, or to extend for one or more years. These options are included in the lease term when it is reasonably certain that the option will be exercised.

The Company has lease arrangements that contain lease components (e.g., minimum rent payments) and non-lease components (e.g., maintenance, labor charges, etc.). It accounts for both of these components as a single lease component. The Company's lease agreements do not contain any material residual value guarantees or material restrictive covenants.

Operating leases are included in *Lease assets*, *Accrued expenses and other current liabilities*, and *Lease liabilities, long term* on the condensed consolidated balance sheets. Leases with an initial term of 12 months or less are not recorded on the balance sheet. Operating lease assets and lease liabilities are recognized at the commencement date based on the present value of the future minimum lease payments over the lease term. The Company calculates the present value of future payments by using an estimated incremental borrowing rate which approximates the rate at which the Company would borrow, on a secured basis and over a similar term. This rate is estimated based on information available at commencement date of the lease, and may differ for individual leases or for portfolios of leased assets. The Company recognizes lease expense for these leases on a straight-line basis over the lease term. Lease expense for operating leases is recognized as an operating cost.

The Company has operating leases for its current headquarters office and lab space at 1550 East Gude Drive in Rockville, MD and for its fleet vehicles. The Company's existing leases for its current headquarters office and lab space run through April 2020. With respect to the fleet vehicle leases, given the volume of individual leases involved in the overall arrangement, the Company applies a portfolio approach to effectively account for the operating lease assets and liabilities.

New Headquarters Lease

The Company entered into a new lease agreement, effective January 31, 2019, with Advent Key West, LLC (Landlord), for its new headquarters in Rockville, MD (Premises). The term of the new headquarters lease commenced on February 1, 2019 (the Commencement Date) and will continue until April 30, 2034, unless earlier terminated in accordance with the terms of the lease. The lease includes options to extend the lease for up to 10 years. Fixed rent with respect to the Premises began on the Commencement Date; however, the Landlord agreed to a rent abatement from the Commencement Date through April 30, 2020. The initial fixed rental rate is approximately $195,000 per month for the first 12 months, and will automatically increase by 2% on each anniversary of the Commencement Date. Under the terms of the Lease, the Company provided a security deposit of approximately $195,000, and will be required to pay all utility charges for the Premises in addition to its pro rata share of any operating expenses and real estate taxes. The Company will occupy the Premises upon completion of the build-out of the Premises.

The lease also provides for a tenant improvement allowance of approximately $10.2 million, in aggregate. Any unspent tenant improvement allowance as of January 31, 2020 will be forfeited. The full amount of the tenant improvement allowance was initially recorded in *Prepaid expenses and other current assets* on the condensed consolidated balance sheets.

Lease assets, lease-related assets and lease liabilities are as follows, in thousands of dollars:

		September 30, 2019
		(unaudited)
Assets	**Balance Sheet Classification**	
Operating leases	Lease assets	$ 18,780
Tenant receivable	Prepaid expenses and other current assets	4,096
Total lease and lease-related assets		$ 22,876
Liabilities		
Current		
Operating leases	Accrued expenses and other current liabilities	$ 3,145
Noncurrent		
Operating leases	Lease liabilities, long term	27,256
Total lease liabilities		$ 30,401

Operating lease costs for the three and nine months ended September 30, 2019 are as follows, in thousands of dollars:

	Three Months ended September 30,	Nine Months ended September 30,
	2019	
	(unaudited)	
Fixed lease cost	$ 1,498	$ 3,517
Variable lease cost	484	1,467
Total operating leases cost	$ 1,982	$ 4,984

Supplemental cash flow information related to leases is as follows, in thousands of dollars:

	Nine Months ended September 30,	
	2019	2018
	(unaudited)	
Cash paid for operating leases	$ 4,048	$ 4,017
Lease assets obtained for new operating leases	$ 31,856	$ —

Weighted average lease term and weighted average discount rate for operating leases as of September 30, 2019 are as follows, unaudited:

Weighted-average remaining lease term (years)	13.45
Weighted-average discount rate	4.34%

Future minimum lease payments under noncancellable operating leases as of September 30, 2019 are as follows, in thousands of dollars, unaudited:

Year ending December 31:	
2019 (remaining)	$ 784
2020	3,089
2021	2,735
2022	2,550
2023	2,537
Thereafter	29,371
Total future minimum lease payments	$ 41,066
Less: Imputed interest[(1)]	(10,665)
Present value of lease liabilities	$ 30,401

(1) Calculated using the interest rate for each lease.

Disclosure Related to Periods Prior to Adoption of the New Lease Standard

Rent expense for the leased facilities and leased vehicles for the years ended December 31, 2018, 2017 and 2016 was approximately $3.6 million, $2.7 million and $2.7 million, respectively.

Future minimum lease payments under noncancelable operating leases as of December 31, 2018 were as follows, in thousands of dollars:

Year ending December 31:	
2019	$ 3,400
2020	2,287
Thereafter	1,840
Total	$ 7,527

15. Accounts Receivable

The Company recorded an allowance of approximately $10.4 million and $11.5 million for prompt pay discounts and contractual service fees paid to the Company's customers, primarily pharmaceutical wholesalers/distributors, as of September 30, 2019 and December 31, 2018, respectively.

16. Disaggregated Revenues

The following table summarizes the disaggregation of revenues by nature, in thousands of dollars:

	Three Months ended September 30,		Nine Months ended September 30,	
	2019	2018	2019	2018
	(unaudited)		(unaudited)	
Net product sales				
Trokendi XR	$ 77,332	$ 79,834	$ 219,989	$ 226,863
Oxtellar XR	22,702	20,393	65,502	59,514
Total net product sales	$ 100,034	$ 100,227	$ 285,491	$ 286,377
Royalty revenues	2,106	2,769	6,818	5,836
Licensing revenues	—	—	—	750
Total revenues	$ 102,140	$ 102,996	$ 292,309	$ 292,963

The majority of the Company's product sales are to pharmaceutical wholesalers/distributors who, in turn, sell the Company's products to chain and independent pharmacies, hospitals and their other customers. Three pharmaceutical wholesalers/distributors collectively accounted for more than 90% of both the Company's total net product sales as well as its accounts receivables as of the three and nine months ended September 30, 2019 and 2018, respectively.

The Company recognized noncash royalty revenue of $1.6 million and $5.0 million for the three and nine months ended September 30, 2019, respectively, as compared to the $1.5 million and $4.3 million for the three and nine months ended September 30, 2018, respectively.

For the three and nine months ended September 30, 2019, revenues recognized from performance obligations related to prior periods (e.g., due to changes in transaction price) were not material, in the aggregate, to either *Net product sales* or *to Royalty revenues.*

17. Commitments and Contingencies

Product Licenses

The Company has obtained exclusive licenses from third parties for proprietary rights to support the product candidates in the Company's neurology and psychiatry portfolio. Under these license agreements, the Company may be required to pay certain amounts upon the achievement of defined milestones. If these products are ultimately commercialized, the Company is

also obligated to pay royalties to third parties, as percentage of net product sales, for each respective product under license agreement.

Royalty Agreement

In the third quarter of 2014, the Company received a $30.0 million payment pursuant to a Royalty Interest Acquisition Agreement related to the purchase by HC Royalty of certain of the Company's rights under the Company's agreement with United Therapeutics related to the commercialization of Orenitram (treprostinil) Extended-Release Tablets. Full ownership of the royalty rights will revert to the Company if and when a certain cumulative payment threshold is reached, per the terms of the agreement. The Company recorded a nonrecourse liability related to this transaction, and amortizes this amount as noncash royalty revenue (see Note 16). The Company also recognizes noncash interest expense related to this liability and accrues interest expense at an effective interest rate (see Note 10). The interest rate is determined based on projections of HC Royalty's rate of return.

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

Management's Discussion and Analysis of Financial Condition and Results of Operations is intended to help the reader understand the results of operations and the financial condition of Supernus Pharmaceuticals, Inc. (the Company, we, us, or our). The interim financial statements included in this report and this Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with our audited consolidated financial statements and notes thereto for the year ended December 31, 2018 and the related Management's Discussion and Analysis of Financial Condition and Results of Operations, both of which are contained in our Annual Report on Form 10-K, filed with the Securities and Exchange Commission on March 1, 2019.

In addition to historical information, this Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are intended to be covered by the safe harbors created thereby. These forward-looking statements may include declarations regarding the Company's belief or current expectations of management, such as statements including the words "budgeted," "anticipate," "project," 'forecast," "estimate," "expect," "may," "believe," "potential," and similar statements or expressions, which are intended to be among the statements that are forward-looking statements, as such statements reflect the reality of risk and uncertainty that is inherent in our business. Actual results may differ materially from those expressed or implied by such forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements, which are made as of the date this report was filed with the Securities and Exchange Commission. Our actual results and the timing of events could differ materially from those discussed in our forward-looking statements as a result of many factors, including those set forth under the "Risk Factors" section of our Annual Report on Form 10-K and elsewhere in this report as well as in other reports and documents we file with the Securities and Exchange Commission from time to time. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances occurring after the date of this Quarterly Report on Form 10-Q.

Solely for convenience, in this Quarterly Report on Form 10-Q, the trade names are referred to without the TM symbols and the trademark registrations are referred to without the circled R, but such references should not be construed as any indicator that the Company will not assert, to the fullest extent under applicable law, our rights thereto.

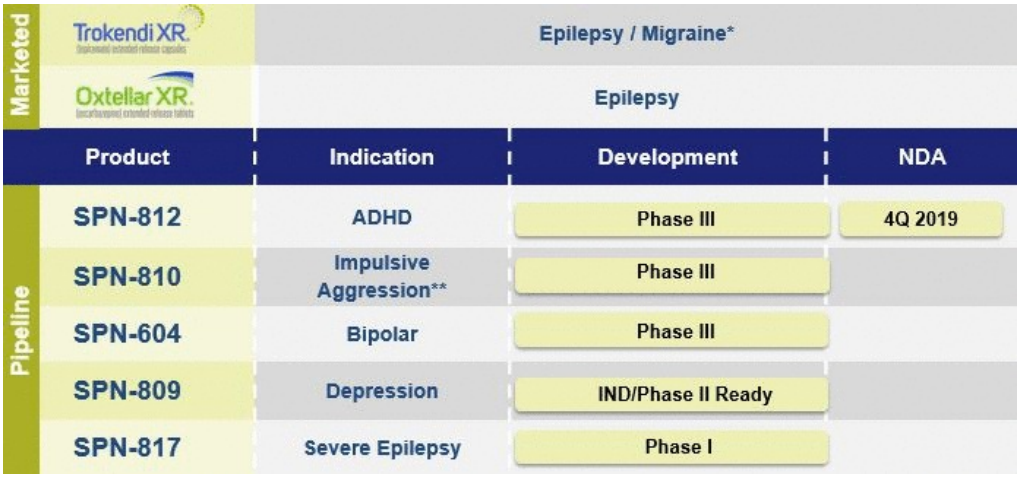
Overview

We are a pharmaceutical company focused on developing and commercializing products for the treatment of central nervous system (CNS) diseases in neurology and psychiatry.

We market two products, Oxtellar XR and Trokendi XR, in the United States (U.S.), through our own sales force. We seek strategic collaborations with other pharmaceutical companies to commercialize our products outside of the U.S. via license agreements.

In addition, we are developing multiple proprietary product candidates in the CNS market to address unmet medical needs with significant market opportunities.

The table below summarizes our current portfolio of novel products and product candidates:



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* Prophylaxis of migraine headache in adults and adolescents.

** Initially for Impulsive Aggression (IA) in patients with attention deficit hyperactivity disorder (ADHD), with plans to add other indications, such as IA in patients with post traumatic stress disorder (PTSD), bipolar disorder, Alzheimer's and other forms of dementia.

We devote significant resources to research and development of products and proprietary drug technologies. We expect to incur significant expenses as we: invest in research and development related to the continued development of each of our product candidates through FDA approval or until the program terminates; expand product indications for approved products; invest in sales and marketing resources for existing and new products; enter into agreements to purchase products or other companies; and invest in support of our business, technology, regulatory and intellectual property portfolio.

Our Neurology Portfolio

Our neurology portfolio includes two commercial products and one product candidate for the treatment of neurological diseases.

Commercial Products

Trokendi XR is a once-daily extended release topiramate product for the prophylaxis of migraine headache and for the treatment of epilepsy.

Oxtellar XR is a once-daily extended release oxcarbazepine product that was initially approved for adjunctive treatment of partial onset seizures of epilepsy. During the first quarter of 2019, we launched Oxtellar XR for the recently approved monotherapy treatment of partial onset seizures of epilepsy in adults and in children 6 to 17 years of age.

These two commercial products differ from immediate release formulations by offering once-daily dosing and unique pharmacokinetic profiles, which we believe can have very positive clinical effects for many patients. We believe a once-daily dosing regimen improves adherence, making it more probable that patients maintain sufficient levels of medication in their bloodstreams to protect against seizures and migraines. In addition, we believe that the unique smooth and steady pharmacokinetic profiles of our once-daily formulations reduce the peak to trough blood level fluctuations, which are typically associated with immediate release products and which may result in increased adverse events (AEs), more side effects and decreased efficacy.

Product Prescriptions

We expect the number of prescriptions filled for Oxtellar XR and Trokendi XR to continue to increase until patent expiration or generic entry, whichever comes first.

The following table provides data regarding our prescriptions, as reported by IQVIA, during the periods indicated, including percentage changes in volume:

	Three Months ended September 30,		Change		Nine Months ended September 30,		Change	
	2019	2018	Volume	Percent	2019	2018	Volume	Percent
Prescriptions								
Trokendi XR	172,981	164,689	8,292	5%	502,603	468,252	34,351	7%
Oxtellar XR	42,052	37,476	4,576	12%	121,016	108,258	12,758	12%
Total prescriptions	215,033	202,165	12,868	6%	623,619	576,510	47,109	8%

Product Candidate

SPN-817 (huperzine A)

SPN-817 will utilize a novel synthetic form of huperzine A, whose mechanism of action (MOA) includes potent acetyl cholinesterase inhibition with pharmacological activities in CNS conditions such as epilepsy.

SPN-817 Development Program

We plan on studying SPN-817 initially in severe pediatric epilepsy disorders. A Phase I proof-of-concept trial is currently underway outside the U.S. in adult patients with refractory complex partial seizures to study the efficacy, safety and pharmacokinetic profile of a new extended release formulation of non-synthetic huperzine A.

We are completing and optimizing the synthesis process for manufacturing synthetic huperzine A and developing a novel dosage form prior to conducting additional clinical trials. Given the potency of huperzine A, a novel extended release oral dosage form is critical to the success of this program because initial studies with the immediate release formulations of non-synthetic huperzine A have shown dose-limiting, serious side effects.

Our Psychiatry Portfolio

Our psychiatry portfolio includes four product candidates for the treatment of psychiatric disorders.

Product Candidates

SPN-812 (extended release viloxazine hydrochloride)

Viloxazine, the active ingredient in SPN-812, is a structurally distinct, bicyclic, serotonin norepinephrine modulating agent (SNMA) with New Chemical Entity (NCE) status in the U.S. We are developing SPN-812 as a novel treatment for ADHD in pediatric and adolescent patients. We believe that SPN-812 could be a better alternative than other non-stimulant and stimulant ADHD therapies due to its unique pharmacological and pharmacokinetic profile.

Viloxazine has an extensive safety record in Europe, where it was previously marketed for many years as an antidepressant.

SPN-812 Development Program

Our Phase III program consisted of four three-arm, placebo-controlled trials: P301 and P303 trials in patients 6 to 11 years old, and P302 and P304 trials in patients 12 to 17 years old. In December 2018, we announced positive topline results from the pediatric trials (P301 and P303) and the first adolescent trial (P302). In March 2019, we announced topline results from the second adolescent trial (P304), supporting the positive results seen in the three previous Phase III trials. The Phase III program for SPN-812 is complete. Patients completing the Phase III trials were permitted to continue treatment under our open label extension trial. That trial is on-going and is expected to continue through 2020, or until our NDA is approved.

In addition, we initiated a Phase III program in adults in the third quarter of 2019.

The Company continues to focus on compiling the New Drug Application (NDA) for SPN-812 for submission to the U.S. Food and Drug Administration (FDA) in the fourth quarter of 2019. We expect to launch SPN-812, assuming FDA approval, in the second half of 2020.

We are continuing to develop and expand our intellectual property (IP) portfolio covering the novel synthesis process for the active ingredient in SPN-812, its novel use in treatment of ADHD and its novel extended release delivery.

SPN-810 (molindone hydrochloride)

We are developing SPN-810 as a novel treatment for IA in patients who have ADHD, with the potential to be the first product available to address this serious, unmet medical need. Molindone hydrochloride was previously marketed in the U.S. for the treatment of schizophrenia, under the trade name Moban, at much higher strengths and using different dosage forms than we are using in our development program. If we are successful in developing SPN-810 as a novel treatment for IA in patients who have ADHD, we may then develop the product as a candidate for treating IA in other indications; e.g., patients with IA in PTSD; bipolar disorder; Alzheimer's; and other forms of dementia.

SPN-810 Development Program

Our Phase III program consists of two clinical studies in patients 6 to 11 years old (P301 and P302) and one in patients 12 to 17 years old (P503).

In November 2019, we announced topline results from the Phase III P301 trial. The P301 trial did not meet its primary endpoint. The study was a randomized, double-blind, placebo controlled, multicenter, parallel group clinical trial in patients diagnosed with ADHD. Patients receiving SPN-810 36mg showed a median percent reduction of 58.6% in the average weekly frequency of impulsive aggression episodes from baseline that was not statistically significant ($p= 0.092$) compared to placebo. These results are based on the combined analysis of data from stages 1 and 2 in the study. In stage 1 (interim analysis stage), the median percent reduction was 60%, which was statistically significant ($p= 0.029$) compared to placebo. However, in stage 2 of the study, post the interim analysis, the increase in variability in the 36mg treatment arm seems to have adversely impacted the results of the combined analysis.

Percent Change from Baseline (CFB) in the Frequency of IA Behaviors
Treatment Period - Primary Analysis (ITT Population)

	Placebo	SPN-810 18mg	SPN-810 36mg
Stage 1 - % CFB			
N	52	49	45
Mean (SD)	-42.9 (35.9)	-45.8 (33.5)	-56.6 (34.1)
Median	-48.6	-47.8	-60.0
P-value		0.651	0.029
Stage 2 - % CFB			
N	73	16	90
Mean (SD)	-43.8 (36.3)	-44.5 (34.6)	-44.0 (43.5)
Median	-47.2	-45.6	-58.5
P-value			0.102
Stages 1 & 2 Combined - % CFB			
N	125	65	135
Mean (SD)	-43.4 (36.0)	-45.5 (33.5)	-48.2 (40.9)
Median	-48.2	-47.9	-58.6
P-value		0.714	0.092

The median percent reduction in frequency of IA behavior in this Phase III study is consistent with the range of percent improvement in the retrospective modified aggression scale (58% - 62%) we saw in the two positive treatment arms in the Phase IIb study. We will continue to analyze the results to better understand the reasons behind the increased variability in the 36mg treatment arm in the P301 study.

Overall, the trial exhibited favorable tolerability and safety profiles with low incidence of AEs across all doses. AEs were mild leading to low discontinuation rates of 0%, 7% and 5% for the 18mg, 36mg and combined treatment arms, respectively.

Adverse Event (AE) N (%)	Placebo (N=126)	SPN-810 18mg (N=65)	SPN-810 36mg (N=137)	SPN-810 Combined (N=202)
Fatigue	1 (0.8)	2 (3.1)	10 (7.3)	12 (5.9)
Headache	2 (1.6)	2 (3.1)	7 (5.1)	9 (4.5)
Increased Appetite	6 (4.8)	0	9 (6.6)	9 (4.5)
Blood Prolactin Increased	1 (0.8)	4 (6.2)	2 (1.5)	6 (3.0)
Upper Respiratory Tract Infection	8 (6.3)	2 (3.1)	2 (1.5)	4 (2.0)
Discontinuation Rate due to AEs	4 (3.1)	0 (0)	10 (7.2)	10 (4.9)

Enrollment in the Phase III P302 trial in patients 6 to 11 years old is at 98% of the target. We will cease enrollment in the P302 trial and analyze the data, which are expected to be available by the end of 2019. In the meantime, enrollment in the P503 Phase III trial (adolescents) is on hold until data from the P302 study are available and a final decision is reached regarding the SPN-810 program in IA.

We continue to develop and expand our IP portfolio covering the novel synthesis process for the active ingredient in SPN-810, its novel use in IA and its novel extended release delivery.

SPN-809 (viloxazine hydrochloride)

SPN-809 is a novel once-daily product candidate for the treatment of depression. SPN-809 incorporates the same active ingredient as SPN-812, viloxazine hydrochloride.

Because SPN-809 contains the same active ingredient as SPN-812, we expect that many of our activities related to the development of SPN-812 will also benefit the development of SPN-809.

SPN-604 (extended release oxcarbazepine for treatment of bipolar disorder)

We initiated a pivotal Phase III monotherapy trial for the treatment of bipolar disorder in the fourth quarter of 2019. If approved, this would represent the first approval for treatment of bipolar patients with oxcarbazepine in the U.S.

Patents

We currently have ten U.S. patents that cover Trokendi XR and we own all of the issued patents. We have one patent issued for extended release topiramate in each of the following countries: Mexico; Australia; Japan and Canada. We have two patents issued in Europe. The ten issued U.S. patents covering Trokendi XR will expire no earlier than 2027.

The Company has entered into settlement agreements with third parties permitting sale of a generic version of Trokendi XR on January 1, 2023, or earlier under certain circumstances.

Our extended release oxcarbazepine patent portfolio currently includes twelve U.S. patents, nine of which cover Oxtellar XR. The nine issued U.S. patents covering Oxtellar XR will expire no earlier than 2027. We own all of the issued patents and all pending patent application. We have two issued patents for extended release oxcarbazepine in both Europe and Australia, and one patent issued in each of the following countries: Canada; Japan; China and Mexico. In addition, we have a pending U.S. patent application that covers various extended release formulations containing oxcarbazepine.

Our patent portfolio also contains patent applications relating to our pipeline products.

We continue to build our intellectual property portfolio to provide additional protection for our technologies, measurement scales, products and product candidates.

To protect our competitive position, it may be necessary to enforce our patent rights through litigation against infringing third parties. See Part II, Item 1 —*Legal Proceedings* for additional information.

Critical Accounting Policies and the Use of Estimates

The significant accounting policies and bases of presentation for our condensed consolidated financial statements are described in Part I, Item 1, Financial Statements, Note 2, *Summary of Significant Accounting Policies* in the Notes to the Condensed Consolidated Financial Statements. Our condensed consolidated financial statements are prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP), requiring us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses, and to disclose material contingent assets and liabilities. Actual results could differ materially from our estimates.

We believe the following accounting policies and estimates to be critical:

Revenue Recognition

Revenue from product sales is recognized when physical control of our products is transferred to our customers, primarily pharmaceutical wholesalers and distributors. Product sales are recorded net of various forms of variable consideration, including: estimated rebates; sales discounts; and an estimated liability for future product returns (collectively, "sales deductions"). We adjust our estimates at the earlier of when the most likely amount of consideration we expect to receive changes, or when the consideration becomes fixed. For a complete description of our revenue recognition policy, see Part I, Item 1, Financial Statements, Note 2, *Revenue from Product Sales,* in the Notes to Condensed Consolidated Financial Statements.

Research and Development Expenses and Related Accrued Clinical Expenses

Research and development expenditures are expensed as incurred. We estimate preclinical study and clinical trial expenses based on services performed pursuant to contracts with research institutions, clinical investigators, clinical research organizations (CROs) and other services providers that conduct activities on the Company's behalf. If the actual timing of the performance of services or the level of effort varies from the estimate, we adjust our accrued expenses or our deferred advance payments accordingly. For a complete description of our research and development expense and preclinical study and clinical trial accrual policies, see Part I, Item 1, Financial Statements, Note 2, *Research and Development Expense* and *Preclinical Study and Clinical Trial Accruals*, in the Notes to Condensed Consolidated Financial Statements.

Clinical trials are inherently complex and often involve multiple service providers. Because billing for services often lags by a month or several months, we are often required to estimate, and therefore accrue, a significant portion of our clinical expenses. This process involves reviewing open contracts and communicating with our subject matter expert personnel, as well as

the appropriate service provider personnel to identify services that have been performed on our behalf but for which no invoice has been received. This includes services provided by CROs, as well as services provided by investigators and other service providers. We accrue the cost for unbilled services performed, both partially and fully completed.

Payments to service providers can either be based on hourly rates for service or based on achievement of performance driven milestones. When accruing clinical trial expenses, we estimate the time period over which services will be performed during the life of the entire clinical program, the total cost of the program, and the level of effort to be expended in each intervening period. We work with each service provider to obtain an estimate for services provided but as yet unbilled as of the end of the calendar quarter, including estimates for payments to site investigators.

We work diligently to minimize, if not eliminate, estimates based solely on company generated calculations. We therefore rely primarily on estimates provided by our vendors. If we and/or the service provider underestimates or overestimates the costs associated with a trial or service at any given point in time, adjustments to research and development expenses may be necessary in the following periods. Historically, our estimated accrued clinical expenses have closely approximated the actual expenses incurred.

Results of Operations

Comparison of the Three and Nine Months ended September 30, 2019 and 2018

Revenues

Revenues consist of net product sales of Trokendi XR and Oxtellar XR in the U.S., and royalty and licensing revenues from our collaborative licensing arrangements.

The following table provides information regarding our revenues during the periods indicated (dollar amount in thousands):

	Three Months ended September 30,		Change		Nine Months ended September 30,		Change	
	2019	2018	Dollar	Percent	2019	2018	Dollar	Percent
Net product sales								
Trokendi XR	$ 77,332	$ 79,834	$ (2,502)	(3)%	$ 219,989	$ 226,863	$ (6,874)	(3)%
Oxtellar XR	22,702	20,393	2,309	11%	65,502	59,514	5,988	10%
Total net product sales	$ 100,034	$ 100,227	$ (193)	—%	$ 285,491	$ 286,377	$ (886)	—%
Royalty revenues	2,106	2,769	(663)	(24)%	6,818	5,836	982	17%
Licensing revenues	—	—	—	—%	—	750	(750)	(100)%
Total revenues	$ 102,140	$ 102,996	$ (856)	(1)%	$ 292,309	$ 292,963	$ (654)	—%

Net product sales

Net product sales are computed as gross revenue from our product shipments to our customers, which are primarily pharmaceutical wholesalers and distributors, less estimates for rebates, product returns and sales discounts.

In the fourth quarter of 2018, wholesalers, distributors and pharmacies increased their inventory holdings when compared to the prevailing inventory levels in the third quarter of 2018. We estimated that this caused net product sales to be approximately $10 million higher in the fourth quarter of 2018 than it would have been, had channel inventory levels remained consistent from the third to the fourth quarter of 2018.

The channel inventory build-up in the fourth quarter of 2018 was effectively reversed in the first quarter of 2019. Specifically, based on analysis of sales and inventory data, inventory levels at wholesalers, distributors and pharmacies returned to the prevailing levels of the third quarter of 2018. As a result of this channel inventory reduction, both gross sales and net product sales decreased in the first half of 2019, as compared to the prior year. The adverse impact on net product sales in the first half of 2019 due to the reduction in channel inventory is estimated at approximately $10 million.

On a year over year comparison, the aforementioned $10 million reduction in channel inventory and adverse year over year changes in sales deductions were mostly offset by the favorable unit prescription volume growth of 8% coupled with the

impact of an 8% price increase. On a quarter over quarter comparison, favorable unit prescription volume growth of 6% was mostly offset by higher sales deductions. Specifically as regards sales deductions, patient reimbursement challenges and increased contracting pressure from managed care providers resulted in both increased per patient costs for our co-pay program as well as higher per patient rebate payments to managed care providers. In aggregate, net product sales for the three and nine months ended September 30, 2019 were relatively flat.

Trokendi XR

Trokendi XR net product sales decreased by $2.5 million for the three months ended September 30, 2019 as compared to the same period in 2018. Compared to 2018, favorable unit prescription volume growth of 5% coupled with the impact of an 8% price increase were offset by higher levels of net sales deductions. Increased sales deductions were driven primarily by increased per patient costs for our co-pay program, as well as higher per patient rebate payments to managed care providers.

Trokendi XR net product sales decreased by $6.9 million for the nine months ended September 30, 2019 as compared to the same period in 2018. The primary driver for the decrease was the aforementioned channel inventory reduction coupled with higher net product sales deductions, offsetting prescription volume growth and impact of price increase.

Oxtellar XR

Oxtellar XR net product sales increased by $2.3 million for the three months ended September 30, 2019 as compared to the same period in 2018. Oxtellar XR net product sales increased by $6.0 million for the nine months ended September 30, 2019 as compared to the same period in 2018. In both periods, the increase was attributable to growth in prescription unit volume of 12% and the impact of an 8% price increase taken in January. These effects were partially offset by increased net product sales deductions from higher per patient payments under both Medicaid and managed care programs, as well as higher co-pay program expenditures.

Sales deductions and related accruals

The Company records accrued product rebates and accrued product returns in *Accrued product returns and rebates* as current liabilities on our condensed consolidated balance sheets and records sales discounts as a valuation allowance against *Accounts receivable* on the condensed consolidated balance sheets. These outstanding amounts are generally affected by changes in level of gross sales, changes in the provision for net product sales deductions, and timing of payments/credits.

The following table provides a summary of activities with respect to sales deductions and related accruals for the nine months ended September 30, 2019 and 2018, respectively, in thousands of dollars:

	Accrued Product Returns and Rebates			
	Product Rebates	Product Returns	Allowance for Sales Discounts	Total
Balance at December 31, 2018	$ 85,003	$ 22,060	$ 11,548	$ 118,611
Provision				
Provision for sales in current year	221,598	6,171	43,693	271,462
Adjustments relating to prior year sales	(888)	(910)	(43)	(1,841)
Total provision	$ 220,710	$ 5,261	$ 43,650	$ 269,621
Less: Actual payments/credits	(228,955)	(6,029)	(44,816)	(279,800)
Balance at September 30, 2019	$ 76,758	$ 21,292	$ 10,382	$ 108,432

	Accrued Product Returns and Rebates			
	Product Rebates	Product Returns	Allowance for Sales Discounts	Total
Balance at December 31, 2017	$ 49,460	$ 18,883	$ 8,892	$ 77,235
Provision				
Provision for sales in current year	166,992	6,347	41,561	214,900
Adjustments relating to prior year sales	(1,744)	(79)	(3)	(1,826)
Total provision	$ 165,248	$ 6,268	$ 41,558	$ 213,074
Less: Actual payments/credits	(147,970)	(5,919)	(39,267)	(193,156)
Balance at September 30, 2018	$ 66,738	$ 19,232	$ 11,183	$ 97,153

The total provision for sales deductions on gross product sales increased from $213.1 million in 2018 to $269.6 million in 2019. A significant portion of this increase was attributable to the year over year increase in the provision for product rebates, from $165.2 million in 2018 to $220.7 million in 2019, or $55.5 million.

Year over year increase in the provision for product rebates is primarily attributable to greater utilization of our patient co-pay programs, as well as higher per patient payments under both Medicaid and managed care programs. Growth in prescriptions and the impact of the 8% price increase taken in January also contributed to the increase in product rebates.

The $1.0 million decrease in the provision for product returns from $6.3 million to $5.3 million for the nine months ended September 30, 2018 and 2019, respectively, is due primarily to favorable returns experience.

The provision for sales discounts increased by $2.1 million, from $41.6 million to $43.7 million for the nine months ended September 30, 2018 and 2019, respectively, because of the prescription volume growth.

Adjustments related to prior year sales due to changes in our estimates was $1.8 million as compared to $285.5 million of net product sales for the nine months ended September 30, 2019, and $1.8 million as compared to $286.4 million of net product sales for the same period in prior year.

Royalty Revenues

Royalty revenues include royalty from net product sales of Mydayis, a product of Shire Plc (a subsidiary of Takeda Pharmaceuticals Company Ltd.), as well as noncash royalty revenue pursuant to our agreement with Healthcare Royalty Partners III, L.P. (HC Royalty). HC Royalty receives royalty payments from United Therapeutics Corporation (United Therapeutics) based on net product sales of United Therapeutics' product Orenitram. Supernus records noncash royalty revenue based on such product sales.

Royalty revenues decreased by approximately $0.7 million, or 24%, for the three months ended September 30, 2019, compared to the same period in 2018, and increased by $1.0 million, or 17%, in the nine months ended September 30, 2019 as compared to the same period in 2018. The decrease quarter over quarter was primarily due to decreased sales of Mydayis. The year over year increase was primarily due to increased sales of Orenitram. Noncash royalty revenue, which is included in total royalty revenue, was $1.6 million and $5.0 million, respectively, for the three and nine months ended September 30, 2019, and $1.5 million and $4.3 million, respectively, for the three and nine months ended September 30, 2018.

Cost of Goods Sold

The following table provides information regarding our cost of goods sold during the periods indicated (dollar amounts in thousands):

	Three Months ended September 30,		Change		Nine Months ended September 30,		Change	
	2019	2018	Dollar	Percent	2019	2018	Dollar	Percent
Cost of goods sold	$ 4,819	$ 4,207	$ 612	15%	$ 12,547	$ 11,168	$ 1,379	12%

Cost of goods sold during the three months ended September 30, 2019 was $4.8 million, $0.6 million higher than the $4.2 million for the same period in 2018. Cost of goods sold during the nine months ended September 30, 2019 was $12.5 million compared to $11.2 million for the same period in 2018. The increase in both periods is primarily attributable to higher volume of product sold due to increased prescriptions.

Research and Development Expenses

The following table provides information regarding our research and development (R&D) expenses during the periods indicated (dollar amounts in thousands):

	Three Months ended September 30,		Change		Nine Months ended September 30,		Change	
	2019	2018	Dollar	Percent	2019	2018	Dollar	Percent
Research and development	$ 16,943	$ 20,422	$ (3,479)	(17)%	$ 49,307	$ 59,368	$ (10,061)	(17)%

R&D expenses decreased by $3.5 million in the three months ended September 30, 2019 as compared to the same period in 2018. R&D expenses decreased by $10.1 million in the nine months ended September 30, 2019 as compared to the same period in 2018. The decrease in both periods is primarily driven by the completion of the four Phase III clinical trials for SPN-812 in late 2018/early 2019, partially offset by the cost to manufacture registration/validation materials for SPN-812 to support our upcoming NDA filing.

Selling, General and Administrative Expenses

The following table provides information regarding our selling, general and administrative (SG&A) expenses during the periods indicated (dollar amounts in thousands):

	Three Months ended September 30,		Change		Nine Months ended September 30,		Change	
	2019	2018	Dollar	Percent	2019	2018	Dollar	Percent
Selling and marketing	$ 29,584	$ 31,967	$ (2,383)	(7)%	$ 90,552	$ 90,982	$ (430)	—%
General and administrative	11,065	8,925	2,140	24%	32,148	26,856	5,292	20%
Total	$ 40,649	$ 40,892	$ (243)	(1)%	$ 122,700	$ 117,838	$ 4,862	4%

Selling and Marketing. Selling and marketing expenses decreased by $2.4 million in the three months ended September 30, 2019 as compared to the same period in 2018. Increased selling expenses of $1.8 million due to increased employee-related expenses were mostly offset by decreased professional and consulting expenses of $1.3 million. Marketing expenses decreased by $2.9 million primarily due to timing of sample production.

Selling and marketing expenses decreased by $0.4 million in the nine months ended September 30, 2019 as compared to the same period in 2018, due to timing of sample production, offset by increased employee related expenses, including share-based compensation.

General and Administrative. General and administrative expenses increased by $2.1 million and $5.3 million in the three and nine months ended September 30, 2019, respectively, as compared to the same periods in 2018. The increase is primarily due to higher employee-related expenses, including share-based compensation, of $2.0 million quarter over quarter and $4.2 million year over year, and modest increases in professional and consulting fees, facilities cost and insurance.

Other Income (Expenses)

The following table provides the components of other income (expenses) during the periods indicated (dollar amounts in thousands):

	Three Months ended September 30,		Change		Nine Months ended September 30,		Change	
	2019	2018	Dollar	Percent	2019	2018	Dollar	Percent
Interest income	$ 5,523	$ 4,461	$ 1,062	24%	$ 15,657	$ 9,331	$ 6,326	68%
Interest expense	(4,546)	(4,374)	172	4%	(13,425)	(9,415)	4,010	43%
Interest expense on nonrecourse liability related to sale of future royalties	(1,116)	(1,191)	(75)	(6)%	(3,412)	(3,096)	316	10%
Total	$ (139)	$ (1,104)	$ 965	(87)%	$ (1,180)	$ (3,180)	$ 2,000	(63)%

Interest income increased by $1.1 million for the three months ended September 30, 2019 and $6.3 million for the nine months ended September 30, 2019 as compared to the same periods in 2018, respectively. The increase in both periods was mainly attributable to an increase in cash, cash equivalents and marketable security holdings primarily resulting from the March 2018 issuance of $402.5 million of 0.625% Convertible Senior Notes, due 2023 (2023 Notes).

Interest expense for the three months ended September 30, 2019 remained essentially unchanged compared to the same period in 2018. Interest expense increased by $4.0 million for the nine months ended September 30, 2019 as compared to the same period in 2018, because of noncash interest expense related to the amortization of deferred financing costs and debt discount on the 2023 Notes.

Noncash interest expense related to our nonrecourse royalty liability for the three months ended September 30, 2019, remained unchanged as compared to the same periods in 2018. Noncash interest expense for the nine months ended September

30, 2019 increased by approximately $0.3 million as compared to the same periods in 2018, due to higher projected royalties from increased future sales of Orenitram.

Income Tax Expense

The following table provides information regarding our income tax expense during the periods indicated (dollar amounts in thousands):

	Three Months ended September 30,		Change		Nine Months ended September 30,		Change	
	2019	2018	Dollar	Percent	2019	2018	Dollar	Percent
Income tax expense	$10,730	$8,360	$2,370	28.3%	$26,648	$16,309	$10,339	63.4%
Effective tax rate	27.1%	23.0%			25.0%	16.1%		

The increase in income tax expense and the increase in the effective tax rate for the three months ended September 30, 2019, as compared to the same period in the prior year, was primarily attributable to income growth, state income tax rate changes, greater 2018 research and development credit and larger employee stock option tax benefits realized in 2018.

The increase in income tax expense and the increase in the effective tax rate for the nine months ended September 30, 2019, as compared to the same period in the prior year, was primarily attributable to the tax benefits realized in 2018 related to exercise of employee stock options. In particular, the Company recorded income tax benefits related to the exercise of employee stock options of approximately $30,000 and $400,000 for the three and nine months ended September 30, 2019, respectively, as compared to $700,000 and $7.0 million for the three and nine months ended September 30, 2018, respectively.

Liquidity and Capital Resources

We have financed our operations primarily with cash generated from product sales, supplemented by revenue from royalty and licensing arrangements as well as proceeds from the sale of equity and debt securities. As regards continued cash generation, we are highly dependent on the commercial success of our two commercial products, Trokendi XR and Oxtellar XR.

We were cash flow positive and profitable from operations in the nine months ended September 30, 2019. While we expect continued profitability for the current year and in subsequent years, we anticipate there may be significant variability from quarter to quarter in our profitability, and particularly as we move forward with the anticipated commercial launch of SPN-812 in 2020, assuming FDA approval.

We believe our existing cash and cash equivalents, marketable securities and cash received from product sales will be sufficient to finance ongoing operations and to finance development of our new products and label expansions for existing products. To continue to grow our business over the long-term, we plan to commit substantial resources to: product acquisition; product in-licensing; product development and clinical trials of product candidates; and supportive functions such as compliance, finance, management of our intellectual property portfolio, information technology systems and personnel. In each case, spending would be commensurate with the growth of the business.

We may, from time to time, consider additional funding through a combination of new collaborative arrangements, strategic alliances, additional equity and debt financings, or financing from other sources, especially in conjunction with opportunistic acquisitions or licensing arrangements. We will continue to actively manage our capital structure and to consider all financing opportunities that could strengthen our long-term liquidity profile. Any such capital structure may or may not be similar to transactions in which we have engaged in the past. There can be no assurances that any such financing opportunities will be available on acceptable terms, if at all.

Financial Condition

Cash and cash equivalents, marketable securities, working capital, convertible notes and total stockholder's equity as of the periods presented below are as follows (dollars in thousands):

	September 30 2019	December 31 2018	Change Dollar	Change Percent
Cash and cash equivalents	$ 116,889	$ 192,248	$ (75,359)	(39)%
Marketable securities	179,808	163,770	16,038	10%
Long term marketable securities	596,442	418,798	177,644	42%
Total	$ 893,139	$ 774,816	$ 118,323	15%
Working capital	277,365	332,134	(54,769)	(16)%
2023 Notes	341,163	329,462	11,701	4%
Total stockholder's equity	557,257	453,023	104,234	23%

The total cash and cash equivalents, marketable securities and long term marketable securitiesincreased by $118.3 million in the first nine months of 2019 primarily from cash generated from operations for the period.

Our working capital at September 30, 2019 was $277.4 million, a decrease of $54.8 million compared to $332.1 million at December 31, 2018. The decrease was primarily due to increased investment in long term marketable securities of approximately$177.6 million in the nine months ended September 30, 2019.

As of September 30, 2019, the outstanding principal on the 2023 Notes was$402.5 million. No 2023 Notes were converted as ofSeptember 30, 2019. Contemporaneous with the issuance of the 2023 Notes, the Company also entered into separate convertible note hedge transactions (collectively, the Convertible Note Hedge Transactions). The Company issued 402,500 convertible note hedge options. The Convertible Note Hedge Transactions are expected to reduce the potential dilution of the Company's common stocks upon conversion of the 2023 Notes. Concurrently with entering into the Convertible Note Hedge Transactions, the Company also entered into separate warrant transactions, issuing a total of 6,783,939 warrants (the Warrant Transactions). See Note 9, *Convertible Senior Notes Due 2023* in the Notes to the Condensed Consolidated Financial Statements for further discussion of the 2023 Notes and our other indebtedness.

Our stockholders' equity increased by $104.2 million during the nine months ended September 30, 2019, primarily as a result of net earnings of$79.9 million, unrealized gains on marketable securities of$10.4 million, issuance of common stock of$2.7 million and share-based compensation of $11.2 million.

Summary of Cash Flows

The following table sets forth the major sources and uses of cash for the periods set forth below (summarized, in thousands):

	Nine Months ended September 30,		Change
	2019	2018	Dollar
Net cash provided by (used in):			
Operating activities			
Operating earnings	$ 104,905	$ 97,561	$ 7,344
Working capital	(5,567)	(1,424)	(4,143)
Total operating activities	99,338	96,137	3,201
Investing activities	(177,362)	(447,810)	270,448
Financing activities	2,665	375,187	(372,522)
Net change in cash and cash equivalents	$ (75,359)	$ 23,514	$ (98,873)

Operating Activities

Net cash provided by operating activities is comprised of two components: cash provided by operating earnings and cash provided by (used in) changes in working capital. The increase in net cash provided by operating activities is primarily driven by a period over period increase in operating earnings, offset by incremental cash absorbed by additions to working capital. Cash utilized in working capital reflects the timing of cash collections on receivables and settlement of payables as described below.

The changes in certain operating assets and liabilities are as follows, in thousands:

	Nine Months ended September 30,		
	2019	2018	Explanation of Change
(Increase) Decrease in:			
Accounts receivable	$ 16,344	$ (10,687)	Timing of collections; decreased receivables in 2019 because of sequential decline in prescription volume coupled with channel inventory reduction in first quarter 2019.
Inventories	155	(6,976)	Increased inventory to support increased product demand.
Prepaid expenses, other current assets and other assets	(4,377)	(3,120)	Timing differences related to deposits for equipment purchases; prepaid clinical trial costs.
Increase (Decrease) in:			
Accounts payable and accrued expenses and noncurrent liabilities	786	9,032	Timing of vendor payments.
Accrued product returns and rebates	(9,013)	17,627	Timing of rebate payments coupled with impact of channel inventory reduction in first quarter 2019; increased provision directly related to growth in prescriptions; growth in Medicaid and managed care rebates higher expenditures for patient co-pay programs.
Income taxes payable	(7,559)	(7,390)	Timing of income tax payments.
Other	(1,903)	90	Timing of compensation payments.
	$ (5,567)	$ (1,424)	

Investing Activities

Net cash used in investing activities decreased by $270.4 million for the nine months ended September 30, 2019, as compared to the same period in 2018, primarily due to net purchases of marketable securities. This represents the investment of excess cash in long term securities investments as well as the investment of the proceeds from the issuance of $402.5 million in 2023 Notes in March 2018.

Financing Activities

Net cash provided by financing activities decreased to $2.7 million for the nine months ended September 30, 2019 versus $375.2 million provided in the same period in 2018. This year over year decrease is primarily attributable to the issuance of the 2023 Notes, and the related convertible note hedges and warrants, in March 2018.

Contractual Obligations and Commitments

Refer to the "Contractual Obligations and Commitments" section in "Part II, Item 7 — Management's Discussion and Analysis of Liquidity and Capital Resources" of our Annual Report on Form 10-K for the year ended December 31, 2018, for a discussion of our contractual obligations.

In addition, during the first quarter of 2019, we entered into a new lease agreement with Advent Key West, LLC for our new headquarters in Rockville, MD. Refer to Note 14 in the Notes to Condensed Consolidated Financial Statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Off-Balance Sheet Arrangements

We do not currently have, nor have we ever had, any relationships with unconsolidated entities or financial partnerships, such entities often referred to as structured finance or special purpose entities. These would have been established for the purpose of facilitating off-balance sheet arrangements or for other contractually narrow or limited purposes.

In addition, we do not engage in trading activities involving non-exchange traded contracts.

Recently Issued Accounting Pronouncements

On January 1, 2019, we adopted Accounting Standards Codification (ASC) Topic 842, *Leases*, or ASC 842. For a discussion of new accounting pronouncements, see Note 2 in the Notes to the Condensed Consolidated Financial Statements in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The primary objective of our investment activities is to preserve our capital to fund operations and to facilitate business development activities. We also seek to maximize income from our investments without assuming significant interest rate, liquidity risk or risk of default by investing in investment grade securities, with maturities of four years or less. Our exposure to market risk is confined to investments in cash, cash equivalents, marketable securities and long term marketable securities. As of September 30, 2019, we had unrestricted cash, cash equivalents, marketable securities and long term marketable securities of $893.1 million.

In connection with the 2023 Notes, we have separately entered into Convertible Note Hedge Transactions and Warrant Transactions to reduce the potential dilution of the Company's common stock upon conversion of the 2023 Notes, and to partially offset the cost to purchase the Convertible Note Hedge Transactions, respectively.

Our cash and cash equivalents consist primarily of cash held at banks, certificates of deposit and money market funds, and have short-term maturities. Our marketable securities consist of investments in commercial paper, investment grade corporate and U.S. government agency and state debt securities, which are reported at fair value. We generally hold these securities to maturities of one to four years. Because of the relatively short period that we hold our investments and because we generally hold these securities to maturity, we do not believe that an increase in interest rates would have any significant impact on the realizable value of our investments. We do not have any currency or other derivative financial instruments other than outstanding warrants to purchase common stock and the convertible note hedges.

We may contract with CROs and investigational sites globally. Currently, we have only one ongoing trial, for SPN-817, outside the U.S. We do not hedge our foreign currency exchange rate risk. Transactions denominated in currencies other than the

U.S. dollar are recorded based on exchange rates at the time such transactions arise. As of September 30, 2019 and December 31, 2018, substantially all of our liabilities were denominated in the U.S. dollar.

Inflation generally affects us by increasing our cost of labor and the cost of services provided by our vendors. We do not believe that inflation and changing prices over the three and nine months ended September 30, 2019 and 2018 had a significant impact on our condensed consolidated results of operations.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Our disclosure controls and procedures are designed to provide reasonable assurance that the information required to be disclosed by us in the reports we file or submit under the Exchange Act has been appropriately recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to our management, including our CEO and CFO, to allow timely decisions regarding required disclosure.

We conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of September 30, 2019, the end of the period covered by this report. Based on that evaluation, under the supervision and with the participation of our management, including our CEO and CFO, we concluded that our disclosure controls and procedures were effective as of September 30, 2019.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the quarter ended September 30, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings

From time to time and in the ordinary course of business, we may be subject to various claims, charges and litigation. We may be required to file infringement claims against third parties for the infringement of our patents. As of September 30, 2019, the Company has no outstanding litigation.

Item 1A Risk Factors

Any investment in our business involves a high degree of risk. Before making an investment decision, you should carefully consider the information we include in this Quarterly Report on Form 10-Q, including our condensed consolidated financial statements and related notes; the additional information in the other reports we file with the Securities and Exchange Commission; and the risks described in our Annual Report on Form 10-K for the year ended December 31, 2018. These risks may result in material harm to our business and our financial condition and results of operations. If a material, adverse event were to occur, the market price of our common stock may decline and you could lose part or all of your investment.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

(a) Sales of Unregistered Securities.

During the three months ended September 30, 2019, the Company granted options to employees to purchase an aggregate of 26,700 shares of common stock at a weighted-average exercise price of $32.53 per share. Once vested, the options are exercisable for a period of ten years from the grant date. These issuances are exempt from registration in reliance on Section 4(a)(2) of the Securities Act as transactions not involving a public offering.

Item 3. Defaults Upon Senior Securities

None

Item 4. Mine Safety Disclosures

None

Item 5. Other Information

None

Item 6. Exhibits

The following exhibits are filed or furnished as part of this Quarterly Report on Form 10-Q:

31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a).
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a).
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	The following financial information from the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2019, formatted in Inline XBRL: (i) Cover Page, (ii) Consolidated Condensed Statements of Income, (iii) Consolidated Condensed Statements of Comprehensive Income, (iv) Consolidated Condensed Balance Sheets, (v) Consolidated Condensed Statements of Shareholders' Equity, (vi) Consolidated Condensed Statements of Cash Flows, and (vii) the Notes to Consolidated Condensed Financial Statements, tagged in summary and detail.
104	The cover page of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2019, formatted in Inline XBRL (included with the Exhibit 101 attachments).

EXHIBIT INDEX

Number	Description
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a).
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101	The following financial information from the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2019, formatted in Inline XBRL: (i) Cover Page, (ii) Consolidated Condensed Statements of Income, (iii) Consolidated Condensed Statements of Comprehensive Income, (iv) Consolidated Condensed Balance Sheets, (v) Consolidated Condensed Statements of Shareholders' Equity, (vi) Consolidated Condensed Statements of Cash Flows, and (vii) the Notes to Consolidated Condensed Financial Statements, tagged in summary and detail.
104	The cover page of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2019, formatted in Inline XBRL (included with the Exhibit 101 attachments).

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.

SUPERNUS PHARMACEUTICALS, INC.

DATED: November 8, 2019

By: /s/ Jack A. Khattar

Jack A. Khattar
President, Secretary and Chief Executive Officer

DATED: November 8, 2019

By: /s/ Gregory S. Patrick

Gregory S. Patrick
Senior Vice President and Chief Financial Officer

EXHIBIT 31.1

CERTIFICATION

I, Jack A. Khattar, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Supernus Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 8, 2019

By: /s/ Jack A. Khattar
Jack A. Khattar
President and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION

I, Gregory S. Patrick, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Supernus Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 8, 2019

By: /s/ Gregory S. Patrick
Gregory S. Patrick
Senior Vice President and Chief Financial Officer

EXHIBIT 32.1

SUPERNUS PHARMACEUTICALS, INC.

CERTIFICATION PURSUANT TO

18 U.S.C. sec. 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Supernus Pharmaceuticals, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jack A. Khattar, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. sec. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 8, 2019

By: /s/ Jack A. Khattar

Jack A. Khattar
President and Chief Executive Officer

EXHIBIT 32.2

SUPERNUS PHARMACEUTICALS, INC.

CERTIFICATION PURSUANT TO

18 U.S.C. sec. 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Supernus Pharmaceuticals, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Gregory S. Patrick, Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. sec. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 8, 2019

By: /s/ Gregory S. Patrick

Gregory S. Patrick
Senior Vice President and Chief Financial Officer