Table of Contents

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

FORM 10-Q

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

FOR THE QUARTERLY PERIOD ENDED JUNE 30, 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 001-36509

AMPHASTAR PHARMACEUTICALS, INC.
(Exact name of Registrant as specified in its charter)

Delaware	**33-0702205**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
11570 6th Street **Rancho Cucamonga, CA**	**91730**
(Address of principal executive offices)	**(zip code)**

(909) 980-9484
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.0001 per share	AMPH	The NASDAQ Stock Market LLC

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

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

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

Large accelerated filer ☐	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 ☒

The number of shares outstanding of the registrant's only class of common stock as of August 2, 2019 was 47,226,496.

AMPHASTAR PHARMACEUTICALS, INC.
TABLE OF CONTENTS
FORM 10-Q FOR THE QUARTERLY PERIOD ENDED JUNE 30, 2019

SPECIAL NOTE ABOUT FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q, or Quarterly Report, contains "forward-looking statements" that involve substantial risks and uncertainties. In some cases, you can identify forward-looking statements by the following words: "may," "might," "will," "could," "would," "should," "expect," "intend," "plan," "anticipate," "believe," "estimate," "predict," "project," "potential," "continue," "ongoing" or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these identifying words. Forward-looking statements relate to future events or future financial performance or condition and involve known and unknown risks, uncertainties and other factors that could cause actual results, levels of activity, performance or achievement to differ materially from those expressed or implied by the forward-looking statements. These forward-looking statements include, but are not limited to, statements about:

- our expectations regarding the sales and marketing of our products;
- our expectations regarding our manufacturing and production and the integrity of our supply chain for our products, including the risks associated with our single source suppliers;
- the timing and likelihood of U.S. Food and Drug Administration, or FDA, approvals and regulatory actions on our product candidates, manufacturing activities and product marketing activities;
- our ability to advance product candidates in our platforms into successful and completed clinical trials and our subsequent ability to successfully commercialize our product candidates;
- our ability to compete in the development and marketing of our products and product candidates;
- our expectations regarding the business expansion plans for our Chinese subsidiary, ANP;
- the potential for adverse application of environmental, health and safety and other laws and regulations on our operations;
- our expectations for market acceptance of our new products and proprietary drug delivery technologies, as well as those of our active pharmaceutical ingredient, or API, customers;
- the potential for our marketed products to be withdrawn due to patient adverse events or deaths, or if we fail to secure FDA approval for products subject to the Prescription Drug Wrap-Up program;
- our expectations in obtaining insurance coverage and adequate reimbursement for our products from third-party payers;
- the amount of price concessions or exclusion of suppliers adversely affecting our business;
- our ability to establish and maintain intellectual property protection for our products and our ability to successfully defend our intellectual property in cases of alleged infringement;
- the implementation of our business strategies, product development strategies and technology utilization;
- the potential for exposure to product liability claims;
- future acquisitions, divestitures or investments, including the anticipated benefits of such acquisitions, divestitures or investments;
- our ability to expand internationally;
- economic and industry trends and trend analysis;
- our ability to remain in compliance with laws and regulations that currently apply or become applicable to our business both in the United States and internationally;
- global, national and local economic and market conditions, specifically with respect to geopolitical uncertainty;
- the impact of trade tariffs or other trade barriers;
- the impact of Patient Protection and Affordable Care Act (as amended) and other legislative and regulatory healthcare reforms in the countries in which we operate including the potential for drug price controls;
- the impact of global and domestic tax reforms, including the Tax Cuts and Jobs Act of 2017, or the Tax Act;
- the timing for completion of the validation of the new construction at our ANP and IMS facilities; and
- our financial performance expectations, including our expectations regarding our backlog, revenue, cost of revenue, gross profit or gross margin, operating expenses, including changes in research and development, sales and marketing and general and administrative expenses, and our ability to achieve and maintain future profitability.

You should read this Quarterly Report and the documents that we reference elsewhere in this Quarterly Report completely and with the understanding that our actual results may differ materially from what we expect as expressed or implied by our forward-looking statements. In light of the significant risks and uncertainties to which our forward-looking statements are subject, you should not place undue reliance on or regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified timeframe, or at all. We discuss many of these risks and uncertainties in greater detail in this Quarterly Report and in our Annual Report on Form 10-K for the year ended December 31, 2018, particularly in Item 1A. "Risk Factors." These forward-looking statements represent our estimates and assumptions only as of the date of this Quarterly Report regardless of the time of delivery of this Quarterly Report, and such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. Except as required by law, we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise after the date of this Quarterly Report.

Unless expressly indicated or the context requires otherwise, references in this Quarterly Report to “Amphastar,” “the Company,” “we,” “our,” and “us” refer to Amphastar Pharmaceuticals, Inc. and our subsidiaries.

PART I – FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

AMPHASTAR PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except share data)

	June 30, 2019 (unaudited)	December 31, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	$ 120,373	$ 86,337
Restricted cash	1,865	1,865
Short-term investments	2,836	2,831
Restricted short-term investments	2,290	2,290
Accounts receivable, net	48,823	52,163
Inventories	99,232	69,322
Income tax refunds and deposits	226	49
Prepaid expenses and other assets	8,489	5,485
Total current assets	284,134	220,342
Property, plant, and equipment, net	220,060	210,418
Finance lease right-of-use assets	985	—
Operating lease right-of-use assets	20,143	—
Goodwill and intangible assets, net	41,718	42,267
Other assets	13,515	9,918
Deferred tax assets	20,746	30,618
Total assets	$ 601,301	$ 513,563
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	$ 88,171	$ 87,418
Income taxes payable	3,150	1,187
Current portion of long-term debt	6,941	18,229
Current portion of operating lease liabilities	2,737	—
Total current liabilities	100,999	106,834
Long-term reserve for income tax liabilities	415	415
Long-term debt, net of current portion	39,793	31,984
Long-term operating lease liabilities, net of current portion	17,754	—
Deferred tax liabilities	1,025	1,031
Other long-term liabilities	9,027	8,940
Total liabilities	169,013	149,204
Commitments and contingencies:		
Stockholders' equity:		
Preferred stock: par value $0.0001; 20,000,000 shares authorized; no shares issued and outstanding	—	—
Common stock: par value $0.0001; 300,000,000 shares authorized; 52,212,760 and 47,217,675 shares issued and outstanding as of June 30, 2019 and 51,438,675 and 46,631,118 shares issued and outstanding as of December 31, 2018, respectively	5	5
Additional paid-in capital	355,436	344,434
Retained earnings	116,086	67,485
Accumulated other comprehensive loss	(4,223)	(4,013)
Treasury stock	(79,459)	(75,476)
Total Amphastar Pharmaceuticals, Inc. stockholders' equity	387,845	332,435
Non-controlling interests	44,443	31,924
Total equity	432,288	364,359
Total liabilities and stockholders' equity	$ 601,301	$ 513,563

See Accompanying Notes to Condensed Consolidated Financial Statements.

AMPHASTAR PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited; in thousands, except per share data)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net revenues	$ 79,047	$ 71,040	$ 158,837	$ 129,433
Cost of revenues	46,660	44,976	95,547	86,397
Gross profit	32,387	26,064	63,290	43,036
Operating expenses:				
Selling, distribution, and marketing	2,992	1,876	6,133	3,597
General and administrative	12,426	11,669	28,753	22,667
Research and development	15,996	15,460	30,603	29,490
Total operating expenses	31,414	29,005	65,489	55,754
Income (loss) from operations	973	(2,941)	(2,199)	(12,718)
Non-operating income (expenses):				
Interest income	143	106	291	230
Interest expense	(24)	(100)	(54)	(118)
Other income (expenses), net	60,001	(1,265)	59,422	(483)
Total non-operating income (expenses), net	60,120	(1,259)	59,659	(371)
Income (loss) before income taxes	61,093	(4,200)	57,460	(13,089)
Income tax provision (benefit)	14,173	(1,347)	12,694	(3,095)
Net income (loss)	$ 46,920	$ (2,853)	$ 44,766	$ (9,994)
Net loss attributable to non-controlling interests	$ (867)	$ —	$ (3,889)	$ —
Net income (loss) attributable to Amphastar Pharmaceuticals, Inc.	$ 47,787	$ (2,853)	$ 48,655	$ (9,994)
Net income (loss) per share attributable to Amphastar Pharmaceuticals, Inc. shareholders:				
Basic	$ 1.01	$ (0.06)	$ 1.04	$ (0.21)
Diluted	$ 0.96	$ (0.06)	$ 0.97	$ (0.21)
Weighted-average shares used to compute net income (loss) per share attributable to Amphastar Pharmaceuticals, Inc. shareholders:				
Basic	47,107	46,557	46,925	46,535
Diluted	49,894	46,557	50,155	46,535

See Accompanying Notes to Condensed Consolidated Financial Statements.

AMPHASTAR PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Unaudited; in thousands)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net income (loss) attributable to Amphastar Pharmaceuticals, Inc.	$ 47,787	$ (2,853)	$ 48,655	$ (9,994)
Other comprehensive loss attributable to Amphastar Pharmaceuticals, Inc., net of income taxes				
Foreign currency translation adjustment	(97)	(2,256)	(210)	(1,066)
Total other comprehensive loss attributable to Amphastar Pharmaceuticals, Inc.	(97)	(2,256)	(210)	(1,066)
Total comprehensive income (loss) attributable to Amphastar Pharmaceuticals, Inc.	$47,690	$(5,109)	$48,445	$(11,060)

See Accompanying Notes to Condensed Consolidated Financial Statements.

AMPHASTAR PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited; in thousands)

	Six Months Ended June 30,	
	2019	2018
Cash Flows From Operating Activities:		
Net income (loss)	$ 44,766	$ (9,994)
Reconciliation to net cash provided by (used in) operating activities:		
Loss on impairment and disposal of assets	850	743
Depreciation of property, plant, and equipment	8,311	6,513
Amortization of product rights, trademarks, and patents	526	1,451
Operating lease right-of-use asset amortization	1,390	—
Share-based compensation expense	8,706	8,862
Changes in deferred taxes	9,872	—
Changes in operating assets and liabilities:		
Accounts receivable, net	1,700	(5,221)
Inventories	(30,012)	1,625
Prepaid expenses and other assets	(1,221)	1,715
Income tax refund, deposits, and payable	1,784	(3,209)
Operating lease right-of-use assets and liabilities, net	(1,297)	—
Accounts payable and accrued liabilities	2,738	10,408
Net cash provided by operating activities	48,113	12,893
Cash Flows From Investing Activities:		
Purchases and construction of property, plant, and equipment	(24,467)	(24,591)
Sale of intangible assets	—	4,400
Purchase of short-term investments	—	(204)
Payment of deposits and other assets	(86)	(114)
Net cash used in investing activities	(24,553)	(20,509)
Cash Flows From Financing Activities:		
Proceeds from the private placement of ANP	18,298	—
Equity related tax payments, net of proceeds from equity plans	(157)	(294)
Purchase of treasury stock	(4,088)	(14,850)
Proceeds from borrowing under lines of credit	—	260
Repayments under lines of credit	(347)	—
Proceeds from issuance of long-term debt	—	8,000
Principal payments on long-term debt	(3,219)	(2,834)
Net cash provided by (used in) financing activities	10,487	(9,718)
Effect of exchange rate changes on cash	(11)	(190)
Net increase (decrease) in cash, cash equivalents, and restricted cash	34,036	(17,524)
Cash, cash equivalents, and restricted cash at beginning of period	88,202	67,459
Cash, cash equivalents, and restricted cash at end of period	$ 122,238	$ 49,935
Noncash Investing and Financing Activities:		
Capital expenditure included in accounts payable	$ 6,631	$ 5,840
Operating lease right-of-use assets	$ 7,671	$ —
Equipment acquired under finance leases	$ 61	$ 14
Supplemental Disclosures of Cash Flow Information:		
Interest paid, net of capitalized interest	$ 1,277	$ 1,078
Income taxes paid	$ 1,147	$ 149

See Accompanying Notes to Condensed Consolidated Financial Statements.

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Note 1. General

Amphastar Pharmaceuticals, Inc., a California corporation, was incorporated in February 1996 and merged with and into Amphastar Pharmaceuticals, Inc., a Delaware corporation, in July 2004 (together with its subsidiaries, hereinafter referred to as the "Company"). The Company is a specialty pharmaceutical company that develops, manufactures, markets, and sells generic and proprietary injectable, inhalation, and intranasal products, including products with high technical barriers to market entry. Additionally, the Company sells insulin active pharmaceutical ingredient, or API, products. Most of the Company's products are used in hospital or urgent care clinical settings and are primarily contracted and distributed through group purchasing organizations and drug wholesalers. The Company's insulin API products are sold to other pharmaceutical companies for use in their own products and are being used by the Company in the development of injectable finished pharmaceutical products. The Company's inhalation products are primarily distributed through drug retailers.

The accompanying unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements of the Company for the year ended December 31, 2018, and the notes thereto as filed with the Securities and Exchange Commission, or SEC, in the Company's Annual Report on Form 10-K for the year ended December 31, 2018. Certain information and footnote disclosures normally included in annual financial statements prepared in accordance with generally accepted accounting principles, or GAAP, have been condensed or omitted from the accompanying condensed consolidated financial statements. The accompanying year-end condensed consolidated balance sheet was derived from the audited financial statements. The accompanying interim financial statements are unaudited, but reflect all adjustments which are, in the opinion of management, necessary for a fair statement of the Company's consolidated financial position, results of operations, comprehensive income (loss) and cash flows for the periods presented. Unless otherwise noted, all such adjustments are of a normal, recurring nature. The Company's results of operations, comprehensive income (loss) and cash flows for the interim periods are not necessarily indicative of the results of operations and cash flows that it may achieve in future periods.

Note 2. Summary of Significant Accounting Policies

Basis of Presentation

The unaudited condensed consolidated financial statements include the accounts of the Company and its subsidiaries, and are prepared in accordance with United States GAAP, or GAAP. All intercompany activity has been eliminated in the preparation of the condensed consolidated financial statements. In the opinion of management, the accompanying unaudited condensed consolidated financial statements include all adjustments (consisting only of normal recurring adjustments) necessary to present fairly the consolidated financial position, results of operations, and cash flows of the Company.

The Company's subsidiaries include: (1) International Medication Systems, Limited, or IMS, (2) Armstrong Pharmaceuticals, Inc., or Armstrong, (3) Amphastar Nanjing Pharmaceuticals Inc., or ANP, (4) Nanjing Letop Fine Chemistry Co., Ltd., or Letop, (5) Nanjing Hanxin Pharmaceutical Technology Co., Ltd, or Hanxin, (6) Nanjing Baixin Trading Co. Ltd., or Baixin, (7) Amphastar France Pharmaceuticals, S.A.S., or AFP, (8) Amphastar UK Ltd., or AUK, and (9) International Medication Systems (UK) Limited, or IMS UK.

In July 2018, the Company's Chinese subsidiary, ANP, completed a private placement of its common equity interest to accredited investors for aggregate gross proceeds of approximately $57 million. While investors were initially required to complete their contributions in cash by December 31, 2018, ANP granted an extension to certain investors. Certain investors contributed their payments in Chinese yuan, which resulted in a difference in U.S. dollars, or USD, due to currency fluctuations subsequent to the execution of the placement agreement. A total of $56.3 million was received by ANP and the difference that was received in USD was expensed in the quarter ended March 31, 2019. The Company has retained approximately 58% of the equity interest in ANP following the private placement and continues to consolidate

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

the financial results of ANP with the Company's results of operations. ANP's net loss after July 2, 2018, was attributed to the Company in accordance with the Company's equity interest of approximately 58% in ANP.

In 2018, the Company identified certain errors in its accounting primarily related to the depreciation of certain leasehold improvements within property, plant and equipment. The errors were not material to any of the Company's prior period annual financial statements. However, for comparative purposes, the Company has revised the prior period consolidated financial statements included herein. As a result, the net loss for the three months ended June 30, 2018 increased by $0.1 million. The errors did not result in a change to the basic or diluted net loss per share for the three months ended June 30, 2018. The net loss for the six months ended June 30, 2018, did not materially change as a result of the error. However, the error resulted in a change to the basic and diluted net loss per share for the six months ended June 30, 2018 by $0.01 and $0.01, respectively. The balances of property, plant, and equipment, net and retained earnings as of June 30, 2018, were reduced by $4.7 million and $3.6 million, respectively. The error did not result in a change to the net cash provided by operating activities in the Company's consolidated statement of cash flows for the six months ended June 30, 2018.

Use of Estimates

The preparation of condensed consolidated financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. Actual results could differ from those estimates. The principal accounting estimates include determination of allowances for doubtful accounts and discounts, provision for chargebacks and rebates, provision for product returns, adjustment of inventory to their net realizable values, impairment of long-lived and intangible assets and goodwill, self-insured claims, workers' compensation liabilities, litigation reserves, stock price volatilities for share-based compensation expense, valuation allowances for deferred tax assets, and liabilities for uncertain income tax positions.

Foreign Currency

The functional currency of the Company, its domestic subsidiaries, its Chinese subsidiary, ANP, and its U.K. subsidiary, AUK, is the USD. ANP maintains its books of record in Chinese yuan. These books are remeasured into the functional currency of USD using the current or historical exchange rates. The resulting currency remeasurement adjustments and other transactional foreign currency exchange gains and losses are reflected in the Company's statements of operations.

The Company's French subsidiary, AFP, maintains its book of record in euros. Its other Chinese subsidiaries maintain their books of record in Chinese yuan. Its U.K. subsidiary, IMS UK, maintains its book of record in British pounds. These local currencies have been determined to be the subsidiaries' respective functional currencies. These books of record are translated into USD using average exchange rates during the period. Assets and liabilities are translated at the rate of exchange prevailing on the balance sheet date. Equity is translated at the prevailing rate of exchange at the date of the equity transactions. Translation adjustments are reflected in stockholders' equity and are included as a component of other accumulated comprehensive income (loss). The unrealized gains or losses of intercompany foreign currency transactions that are of a long-term investment nature are reported in other accumulated comprehensive income (loss). The unrealized gains and losses of intercompany foreign currency transactions that are of a long-term investment nature for the three and six months ended June 30, 2019, were $0.4 million loss and $0.2 million gain, respectively, and for the three and six months ended June 30, 2018, were $1.7 million loss and $0.8 million loss, respectively.

The Company does not undertake hedging transactions to cover its foreign currency exposure.

Comprehensive Income (Loss)

For the three and six months ended June 30, 2019 and 2018, the Company included its foreign currency translation gain or loss as part of its comprehensive income (loss).

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Restricted Cash and Short-Term Investments

Restricted cash and short-term investments are collateral required for the Company to effect standby letters of credit and to qualify for workers' compensation self-insurance and to guarantee certain vendor payments in France. As of June 30, 2019 and December 31, 2018, restricted cash and short-term investments include $1.9 million in cash and $2.3 million in certificates of deposit, respectively. The certificates of deposit have original maturities greater than three months and are classified as short-term investments.

Financial Instruments

The carrying amounts of cash and cash equivalents, short-term investments, restricted cash and short-term investments, accounts receivable, accounts payable, accrued expenses, and short-term borrowings approximate fair value due to the short maturity of these items. The majority of the Company's long-term obligations consist of variable rate debt, and their carrying value approximates fair value as the stated borrowing rates are comparable to rates currently offered to the Company for instruments with similar maturities. The Company at times enters into fixed interest rate swap contracts to exchange the variable interest rates for fixed interest rates without the exchange of the underlying notional debt amounts. Such interest rate swap contracts are recorded at their fair values.

Deferred Income Taxes

The Company utilizes the liability method of accounting for income taxes, under which deferred taxes are determined based on the temporary differences between the financial statements and the tax basis of assets and liabilities using enacted tax rates. A valuation allowance is recorded when it is more likely than not that the deferred tax assets will not be realized.

Recent Accounting Pronouncements

In June 2016, the Financial Accounting Standards Board, or FASB, issued Accounting Standard Update, or ASU, No. 2016-13 *Financial Instruments – Credit Losses*, which is aimed at providing financial statement users with more useful information about the expected credit losses on financial instruments and other commitments to extend credit. The standard update changes the impairment model for financial assets measured at amortized cost, requiring presentation at the net amount expected to be collected. The measurement of expected credit losses requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. Available-for-sale debt securities with unrealized losses will be recorded through an allowance for credit losses. The ASU and the related clarifications subsequently issued by FASB will become effective for the Company's interim and annual reporting periods during the year ending December 31, 2020. Early adoption is permitted for interim or annual periods after December 31, 2019. The Company will be required to apply the standard's provisions as a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. The Company does not believe the adoption of this accounting guidance will have a material impact on its consolidated financial statements and related disclosures.

In January 2017, the FASB issued ASU No. 2017-04 *Simplifying the Test for Goodwill Impairment*, which eliminates the requirement to calculate the implied fair value of goodwill. An entity should perform its annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The update also eliminated the requirements for any reporting unit with a zero or negative carrying amount to perform a qualitative assessment and, if it fails that qualitative test, to perform Step 2 of the goodwill impairment test. An entity is required to disclose the amount of goodwill allocated to each reporting unit with a zero or negative carrying amount of net assets. The guidance is effective for the Company's interim and annual reporting periods during the year ending December 31, 2020, and applied on a prospective basis. Early adoption is permitted for interim and annual goodwill impairment testing dates after January 1,

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

2017. The Company currently does not believe that the adoption of this accounting guidance will have a material impact on its consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU No. 2018-13 *Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement*, which removes, modifies, and adds certain disclosure requirements to ASC 820, *Fair Value Measurement*. The guidance is effective for the Company's interim and annual reporting periods during the year ending December 31, 2020. Early adoption is permitted. The Company does not believe that the adoption of this accounting guidance will have a material impact on its consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU No. 2018-14 *Disclosure Framework – Changes to the Disclosure Requirements for Defined Benefit Plans*, which removes, modifies, and adds certain disclosure requirements to ASC 715-20, *Defined Benefit Plans*. The guidance is effective for the Company's interim and annual reporting periods during the year ending December 31, 2021. Early adoption is permitted. The Company does not believe that the adoption of this accounting guidance will have a material impact on its consolidated financial statements and related disclosures.

In October 2018, the FASB issued ASU No. 2018-17 *Targeted Improvements to Related Party Guidance for Variable Interest Entities*, which requires indirect interests held through related parties in common control arrangements be considered on a proportional basis for determining whether fees paid to decision makers and service providers are variable interests. The guidance is effective for the Company's interim and annual reporting periods during the year ending December 31, 2020. Early adoption is permitted. The Company currently does not believe that the adoption of this accounting guidance will have a material impact on its consolidated financial statements and related disclosures.

In November 2018, the FASB issued ASU No. 2018-18 *Clarifying the Interaction between Topic 808 and Topic 606*, which requires transactions in collaborative arrangements to be accounted for under ASC 606, Revenue from Contracts with Customers, or ASC 606, if the counterparty is a customer for a good or service that is a distinct unit of account. The amendments also preclude entities from presenting consideration from transactions with a collaborator that is not a customer together with revenue recognized from contracts with customers. The guidance is effective for the Company's interim and annual reporting periods during the year ending December 31, 2020. Early adoption is permitted, including in any interim period. The Company is currently evaluating the impact that the adoption of this guidance will have on its consolidated financial statements and related disclosures.

Note 3. Revenue Recognition

In accordance with ASC 606, revenue is recognized at the time that the Company's customers obtain control of the promised goods.

Generally, revenue is recognized at the time of product delivery to the Company's customers. In some cases, revenue is recognized at the time of shipment when stipulated by the terms of the sale agreements. Revenues derived from contract manufacturing services are recognized when third-party products are shipped to customers, and after the customer has accepted test samples of the products to be shipped.

The Company only records revenue to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved, by estimating and recording reductions to revenue for discounts, product returns, and pricing adjustments, such as wholesaler chargebacks and retailer rebates, in the same period that the related revenue is recorded.

The Company's accounting policy is to review each agreement involving contract development and manufacturing services to determine if there are multiple revenue-generating activities that constitute more than one unit of accounting. Revenues are recognized for each unit of accounting based on revenue recognition criteria relevant to that unit. The Company does not have any revenue arrangements with multiple performance obligations.

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Provision for Chargebacks and Rebates

The provision for chargebacks and rebates is a significant estimate used in the recognition of revenue. Wholesaler chargebacks relate to sales terms under which the Company agrees to reimburse wholesalers for differences between the gross sales prices at which the Company sells its products to wholesalers and the actual prices of such products that wholesalers resell under the Company's various contractual arrangements with third parties such as hospitals and group purchasing organizations in the United States. Rebates include primarily amounts paid to retailers, payers, and providers in the United States, including those paid to state Medicaid programs, and are based on contractual arrangements or statutory requirements. The Company estimates chargebacks and rebates using the expected value method at the time of sale to wholesalers based on wholesaler inventory stocking levels, historic chargeback and rebate rates, and current contract pricing.

The provision for chargebacks and rebates is reflected as a component of net revenues. The following table is an analysis of the chargeback and rebate provision:

	Six Months Ended June 30,	
	2019	2018
	(in thousands)	
Beginning balance	$ 22,423	$ 18,470
Provision for chargebacks and rebates	58,001	55,372
Credits and payments issued to third parties	(61,704)	(55,999)
Ending balance	$ 18,720	$ 17,843

Changes in the chargeback provision from period to period are primarily dependent on the Company's sales to its wholesalers, the level of inventory held by wholesalers, and the wholesalers' customer mix. Changes in the rebate provision from period to period are primarily dependent on retailer's and other indirect customers' purchases. The approach that the Company uses to estimate chargebacks has been consistently applied for all periods presented. Variations in estimates have been historically small. The Company continually monitors the provision for chargebacks and rebates and makes adjustments when it believes that the actual chargebacks and rebates may differ from the estimates. The settlement of chargebacks and rebates generally occurs within 30 days to 60 days after the sale to wholesalers. Accounts receivable and/or accounts payable and accrued liabilities are reduced and/or increased by the chargebacks and rebate amounts depending on whether the Company has the right to offset with the customer. Of the provision for chargebacks and rebates as of June 30, 2019 and December 31, 2018, $11.5 million and $12.0 million were included in accounts receivable, net, on the condensed consolidated balance sheets, respectively. The remaining provision of $7.2 million and $10.4 million were included in accounts payable and accrued liabilities, respectively.

Accrual for Product Returns

The Company offers most customers the right to return qualified excess or expired inventory for partial credit; however, API product sales are generally non-returnable. The Company's product returns primarily consist of the returns of expired products from sales made in prior periods. Returned products cannot be resold. At the time product revenue is recognized, the Company records an accrual for product returns estimated using the expected value method. The accrual is based, in part, upon the historical relationship of product returns to sales and customer contract terms. The Company also assesses other factors that could affect product returns including market conditions, product obsolescence, and the introduction of new competition. Although these factors do not normally give the Company's customers the right to return products outside of the regular return policy, the Company realizes that such factors could ultimately lead to increased returns. The Company analyzes these situations on a case-by-case basis and makes adjustments to the product return reserve as appropriate.

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

The provision for product returns is reflected as a component of net revenues. The following table is an analysis of the product return liability:

	Six Months Ended June 30,	
	2019	2018
	(in thousands)	
Beginning balance	$ 8,030	$ 6,522
Provision for product returns	3,654	917
Credits issued to third parties	(2,243)	(865)
Ending balance	$ 9,441	$ 6,574

Of the provision of product returns as of June 30, 2019 and December 31, 2018, $6.6 million and $5.3 million were included in accounts payable and accrued liabilities on the condensed consolidated balance sheets, respectively. The remaining provision as of June 30, 2019 and December 31, 2018, of $2.8 million and $2.7 million was included in other long-term liabilities, respectively. For the six months ended June 30, 2019 and 2018, the Company's aggregate product return rate was 1.5% and 1.3% of qualified sales, respectively.

Note 4. Income (Loss) per Share Attributable to Amphastar Pharmaceuticals, Inc. Shareholders

Basic net income (loss) per share attributable to Amphastar Pharmaceuticals, Inc. shareholders is calculated based upon the weighted-average number of shares outstanding during the period. Diluted net income (loss) per share attributable to Amphastar Pharmaceuticals, Inc. shareholders gives effect to all potential dilutive shares outstanding during the period, such as stock options, non-vested restricted stock units, and shares issuable under the Company's Employee Stock Purchase Plan, or ESPP, and the 2018 ANP Equity Incentive Plan, or the 2018 Plan.

For the three and six months ended June 30, 2019, options to purchase 783,001 and 762,937 shares of stock, respectively, with a weighted-average exercise price of $21.98 per share and $22.00 per share, respectively, were excluded in the computation of diluted net income per common share attributable to Amphastar Pharmaceuticals, Inc.'s shareholders because the effect from the assumed exercise of these options would be anti-dilutive. Additionally, 3,648,932 options to purchase ANP stock were awarded to ANP employees, which represent approximately 2% of ANP's total equity, were excluded in the computation of diluted net income per common share attributable to Amphastar Pharmaceuticals, Inc.'s shareholders because the effect from the assumed exercise of these options would be anti-dilutive.

As the Company reported a net loss for the three and six months ended June 30, 2018, the diluted net loss per share attributable to Amphastar Pharmaceuticals, Inc. shareholders, as reported, equals the basic net loss per share attributable to Amphastar Pharmaceuticals, Inc. shareholders since the effect of the assumed exercise of stock options, vesting of non-vested RSUs, and issuance of common shares under the Company's ESPP are anti-dilutive. Total stock options, non-vested RSUs, and shares issuable under the Company's ESPP excluded from the three and six months ended June 30, 2018, net loss per share were 11,649,241 stock options, 1,232,237 non-vested RSUs, and 60,854 shares issuable under the Company's ESPP.

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

The following table provides the calculation of basic and diluted net income (loss) per share attributable to Amphastar Pharmaceuticals, Inc. shareholders for each of the periods presented:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
	(in thousands, except per share data)			
Basic and dilutive numerator:				
Net income (loss) attributable to Amphastar Pharmaceuticals, Inc.	$ 47,787	$ (2,853)	$ 48,655	$ (9,994)
Denominator:				
Weighted-average shares outstanding — basic	47,107	46,557	46,925	46,535
Net effect of dilutive securities:				
Incremental shares from equity awards	2,787	—	3,230	—
Weighted-average shares outstanding — diluted	49,894	46,557	50,155	46,535
Net income (loss) per share attributable to Amphastar Pharmaceuticals, Inc. shareholders — basic	$ 1.01	$ (0.06)	$ 1.04	$ (0.21)
Net income (loss) per share attributable to Amphastar Pharmaceuticals, Inc. shareholders — diluted	$ 0.96	$ (0.06)	$ 0.97	$ (0.21)

Note 5. Segment Reporting

The Company's business is the development, manufacture, and marketing of pharmaceutical products. The Company has identified two reporting segments that each report to the Chief Operating Decision Maker, or CODM, as defined in ASC 280, Segment Reporting. The Company's performance is assessed and resources are allocated by the CODM based on the following two reportable segments:

- Finished pharmaceutical products
- API

The finished pharmaceutical products segment manufactures, markets and distributes enoxaparin, naloxone, phytonadione, lidocaine, medroxyprogesterone acetate, Primatene® Mist, as well as various other critical and non-critical care drugs. The API segment manufactures and distributes recombinant human insulin API and porcine insulin API for external customers and internal product development.

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Selected financial information by reporting segment is presented below:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
	(in thousands)			
Net revenues:				
Finished pharmaceutical products	$ 73,735	$ 63,241	$ 148,274	$ 116,358
API	5,312	7,799	10,563	13,075
Total net revenues	79,047	71,040	158,837	129,433
Gross profit:				
Finished pharmaceutical products	34,540	27,649	66,852	47,285
API	(2,153)	(1,585)	(3,562)	(4,249)
Total gross profit	32,387	26,064	63,290	43,036
Operating expenses	31,414	29,005	65,489	55,754
Income (loss) from operations	973	(2,941)	(2,199)	(12,718)
Non-operating income (expense)	60,120	(1,259)	59,659	(371)
Income (loss) before income taxes	$ 61,093	$ (4,200)	$ 57,460	$ (13,089)

The Company manages its business segments to the gross profit level and manages its operating and other costs on a company-wide basis. The Company does not identify total assets by segment for internal purposes, as the Company's CODM does not assess performance, make strategic decisions, or allocate resources based on assets.

The amount of net revenues in the finished pharmaceutical product segment is presented below:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
	(in thousands)			
Finished pharmaceutical products net revenues:				
Enoxaparin	$ 9,838	$ 8,715	$ 24,322	$ 15,722
Phytonadione	12,441	10,806	22,561	19,987
Lidocaine	10,082	10,010	22,061	19,792
Naloxone	7,833	11,133	15,197	20,060
Medroxyprogesterone	6,696	6,365	13,909	9,071
Epinephrine	3,139	3,687	5,818	6,910
Primatene® Mist	2,512	—	5,409	—
Other finished pharmaceutical products	21,194	12,525	38,997	24,816
Total finished pharmaceutical products net revenues	$ 73,735	$ 63,241	$ 148,274	$ 116,358

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Net revenues and carrying values of long-lived assets of enterprises by geographic regions are as follows:

	Net Revenue				Long-Lived Assets	
	Three Months Ended June 30,		Six Months Ended June 30,		June 30,	December 31,
	2019	2018	2019	2018	2019	2018
	(in thousands)					
United States	$74,781	$68,560	$151,238	$121,664	$106,803	$ 109,331
China	984	—	984	—	68,620	58,059
France	3,282	2,480	6,615	7,769	44,637	43,028
United Kingdom	—	—	—	—	—	—
Total	$79,047	$71,040	$158,837	$129,433	$220,060	$ 210,418

Note 6. Customer and Supplier Concentration

Customer Concentrations

Three large wholesale drug distributors, AmerisourceBergen Corporation, or AmerisourceBergen, Cardinal Health, Inc., or Cardinal, and McKesson Corporation, or McKesson, are all distributors of the Company's products as well as suppliers of a broad range of health care products. The Company considers these three customers to be its major customers, as each individually, and these customers collectively, represented a significant percentage of the Company's net revenue for the three and six months ended June 30, 2019 and 2018, and accounts receivable as of June 30, 2019 and December 31, 2018, respectively. The following table provides accounts receivable and net revenue information for these major customers:

	% of Total Accounts Receivable		% of Net Revenue			
			Three Months Ended June 30,		Six Months Ended June 30,	
	June 30, 2019	December 31, 2018	2019	2018	2019	2018
McKesson	28 %	28 %	25 %	25 %	27 %	26 %
Cardinal Health	20 %	21 %	21 %	20 %	23 %	21 %
AmerisourceBergen	12 %	19 %	25 %	27 %	23 %	26 %

Supplier Concentrations

The Company depends on suppliers for raw materials, APIs, and other components that are subject to stringent FDA requirements. Some of these materials may only be available from one or a limited number of sources. Establishing additional or replacement suppliers for these materials may take a substantial period of time, as suppliers must be approved by the FDA. Furthermore, a significant portion of raw materials may only be available from foreign sources. If the Company is unable to secure, on a timely basis, sufficient quantities of the materials it depends on to manufacture and market its products, it could have a materially adverse effect on the Company's business, financial condition, and results of operations.

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Note 7. Fair Value Measurements

The accounting standards of the FASB, define fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal or most advantageous market for the asset or liability at the measurement date (an exit price). These standards also establish a hierarchy that prioritizes observable and unobservable inputs used in measuring fair value of an asset or liability, as described below:

- *Level 1* – Inputs to measure fair value are based on quoted prices (unadjusted) in active markets on identical assets or liabilities;
- *Level 2* – Inputs to measure fair value are based on the following: a) quoted prices in active markets on similar assets or liabilities, b) quoted prices for identical or similar instruments in inactive markets, or c) observable (other than quoted prices) or collaborated observable market data used in a pricing model from which the fair value is derived; and
- *Level 3* – Inputs to measure fair value are unobservable and the assets or liabilities have little, if any, market activity; these inputs reflect the Company's own assumptions about the assumptions that market participants would use in pricing the assets or liabilities based on best information available in the circumstances.

As of June 30, 2019, cash equivalents include money market accounts. Short-term investments consist of certificates of deposit with original expiration dates within 12 months. These certificates of deposit are carried at amortized cost in the Company's consolidated balance sheet, which approximates their fair value determined based on Level 2 inputs. The restrictions on restricted cash and short-term investments have a negligible effect on the fair value of these financial assets.

The Company does not hold any significant Level 2 or Level 3 instruments that are measured for fair value on a recurring basis.

Nonfinancial assets and liabilities are not measured at fair value on a recurring basis but are subject to fair value adjustments in certain circumstances. These items primarily include long-lived assets, goodwill, and intangible assets for which the fair value of assets is determined as part of the related impairment test. As of June 30, 2019 and December 31, 2018, there were no adjustments to fair value for nonfinancial assets or liabilities.

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Note 8. Goodwill and Intangible Assets

The table below shows the weighted-average life, original cost, accumulated amortization, and net book value by major intangible asset classification:

	Weighted-Average Life (Years)	Original Cost	Accumulated Amortization	Net Book Value
		(in thousands)		
Definite-lived intangible assets				
IMS (UK) international product rights	10	8,880	2,590	6,290
Patents	12	486	234	252
Land-use rights	39	2,540	519	2,021
Other intangible assets	4	69	69	—
Subtotal	13	11,975	3,412	8,563
Indefinite-lived intangible assets				
Trademark	*	29,225	—	29,225
Goodwill - Finished pharmaceutical products	*	3,930	—	3,930
Subtotal	*	33,155	—	33,155
As of June 30, 2019	*	$ 45,130	$ 3,412	$ 41,718

	Weighted-Average Life (Years)	Original Cost	Accumulated Amortization	Net Book Value
		(in thousands)		
Definite-lived intangible assets				
Cortrosyn® product rights	12	$ 27,134	$ 27,134	$ —
IMS (UK) international product rights	10	8,911	2,153	6,758
Patents	12	486	213	273
Land-use rights	39	2,540	486	2,054
Other intangible assets	4	69	63	6
Subtotal	12	39,140	30,049	9,091
Indefinite-lived intangible assets				
Trademark	*	29,225	—	29,225
Goodwill - Finished pharmaceutical products	*	3,951	—	3,951
Subtotal	*	33,176	—	33,176
As of December 31, 2018	*	$ 72,316	$ 30,049	$ 42,267

* Intangible assets with indefinite lives have an indeterminable average life.

Sale of Fourteen Injectable ANDAs

In February 2017, the Company sold the 14 ANDAs it acquired in March 2016 from Hikma Pharmaceuticals, Inc. to an unrelated party. The consideration included a purchase price of $6.4 million of which $1.0 million was received upon closing, $1.0 million was received in the second quarter of 2017 and the remaining $4.4 million was received in January 2018. In addition to the purchase price, the purchaser agreed to pay the Company a royalty fee equal to 2% of net sales derived from purchaser's sales of the products for the period from February 2017 through February 2027. The Company has not recognized any royalty fee revenue. In 2017, the Company recognized a gain of $2.6 million within operating (income) expenses on its consolidated statement of operations.

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Goodwill

The changes in the carrying amounts of goodwill were as follows:

	June 30, 2019	December 31, 2018
	(in thousands)	
Beginning balance	$ 3,951	$ 4,461
Currency translation	(21)	(510)
Ending balance	$ 3,930	$ 3,951

Primatene® Trademark

In January 2009, the Company acquired the exclusive rights to the trademark, domain name, website and domestic marketing, distribution and selling rights related to Primatene® Mist, an over-the-counter bronchodilator product, recorded at the allocated fair value of $29.2 million, which is its carrying value as of June 30, 2019.

The trademark was determined to have an indefinite life. In determining its indefinite life, the Company considered the following: the expected use of the intangible; the longevity of the brand; the legal, regulatory and contractual provisions that affect their maximum useful life; the Company's ability to renew or extend the asset's legal or contractual life without substantial costs; effects of the regulatory environment; expected changes in distribution channels; maintenance expenditures required to obtain the expected future cash flows from the asset; and considerations for obsolescence, demand, competition and other economic factors.

As a result of environmental concerns about chlorofluorocarbons, or CFCs, the FDA required the CFC formulation of Primatene® Mist to be phased out on December 31, 2011.

In 2013, the Company filed a new drug application, or NDA, for Primatene® Mist, which utilizes a non-CFC propellant. In November 2018, the FDA granted over-the-counter approval of the NDA for Primatene® Mist, and the Company re-launched this product in December 2018.

Note 9. Inventories

Inventories consist of the following:

	June 30, 2019	December 31, 2018
	(in thousands)	
Raw materials and supplies	$ 45,633	$ 30,153
Work in process	36,224	30,272
Finished goods	17,375	8,897
Total inventories	$ 99,232	$ 69,322

Charges totaling $2.5 million and $5.7 million were included in the cost of revenues in the Company's consolidated statements of operations for the three and six months ended June 30, 2019, respectively, to adjust the Company's inventory and related firm inventory purchase commitments to their net realizable value. For the three and six months ended June 30, 2018, charges totaling $1.2 million and $3.1 million were included in the cost of revenues, respectively, to adjust the Company's inventory and related firm inventory purchase commitments to their net realizable value.

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Note 10. Property, Plant, and Equipment

Property, plant, and equipment consist of the following:

	June 30, 2019	December 31, 2018
	(in thousands)	
Buildings	$ 97,340	$ 96,287
Leasehold improvements	29,211	26,755
Land	7,619	7,628
Machinery and equipment	151,457	143,299
Furniture, fixtures, and automobiles	19,982	19,151
Construction in progress	70,716	66,390
Total property, plant, and equipment	376,325	359,510
Less accumulated depreciation	(156,265)	(149,092)
Total property, plant, and equipment, net	$ 220,060	$ 210,418

Note 11. Accounts Payable and Accrued Liabilities

Accounts payable and accrued liabilities consisted of the following:

	June 30, 2019	December 31, 2018
	(in thousands)	
Accrued customer fees and rebates	$ 11,455	$ 15,215
Accrued payroll and related benefits	20,357	19,430
Accrued product returns, current portion	6,644	5,349
Reserve for net loss on firm purchase commitments	3,403	5,355
Other accrued liabilities	14,850	10,746
Total accrued liabilities	56,709	56,095
Accounts payable	31,462	31,323
Total accounts payable and accrued liabilities	$ 88,171	$ 87,418

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Note 12. Debt

Debt consists of the following:

	June 30, 2019	December 31, 2018
	(in thousands)	
Loans with East West Bank		
Equipment loan paid off January 2019	$ —	$ 128
Line of credit facility due December 2020	—	—
Mortgage payable due February 2021	3,446	3,491
Equipment loan due June 2021	2,449	3,061
Equipment loan due December 2022	7,000	8,000
Line of credit facility due February 2024	—	—
Mortgage payable due October 2026	3,432	3,463
Mortgage payable due June 2027	8,732	8,801
Loans with Cathay Bank		
Line of credit facility due May 2020	—	—
Mortgage payable due August 2027	7,540	7,627
Acquisition loan due June 2024	11,979	13,025
Loans with Bank of Nanjing		
Working capital loan paid off June 2019	—	347
Loans with Seine-Normandie Water Agency		
French government loan due June 2020	26	55
French government loan due July 2021	176	172
French government loans due December 2026	438	436
Payment Obligation to Merck	558	552
Equipment under Finance Leases	958	—
Equipment under Capital Leases	—	1,055
Total debt	46,734	50,213
Less current portion of long-term debt	6,941	18,229
Long-term debt, net of current portion	$ 39,793	$ 31,984

As of June 30, 2019, the fair value of the loans listed above approximated their carrying amount. The interest rate used in the fair value estimation was determined to be a Level 2 input. For certain loans with East West Bank, the Company has entered into fixed interest rate swap contracts to exchange the variable interest rates for fixed interest rates over the life of certain debt instruments without the exchange of the underlying notional debt amount. The interest rate swap contracts do not qualify for hedge accounting and are recorded at fair value based on Level 2 inputs. These swap contracts had an aggregate fair value of $0.4 million and $0.2 million as of June 30, 2019 and December 31, 2018, respectively. The change in fair value is recorded in other income (expense) in the Company's condensed consolidated statement of operations.

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Acquisition loan – Due June 2024

In July 2019, the Company amended the acquisition loan relating to the AFP acquisition. The amendment was effective in June 2019. Under the amended loan agreement, the maturity date was extended to June 2024. The acquisition loan bears a variable interest rate at the prime rate as published by *The Wall Street Journal*, with a minimum interest rate of 5.00%. Beginning in August 2019, and through the maturity date, the Company must make monthly payments of principal and interest based on the then outstanding amount of the loan amortized over a 60-month period.

Covenants

At June 30, 2019 and December 31, 2018, the Company was in compliance with its debt covenants, which include a minimum current ratio, minimum debt service coverage, minimum tangible net worth, maximum debt-to-effective-tangible-net-worth ratio, and minimum deposit requirement computed on a consolidated basis. The profitability-related covenants for loans with Cathay Bank were not effective as of June 30, 2019 or December 31, 2018. Such covenants will become effective as of December 31, 2019.

Note 13. Income Taxes

The following table sets forth the Company's income tax provision (benefit) for the periods indicated:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
	(in thousands)			
Income (loss) before taxes	$ 61,093	$ (4,200)	$ 57,460	$ (13,089)
Income tax provision (benefit)	14,173	(1,347)	12,694	(3,095)
Net income (loss)	$ 46,920	$ (2,853)	$ 44,766	$ (9,994)
Income tax provision (benefit) as a percentage of loss before income taxes	23.2 %	32.1 %	22.1 %	23.6 %

The decrease in the Company's effective tax rate for the three and six months ended June 30, 2019, was primarily due to differences in pre-tax income (loss) positions and timing of discrete tax items.

Valuation Allowance

In assessing the need for a valuation allowance, management considers whether it is more likely than not that some portion or all of the deferred tax assets will be realized. Ultimately, the realization of deferred tax assets depends on the existence of future taxable income. Management considers sources of taxable income such as income in prior carryback periods, future reversal of existing deferred taxable temporary differences, tax-planning strategies, and projected future taxable income.

The Company has discontinued recognizing AFP's income tax benefits by recording a full valuation allowance until it is determined that it is more likely than not that AFP will generate sufficient taxable income to realize its deferred income tax assets.

In 2019, for purposes of computing its annual effective tax rate, the Company did not benefit from its losses in the states where it files separately. This increased the Company's income tax provision by an immaterial amount during the three and six months ended June 30, 2019.

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Note 14. Stockholders' Equity

The changes in stockholders' equity for the three and six months ended June 30, 2019 and 2018 consisted of the following:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
	(in thousands)			
Stockholders' equity beginning balance	$ 380,266	$ 323,616	$ 364,359	$ 333,736
Beginning balance adjustment as a result of the adoption of new accounting standards	—	—	(54)	582
Net income (loss) attributable to Amphastar Pharmaceuticals, Inc.	47,787	(2,853)	48,655	(9,994)
Other comprehensive income (loss) attributable to Amphastar Pharmaceuticals, Inc.	(97)	(2,256)	(210)	(1,066)
Net proceeds from the private placement of ANP	—	—	18,966	—
Net loss attributable to non-controlling interests	(867)	—	(3,889)	—
Net proceeds from equity plans, net of withholding tax payments	2,240	1,499	(157)	(294)
Share-based compensation expense	4,032	4,196	8,706	8,862
Purchase of treasury stock	(1,073)	(7,226)	(4,088)	(14,850)
Stockholders' equity ending balance	$ 432,288	$ 316,976	$ 432,288	$ 316,976

Share Buyback Program

Pursuant to the Company's existing share buyback program, the Company purchased 50,980 and 196,459 shares of its common stock during the three and six months ended June 30, 2019, for total consideration of $1.1 million and $4.1 million, respectively. The Company purchased 430,137 and 837,741 shares of its common stock during the three and six months ended June 30, 2018, for total consideration of $7.2 million and $14.8 million, respectively.

In May 2019, the Company's Board of Directors authorized an increase of $20.0 million to the Company's share buyback program, which is expected to continue for an indefinite period of time. The primary goal of the program is to offset dilution created by the Company's equity compensation programs.

Purchases are made through open market and private block transactions pursuant to Rule 10b5-1 plans, privately negotiated transactions or other means as determined by the Company's management and in accordance with the requirements of the SEC and applicable laws. The timing and actual number of treasury share purchases will depend on a variety of factors including price, corporate and regulatory requirements, and other conditions. These treasury share purchases are accounted for under the cost method and are included as a component of treasury stock in the Company's consolidated balance sheets.

The 2015 Equity Incentive Plan

As of June 30, 2019, the Company reserved an aggregate of 6,137,364 shares of common stock for future issuance under the 2015 Equity Incentive Plan, or the 2015 Plan, including 1,165,778 shares which were reserved in January 2019 pursuant to the evergreen provision in the 2015 Plan.

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Share-Based Award Activity and Balances (excluding the ANP Equity Plan)

The Company accounts for share-based compensation payments in accordance with ASC 718, which requires measurement and recognition of compensation expense at fair value for all share-based payment awards made to employees and directors. Under these standards, the fair value of option awards and the option components of the Employee Stock Purchase Plan awards are estimated at the grant date using the Black-Scholes option-pricing model. The fair value of RSUs is estimated at the grant date using the Company's common share price. Prior to the adoption of ASU No. 2018-07, *Improvements to Non-employees Share-Based Payment Accounting*, non-vested stock options held by non-employees were revalued at each balance sheet date. As a result of the Company's early adoption of the guidance in July 2018, stock options held by non-employees are no longer revalued after grant. The portion that is ultimately expected to vest is amortized and recognized in compensation expense on a straight-line basis over the requisite service period, generally from the grant date to the vesting date.

The weighted-averages for key assumptions used in determining the fair value of options granted during the three and six months ended June 30, 2019 and 2018, are as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Average volatility	43.4 %	41.7 %	42.5 %	39.9 %
Risk-free interest rate	2.0 %	2.8 %	2.4 %	2.7 %
Weighted-average expected life in years	5.0	4.9	5.7	5.7
Dividend yield rate	— %	— %	— %	— %

A summary of option activity for the six months ended June 30, 2019, is presented below:

	Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value[1]
				(in thousands)
Outstanding as of December 31, 2018	10,105,565	$ 14.69		
Options granted	1,033,268	20.96		
Options exercised	(1,074,413)	15.60		
Options cancelled	(5,219)	18.90		
Options expired	(2,325)	14.65		
Outstanding as of June 30, 2019	10,056,876	$ 15.23	5.16	$ 59,792
Exercisable as of June 30, 2019	7,311,977	$ 14.18	4.13	$ 50,760

(1) The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying awards and the estimated fair value of the Company's common stock for those awards that have an exercise price below the estimated fair value at June 30, 2019.

For the three and six months ended June 30, 2019, the Company recorded expenses of $1.8 million and $4.2 million, respectively, related to stock options granted. For the three and six months ended June 30, 2018, the Company recorded expenses of $2.0 million and $4.6 million, respectively, related to stock options granted under all plans.

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Information relating to option grants and exercises is as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
	(in thousands, except per share data)			
Weighted-average grant date fair value per option share	$ 8.17	$ 6.53	$ 8.46	$ 7.79
Intrinsic value of options exercised	452	277	5,822	1,338
Cash received from options exercised	1,108	650	5,047	2,511
Total fair value of the options vested during the year	388	1,383	7,502	7,790

A summary of the status of the Company's non-vested options as of June 30, 2019, and changes during the six months ended June 30, 2019, is presented below:

	Options	Weighted-Average Grant Date Fair Value
Non-vested as of December 31, 2018	3,279,026	$ 5.47
Options granted	1,033,268	8.46
Options vested	(1,562,176)	4.80
Options forfeited	(5,219)	8.12
Non-vested as of June 30, 2019	2,744,899	6.97

As of June 30, 2019, there was $15.2 million of total unrecognized compensation cost, net of forfeitures, related to non-vested stock option based compensation arrangements granted. The cost is expected to be recognized over a weighted-average period of 2.5 years and will be adjusted for future changes in estimated forfeitures.

Restricted Stock Units

The Company grants restricted stock units, or RSUs, to certain employees and members of the Board of Directors with a vesting period of up to five years. The grantee receives one share of common stock at a specified future date for each RSU awarded. The RSUs may not be sold or otherwise transferred until certificates of common stock have been issued, recorded, and delivered to the participant. The RSUs do not have any voting or dividend rights prior to the issuance of certificates of the underlying common stock. The share-based expense associated with these grants was based on the Company's common stock fair value at the time of grant and is amortized over the requisite service period, which generally is the vesting period using the straight-line method. During the three and six months ended June 30, 2019, the Company recorded expenses of $2.0 million and $4.1 million, respectively, related to RSU awards granted. During the three and six months ended June 30, 2018, the Company recorded expenses of $2.0 million and $3.9 million, respectively, related to RSU awards granted.

As of June 30, 2019, there was $16.5 million of total unrecognized compensation cost, net of forfeitures, related to non-vested RSU-based compensation arrangements granted. The cost is expected to be recognized over a weighted-average period of 2.5 years and will be adjusted for future changes in estimated forfeitures.

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Information relating to RSU grants and deliveries is as follows:

	Total RSUs Issued	Total Fair Market Value of RSUs Issued as Compensation[1]
		(in thousands)
RSUs outstanding at December 31, 2018	1,206,661	
RSUs granted	431,697	$ 8,733
RSUs forfeited	(2,976)	
RSUs vested[2]	(530,506)	
RSUs outstanding at June 30, 2019	1,104,876	

(1) The total fair market value is derived from the number of RSUs granted times the stock price on the date of grant.
(2) Of the vested RSUs, 233,539 shares of common stock were surrendered to fulfill tax withholding obligations.

The Company recorded share-based compensation expense and it is included in the Company's consolidated statement of operations as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
	(in thousands)			
Cost of revenues	$ 959	$ 981	$ 2,238	$ 2,141
Operating expenses:				
Selling, distribution, and marketing	95	104	189	211
General and administrative	2,648	2,743	5,439	5,636
Research and development	330	368	840	874
Total share-based compensation	$ 4,032	$ 4,196	$ 8,706	$ 8,862

The 2018 ANP Equity Incentive Plan

In December 2018, ANP's board of directors approved the 2018 Plan, which is set to expire in December 2023. The 2018 Plan permits the grant of stock options and other equity awards in ANP shares to ANP employees. In June 2019, ANP issued 3,648,932 stock options to its employees under the 2018 Plan all of which were still outstanding at June 30, 2019. The options vest over a period of approximately four years and have up to a 10 year contractual term. The total fair value of the options awarded was $2.1 million. For the three and six months ended June 30, 2019, the Company recorded an immaterial amount of expense related to stock options issued by ANP under the 2018 Plan.

Note 15. Employee Benefits

401(k) Plan

The Company has a defined contribution 401(k) plan, or the Plan, whereby eligible employees voluntarily contribute up to a defined percentage of their annual compensation. The Company matches contributions at a rate of 50% on the first 6% of employee contributions, and pays the administrative costs of the Plan. Total employer contributions for the three and six months ended June 30, 2019 were approximately $0.4 million and $0.7 million, respectively, compared to the prior year expense of $0.3 million and $0.6 million for the three and six months ended June 30, 2018, respectively.

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Defined Benefit Pension Plan

In connection with the AFP acquisition, the Company assumed an obligation associated with a defined-benefit plan for eligible employees of AFP. This plan provides benefits to the employees from the date of retirement and is based on the employee's length of time employed by the Company. The calculation is based on a statistical calculation combining a number of factors that include the employee's age, length of service, and AFP employee turnover rate.

The liability under the plan is based on a discount rate of 0.9% and 1.70% as of June 30, 2019 and December 31, 2018, respectively. The liability is included in accrued liabilities in the accompanying consolidated balance sheets. The plan is currently unfunded, and the benefit obligation under the plan was $2.2 million and $2.2 million at June 30, 2019 and December 31, 2018, respectively. The Company recorded an immaterial amount of expense under the plan for the three months ended June 30, 2019, and $0.1 million for the six months ended June 30, 2019. The Company recorded an immaterial amount of expense under the plan for the three months ended June 30, 2018, and $0.1 million for the six months ended June 30, 2018.

Note 16. Commitments and Contingencies

Lease Liabilities

On January 1, 2019, the Company adopted ASC 842, which resulted in the recognition of right-of-use, or ROU, assets of approximately $13.9 million and related lease liabilities in the consolidated balance sheets of approximately $14.1 million related to its operating lease commitments. ROU assets represent the Company's right to control an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. ROU assets and liabilities are recognized at the commencement date based on the present value of lease payments over the lease term. As most of its leases do not provide an implicit rate, the Company used its incremental borrowing rate based on the information available at the commencement date in determining the discount rate used to present value the lease payments. The Company leases real and personal property, in the normal course of business, under various non-cancelable operating leases. The Company, at its option, can renew a substantial portion of its leases, at the market rate, for various renewal periods ranging from one to six years.

The components of lease costs for the three and six months ended June 30, 2019 were as follows:

	Three Months Ended June 30, 2019	Six Months Ended June 30, 2019
	(in thousands)	
Operating lease costs	$ 902	$ 1,790
Short-term lease costs	177	307
Finance lease costs		
Amortization of right-of-use assets	88	171
Interest on lease liabilities	12	24
Total finance lease costs	$ 100	$ 195
Total lease costs	$ 1,179	$ 2,292

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Other information to leases are as follows:

Supplemental cash flow information	Six Months Ended June 30, 2019 (in thousands, except lease term and discount rate)
Cash paid for amounts included in the measurement of lease liabilities	
Operating cash flows from operating leases	$ 1,648
Operating cash flows from finance leases	24
Financing cash flows from finance leases	171
Right-of use assets obtained in exchange for lease liabilities	
Operating leases	7,663
Finance leases	61
Weighted-average remaining lease term (years)	
Operating leases	8.4
Finance leases	2.9
Weighted-average discount rate	
Operating leases	5.9 %
Finance leases	4.6 %

Future minimum rental payments under operating leases that have initial or remaining non-cancelable lease terms in excess of 12 months as of June 30, 2019, are as follows:

	Operating Leases	Finance Leases	Total
		(in thousands)	
2019 (excluding the Six Months Ended June 30, 2019)	$ 1,844	$ 163	$ 2,007
2020	4,111	375	4,486
2021	4,335	298	4,633
2022	3,651	175	3,826
2023	2,429	14	2,443
Thereafter	10,167	6	10,173
Total lease payments	$ 26,537	$ 1,031	$ 27,568
Less: interest	6,046	73	6,119
Total	$ 20,491	$ 958	$ 21,449

Purchase Commitments

As of June 30, 2019, the Company has entered into commitments to purchase equipment and raw materials for an aggregate amount of approximately $55.1 million. The Company anticipates that most of these commitments with remaining terms in excess of one year will be fulfilled by 2020.

In accordance with certain agreements between ANP and the Chinese government, in January 2010 and November 2012,

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

the Company acquired certain land-use rights for $1.2 million and $1.3 million, respectively. As required by these agreements, the Company committed to spend approximately $15.0 million in the related land development, which primarily includes the construction of fixed assets according to a specific timetable. As of June 30, 2019, the Company has spent $8.3 million on such construction. The Company anticipates that this spending commitment will be met by the end of 2019.

Note 17. Related-Party Transactions

ANP Private Placement

As discussed in footnote 2, in July 2018, ANP completed a private placement of its common equity interest and received approximately $56.3 million of cash proceeds. In connection with the private placement, all of the executive officers of the Company, Stephen Shohet, Howard Lee, and Richard Koo, directors of the Company, and certain employees of ANP entered into subscription agreements (each, a "Subscription Agreement") for the indirect investment in ANP. These Subscription Agreements were transacted either through an investment in Amphastar Cayman, a Cayman Islands limited liability company, or Qianqia, or Zhongpan, Chinese partnerships. The aggregate gross proceeds received from management and directors were approximately $29.7 million.

Note 18. Litigation

Momenta/Sandoz Enoxaparin Patent and Antitrust Litigation

In September 2011, Momenta Pharmaceuticals, Inc., or Momenta, a Boston-based pharmaceutical company, and Sandoz Inc., or Sandoz, the generic division of Novartis, initiated litigation against the Company for alleged patent infringement of two patents related to testing methods for batch release of enoxaparin, which the Company refers to as the "'886 patent" and the "'466 patent." The lawsuit was filed in the United States District Court for the District of Massachusetts, or the Massachusetts District Court.

On September 17, 2015, the Company initiated a lawsuit by filing a complaint in the California District Court against Momenta and Sandoz, or the Defendants. The Company's complaint generally asserts that Defendants have engaged in certain types of illegal, monopolistic, and anticompetitive conduct giving rise to various causes of action against them.

On May 20, 2019, the Company and the Plaintiffs entered into a Settlement Agreement to fully settle the patent litigation and antitrust litigation. The Settlement Agreement was contingent upon the District Court's granting a Joint Motion to Vacate the Patent Judgment and thereafter, the Plaintiffs' payment of $59.9 Million to the Company. On June 18, 2019, the parties filed a Joint Motion to Vacate the Patent Judgment with the District Court, and on the same day, the District Court granted such motion. Accordingly, on June 19, 2019, the parties filed Joint Stipulations with the District Court to dismiss the patent litigation and the antitrust litigation, each of which is self-executing and effective upon filing pursuant to the Federal Rules of Civil Procedure 41(a)(1)(A)(ii). Furthermore, on June 26, 2019, the Federal Circuit issued an Order and a Mandate dismissing the appeal of the patent litigation. On June 27, 2019, pursuant to the Settlement Agreement, the Plaintiffs paid the Company $59.9 Million. The Company is not entitled to future rights or royalties related to this settlement. Accordingly, the Company recorded the settlement amount as other income (expenses), in its condensed consolidated statements of operations.

False Claims Act Litigation

In January 2009, the Company filed a qui tam complaint in the U.S. District Court for the Central District of California, or the California District Court, alleging that Aventis Pharma S.A., or Aventis, through its acquisition of a patent through false and misleading statements to the U.S. Patent and Trademark Office, as well as through false and misleading statements to the FDA, overcharged the federal and state governments for its Lovenox® product. If the Company is

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

successful in this litigation, it could be entitled to a portion of any damage award that the government ultimately may recover from Aventis. In October 2011, the California District Court unsealed the Company's complaint.

On February 28, 2014, Aventis filed a motion for summary judgment on the issue of the adequacy of the Company's notice letter to the government, and the California District Court denied Aventis' motion for summary judgment in a final order it issued on May 12, 2014. On June 9, 2014, at Aventis' request, the California District Court issued an order certifying for appeal its order denying Aventis' motion for summary judgment. On June 9, 2014, Aventis filed with the United States Court of Appeals for the Ninth Circuit, or the Ninth Circuit, a petition for permission to appeal the California District Court's denial of Aventis' motion for summary judgment, and the Company filed an opposition to Aventis' petition on June 19, 2014. On August 22, 2014, the Ninth Circuit granted Aventis' petition. The parties filed their respective appeal briefs with the Ninth Circuit. On November 10, 2016, the Ninth Circuit heard oral argument on the appeal.

The California District Court set an evidentiary hearing for July 7, 2014 on the "original source" issue, a key element under the False Claims Act. The evidentiary hearing was conducted as scheduled, from July 7, 2014 through July 10, 2014. On July 13, 2015, the California District Court issued a ruling concluding that the Company is not an original source under the False Claims Act, and entered final judgment dismissing the case for lack of subject matter jurisdiction.

On July 20, 2015, the Company filed with the Ninth Circuit a notice of appeal of the California District Court's dismissal of the case, and Aventis filed a notice of cross-appeal on August 5, 2015. On November 12, 2015, Aventis filed a pleading asking that the California District Court impose various monetary penalties and fines against the Company, including disgorgement of enoxaparin revenues and attorneys' fees expended by Aventis in this action, based on Aventis' allegations that the Company engaged in sanctionable conduct. On November 23, 2015, the California District Court issued an order setting forth a procedure for sanctions proceedings as to the Company as well as its outside counsel. On December 24, 2015, the Company filed a pleading with the California District Court opposing the imposition of sanctions, and on January 20, 2016, Aventis filed a response pleading further pressing for the imposition of sanctions. On May 4, 2016, the California District Court issued three orders requesting that the Company and its outside counsel file a document showing cause as to why sanctions should not be imposed and to set up a conference call with the parties and the Court to discuss whether any discovery and/or a hearing is necessary. On June 13, 2016, the Company and its outside counsel each filed responses to the Court's order to show cause as to why sanctions should not be imposed. On July 21, 2016, Aventis filed a response contending that the Court should impose sanctions. On February 10, 2017, the Court held a show cause hearing regarding the potential imposition of sanctions and took the matter under submission. On September 18, 2017, the District Court issued its decision that no sanctions will be imposed on either the Company or its counsel.

On March 28, 2016, the Company filed its opening brief with the Ninth Circuit Court of Appeals setting forth detailed arguments as to why the False Claims Act litigation should not have been dismissed by the California District Court. On June 20, 2016, Aventis filed its principal brief in the appeal, responding to the Company's arguments regarding dismissal of the False Claims Act litigation, and setting forth Aventis' argument that it should be awarded attorneys' fees and expenses. On September 19, 2016, the Company filed its reply brief to Aventis' principal brief. On October 3, 2016, Aventis filed its reply brief in support of its cross-appeal of the District Court's denial of attorneys' fees. On November 10, 2016, the Ninth Circuit heard oral argument on the appeals.

On May 11, 2017, the Ninth Circuit issued an opinion affirming the California District Court's dismissal of the action for lack of subject matter jurisdiction; dismissing as moot Aventis' appeal of the District Court's denial of its motion for summary judgment on the issue of the adequacy of the Company's notice letter to the government; reversing the District Court's denial of Aventis' motion for attorneys' fees; and remanding the case to the District Court for resolution of the attorneys' fees issue. On July 14, 2017, Aventis filed an application with the District Court for entitlement to attorneys' fees and expenses. On November 20, 2017, the District Court issued its order granting Aventis' application for fees, stating that it would refer the matter to a magistrate judge for a report and recommendation regarding the amount of the award to be made. On November 21, 2017, the District Court referred the matter to a magistrate judge.

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

On August 7, 2018, Aventis filed its Application for Fees and Expenses. On November 26, 2018, the Company filed its Opposition to Aventis' Application for Fees and Expenses. On February 12, 2019, following further briefing on the attorneys' fee issue, the District Court approved of the parties' consent for the Magistrate Judge to conduct all further proceedings in this matter at the district court level, including determining the amount of attorneys' fees to be awarded and entering a final judgment. The Magistrate Judge held a hearing on the Application on May 8, 2019. At the May 8, 2019 hearing, the Magistrate Judge did not rule on the Application, but indicated that a written opinion on this Application for Fees and Expenses would be forthcoming. The Company intends to continue to vigorously defend against any imposition of attorneys' fees and expenses in this case.

Epinephrine Injection, 0.1 mg/mL Litigation

On June 28, 2018, Belcher Pharmaceuticals, LLC, or Belcher, initiated a lawsuit by filing a complaint against IMS for infringement of U.S. Patent No. 9,283,197 (the "'197 Patent"), with regard to IMS's New Drug Application No. 211363, filed under 21 U.S.C. § 355(b)(2) of the Hatch-Waxman Act, for FDA approval to manufacture and sell 0.1 mg/mL epinephrine injections. On July 20, 2018, the Company filed a motion to dismiss Belcher's complaint for patent infringement under Federal Rule of Civil Procedure 12(b)(6). On March 31, 2019, the Court denied the Company's motion to dismiss. On April 15, 2019, the Company filed its Answer and Counterclaims. On April 24, 2019, the Court entered the Parties' Joint Stipulation to stay the litigation until after Belcher's June 2019 trial with Hospira, Inc. regarding the '197 patent. Belcher's trial with Hospira regarding the '197 patent concluded in June 2019 but the Court has not yet ruled on the outcome of this trial. Thus, on July 3, 2019, the Parties filed a Joint Stipulation to stay the litigation pending the Court's ruling on the outcome of Belcher's trial with Hospira. The Company intends to vigorously defend this lawsuit.

Vasopressin (20 units/mL) Patent Litigation

On December 20, 2018, Par Pharmaceutical, Inc., Par Sterile Products, LLC and Endo Par Innovation Company (collectively, "Par") initiated a patent lawsuit by filing a Complaint against the Company for infringement of U.S. Patent Nos. 9,375,478 ("the '478 Patent"), 9,687,526 ("the '526 Patent"), 9,744,209 ("the '209 Patent"), 9,744,239 ("the '239 Patent"), 9,750,785 ("the '785 Patent") and 9,937,223 ("the '223 Patent") (collectively, "Par Patents") with regard to the Company's Abbreviated New Drug Application No. 211,857 for FDA approval to manufacture and sell Vasopressin (20 units/ mL). The Company filed its Answer to this Complaint on February 19, 2019. On April 18, 2019, the Court held a scheduling conference and entered a Scheduling Order. Trial is scheduled for January 2021. The Company intends to vigorously defend this patent lawsuit.

Other Litigation

The Company is also subject to various other claims and lawsuits from time to time arising in the ordinary course of business.

The Company records a provision for contingent losses when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. In the opinion of management, the ultimate resolution of any such matters is not expected to have a material adverse effect on its financial position, results of operations, or cash flows; however, the results of litigation and claims are inherently unpredictable and the Company's view of these matters may change in the future. Regardless of the outcome, litigation can have an adverse impact on the Company because of defense and settlement costs, diversion of management resources, and other factors.

AMPHASTAR PHARMACEUTICALS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Note 19. Subsequent Events

Supply Agreement with MannKind Corporation

In August 2019, the Company amended the Supply Agreement with MannKind Corporation, or MannKind, whereby MannKind's aggregate total commitment of RHI API under the Supply Agreement was not reduced; however, the annual minimum purchase commitments of RHI API under the Supply Agreement were modified and extended for an additional two years through 2026, which timeframe would have previously lapsed after calendar year 2024. MannKind has agreed to pay the Company an amendment fee of $2.75 million, with $1.5 million due in September 2019, and the remaining balance due in December 2019.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following is a discussion and analysis of the consolidated operating results, financial condition, liquidity and cash flows of our company as of and for the periods presented below. The following discussion and analysis should be read in conjunction with the "Condensed Consolidated Financial Statements" and the related notes thereto included in this Quarterly Report on Form 10-Q, or Quarterly Report. This discussion contains forward-looking statements that are based on the beliefs of our management, as well as assumptions made by, and information currently available to, our management. Actual results could differ materially from those discussed in or implied by forward-looking statements. These risks, uncertainties, and other factors include, among others, those identified under the "Special Note About Forward-Looking Statements," above and described in greater detail elsewhere in this Quarterly Report and in our Annual Report on Form 10-K for the year ended December 31, 2018, particularly in Item 1A. "Risk Factors".

Overview

We are a specialty pharmaceutical company that focuses primarily on developing, manufacturing, marketing and selling technically challenging generic and proprietary injectable, inhalation and intranasal products as well as insulin API products. We currently manufacture and sell over 20 products. In November 2018, the FDA granted over-the-counter approval for our NDA for Primatene® Mist in a new CFC-free formulation.

We are currently developing a portfolio of 15 generic abbreviated new drug applications, or ANDAs, three biosimilar product candidates and four proprietary product candidates, which are in various stages of development and target a variety of indications. Four of the ANDAs and one of the NDAs are currently on file with the FDA.

Our largest products by net revenues currently include enoxaparin sodium injection, naloxone hydrochloride injection, lidocaine jelly and sterile solution, phytonadione, medroxyprogesterone acetate, and Primatene® Mist. We launched Primatene® Mist in the fourth quarter of 2018.

To complement our internal growth and expertise, we have made several strategic acquisitions of companies, products and technologies. These acquisitions collectively have strengthened our core injectable and inhalation product technology infrastructure by providing additional manufacturing, marketing, and research and development capabilities including the ability to manufacture raw materials, APIs and other components for our products.

Included in these acquisitions are marketing authorizations for 33 products in the UK, Ireland, Australia, and New Zealand, representing 11 different injectable chemical entities, from UCB Pharma GmbH. We are in the process of transferring the manufacturing of these products to our facilities in California, which will require approvals from the UK Medicines and Healthcare products Regulatory Agency before we can relaunch the products.

In July 2018, our Chinese subsidiary, ANP, completed a private placement of its common equity interest and received approximately $56.3 million of cash proceeds. We have retained approximately 58% of the equity interest in ANP following the private placement. ANP's net income or loss after July 2, 2018, is attributed to us in accordance with our equity interest of approximately 58% in ANP.

On May 20, 2019, we entered into a settlement relating to the enoxaparin patent litigation with Momenta Pharmaceuticals, Inc. and Sandoz Inc. For more information regarding the enoxaparin patent litigation, see "Part I – Item 1. Financial Statements – Notes to Condensed Consolidated Financial Statements – Litigation." Pursuant to the settlement agreement, the plaintiffs paid us $59.9 Million on June 27, 2019.

Business Segments

As of June 30, 2019, our performance is assessed and resources are allocated based on the following two reportable segments: (1) finished pharmaceutical products and (2) API products. The finished pharmaceutical products segment manufactures, markets, and distributes enoxaparin, naloxone, phytonadione, lidocaine, medroxyprogesterone acetate, Primatene® Mist, as well as various other critical and non-critical care drugs. The API segment manufactures and

distributes RHI API and porcine insulin API for external customers and internal product development. Information reported herein is consistent with how it is reviewed and evaluated by our chief operating decision maker. Factors used to identify our segments include markets, customers and products.

For more information regarding our segments, see "Part I – Item 1. Financial Statements – Notes to Condensed Consolidated Financial Statements – Segment Reporting."

Results of Operations

Three Months Ended June 30, 2019 Compared to Three Months Ended June 30, 2018

Net revenues

	Three Months Ended June 30,		Change	
	2019	2018	Dollars	%
	(in thousands)			
Net revenues				
Finished pharmaceutical products	$ 73,735	$ 63,241	$ 10,494	17 %
API	5,312	7,799	(2,487)	(32)%
Total net revenues	$ 79,047	$ 71,040	$ 8,007	11 %
Cost of revenues				
Finished pharmaceutical products	$ 39,195	$ 35,592	$ 3,603	10 %
API	7,465	9,384	(1,919)	(20)%
Total cost of revenues	$ 46,660	$ 44,976	$ 1,684	4 %
Gross profit	$ 32,387	$ 26,064	$ 6,323	24 %
as % of net revenues	*41 %*	*37 %*		

The increase in net revenues of finished pharmaceutical products for the three months ended June 30, 2019 was primarily due to the following changes:

	Three Months Ended June 30,		Change	
	2019	2018	Dollars	%
	(in thousands)			
Finished pharmaceutical products net revenues				
Phytonadione	$ 12,441	$ 10,806	$ 1,635	15 %
Lidocaine	10,082	10,010	72	1 %
Enoxaparin	9,838	8,715	1,123	13 %
Naloxone	7,833	11,133	(3,300)	(30)%
Medroxyprogesterone	6,696	6,365	331	5 %
Epinephrine	3,139	3,687	(548)	(15)%
Primatene® Mist	2,512	—	2,512	N/A
Other finished pharmaceutical products	21,194	12,525	8,669	69 %
Total finished pharmaceutical products net revenues	$ 73,735	$ 63,241	$ 10,494	17 %

The increase in sales of enoxaparin during the second quarter of 2019 was primarily driven by higher average selling prices due to a price increase and a change in customer mix, which resulted in an increase of $4.7 million. This was partially offset by a decrease in unit volume of $3.6 million. The increase in sales of phytonadione was primarily driven by a higher average selling price. The decrease in sales of naloxone was primarily driven by lower unit volumes. Other finished pharmaceutical products sales increased primarily due to higher unit sales volumes of Cortrosyn®, atropine, calcium chloride and dextrose which were in high demand due to market shortages. Sales of isoproterenol, which we launched in the third quarter of 2018, also contributed to the increase in other finished pharmaceutical sales.

We anticipate that sales of naloxone, enoxaparin, and medroxyprogesterone will continue to fluctuate in the future as a result of competition.

Sales of API decreased primarily due to the timing of customer purchases.

We anticipate that sales of API will continue to fluctuate and may decrease due to the inherent uncertainties related to sales to MannKind Corporation, or MannKind. In addition, most of our API sales are denominated in euros, and the fluctuation in the value of the euro versus the U.S. dollar has had, and will continue to have, an impact on API sales revenues in the near term.

A significant portion of our customer shipments in any period relate to orders received and shipped in the same period, generally resulting in low product backlog relative to total shipments at any time. We had no significant backlog as of June 30, 2019. Historically, our backlog has not been a meaningful indicator in any given period of our ability to achieve any particular level of overall revenue or financial performance.

Gross margins

The launch of Primatene® Mist and an increase in sales of medroxyprogesterone and Cortrosyn®, which are higher margin products, as well as the higher average selling price of enoxaparin, helped increase our gross margins for the second quarter of 2019. Gross margins for Primatene® Mist were magnified by the use of API and components which were expensed to pre-launch inventory in prior years.

In 2018, we received FDA approval of our ANDA supplement for the manufacture of semi-purified heparin at ANP, and the manufacture of heparin sodium at IMS. The cost of heparin, which is the starting material for enoxaparin, has increased and is expected to increase further, putting downward pressure on our gross margins. However, we believe that this trend will be offset by sales of our higher-margin products, such as medroxyprogesterone isoproterenol, and Primatene® Mist, which were launched over the past two years.

Selling, distribution and marketing, and general and administrative

	Three Months Ended June 30,		Change	
	2019	2018	Dollars	%
	(in thousands)			
Selling, distribution, and marketing	$ 2,992	$ 1,876	$1,116	59 %
General and administrative	$12,426	$11,669	$ 757	6 %

The increase in selling, distribution, and marketing expenses was primarily due to marketing expenses related to Primatene® Mist and increased freight costs. The increase in general and administrative expense was primarily due to increased legal expenses. For more information regarding the enoxaparin patent litigation, see “Part I – Item 1. Financial Statements –Notes to Condensed Consolidated Financial Statements – Litigation.”

We expect that selling, distribution and marketing expenses will increase due to the increase in marketing expenditures for Primatene® Mist. We expect that general and administrative expenses will increase on an annual basis due to increased costs associated with ongoing compliance with public company reporting obligations and an increase in legal fees associated with patent challenges.

Research and development

	Three Months Ended June 30,		Change	
	2019	2018	Dollars	%
	(in thousands)			
Salaries and personnel-related expenses	$ 6,237	$ 4,920	$ 1,317	27 %
Pre-launch inventory	143	835	(692)	(83)%
Clinical trials	1,530	1,218	312	26 %
FDA fees	104	235	(131)	(56)%
Testing, operating and lab supplies	3,878	5,558	(1,680)	(30)%
Depreciation	2,147	1,630	517	32 %
Other expenses	1,957	1,064	893	84 %
Total research and development expenses	$15,996	$15,460	$ 536	3 %

Research and development costs consist primarily of costs associated with the research and development of our product candidates including the cost of developing APIs. We expense research and development costs as incurred.

Salaries and personnel-related expenses as well as depreciation expense increased during the second quarter of 2019 primarily due to the expansion of our ANP facility. Clinical trial expense increased due to external studies related to our generic product pipeline. These increases were partially offset by a decrease in pre-launch inventory compared to the same period last year relating to the production of Primatene® Mist in anticipation for the launch at the end of 2018.

We have made, and expect to continue to make, substantial investments in research and development to expand our product portfolio and grow our business. We expect that research and development expenses will increase on an annual basis due to increased clinical trial costs related to our biosimilar and inhalation product candidates. These expenditures will include costs of APIs developed internally and purchased externally, the cost of purchasing reference listed drugs and the costs of performing the clinical trials. As we undertake new and challenging research and development projects, we anticipate that the associated costs will increase significantly over the next several quarters and years.

Other income (expenses), net

	Three Months Ended June 30,		Change	
	2019	2018	Dollars	%
	(in thousands)			
Other income (expenses), net	$60,001	$(1,265)	$61,266	NM

In June 2019, we recognized a gain of $59.9 million relating to our settlement of the enoxaparin patent litigation with Momenta Pharmaceuticals, Inc. and Sandoz Inc. For more information regarding litigation matters, see "Part I – Item 1. Financial Statements –Notes to Condensed Consolidated Financial Statements – Litigation."

Income tax provision (benefit)

	Three Months Ended June 30,		Change	
	2019	2018	Dollars	%
	(in thousands)			
Income tax provision (benefit)	$14,173	$(1,347)	$15,520	NM
Effective tax rate	*23 %*	*32 %*		

The difference in income tax provision (benefit) was primarily due to differences in pre-tax income (loss) positions and timing of discrete tax items.

Six Months Ended June 30, 2019 Compared to Six Months Ended June 30, 2018

Net revenues

	Six Months Ended June 30,		Change	
	2019	2018	Dollars	%
	(in thousands)			
Net revenues				
Finished pharmaceutical products	$148,274	$116,358	$31,916	27 %
API	10,563	13,075	(2,512)	(19)%
Total net revenues	$158,837	$129,433	$29,404	23 %
Cost of revenues				
Finished pharmaceutical products	$ 81,422	$ 69,073	$12,349	18 %
API	14,125	17,324	(3,199)	(18)%
Total cost of revenues	$ 95,547	$ 86,397	$ 9,150	11 %
Gross profit	$ 63,290	$ 43,036	$20,254	47 %
as % of net revenues	*40 %*	*33 %*		

The increase in net revenues of the finished pharmaceutical products for the six months ended June 30, 2019, was primarily due to the following changes:

	Six Months Ended June 30,		Change	
	2019	2018	Dollars	%
	(in thousands)			
Finished pharmaceutical products net revenues				
Enoxaparin	$ 24,322	$ 15,722	$ 8,600	55 %
Phytonadione	22,561	19,987	2,574	13 %
Lidocaine	22,061	19,792	2,269	11 %
Naloxone	15,197	20,060	(4,863)	(24)%
Medroxyprogesterone	13,909	9,071	4,838	53 %
Epinephrine	5,818	6,910	(1,092)	(16)%
Primatene® Mist	5,409	—	5,409	N/A
Other finished pharmaceutical products	38,997	24,816	14,181	57 %
Total finished pharmaceutical products net revenues	$ 148,274	$ 116,358	$31,916	27 %

The increase in sales of enoxaparin during the first half of 2019 was primarily driven by higher average selling prices due to a price increase and a change in customer mix, which resulted in an increase of $9.8 million, and was partially offset by a decrease in unit volume of $1.2 million. The increase in sales of phytonadione was primarily driven by a higher average selling price. $1.4 million of the increase in sales of lidocaine was due to higher unit volumes, while the remainder was due to higher average selling prices. The decrease in sales of naloxone was primarily driven by lower unit volumes. The increase in sales of medroxyprogesterone was due to increased unit sales as it was launched in the first quarter of 2018. Therefore, the prior year did not have a full quarter of sales during the first quarter of 2018. Other finished pharmaceutical products sales increased primarily due to higher unit sales volumes of Cortrosyn®, atropine, sodium bicarbonate and dextrose which were in high demand due to market shortages. Sales of isoproterenol which we launched in the third quarter of 2018, also contributed to the increase in other finished pharmaceutical sales.

We anticipate that sales of naloxone, enoxaparin, and medroxyprogesterone will continue to fluctuate in the future as a result of competition.

Sales of API decreased primarily due to the timing of customer purchases.

We anticipate that sales of API will continue to fluctuate and may decrease due to the inherent uncertainties related to sales to MannKind. In addition, most of our API sales are denominated in euros, and the fluctuation in the value of the euros versus the U.S. dollar has had, and will continue to have, an impact on API sales revenues in the near term.

A significant portion of our customer shipments in any period relate to orders received and shipped in the same period, generally resulting in low product backlog relative to total shipments at any time. We had no significant backlog as of June 30, 2019. Historically, our backlog has not been a meaningful indicator in any given period of our ability to achieve any particular level of overall revenue or financial performance.

Gross margins

The launch of Primatene® Mist and an increase in sales of medroxyprogesterone and Cortrosyn®, which are higher margin products, as well as the higher average selling price of enoxaparin, helped increase our gross margins for the first half of 2019. Gross margins for Primatene® Mist were magnified by the use of API and components which were expensed to pre-launch inventory in prior years.

In 2018, we received FDA approval of our ANDA supplement for the manufacture of semi-purified heparin at ANP, and the manufacture of heparin sodium at IMS. The cost of heparin, which is the starting material for enoxaparin, has increased and is expected to increase further, putting downward pressure on our gross margins. However, we believe that this trend will be offset by sales of our higher-margin products, such as medroxyprogesterone, isoproterenol, and Primatene® Mist, which were launched over the past two years.

Selling, distribution and marketing, and general and administrative

	Six Months Ended June 30,		Change	
	2019	2018	Dollars	%
	(in thousands)			
Selling, distribution, and marketing	$ 6,133	$ 3,597	$2,536	71 %
General and administrative	$28,753	$22,667	$6,086	27 %

The increase in selling, distribution, and marketing expenses was primarily due to marketing expenses related to Primatene® Mist and increased freight costs. The increase in general and administrative expense was primarily due to increased legal expenses (see Note 18 to the condensed consolidated financial statements for more information regarding litigation matters).

We expect that selling, distribution and marketing expenses will increase due to the increase in marketing expenditure for Primatene® Mist. We expect that general and administrative expenses will increase on an annual basis due to increased costs associated with ongoing compliance with public company reporting obligations and an increase in legal fees associated with patent challenges.

Research and development

	Six Months Ended June 30,		Change	
	2019	2018	Dollars	%
	(in thousands)			
Salaries and personnel-related expenses	$12,642	$ 9,685	$ 2,957	31 %
Pre-launch inventory	158	1,573	(1,415)	(90)%
Clinical trials	3,233	2,026	1,207	60 %
FDA fees	404	1,461	(1,057)	(72)%
Testing, operating and lab supplies	6,450	8,967	(2,517)	(28)%
Depreciation	4,275	2,941	1,334	45 %
Other expenses	3,441	2,837	604	21 %
Total research and development expenses	$30,603	$29,490	$ 1,113	4 %

Research and development costs consist primarily of costs associated with the research and development of our product candidates. We expense research and development costs as incurred.

Salaries and personnel-related expenses as well as depreciation expense increased during the first half of 2019 primarily due to the expansion of our ANP facility. Clinical trial expense increased due to external studies related to our generic product pipeline. These increases were partially offset by a decrease in pre-launch inventory compared to the same period last year relating to the production of Primatene® Mist in anticipation for the launch at the end of 2018. FDA fees decreased for the period, as we filed an NDA and ANDA for products we currently market or previously marketed under the grandfather exception in 2018.

We have made, and expect to continue to make, substantial investments in research and development to expand our product portfolio and grow our business. We expect that research and development expenses will increase on an annual basis due to increased clinical trial costs related to our biosimilar and inhalation product candidates. These expenditures will include costs of APIs developed internally and purchased externally, the cost of purchasing reference listed drugs and the costs of performing the clinical trials. As we undertake new and challenging research and development projects, we anticipate that the associated costs will increase significantly over the next several quarters and years.

Other income (expenses), net

	Six Months Ended June 30,		Change	
	2019	2018	Dollars	%
	(in thousands)			
Other income (expenses), net	$59,422	$(483)	$59,905	NM

In June 2019, we recognized a gain of $59.9 million relating to our settlement of the enoxaparin patent litigation with Momenta Pharmaceuticals, Inc. and Sandoz Inc. For more information regarding the enoxaparin patent litigation, see "Part I – Item 1. Financial Statements –Notes to Condensed Consolidated Financial Statements – Litigation."

Income tax provision (benefit)

	Six Months Ended June 30,		Change	
	2019	2018	Dollars	%
	(in thousands)			
Income tax provision (benefit)	$12,694	$(3,095)	$15,789	NM
Effective tax rate	*22 %*	*24 %*		

The difference in income tax provision (benefit) was primarily due to differences in pre-tax income (loss) positions and timing of discrete tax items.

Liquidity and Capital Resources

Cash Requirements and Sources

We need capital resources to maintain and expand our business. We expect our cash requirements to increase significantly in the foreseeable future as we sponsor clinical trials for, seek regulatory approvals of, and develop, manufacture and market our current development-stage product candidates and pursue strategic acquisitions of businesses or assets. Our future capital expenditures include projects to upgrade, expand, and improve our manufacturing facilities in the United States, China, and France. Our cash obligations include the principal and interest payments due on our existing loans and lease payments, as described below and throughout this Quarterly Report. As of June 30, 2019, our foreign subsidiaries collectively held $38.7 million in cash and cash equivalents. Cash or cash equivalents held at foreign subsidiaries are not available to fund the parent company's operations in the United States. We believe that our cash reserves, operating cash flows, and borrowing availability under our credit facilities will be sufficient to fund our operations for at least the next 12 months. We expect additional cash flows to be generated in the longer term from future

product introductions, although there can be no assurance as to the receipt of regulatory approval for any product candidates that we are developing or the timing of any product introductions, which could be lengthy or ultimately unsuccessful.

We maintain a shelf registration statement on Form S-3 pursuant to which we may, from time to time, sell up to an aggregate of $250 million of our common stock, preferred stock, depositary shares, warrants, units, or debt securities. If we require or elect to seek additional capital through debt or equity financing in the future, we may not be able to raise capital on terms acceptable to us or at all. To the extent we raise additional capital through the sale of equity or convertible debt securities, the issuance of such securities will result in dilution to our stockholders. If we are required and unable to raise additional capital when desired, our business, operating results and financial condition may be adversely affected.

Working capital increased by $69.6 million to $183.1 million at June 30, 2019, compared to $113.5 million at December 31, 2018 as a result of the $59.9 million settlement received relating to the enoxaparin patent litigation with Momenta Pharmaceuticals, Inc. and Sandoz Inc. For more information regarding the enoxaparin patent litigation, see "Part I – Item 1. Financial Statements –Notes to Condensed Consolidated Financial Statements – Litigation."

Cash Flows from Operations

The following table summarizes our cash flows used in operating, investing, and financing activities for the six months ended June 30, 2019 and 2018:

	Six Months Ended June 30,	
	2019	2018
	(in thousands)	
Statement of Cash Flow Data:		
Net cash provided by (used in)		
Operating activities	$ 48,113	$ 12,893
Investing activities	(24,553)	(20,509)
Financing activities	10,487	(9,718)
Effect of exchange rate changes on cash	(11)	(190)
Net increase (decrease) in cash, cash equivalents, and restricted cash	$ 34,036	$ (17,524)

Sources and Use of Cash

Operating Activities

Net cash provided by operating activities was $48.1 million for the six months ended June 30, 2019, which included net income of $44.8 million. Non-cash items were primarily comprised of $8.8 million of depreciation and amortization, and $8.7 million of share-based compensation expense.

Additionally, there was a net cash outflow from changes in operating assets and liabilities of $15.0 million which resulted from the increase in accounts receivable and inventory partially offset by an increase in accounts payable and accrued liabilities. The increase in accounts receivable was due to the timing of sales in the quarter. The increase in inventory was partially due to increased purchases of raw materials and production of finished goods resulting in a net increase of $24.9 million of enoxaparin and a net increase of $6.3 million of Primatene® Mist inventory. These trends were partially offset by a decrease in API at AFP. Tax related items increased as a result of the receipt of the $59.9 million relating to the litigation settlement with Momenta Pharmaceuticals, Inc. and Sandoz Inc. Accounts payable and accrued liabilities increased primarily due to the timing of payments.

Net cash provided by operating activities was $12.9 million for the six months ended June 30, 2018, which included net loss of $10.0 million. Non-cash items were primarily comprised of $8.0 million of depreciation and amortization, and $8.9 million of share-based compensation expense. Operating assets and liabilities changed primarily due to the timing

of sales and purchases activities in the normal course of business and the timing of the related cash receipts and disbursements.

Investing Activities

Net cash used in investing activities was $24.6 million for the six months ended June 30, 2019, primarily as a result of $24.5 million in purchases of property, plant, and equipment, which included $6.0 million incurred in the United States, $4.3 million in France, and $14.2 million in China.

Net cash used in investing activities was $20.5 million for the six months ended June 30, 2018, primarily as a result of $24.6 million in purchases of property, machinery, and equipment, which included $8.4 million incurred in the United States, $7.0 million in France, and $9.2 million in China. The cash used was partially offset by the $4.4 million receipt of the remaining consideration of the sale of the various ANDAs in February 2017.

Financing Activities

Net cash provided by financing activities was $10.5 million for the six months ended June 30, 2019, primarily as a result of the receipt of $18.3 million for ANP private placement, which was partially offset by $4.1 million used to purchase treasury stock, and $0.2 million of net proceeds used to settle share-based compensation awards under our equity plans. Additionally, we made $3.6 million in principal payments on our long-term debt and lines of credit.

Net cash used in financing activities was $9.7 million for the six months ended June 30, 2018, primarily as a result of $14.9 million used to purchase treasury stock. Additionally, we made $2.8 million in principal payments on our long-term debt, and drew down $8.0 million on the equipment line of credit from East West Bank, which is due December 2022.

Indebtedness

For more information regarding our outstanding indebtedness, see Note 12 of Notes to Condensed Consolidated Financial Statements of this Quarterly Report on Form 10-Q.

Contractual Obligations

There have been no material changes outside the ordinary course of our business in the contractual obligations disclosed in our Annual Report on Form 10-K for the year ended December 31, 2018, except that our outstanding debt obligations have changed as follows:

	June 30, 2019	December 31, 2018	Change
		(in thousands)	
Short-term debt and current portion of long-term debt	$ 6,941	$ 18,229	$ (11,288)
Long-term debt	39,793	31,984	7,809
Total debt	$ 46,734	$ 50,213	$ (3,479)

As of June 30, 2019, we had $45.0 million in unused borrowing capacity under revolving lines of credit with Cathay Bank and East West Bank.

Critical Accounting Policies

The preparation of our condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and the notes to the financial statements. Some of those judgments can be subjective and complex, and therefore, actual results could differ materially from those estimates under different assumptions or conditions. A summary of our critical accounting policies is presented in Part II, Item 7, of our Annual Report on Form 10-K for the year ended December 31, 2018.

There were no material changes to our critical accounting policies during the three and six months ended June 30, 2019, other than the adoption of ASC 2016-02, Leases, or ASC 2016-02, using the alternative transition method. The adoption of ASC 2016-02 did not have a material impact on the Company's condensed consolidated financial statements. The results for the reporting period beginning after January 1, 2019, are presented in accordance with the new standard, although comparative information has not been restated and continues to be reported under the accounting standards and policies in effect for those periods.

Recent Accounting Pronouncements

For information regarding recent accounting pronouncements, see "Part I – Item 1. Financial Statements – Notes to Consolidated Financial Statements – Summary of Significant Accounting Policies."

Off-Balance Sheet Arrangements

We do not have any relationships or financial partnerships with unconsolidated entities, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. In addition, we do not engage in trading activities involving non-exchange traded contracts.

Government Regulation

The 340(B) Public Health Services drug pricing program provides drugs at reduced rates to certain qualifying customers. As of January 1, 2019, the program provided for increased discounts for certain products we sell, including Cortrosyn®.

Our products and facilities are subject to regulation by a number of federal and state governmental agencies. The FDA, in particular, maintains oversight of the formulation, manufacture, distribution, packaging, and labeling of all of our products. The Drug Enforcement Administration, or DEA, maintains oversight over our products that are considered controlled substances.

From February 5, 2019 through February 12, 2019, our Amphastar facility in Rancho Cucamonga, California was subject to a preapproval inspection by the FDA. The inspection included a review of our corrective actions taken from the previous cGMP inspection in March 2017, as well as review of data to support our pending applications. The inspections resulted in multiple observations on Form 483. We fully responded to those observations on March 6, 2019. We believe that our responses to the observations will satisfy the requirements of the FDA and that no significant further actions will be necessary.

From February 25 through March 1, 2019, our IMS facility in South El Monte, California was subject to a preapproval inspection by the FDA. The inspection included a review of our corrective actions taken from the 2017 inspection as well as review of data to support our pending applications. The inspection resulted in multiple observations on Form 483. We responded to those observations on March 22, 2019. We believe that our responses to the observations will satisfy the requirements of the FDA and that no significant further actions will be necessary.

From July 23 through July 25, 2019, our Amphastar facility in Rancho Cucamonga, California was subject to a routine, post-marketing adverse drug experience reporting inspection, or PADE, by the FDA. The inspection included a review of our processes for collecting, reviewing, investigating and reporting post-marketing adverse drug experiences reported through various sources. The inspection resulted in no Form 483 findings. No further actions will be necessary.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

The following discussion provides forward-looking quantitative and qualitative information about our potential exposure to market risk. Market risk represents the potential loss arising from adverse changes in the value of financial instruments. The risk of loss is assessed based on the likelihood of adverse changes in fair values, cash flows or future earnings. We are exposed to market risk for changes in the market values of our investments (Investment Risk), the impact of interest rate changes (Interest Rate Risk), and the impact of foreign currency exchange changes (Foreign Currency Exchange Risk).

Investment Risk

We regularly review the carrying value of our investments and identify and recognize losses, for income statement purposes, when events and circumstances indicate that any declines in the fair values of such investments below our accounting basis are other than temporary. As of June 30, 2019, we did not have any such investments. We do not enter into investments for trading or speculative purposes.

As of June 30, 2019, we had $35.1 million deposited in seven banks located in China, $2.8 million deposited in one bank located in France, and $0.9 million deposited in one bank located in the United Kingdom. We also maintained $75.3 million in cash equivalents that include money market accounts, as of June 30, 2019. The remaining amounts of our cash equivalent as of June 30, 2019, are in non-interest bearing accounts.

Interest Rate Risk

Our primary exposure to market risk is interest-rate-sensitive investments and credit facilities, which are affected by changes in the general level of U.S. interest rates. Due to the nature of our short-term investments, we believe that we are not subject to any material interest rate risk with respect to our short-term investments.

As of June 30, 2019, we had $46.7 million in long-term debt and finance leases outstanding. Of this amount, $12.0 million had variable interest rates which were not locked-in through fixed interest rate swap contracts. The debt with variable interest rate exposure had a weighted-average interest rate of 5.5% at June 30, 2019. An increase in the index underlying these rates of 1% (100 basis points) would increase our annual interest expense on the debt with variable interest rate exposure by approximately $0.1 million per year.

Foreign Currency Exchange Risk

Our finished pharmaceutical products are primarily sold in the U.S. domestic market, and have little exposure to foreign currency price fluctuations. However, as a result of our acquisition of the API manufacturing business in Éragny-sur-Epte, France, we are exposed to market risk related to changes in foreign currency exchange rates. Specifically, our insulin sales contracts are frequently denominated in euros, which are subject to fluctuations relative to the USD.

Our Chinese subsidiary, ANP, maintains its books of record in Chinese yuan. These books are remeasured into the functional currency of USD, using the current or historical exchange rates. The resulting currency remeasurement adjustments and other transactional foreign exchange gains and losses are reflected in our statement of operations.

Our French subsidiary, AFP, maintains its books of record in euros. Our U.K. subsidiary, IMS UK, maintains its books of record in British pounds. The results of operations are translated to USD at the average exchange rates during the period. Assets and liabilities are translated at the rate of exchange prevailing on the balance sheet date. Equity is translated at the prevailing exchange rate at the date of the equity transactions. Translation adjustments are reflected in stockholders' equity and are included as a component of other comprehensive income (loss).

We are also exposed to the potential earnings effects from intercompany foreign currency assets and liabilities that arise from normal trade receivables and payables and other intercompany loans.

We do not undertake hedging transactions to cover our foreign currency exposure. As of June 30, 2019, a 10%

unfavorable change in the exchange rate of the U.S. dollar strengthening against the foreign currencies to which we have exposure would result in approximately $2.0 million reduction of foreign currency gains, and approximately $3.9 million reduction in other comprehensive income.

As of June 30, 2019, our foreign subsidiaries had cash balances denominated in foreign currencies of $7.2 million.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, under the supervision and with the participation of our Chief Executive Officer and our Chief Financial Officer, our principal executive and principal financial officers, respectively, conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act of 1934, as amended, as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that as of such date, our disclosure controls and procedures were effective (a) to ensure that information that we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms and (b) to include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in reports filed or submitted under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting that occurred during the quarter ended June 30, 2019, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act).

Inherent Limitations of Internal Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal controls over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management overriding of the controls. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

For information regarding legal proceedings, see "Part I – Item 1. Financial Statements – Notes to Consolidated Financial Statements – Litigation."

ITEM 1A. RISK FACTORS

Except as noted below, there were no material changes from the risk factors previously disclosed in our Annual Report on Form 10-K for the year ended December 31, 2018, filed with the Securities and Exchange Commission on March 15, 2019.

Some of our products are marketed without FDA approval and may be subject to enforcement actions by the FDA.

A number of our prescription products are marketed without FDA approval. These products, like many other prescription drugs on the market that the FDA has not formally evaluated as being effective, contain active ingredients that were first marketed prior to the enactment of the Federal Food, Drug and Cosmetic Act, or FFDCA. The FDA has assessed these products in a program known as the "Prescription Drug Wrap-Up" and has stated that these drugs cannot be lawfully marketed unless they comply with certain "grandfather" exceptions to the definition of "new drug" in the FFDCA. These exceptions have been strictly construed by FDA and by the courts, and the FDA has stated that it is unlikely that any of the unapproved prescription drugs on the market, including certain of our drugs, qualify for the exceptions. At any time, the FDA may require that some or all of our unapproved prescription drugs be submitted for approval and may direct us to recall these products and/or cease marketing the products until they are approved. The FDA may also take enforcement actions based on our marketing of these unapproved products, including but not limited to the issuance of an untitled letter or a warning letter, and a judicial action seeking an injunction, product seizure and/or civil or criminal penalties. The enforcement posture could change at any time and our ability to market such drugs could terminate with little or no notice. Moreover, if our competitors seek and obtain approval and market FDA-approved prescription products that compete against our unapproved prescription products, we would be subject to a higher likelihood that the FDA may seek to take action against our unapproved products. Such competitors have brought and may bring claims against us alleging unfair competition or related claims.

As a result of our meetings with the FDA in 2009, we decided to discontinue all of our products that were subject to the Prescription Drug Wrap-Up program, with the exception of epinephrine in vial form. These products were all produced at our subsidiary, IMS. During the third quarter of 2010, the FDA requested that we reintroduce several of the withdrawn products to cope with a drug shortage, while we prepared and filed applications for approval of the products. Between August and October, 2010, we reintroduced atropine, morphine, dextrose, and epinephrine prefilled syringes.

In February 2017, the FDA requested that we discontinue the manufacturing and distribution of our epinephrine injection, USP vial product, which had been marketed under the "grandfather" exception to the FDA's Prescription Drug Wrap-Up program. We discontinued selling this product in the second quarter of 2017.

For the years ended December 31, 2018, 2017, and 2016, we recorded net revenues of $26.4 million, $22.0 million, and $17.4 million, respectively, from our unapproved products. For the six months ended June 30, 2019 and 2018, we recorded net revenues of $8.9 million and $7.2 million, respectively, from our unapproved products. Our unapproved products currently on the market include: atropine, morphine, dextrose and epinephrine prefilled syringes. We have filed three ANDAs and one NDA with respect to our remaining unapproved products in order to mitigate all risk associated with the marketing of unapproved drug products. Prior to the approval of our ANDA and NDA submissions, we continue to operate in compliance with the FDA Compliance Policy Guide, CPG Sec. 440.100 Marketed New Drugs Without Approved NDAs and ANDAs.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

(c) Issuer Purchases of Equity Securities

The table below provides information with respect to repurchases of our common stock:

Period	Total Number of Shares Purchased [1]	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
April 1 – April 30, 2019	50,980	$ 21.01	50,980	—
May 1 – May 31, 2019	—	—	—	—
June 1 – June 30, 2019	—	—	—	—

(1) During the second quarter of 2019, we repurchased shares of our common stock as part of the share buyback program authorized by our Board of Directors on May 7, 2018 and May 6, 2019. As of June 30, 2019, $20.0 million remained available under such program.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Not applicable.

ITEM 6. EXHIBITS

Exhibit No.	Description
10.1	Ninth Amendment to the Acquisition Loan, dated July 19, 2019 between Amphastar Pharmaceuticals, Inc. and Cathay Bank
10.2*	Fifth Amendment to the Supply Agreement by and between MannKind Corporation and Amphastar Pharmaceuticals, Inc., dated August 2, 2019
31.1	Certification of Chief Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
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.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definitions Linkbase Document

The information in Exhibits 32.1 and 32.2 shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or otherwise subject to the liabilities of that section, nor shall they be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act (including this Report), unless the Registrant specifically incorporates the foregoing information into those documents by reference.

* Portions of this exhibit (indicated by asterisks) have been redacted in compliance with Regulation S-K Item 601(b)(10).

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.

AMPHASTAR PHARMACEUTICALS, INC.
(Registrant)
By: **/s/ JACK Y. ZHANG**
Jack Y. Zhang
Chief Executive Officer
(Principal Executive Officer)

Date: August 9, 2019

AMPHASTAR PHARMACEUTICALS, INC.
(Registrant)
By: **/s/ WILLIAM J. PETERS**
William J. Peters
Chief Financial Officer
(Principal Financial and Accounting Officer)

Date: August 9, 2019

Exhibit 10.1

Loan No.: 3000029918-100

NINTH AMENDMENT TO LOAN AGREEMENT AND OTHER LOAN DOCUMENTS, AND SECOND EXTENSION AGREEMENT

This Ninth Amendment to Loan Agreement and Other Loan Documents, and Second Extension Agreement (the "Amendment") dated as of July 19, 2019 ("Reference Date"), which is effective as of June 22, 2019 ("Effective Date"), is between AMPHASTAR PHARMACEUTICALS, INC., a Delaware corporation ("Borrower"), and ARMSTRONG PHARMACEUTICALS, INC., a Delaware corporation ("Guarantor"), on the one hand, and CATHAY BANK, a California banking corporation ("Lender"), on the other hand, with reference to the following facts:

RECITALS

A. Lender and Borrower entered into that certain Loan Agreement dated as of April 22, 2014 (as previously amended, the "Loan Agreement") pursuant to which Lender made a loan to Borrower in the principal amount of $21,900,000.00 (the "Loan"). The Loan is evidenced, in part, by that certain Promissory Note dated as of April 22, 2014 executed by Borrower in favor of Lender (the "Note").

B. The Loan is secured by, inter alia, (i) that certain Commercial Security Agreement dated April 22, 2014, executed by Borrower in favor of Lender, (ii) that certain Stock Pledge Agreement dated April 22, 2014, executed by Borrower in favor of Lender, and (iii) that certain *Convention de Nantissement de Titres Financies* dated April 22, 2014, by Borrower, in favor of Lender.

C. Payment and performance of Borrower's obligations to Lender are guaranteed by Guarantor pursuant to, inter alia, that certain Continuing Guaranty dated April 22, 2014, executed by Guarantor in favor of Lender.

D. The Loan Agreement was previously amended by (i) that certain First Amendment to Loan Agreement dated April 28, 2014 ("First Amendment"), (ii) that certain Second Amendment to Loan Agreement dated May 8, 2014 ("Second Amendment"), (iii) that certain Third Amendment to Loan Agreement dated May 23, 2014 ("Third Amendment"), (iv) that certain Fourth Amendment to Loan Agreement dated July 14, 2014 ("Fourth Amendment"), (v) that certain Fifth Amendment to Loan Agreement dated December 31, 2014 ("Fifth Amendment"), (vi) that certain Sixth Amendment to Loan Agreement dated December 18, 2015 ("Sixth Amendment"), (vii) that certain Seventh Amendment to Loan Agreement dated December 27, 2017 ("Seventh Amendment"), (viii) that certain Eighth Amendment to Loan Agreement dated July 11, 2018 ("Eighth Amendment"), and (ix) that certain First Extension Agreement dated April 22, 2019, which extended the Maturity Date (as defined in the Note) of the Loan from April 22, 2019 to June 22, 2019.

E. Lender and Borrower desire to (i) extend the Maturity Date from June 22, 2019 to June 1, 2024, (ii) revise the repayments terms of the Note, and (iii) further amend the Loan Agreement and the other Loan Documents (as defined in the Loan Agreement), as more particularly set forth herein.

AGREEMENT

1. Definitions. Capitalized terms used but not defined in this Amendment shall have the meaning given to them in the Loan Agreement.

2. Borrower and Guarantor Acknowledgment as to Obligations.

A. As of July 19, 2019, the outstanding principal balance of the Loan is $11,801,729.65, plus accrued and unpaid interest thereon.

B. Borrower and Guarantor specifically acknowledge and agree that they do not have any valid offset or defense to the obligations, indebtedness and liability under the Loan Documents.

3. Reaffirmation of Obligations.

This Amendment is, in part, a reaffirmation of the obligations, indebtedness and liability of Borrower and Guarantor, and each of them, to Lender as evidenced by the Loan Documents. Therefore, Borrower and Guarantor, and each of them, acknowledge and agree that, except as specified herein, all of the terms and conditions of the Loan Documents are and shall remain in full force and effect, without waiver or modification of any kind whatsoever, and are ratified and confirmed in all respects.

4. Extension of Maturity Date.

Subject to the terms and conditions of Section 8 of this Amendment, the Maturity Date is hereby extended to June 1, 2024, at which time the entire principal balance under the Loan plus all accrued and unpaid interest thereon is and shall be due and payable as provided under the Loan Documents. Any and all references in the Note and the other Loan Documents to the "Maturity Date" shall mean June 1, 2024.

5. Amendment to Note.

5.1 From and after the Effective Date of this Amendment, on page 1 of the Note, the first paragraph under the heading entitled “INTEREST RATE” is deleted and replaced with the following:

> “**INTEREST RATE.** From and after June 22, 2019, interest on the outstanding principal balance of this Note shall accrue at the greater of (i) five percent (5.00%) per annum, or (ii) ‘The Wall Street Journal Prime Rate,’ as the rate may change from time to time (the ‘Note Rate’). The Note Rate shall be calculated on the basis of the actual days elapsed over a three hundred sixty (360) day year, which calculation method results in a higher effective interest rate than the interest rate set forth herein.”

5.2 From and after the Effective Date of this Amendment, on page 1 of the Note, the first paragraph under the heading entitled "PRINCIPAL AND INTEREST PAYMENTS" is deleted and replaced with the following:

> "**PRINCIPAL AND INTEREST PAYMENTS**. Commencing on August 1, 2019 and continuing on the same day of each and every calendar month thereafter until the Maturity Date, Borrower shall pay to Lender a monthly installment payment of principal and interest in an amount equal to the then outstanding principal balance under this Note amortized over a sixty (60) month period commencing from July 1, 2019 ('Amortization Period'), with interest at the Note Rate then in effect under this Note. Each time there is a change in the Note Rate, the amount of the monthly payment of principal and interest shall be reamortized and adjusted to an amount which will result in the full payment of the then outstanding balance of this Note, at the Note Rate as so adjusted, upon the expiration of the Amortization Period."

6. Borrower's and Guarantor's Representations and Warranties. Borrower and Guarantor hereby represent and warrant to Lender and covenant and agree with Lender as follows:

6.1 Borrower and Guarantor have full legal right, power and authority to enter into and perform this Amendment. The execution and delivery of this Amendment by Borrower and Guarantor, and the consummation by Borrower and Guarantor of the transactions contemplated hereby have been duly authorized by all necessary action by or on behalf of Borrower and Guarantor. This Amendment is a valid and binding obligation of Borrower and Guarantor, enforceable against Borrower and Guarantor in accordance with its terms.

6.2 Neither the execution and delivery of this Amendment by Borrower and Guarantor, nor the consummation by Borrower and Guarantor of the transactions contemplated hereby, conflicts with or constitutes a violation or a default under any law applicable to Borrower and Guarantor, or any contract, commitment, agreement, arrangement or restriction of any kind to which Borrower or Guarantor is a party, by which Borrower or Guarantor is bound or to which any of Borrower's or Guarantor's property or assets is subject.

6.3 There are no actions, suits or proceedings pending, or to the knowledge of Borrower or Guarantor, threatened against or affecting Borrower or Guarantor, in relation to its obligations to Lender or involving the validity and enforceability of this Amendment, or any of the other Loan Documents, as applicable, at law or in equity, or before or by any governmental agency, or which could have a material adverse effect on the financial condition, operations, properties, assets, liabilities or earnings of Borrower or Guarantor, or the ability of Borrower or Guarantor to perform its obligations to Lender.

6.4 Borrower and Guarantor hereby reaffirm and confirm that the representations and warranties of Borrower and Guarantor contained in the Loan Documents are true, correct and complete in all material respects as of the Reference Date of this Amendment.

6.5 Borrower and Guarantor are in full and complete compliance with the terms, covenants, provisions and conditions of the Loan Agreement and the other Loan Documents to which they are a party.

6.6 All covenants, representations and warranties of herein are incorporated by reference and hereby made a part of the Loan Documents, as applicable.

7. Incorporation. The terms, conditions and provisions of this Amendment are hereby incorporated in the Loan Agreement and other Loan Documents and shall have the same force and effect as if originally incorporated therein.

8. Conditions Precedent. The effectiveness of this Amendment shall be expressly conditioned upon the following having occurred or Lender having received, all of the following, in form and content satisfactory to Lender and its counsel, and suitable for filing or recording, as the case may be, as required:

a. This Amendment, fully executed by Borrower and Guarantor;

b. Borrower shall have paid to Lender, from Borrower's own immediately available funds, the sum of $59,000.00;

c. Payment and/or reimbursement to Lender of the fees, costs and expenses (including, without limitation, attorneys' fees) incurred by Lender in connection with this Amendment; and

d. Such additional assignments, agreements, certificates, reports, resolutions, approvals, instruments, documents, subordination agreements, financing statements, consents and opinions as Lender may request, in its sole opinion and judgment, in connection with this Amendment.

9. Conditions Subsequent.

a. As conditions subsequent to the effectiveness of the extension of the Maturity Date provided for this Amendment, by no later than August 5, 2019, Borrower shall execute and deliver to Lender, and Borrower shall have caused Amphastar France Pharmaceuticals, a *société par actions simplifiée*, organized under the laws of France ("Amphastar France"), to execute and deliver to Lender the following documents (individually and collectively, the "Conditions Subsequent Documents"):

i. Addendum No. 2 to that certain Pledge Agreement For A Securities Account dated as of April 22, 2014, which further included an Addendum No. 1 dated June 10, 2014, by and between Lender, Borrower and Amphastar France, which amendment shall be in form and content acceptable to Lender, in Lender's sole discretion, and if applicable, shall be filed or recorded, at Borrower's expense, in the appropriate office and jurisdiction;

ii. Amendment No. 1 to that certain Negative Pledge Agreement dated as of April 22, 2014, by and between Lender, Borrower and Amphastar France, which amendment shall be in form and content acceptable to Lender, in Lender's sole discretion, and if

applicable, shall be filed and/or recorded, at Borrower's expense, in the appropriate office and jurisdiction;

iii. (i) A new Declaration Of Pledge Of A Securities Account (the "New Declaration") that cancels and replaces that certain Declaration Of Pledge Of A Securities Account dated as of April 22, 2014 by Borrower and in favor of Lender, which New Declaration shall be in form and content acceptable to Lender in Lender's sole discretion, and if applicable, shall be filed or recorded, at Borrower's expense in the appropriate office and jurisdiction, and (ii) a new Certificate Of The Pledge Of A Securities Account (the "New Certificate") that cancels and replaces that certain Certificate Of The Pledge Of A Securities Account dated as of April 22, 2014 by Borrower and in favor of Lender, which New Certificate shall be in form and content acceptable to Lender in Lender's sole discretion, and if applicable, shall be filed or recorded, at Borrower's expense in the appropriate office and jurisdiction;

iv. Payment by Borrower, from Borrower's own funds, of all fees and costs (including attorney's fees) incurred by Lender in connection with this Section 9; and

v. Such other documents required by Lender, as determined by Lender in Lender's sole discretion, and suitable for filing and/or recording in the appropriate office and jurisdiction, as the case may be.

b. The failure to fully and timely observe, perform and satisfy any term, condition or provision of this Section 9 shall constitute the failure of conditions subsequent to the effectiveness of the extension of the Maturity Date from June 22, 2019 to June 1, 2024, and consequently, the extension of the Maturity Date shall become null and void *ab initio*, an Event of Default shall exist under the Loan Documents as a result of Borrower's failure to repay the Loan to Lender in full by the Maturity Date of June 22, 2019, and Lender shall have available to it any and all rights and remedies under the Loan Documents, at law and/or in equity, along with the unfettered right to enforce the same.

10. Successors and Assigns. This Amendment shall be binding upon and inure to the benefit of Borrower and Guarantor and their respective successors and assigns, except that Borrower and Guarantor may not assign their rights hereunder or any interest therein without the prior written consent of Lender.

11. General Release of Lender.

11.1 Except as to the obligations imposed upon Lender, as provided herein, Borrower and Guarantor, on behalf of themselves, their respective successors and assigns, and each of them, do hereby forever relieve, release, acquit and discharge Lender and its predecessors, successors and assigns, and their respective past and present attorneys, accountants, insurers, representatives, affiliates, partners, subsidiaries, officers, employees, directors, and shareholders, and each of them (collectively, the "Released Parties"), from any and all claims, debts, liabilities, demands, obligations, promises, acts, agreements, costs and expenses (including, but not limited to, attorneys' fees), damages, injuries, actions and causes of action, of whatever kind or nature, whether legal or equitable, known or unknown, suspected or unsuspected, contingent or fixed, which Borrower or Guarantor now owns or holds or has at any

time heretofore owned or held or may at any time hereafter own or hold against the Released Parties, or any of them, by reason of any acts, facts, transactions or any circumstances whatsoever occurring or existing, including, but not limited to, those based upon, arising out of, appertaining to, or in connection with the Recitals above, the Loan, the facts pertaining to this Amendment, any collateral heretofore granted to Lender or granted in connection herewith, or to any other obligations of Borrower and Guarantor to Lender, or the lending arrangements between Lender and Borrower and Guarantor.

11.2 As to the matters released herein, Borrower and Guarantor expressly waive any and all rights under Section 1542 of the Civil Code of the State of California, which provides as follows:

> "A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release, and that if known by him or her, would have materially affected his or her settlement with the debtor or released party."

11.3 Borrower and Guarantor expressly waive and release any right or benefit which they have or may have under Section 1542 of the Civil Code of the State of California, and any similar law of any state, territory, commonwealth or possession of the United States, or the United States, to the full extent that they may waive all such rights and benefits pertaining to the matters released herein. In connection with such waiver and relinquishment, Borrower and Guarantor acknowledge that they are aware that they may hereafter discover claims presently unknown or unsuspected, or facts in addition to or different from those which they now know or believe to be true. Nevertheless, it is the intention of Borrower and Guarantor, through this Amendment, to fully, finally and forever release all such matters, and all claims relative thereto, which do now exist, may exist, or heretofore have existed. In furtherance of such intention, the release herein given shall be and remain in effect as a full and complete release of such matters notwithstanding the discovery or existence of any such additional or different claims or facts relative thereto.

11.4 Borrower and Guarantor are the sole and lawful owners of all right, title and interest in and to every claim and other matter which they purport to release herein, and they have not heretofore assigned or transferred, or purported to assign or transfer to any person or any entity claims or other matters herein released. Borrower and Guarantor shall indemnify, defend and hold Lender and each of the other Released Parties, and each of them, harmless from and against any claims, liabilities, actions, causes of action, demands, injuries, costs, and expenses (including, but not limited to, attorneys' fees), based upon or arising in connection with any such prior assignment or transfer, or any such purported assignment or transfer, or any claims or other matters released herein.

12. Representations and Warranties. When the Borrower and Guarantor sign this Amendment, the Borrower and Guarantor represent and warrant to the Lender that: (a) the Loan Agreement and all other Loan Documents are in full force and effect, (b) there is no event which is, or with notice or lapse of time or both would be, a default under the Loan Agreement, (c) the representations and warranties in the Loan Agreement are true as of the Reference Date of this Amendment as if made on the Reference Date of this Amendment, (d) this Amendment does not

conflict with any law, agreement, or obligation by which the Borrower or Guarantor is or are bound, and (e) this Amendment is within the Borrower's and Guarantor's powers, has been duly authorized, and does not conflict with any of the Borrower's and Guarantor's organizational papers.

13. Effect of Amendment. Except as provided in this Amendment, all of the terms and conditions of the Loan Agreement shall remain in full force and effect.

14. Counterparts. This Amendment may be executed in counterparts, each of which when so executed shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument.

15. FINAL AGREEMENT. BY SIGNING THIS DOCUMENT EACH PARTY REPRESENTS AND AGREES THAT: (A) THIS DOCUMENT REPRESENTS THE FINAL AGREEMENT BETWEEN PARTIES WITH RESPECT TO THE SUBJECT MATTER HEREOF, (B) THIS DOCUMENT SUPERSEDES ANY COMMITMENT LETTER, TERM SHEET OR OTHER WRITTEN OUTLINE OF TERMS AND CONDITIONS RELATING TO THE SUBJECT MATTER HEREOF, UNLESS SUCH COMMITMENT LETTER, TERM SHEET OR OTHER WRITTEN OUTLINE OF TERMS AND CONDITIONS EXPRESSLY PROVIDES TO THE CONTRARY, (C) THERE ARE NO UNWRITTEN ORAL AGREEMENTS BETWEEN THE PARTIES, AND (D) THIS DOCUMENT MAY NOT BE CONTRADICTED BY EVIDENCE OF ANY PRIOR, CONTEMPORANEOUS, OR SUBSEQUENT ORAL AGREEMENTS OR UNDERSTANDINGS OF THE PARTIES.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, this Amendment is executed as of the date and year first written above.

BORROWER:

AMPHASTAR PHARMACEUTICALS, INC.,
a Delaware corporation

By:/s/ Jason Shandell
Name:Jason Shandell
Title::President

GUARANTOR:

ARMSTRONG PHARMACEUTICALS, INC.,
a Delaware corporation

By:/s/ Rong Zhou
Name:Rong Zhou
Title::President

LENDER:

CATHAY BANK,
a California banking corporation

By:/s/ Kenneth Chan
Name:Kenneth Chan
Title::First Vice President

CORPORATE RESOLUTION TO GUARANTEE
(Armstrong Pharmaceuticals, Inc.**)**

Corporation:

ARMSTRONG PHARMACEUTICALS, INC.
25 John Road
Canton, Massachusetts 02021

Borrower:

AMPHASTAR PHARMACEUTICALS, INC.
11570 6th Street
Rancho Cucamonga, California 91730

Lender:

CATHAY BANK
9650 Flair Drive
El Monte, California 91731
Attention: Ken Chan, First Vice President

WHEREAS, AMPHASTAR PHARMACEUTICALS, INC., a Delaware corporation ("Borrower"), has heretofore obtained from CATHAY BANK, a California banking corporation ("Lender"), a term loan in the principal amount of $21,900,000.00 ("Loan") evidenced by, inter alia, that certain Loan Agreement dated April 22, 2014 (together with any amendments or modifications thereof, the "Loan Agreement"), and may in the future desire to obtain such other or additional loans, advances, and/or extensions of credit (including renewals, modifications and/or extensions of time to pay existing indebtedness) as Lender may be willing to make or extend to Borrower, and said Borrower may hereafter from time to time become indebted or further indebted to Lender; and

WHEREAS, the Board of Directors (the "Board") of ARMSTRONG PHARMACEUTICALS, INC., a Delaware corporation ("Corporation"), incorporated under the laws of the State of Delaware, has reviewed the terms and conditions of that certain Ninth Amendment to Loan Agreement and Other Documents, and Extension Agreement dated as of July 19, 2019 (the "Amendment"), and effective as of June 22, 2019, and has determined that this Corporation will be benefited and its corporate purposes will be served and attained by Borrower's entry into the Amendment in that this Corporation receives a substantial benefit from the support of Borrower, and as such, this Corporation desires and requests that Lender enter into the Amendment with Borrower, on such terms and conditions, as Lender shall determine; and

WHEREAS, this Corporation has full authority to guarantee payment of such loans, advances and/or extensions of credit, and Lender requires that such payment be guaranteed by this Corporation;

NOW, THEREFORE, BE IT RESOLVED, that Rong Zhou, as President of this Corporation (herein sometimes referred to as "authorized officer"), be, and is hereby, authorized, directed and empowered, from time to time, acting alone, to act for and on behalf of and in the name of this Corporation as its corporate act and deed:

(a) To execute and deliver to Lender the Amendment, and to perform all terms, provisions and conditions thereunder.

(b) To guarantee, from time to time and on such terms and conditions as Lender may require, payment of any or all of the indebtedness or obligations, present and/or future, of Borrower in favor of or held by Lender, which indebtedness or obligations are or shall be evidenced by a written instrument or agreement, regardless of the form thereof;

(c) To execute such form of guarantee or guarantees as Lender may require, and as security therefor to pledge, assign, mortgage, hypothecate or grant security interests in such assets of this Corporation as may be required and agreed upon between him or them and Lender and to execute and deliver one or more trust deeds, mortgages and/or security agreements of this Corporation covering such property owned by this Corporation as may be required by Lender, and also, from time to time to substitute for said property or any part thereof, other property to be held on like terms; said guarantees, pledges, trust deeds, mortgages and/or security agreements to contain such provisions and agreements as may be required by Lender; and

(d) To renew, modify or extend the said guarantee or guarantees in whole or in part, and/or to execute other or further guarantees and security instruments, from time to time; and Lender is authorized to at any time apply any money or property in its hands belonging to this Corporation to the payment of any secured or unsecured obligations including such guaranteed obligations of this Corporation to Lender, whether due or not, in the manner recited in the form of security instrument used by Lender.

RESOLVED FURTHER, that the authority hereby conferred shall be deemed retroactive and that this Corporation hereby ratifies and confirms the acts of its officers, agents or employees in heretofore obligating this Corporation to Lender together with any acts performed in relation thereto.

RESOLVED FURTHER, that the Secretary of this Corporation is hereby authorized to execute, acknowledge and deliver a certified copy of this resolution to Lender and any other person or agency which may require copies of this resolution and that the certification of the Secretary as to the above named officer will be binding on this Corporation.

RESOLVED FURTHER, that Lender is authorized to act upon this resolution until written notice of the revocation hereof by a resolution duly adopted by the Board of Directors of this Corporation is delivered to Lender, such revocation in no way to affect the obligations of this Corporation to Lender incurred pursuant to the terms of this resolution prior to receipt by Lender of such notice of revocation.

****

I, Jason Shandell, Secretary of this Corporation, certify that the foregoing is a true copy of a resolution duly and regularly adopted by the Board of Directors of this Corporation, by unanimous written consent without a meeting, and that the resolution has not been modified or rescinded, and that the resolution has not been modified or rescinded. I further certify that the signature appearing below is the genuine signature of the authorized officer.

AUTHORIZED SIGNATURE:

By:/s/ Rong Zhou
Name:Rong Zhou
Title:President

I further certify that said resolution is still in force and effect and has not been amended or revoked and that the specimen signature appearing below is the signature of the officer authorized to sign for this Corporation by virtue of said resolution.

IN WITNESS WHEREOF, I have hereunto set my hand as such Secretary of said Corporation this 19th day of July, 2019.

By:/s/ Jason Shandell
Name:Jason Shandell, Esq.
Title:Secretary

CORPORATE RESOLUTION TO BORROW AND TO GRANT A SECURITY INTEREST

Borrower:	**Lender:**
AMPHASTAR PHARMACEUTICALS, INC. 11570 6th Street Rancho Cucamonga, California 91730	CATHAY BANK 9650 Flair Drive El Monte, California 91731

WHEREAS, AMPHASTAR PHARMACEUTICALS, INC., a Delaware corporation ("Corporation"), has heretofore obtained from CATHAY BANK, a California banking corporation ("Lender"), a term loan in the principal amount of $21,900,000.00 ("Loan") evidenced by, inter alia, that certain Loan Agreement dated April 22, 2014 (together with any amendments or modifications thereof, the "Loan Agreement"), and it may in the future be in the best interests of the Corporation to receive certain other or additional financial accommodation from Lender, and to grant to Lender a security interest in such assets of the Corporation as, in the judgment of said Officer (as defined below), they determine appropriate or necessary.

NOW, THEREFORE, BE IT UNANIMOUSLY RESOLVED, that Jason Shandell, as President of this Corporation (herein sometimes referred to as "said Officer"), be, and is hereby, authorized, directed and empowered, from time to time, acting alone, to act for and on behalf of and in the name of this Corporation as its corporate acts and deeds the following:

(a) To execute and deliver to Lender that certain Ninth Amendment to Loan Agreement and Other Documents, and Extension Agreement dated as of July 19, 2019 (the "Amendment"),and effective as of June 22, 2019, and to perform all terms, provisions and conditions thereunder.

(b) To borrow money from Lender in such amounts and upon such terms as may be agreed upon between Lender and said Officer, to direct the disposition of the proceeds, and to execute and deliver or endorse documents, instruments and such related evidences of indebtedness, loan agreements, security agreements, financing statements, deeds of trust, riders, and of any renewals, extensions, or modifications of any such financial accommodation (including, without limitation, the Amendment), whether in whole or in part thereof, whether now or hereafter existing, as may be required by Lender;

(c) To sell to, or discount, modify or rediscount with, Lender any and all negotiable instruments, contracts or instruments or evidences of debt at any time held by this Corporation and to endorse, transfer and deliver the same together with guaranties of payment thereof or agreements to repurchase the same in favor of Lender, Lender hereby

being authorized and directed to pay the proceeds of said sale, discount, modification or rediscount as directed by the endorsement thereon without inquiring into the circumstances of their issue or endorsement or the disposition of the proceeds;

(d) To grant, pledge, transfer, endorse, mortgage, assign, or hypothecate to Lender or deed in trust for Lender's benefit, any and all of the real or personal property of this Corporation (including, but not limited to, chattel mortgages, bills, instruments, documents, chattel paper, notes, money, deposit accounts, accounts, receivables, inventory, equipment, goods and general intangibles) as security for any monies borrowed from Lender or any liability incurred by this Corporation to Lender, whether matured or not matured, absolute or contingent, and wherever payable;

(e) To withdraw, receive and receipt for and to withdraw upon trust receipts on the responsibility and at the risk of this Corporation, and to sign orders for the withdrawal, substitution or exchange of any property pledged, assigned, transferred or otherwise held for this Corporation's account; such withdrawals, substitutions or exchanges may also be made by the bearer of any order, receipt or request so signed;

(f) To make, execute and deliver such documents, instruments, deeds of trust, riders, financing agreements, waivers, guaranties and agreements containing such provisions, covenants, recitals and agreements as may be required by Lender (which documents may contain restrictions on dividends or payments of indebtedness to officers);

(g) To perform or cause to be performed all further acts and to execute and deliver all further instruments which Lender may deem necessary to carry out the purposes of this resolution; and

(h) To direct Lender orally or by written instructions to disburse the proceeds of any loan in the name of the Corporation for any person, partnership, corporation or other legal entity, including, without limitation, said Officer.

UNANIMOUSLY RESOLVED FURTHER, that the authority hereby conferred shall be deemed retroactive and that this Corporation hereby ratifies and confirms the acts of its officers, agents or employees in heretofore obligating this Corporation to Lender together with any acts performed in relation thereto.

UNANIMOUSLY RESOLVED FURTHER, that at any time Lender may apply any money or property in its hands belonging to the Corporation to the payment of any indebtedness of the Corporation to Lender, whether due or not due.

UNANIMOUSLY RESOLVED FURTHER, that the Secretary of this Corporation is hereby authorized to execute, acknowledge and deliver a certified copy of this resolution to Lender and any other person or agency which may require copies of this resolution and that the certification of the Secretary as to the above named officer will be binding on this Corporation.

UNANIMOUSLY RESOLVED FURTHER, that Lender is authorized to act upon this resolution until written notice of the revocation hereof by a resolution duly adopted by the Board of Directors of this Corporation is delivered to Lender, such revocation in no way to affect the obligations of this Corporation to Lender incurred pursuant to the terms of this resolution prior to receipt by Lender of such notice of revocation.

[CONTINUES ON NEXT PAGE.]

* *

I, Jacob Liawatidewi, Secretary of the Corporation, duly organized and existing under the laws of the State of Delaware, do hereby certify that the foregoing is a full, true and correct copy of a certain unanimous resolution of the Board of Directors of said Corporation, duly and regularly passed and adopted at a meeting of the Board of Directors of said Corporation which was duly and regularly called and held on the 19th day of July, 2019, at which meeting a quorum of the Board of Directors of said Corporation was at all times present and acting.

I further certify that said resolution is still in force and effect and has not been amended or revoked and that the specimen signature appearing below is the signature of the officer authorized to sign for this Corporation by virtue of said resolution.

AUTHORIZED SIGNATURE:

/s/ Jason Shandell
Name:Jason Shandell, Esq
Title:President

IN WITNESS WHEREOF, I have hereunto set my hand as such Secretary of said Corporation this 19th day of July, 2019.

/s/ Jacob Liawatidewi
Jacob Liawatidewi, Secretary

3357780.3

CORPORATE AUTHORIZATION FOR NEGATIVE PLEDGE AND CONSENT TO BORROWER'S PLEDGE AGREEMENT

Corporation:	**Lender:**
AMPHASTAR FRANCE PHARMACEUTICALS 3 Rue du Colonel Moll 75017 Paris, France	CATHAY BANK 9650 Flair Drive El Monte, California 91731 Attention: Ken Chan, First Vice President

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WHEREAS, AMPHASTARFRANCE PHARMACEUTICALS, a *société par actions simplifiée*, organized under the laws of France ("Corporation"), is a wholly- owned subsidiary of AMPHASTAR PHARMACEUTICALS, INC., a Delaware corporation ("Borrower"), which has heretofore obtained from CATHAY BANK, a California banking corporation ("Lender"), a term loan in the principal amount of $21,900,000.00 ("Loan") evidenced by, inter alia, that certain Loan Agreement dated as of April 22, 2014 (together with any amendments or modifications thereof, the "Loan Agreement"), and may in the future desire to obtain such other or additional loans, advances, and/or extensions of credit (including renewals, modifications and/or extensions of time to pay existing indebtedness) as Lender may be willing to make or extend to Borrower, and said Borrower may hereafter from time to time become indebted or further indebted to Lender;

WHEREAS, Lender and Borrower (among other) have entered into that certain Ninth Amendment to Loan Agreement and Other Loan Documents, and Second Extension Agreement dated as July 19, 2019 (the "Ninth Amendment"), and effective as of June 22, 2019, which provides for, among other things, an extension of the Maturity Date (as defined in the Loan Agreement) of the Loan from June 22, 2019 to June 1, 2024, and an increase in the interest rate under the Note (as defined in the Loan Agreement and further set forth in the Ninth Amendment);

WHEREAS, it is a conditions subsequent under the Ninth Amendment that this Corporation execute and deliver to Lender the documents described in Section 9 of the Ninth Amendment (individually and collectively, the "Conditions Subsequent Documents"); and

WHEREAS, the Board of Directors (the "Board") of the Corporation have reviewed the terms and conditions of the Ninth Amendment, as well as the Conditions Subsequent Documents, and has determined that this Corporation will be benefited and its corporate purposes will be served and attained by the terms and provisions of the Ninth Amendment and the Conditions Subsequent Documents. As such, this Corporation desires and requests that Lender enter into the Ninth Amendment and the Conditions Subsequent Documents, on such terms and conditions, as Lender shall determine.

NOW, THEREFORE, BE IT RESOLVED, that Ying Luo, also known as, James Luo ("Authorized Officer") is hereby, authorized, directed and empowered, from time to time, to act for and on behalf of and in the name of this Corporation to execute and deliver to Lender the Conditions Subsequent Documents.

NOW, BE IT FURTHER RESOLVED, that, so long as all or any portion of the Loan remains outstanding, the Board reaffirms that it shall not authorize or issue any additional shares of stock (or debt convertible to shares of stock in Corporation), nor amend the bylaws of Corporation, in any manner that might operate to dilute or minimize, in any way, the rights, privileges and benefits of the holder of the shares of stock pledged to Lender pursuant to that certain Stock Pledge Agreement dated April 22, 2014 (together with any and all other agreements, instruments and/or documents required by Lender in connection therewith, the "Stock Pledge Agreement"), except as permitted by Section 9.1(l) of the Loan Agreement, and so long as all or any portion of the Loan remains outstanding, no less than sixty-five percent (65.00%) of any and all authorized and issued shares of stock in Corporation shall be pledged to Lender as security for the Loan.

RESOLVED FURTHER, that the Board shall not take any action in contravention of the immediately foregoing paragraph without the prior written consent of Lender.

RESOLVED FURTHER, that the authority hereby conferred shall be deemed retroactive and that this Corporation hereby ratifies and confirms the acts of its officers, agents or employees in heretofore obligating this Corporation to Lender together with any acts performed in relation thereto.

RESOLVED FURTHER, that the Secretary of this Corporation is hereby authorized to execute, acknowledge and deliver a certified copy of this resolution to Lender and any other person or agency which may require copies of this resolution and that the certification of the Secretary as to the above named officer will be binding on this Corporation.

RESOLVED FURTHER, that Lender is authorized to act upon this resolution until written notice of the revocation hereof by a resolution duly adopted by the Board is delivered to Lender, such revocation in no way to affect the obligations of this Corporation to Lender incurred pursuant to the terms of this resolution prior to receipt by Lender of such notice of revocation.

[CONTINUES ON NEXT PAGE.]

BOARD OF DIRECTORS

By:/s/ Mary Luo
Name:Mary Luo, PhD
Its:Board Member

By:/s/ Ying Luo
Name:Ying Luo
also known as, James Luo
Its:Board Member

By:/s/ Jack Zhang
Name:Jack Zhang, PhD
Its:Board Member

By:/s/ Jacob Liawatidewi
Name:Jacob Liawatidewi
Its:Board Member

By:/s/ Jason Shandell
Name:Jason Shandell, Esq
Its:Board Member

****

I, Jason Shandell, Secretary of this Corporation, certify that the foregoing is a true copy of a resolution duly and regularly adopted by the Board of Directors of this Corporation, by unanimous written consent without a meeting, and that the resolution has not been modified or rescinded, and that the resolution has not been modified or rescinded. I further certify that the signature appearing below is the genuine signature of the authorized officer.

IN WITNESS WHEREOF, I have hereunto set my hand as such Secretary of said Corporation this 19th day of July, 2019.

By:/s/ Jason Shandell
Name:Jason Shandell, Esq.
Title:Secretary

AUTHORIZED OFFICER:

/s/ Ying Luo
Name:Ying Luo, also known as James Luo
Title:President

DECLARATION OF PLEDGE OF A SECURITIES ACCOUNT

This declaration of pledge of a securities account is subject to the provisions of article L211-20 of the Financial and Monetary Code. It cancels and replaces the declaration of pledge of a securities account signed on April 22, 2014, by the same Settlor to the same Secured Creditor.

This declaration of pledge of a securities account is given in connection with that certain Ninth Amendment to Loan Agreement and Other Loan Documents, and Second Extension Agreement dated as of July 19, 2019, and effective as of June 22, 2019 (the "**Ninth Amendment**").

This declaration of pledge of a securities account dated as of July 19, 2019 is effective as of June 22, 2019.

A. Pledge Settlor

The undersigned, AMPHASTAR PHARMACEUTICALS, Inc., a company under the laws of the State of Delaware, having its registered office 11570 6th Street, Rancho Cucamonga, California 91730, United States of America, represented by its legal representative Mr. Jason Shandell, Esq., duly authorized for the purposes of this document (the " **Settlor** "), sets up in pledge (the " **Pledge** ") the securities account indicated under C. below (the " **Pledge Account** ").

B. Pledge Beneficiary

The Pledge is set up to benefit CATHAY BANK, a company under the laws of the State of California, having its company offices at 9650 Flair Drive, El Monte, California 91731, United States of America (the " **Secured Creditor** ").

C. Identification of the Pledge Account

The Pledge Account is opened in the books of the company AMPHASTAR FRANCE PHARMACEUTICALS, a simplified joint-stock company with a capital of € 650,000, registered in the Beauvais Trade and Company Register under number 801 531 427, having its registered offices at Usine Saint Charles, 60590 Eragny-sur-Epte, France (the " **Issuer and Account Holder** ").

D. Identification of the Secured Debt

The Pledge Account is a special Account opened in the name of the Settlor to the Secured Creditor of the sums owed as set forth by the commitment whose essential features are as follows:

- Type: loan
- Principal amount due on April 22, 2014: twenty-one million nine hundred thousand United States Dollars (21,900,000.00 USD)
- Principal amount due on July 19, 2019: eleven million eight hundred one thousand seven hundred twenty nine United States Dollars and sixty five cents (11,801,729.65 USD)
- Contractual interest rate: higher of: five (5) percent per annum or the index " *Wall Street Journal Prime Rate* ", as the same may change from time to time (as further set forth in the Ninth Amendment)
- Date of the agreement: April 22, 2014 (as amended on (i) April 28, 2014; (ii) May 8, 2014; (iii) May 23, 2014; (iv) July 14, 2014; (v) December 31, 2014; (vi) December 18, 2015; (vii) December 27, 2017; (viii) July 11, 2018; (ix) April 22, 2019; and (x) July 19, 2019 which is effective as of June 22, 2019)

The loan agreement, its eight amendments and its first extension agreement are reproduced in **Exhibit D**.

E. Securities initially recorded in the Pledge Account

The securities that are initially recorded in the Pledge Account are:

- Type: ordinary shares issued by the Issuer and Account Holder
- Number: six thousand five hundred (6,500)
- Nominal value: one (1) Euro

F. Securities now recorded in the Pledge Account

Pursuant to a sole shareholders decision dated June 10, 2014, it has been decided to increase the capital of Amphastar France to six hundred and fifty thousand euros (€ 650,000) by the issuance of six hundred and forty thousand (640,000) new shares of a par value of one (1) euro each.

After the increase of capital, the Pledge Account was such composed of four hundred twenty two thousand and five hundred (422,500) shares, i.e. the six thousand five hundred (6.500) initial securities increased by the four hundred and sixteen thousand (416,000) replacement securities.

- Type: ordinary shares issued by the Issuer and Account Holder
- Number: four hundred twenty two thousand and five hundred (422,500)
- Nominal value: one (1) Euro

G. Pledge Agreement

The Settlor and the Secured Creditor concluded a Pledge Agreement on April 22, 2014, an Addendum No. 1 to the Pledge Agreement on June 10, 2014 (the "**Addendum No. 1**"), and an Addendum No. 2 to the Pledge Agreement on this day (the "**Addendum No. 2**"). These documents stipulate their rights and obligations in the framework of the Pledge.

The Pledge Agreement, the Addendum No. 1 and the Addendum No. 2 are reproduced in **Exhibit G.**

H. Type of Exhibits

The exhibits to this declaration of pledge of a securities account are incorporated hereto by reference and make up an integral part hereof.

I. Applicable Law - Disputes

This declaration of pledge of a securities account is governed by French law. The Court of Appeal of Paris and its lower courts shall have jurisdiction over any dispute arising our or connected with its validity, its interpretation or its performance.

[Signature page follows.]

Executed in Rancho Cucamonga, CA

On July 19, 2019

/s/ Jason Shandell
AMPHASTAR PHARMACEUTICALS Inc.
Represented by Jason Shandell, Esq.

CERTIFICATE OF THE PLEDGE OF A SECURITIES ACCOUNT

This certificate of the pledge of a securities account cancels and replaces the certificate of the pledge of a securities account established on April 22, 2014, by the same Settlor to the same Secured Creditor.

This certificate of the pledge of a securities account is given in connection with that certain Ninth Amendment to Loan Agreement and Other Loan Documents, and Second Extension Agreement dated as of July 19, 2019, and effective as of June 22, 2019 (the "**Ninth Amendment**").

After having become aware of the declaration of the pledge of a securities account signed on this day, (the " **Declaration** ") by AMPHASTAR PHARMACEUTICALS, Inc., a company under the laws of the State of Delaware, having its registered office 11570 6th Street, Rancho Cucamonga, California 91730, United States of America, represented by its legal representative Mr. Jason Shandell, Esq., duly authorized for the purposes of this document (the " **Settlor** "), for the benefit of CATHAY BANK, a company under the laws of the State of California, having its company offices at 9650 Flair Drive, El Monte, California 91731, United States of America (the " **Secured Creditor** "),

The undersigned AMPHASTAR FRANCE PHARMACEUTICALS, a simplified joint-stock company with a capital of € 650,000, registered in the Beauvais Trade and Company Register under number 801 531 427, having its registered offices at Usine Saint Charles, 60590 Eragny-sur-Epte, France, represented by its President, Mr. Ying Luo, also known as, James Luo, acting in this role as holder of the pledged account:

1. by means of this document, certifies the pledging of the securities account to a special account opened in the name of the Settlor and identified under the number 1bis (the " **Pledged Account** ");

2. provides the inventory of the securities, the list of which appears in the Declaration;

3. acknowledges the ban on the Settlor to avail themselves of the securities recorded in the Pledge Account; and

4. accepts the resulting supervisory role.

This certificate of the pledge of a securities account dated as of July 19, 2019 is effective as of June 22, 2019.

[Signature page follows.]

Executed in Rancho Cucamonga, CA

On July 19, 2019

/s/ Ying Luo

AMPHASTAR FRANCE PHARMACEUTICALS
Represented by Mr. Ying Luo, also known as James Luo

AMENDMENT NO. 1 TO THE NEGATIVE PLEDGE AGREEMENT

BETWEEN THE UNDERSIGNED:

AMPHASTAR PHARMACEUTICALS, Inc., a company under the laws of the State of Delaware, having its company offices at 11570 6th Street, Rancho Cucamonga, California 91730, United States of America, represented by its legal representative Mr. Jason Shandell, Esq., duly authorized for the purposes of this document,

Hereinafter referred to as the " **US Promisor** "

AMPHASTAR FRANCE PHARMACEUTICALS, a simplified joint-stock company with a capital of € 650,000, registered in the Beauvais Trade and Company Register under number 801 531 427, having its registered offices at Usine Saint Charles, 60590 Eragny-sur-Epte, France, represented by its President, Mr. Ying Luo, also known as James Luo, duly authorized for the purposes of this document,

Hereinafter referred to as the " **French Promisor** "

On the one hand,

The French Promisor and the US Promisor shall be referred together as the " **Promisors** ".

AND:

CATHAY BANK, a company under the laws of the State of California, having its company offices at 9650 Flair Drive, El Monte, California 91731, United States of America, represented by its legal representative Mr. Ken Chan, duly authorized for the purposes of this document,

Hereinafter referred to as the " **Beneficiary** "

On the other hand,

The Promisors and the Beneficiary being hereinafter collectively referred to as the **" Parties "** and individually as a " **Party** ".

AFTER HAVING RECALLED THAT:

On April 22, 2014, the Beneficiary provided a loan in a principal amount of twenty one million nine hundred thousand United States Dollars (21,900,000 USD) to the US Promisor (the " **Loan** ") according to the terms of a Loan Agreement dated April 22, 2014 (as amended from time to time, the " **Loan Agreement** "), in particular stipulating the conditions of the operation that was financed by the Loan and its reimbursement conditions.

The US Promisor is the owner of the entirety of the share capital of the French Promisor.

The French Promisor as the ultimate beneficiary of the amounts (or a substantial part thereof) to be provided pursuant to the Loan Agreement has agreed to the negative pledge of some of its assets, and in these circumstances the Parties concluded on April 22, 2014 a Negative Pledge Agreement (the **" Negative Pledge Agreement "**).

Pursuant to that certain Ninth Amendment to Loan Agreement and Other Loan Documents, and Second Extension Agreement dated as of July 19, 2019, which is effective as of June 22, 2019 (the "**Ninth Amendment**"), the Parties have agreed to extend the maturity date of the Loan from June 22, 2019 to June 1, 2024 and to increase the interest rate on the Loan, which is now the greater between (i) five percent (5.00%) per annum, or (ii) 'The Wall Street Journal Prime Rate', as the rate may change from time to time (as further set forth in the Ninth Amendment).

Consequently, the Parties have decided to amend the Loan Agreement and the other Loan documents, including the Negative Pledge Agreement.

Thus, the Parties have come together to entered into this Amendment No. 1 to the Negative Pledge Agreement dated as of July 19, 2019, and effective as of June 22, 2019 (this "**Amendment**").

THE FOLLOWING HAS BEEN AGREED UPON AND DECIDED:

ARTICLE 1 – DEFINITIONS

The terms starting with an upper case letter (whether they are singular or plural, whether they are conjugated or not) that are used in this Amendment have the meaning that is attributed to them in the Negative Pledge Agreement or this Amendment.

ARTICLE 2 – PURPOSE

2.1 Pursuant to its Article 6, the Negative Pledge Agreement is entered into for a set term (the " **Term** ") that ends at the first of the following dates:

(i) ten (10) years following its execution;

(ii) on the date of the notification by the Beneficiary to one of the Promisors that the Indebtedness has been fully repaid.

2.2 The maturity date of the Loan was initially June 22, 2019 but is now extended until June 1, 2024 (the " **Extension** ").

2.3 Consequently, the Parties have decided to amend Article 6 of the Negative Pledge Agreement, which is now worded as follows:

*"The Agreement is entered into for a set term (the " **Term** "). It will end when all the obligations of the Settlor according to the terms of the Loan Agreement have been fully performed and paid, at which time the Secured Creditor shall notify the release from the Pledge to Amphastar France, with a copy to the Settlor."*

ARTICLE 3 – FULL FORCE AND EFFECT

The Negative Pledge Agreement remains unchanged (unless expressly provided therein) and fully enforceable between the Parties and continues to bind them in all of its stipulations.

ARTICLE 4 – JURISDICTION AND APPLICABLE LAW

This Amendment is governed by French law.

The Court of Appeal of Paris and its lower courts shall have jurisdiction over any dispute arising out or connected with its validity, its interpretation or its performance.

ARTICLE 5 – GOVERNING VERSION

This Amendment is drafted in French and English, and the French version will prevail for its interpretation.

ARTICLE 6 – ELECTION OF DOMICILE

For the performance of this Amendment, the Parties elect their respective addresses, as stated in the heading of this document, for their domicile.

* *
*

[Signature page follows.]

Executed in Rancho Cucamonga, CA

On July 19, 2019

In three (3) original counterparts
Please precede the signatures by the phrase "*read and approved*"

/s/ Jason Shandell
AMPHASTAR PHARMACEUTICALS Inc.
Represented by Jason Shandell, Esq.

/s/ Ying Luo
AMPHASTAR FRANCE PHARMACEUTICALS
Represented by Mr. Ying Luo, also known as James Luo

/s/ Kenneth Chan
CATHAY BANK
Represented by Mr. Ken Chan

ADDENDUM NO. 2 TO THE PLEDGE AGREEMENT FOR A SECURITIES ACCOUNT

BETWEEN THE UNDERSIGNED:

AMPHASTAR PHARMACEUTICALS, Inc., a company under the laws of the State of Delaware, having its company offices at 11570 6th Street, Rancho Cucamonga, California 91730, United States of America, represented by its legal representative Mr. Jason Shandell, Esq., duly authorized for the purposes of this document,

Hereinafter referred to as the " **Settlor** "

On the one hand,

AND:

CATHAY BANK, a company under the laws of the State of California, having its company offices at 9650 Flair Drive, El Monte, California 91731, United States of America, represented by its legal representative Mr. Ken Chan, duly authorized for the purposes of this document,

Hereinafter referred to as the " **Secured Creditor** "

On the other hand,

The Settlor and the Secured Creditor being hereinafter collectively referred to as the **" Parties "** and individually as a " **Party** ".

IN THE PRESENCE OF:

AMPHASTAR FRANCE PHARMACEUTICALS, a simplified joint-stock company with a capital of € 650,000, registered in the Beauvais Trade and Company Register under number 801 531 427, having its registered offices at Usine Saint Charles, 60590 Eragny-sur-Epte, France, represented by its President, Mr. Ying Luo, also known as James Luo, duly authorized for the purposes of this document,

Hereinafter referred to as the " **Amphastar France** "

AFTER HAVING RECALLED THAT:

On April 22, 2014, the Secured Creditor provided a loan in a principal amount of twenty one million nine hundred thousand United States Dollars (21,900,000 USD) to the Settlor (the " **Loan** ") according to the terms of a Loan Agreement dated April 22, 2014 (as amended from time to time, the " **Loan Agreement** "), in particular stipulating the conditions of the operation that was financed by the loan and its reimbursement conditions.

The Settlor is the owner of the entirety of the share capital of Amphastar France and so as to guarantee the performance of its obligations according to the terms of the Loan Agreement has agreed to pledge a securities account (the " **Pledge Account** ") made out on April 22, 2014.

The Parties have entered into a Pledge Agreement For A Securities Account dated April 22, 2014 so as to define their respective rights and obligations in the framework of the pledge thereby provided (the " **Pledge Agreement** ").

Pursuant to a sole shareholders decision dated June 10, 2014, it has been decided to increase the capital of Amphastar France to six hundred and fifty thousand euros (€ 650,000) by the issuance of six hundred and forty thousand (640,000) new shares of a par value of one (1) euro each (the " **Increase of Capital** ").

The Parties have entered into an Addendum To The Pledge Agreement For A Securities Account dated June 10, 2014 (the " **Addendum No. 1** ") to act that after the Increase of Capital, the Pledge Account was composed of four hundred twenty two thousand and five hundred (422,500) shares, i.e. the six thousand five hundred (6.500) initial securities increased by the four hundred and sixteen thousand (416,000) replacement securities.

Pursuant to that certain Ninth Amendment to Loan Agreement and Other Loan Documents, and Second Extension Agreement dated as of July 19, 2019, which is effective as of June 22, 2019 (the "**Ninth Amendment**"), the Parties have agreed to extend the maturity date of the Loan from June 22, 2019 to June 1, 2024 and to increase the interest rate on the Loan, which is now the greater between (i) five percent (5.00%) per annum, or (ii) 'The Wall Street Journal Prime Rate', as the rate may change from time to time (as further set forth in the Ninth Amendment).

Consequently, the Parties have decided to amend the Loan Agreement and the other Loan documents, including the Pledge Agreement.

Thus, the Parties have come together to establish this new addendum to the Pledge Agreement dated as of July 19, 2019 and effective as of June 22, 2019 (this " **Addendum** ").

THE FOLLOWING HAS BEEN AGREED UPON AND DECIDED :

ARTICLE 1 – DEFINITIONS

The terms starting with an upper case letter (whether they are singular or plural, whether they are conjugated or not) that are used in this Addendum have the meaning that is attributed to them in the Pledge Agreement, the Addendum No. 1 or this Addendum.

ARTICLE 2 – PURPOSE

2.1 Pursuant to its Article 9, the Pledge Agreement is entered into for a set term (the " **Term** ") that ends at the first of the following dates:

(i) ten (10) years following its execution;

(ii) on the date of the notification by the Secured Creditor of the release from the Pledge to Amphastar France, with a copy to the Settlor.

2.2 The maturity date of the Loan was initially June 22, 2019 but is now extended June 1, 2024 (the " **Extension** ").

2.3 Consequently, the Parties have decided to amend Article 9 of the Pledge Agreement, which is now worded as follows:

"*The Agreement is entered into for a set term (the " **Term** "). It will end when all the obligations of the Settlor according to the terms of the Loan Agreement have been fully performed and paid, at which time the Secured Creditor shall notify the release from the Pledge to Amphastar France, with a copy to the Settlor."*

ARTICLE 3 – FULL FORCE AND EFFECT

The Pledge Agreement remains unchanged (unless expressly provided therein) and fully enforceable between the Parties and continues to bind them in all of its stipulations.

ARTICLE 4 – JURISDICTION AND APPLICABLE LAW

This Addendum is governed by French law.

The Court of Appeal of Paris and its lower courts shall have jurisdiction over any dispute arising out or connected with its validity, its interpretation or its performance.

ARTICLE 5 – GOVERNING VERSION

This Addendum is drafted in French and English, and the French version will prevail for its interpretation.

ARTICLE 6 – ELECTION OF DOMICILE

For the performance of this Addendum, the Parties elect their respective addresses, as stated in the heading of this document, for their domicile.

* *
*

[Signature page follows.]

Executed in Rancho Cucamonga, CA
On July 19, 2019

In three (3) original counterparts
Please precede the signatures by the note "*read and approved*"

/s/ Jason Shandell
AMPHASTAR PHARMACEUTICALS Inc.
Represented by Jason Shandell, Esq.

/s/ Kenneth Chan
CATHAY BANK
Represented by Mr. Ken Chan

/s/ Ying Luo
AMPHASTAR FRANCE PHARMACEUTICALS
Represented by Mr. Ying Luo, also known as James Luo

DÉCLARATION DE NANTISSEMENT DE COMPTE DE TITRES FINANCIERS

La présente déclaration de nantissement de compte de titres financiers est soumise aux dispositions de l'article L211-20 du Code Monétaire et Financier. Elle annule et remplace la déclaration de nantissement de compte de titres financiers consentie le 22 avril 2014 par le même Constituant au même Créancier Nanti.

Cette déclaration de nantissement de compte de titres financiers est consentie en relation avec le neuvième amendement au contrat de prêt et autres documents relatifs au prêt, ainsi qu'avec le deuxième accord d'extension signé le 19 juillet 2019 et ayant pris effet le 22 juin 2019.

Cette déclaration de nantissement de compte de titres financiers est signée le 19 juillet 2019 mais produit rétroactivement effet à compter du 22 juin 2019.

A. Constituant du Nantissement

La soussignée, **AMPHASTAR PHARMACEUTICALS, Inc.,** société de droit de l'Etat du Delaware, ayant son siège social au 11570 6th Street, Rancho Cucamonga, Californie 91730, Etats-Unis, représentée par son représentant légal M. Jason Shandell dument habilité aux fins des présentes (le « **Constituant** »), constitue en nantissement (le « **Nantissement** ») le compte-titres désigné au C. ci-dessous (le « **Compte Nanti** »).

B. Bénéficiaire du Nantissement

Le Nantissement est constitué au bénéfice de la société **CATHAY BANK**, société de droit de l'Etat de Californie ayant son siège social au 9650 Flair Drive, El Monte, Californie 91731, Etats-Unis (le « **Créancier Nanti** »).

C. Identification du Compte Nanti

Le Compte Nanti est ouvert dans les livres de la société **AMPHASTAR FRANCE PHARMACEUTICALS**, société par actions simplifiée au capital de 650.000 €, immatriculée au registre du commerce et des sociétés de Beauvais sous le numéro 801 531 427, ayant son siège social Usine Saint Charles, 60590 Eragny-sur-Epte, France (l'« **Emetteur Teneur de Compte** »).

D. Identification de la Créance Garantie

Le Nantissement est constitué en garantie du paiement par le Constituant au Créancier Nanti des sommes dues au titre de l'obligation dont les caractéristiques essentielles sont :

- Nature : prêt
- Montant en principal dû au 22 avril 2014 : vingt et un million neuf cent mille dollars américains (21.900.000 USD)
- Montant en principal dû au 19 juillet 2019 : onze millions huit cent un mille sept cent vingt-neuf dollars américains et soixante-cinq cents (11.801.729,65 USD)
- Intérêts conventionnels : plus élevé de : cinq (5) pourcent ou l'indice « *Wall Street Journal Prime Rate* », qui pourra être modifié à tout moment (comme cela est précisé dans le neuvième amendement au contrat de prêt)
- Date de la convention : 22 avril 2014 (telle qu'amendée les (i) 28 avril 2014, (ii) 8 mai 2014, (iii) 23 mai 2014, (iv) 14 juillet 2014, (v) 31 décembre 2014, (vi) 18 décembre 2015, (vii) 27 décembre 2017, (viii) 11 juillet 2018, (ix) 22 avril 2019 et (x) 19 juillet 2019 avec prise d'effet rétroactive au 22 juin 2019.

Le contrat de prêt, ses huit amendements et sa première extension sont reproduits en **Annexe D**.

E. Titres financiers initialement inscrits au Compte Nanti

Les titres financiers initialement inscrits au Compte Nanti étaient :

- Nature : actions ordinaires émises par l'Emetteur Teneur de Compte
- Nombre : six mille cinq cents (6.500)
- Valeur nominale : un (1) euro

F. Titres financiers maintenant inscrits au Compte Nanti

Par décision de l'associé unique en date du 10 juin 2014, il a été décidé d'augmenter le capital d'Amphastar France à six cent cinquante mille (650.000) euros par émission de six cent quarante mille (640.000) actions nouvelles d'une valeur nominale d'un (1) euro chacune.

Après l'augmentation de capital, le Compte Nanti était composé de quatre cent vingt-deux mille cinq cents (422.500) actions, soit les six mille cinq cents (6.500) titres initiaux augmentés des quatre cent seize mille (416.000) titres remplois.

- Nature : actions ordinaires émises par l'Emetteur Teneur de Compte
- Nombre : quatre cent vingt-deux mille cinq cents (422.500)
- Valeur nominale : un (1) euro

G. Convention de Nantissement

Le Constituant et le Créancier Nanti ont conclu une Convention de Nantissement le 22 avril 2014, un avenant n°1 à la convention de nantissement le 10 juin 2014 (l' « **Avenant 1** »), et un avenant n°2 à la convention de nantissement ce jour (l' « **Avenant 2** »). Ces documents stipulent leurs droits et obligations dans le cadre du Nantissement.

La Convention de Nantissement, l'Avenant n°1 et l'Avenant n°2 sont reproduits en **Annexe G**.

H. Nature des Annexes

Les annexes à la présente déclaration de nantissement de compte des titres financiers y sont incorporées par référence et en font partie intégrante.

I. Droit Applicable – Différends

La présente déclaration de nantissement de compte de titres financiers est soumise au droit français. La Cour d'appel de Paris et ses tribunaux sont compétents pour tout litige lié à sa validité, son interprétation ou son exécution.

Fait à Rancho Cucamonga, CA
Le 19 July 2019

/s/ Jason Shandell
AMPHASTAR PHARMACEUTICALS Inc.
Représentée par M. Jason Shandell, Esq.

ATTESTATION DE NANTISSEMENT DE COMPTE DE TITRES FINANCIERS

Cette attestation de nantissement de compte de titres financiers annule et remplace l'attestation de nantissement de compte de titres financiers consentie le 22 avril 2014 par le même Constituant au même Créancier Nanti.

Cette attestation de nantissement de compte de titres financiers est consentie en relation avec le neuvième amendement au contrat de prêt et autres documents relatifs au prêt, ainsi qu'avec le deuxième accord de prolongation signé le 19 juillet 2019 et ayant pris effet le 22 juin 2019.

Après avoir pris connaissance de la déclaration de nantissement de compte de titres financiers signée ce jour (la « **Déclaration** ») par la société **AMPHASTAR PHARMACEUTICALS Inc**. société de droit de l'Etat du Delaware, ayant son siège social au 11570 6th Street, Rancho Cucamonga, Californie 91730, Etats-Unis, représentée par son représentant légal M. Jason Shandell dument habilité aux fins des présentes (le « **Constituant** »), au bénéfice de la société **CATHAY BANK**, société de droit de l'Etat de Californie ayant son siège social au 9650 Flair Drive, El Monte, Californie 91731, Etats-Unis (le « **Créancier Nanti** »),

La soussignée, **AMPHASTAR FRANCE PHARMACEUTICALS**, société par actions simplifiée au capital de 650.000 euros, immatriculée au registre du commerce et des sociétés de Beauvais sous le numéro 801 531 427, ayant son siège social Usine Saint-Charles 60590 Eragny-sur-Epte, représentée par son Président Monsieur Ying Luo, également appelé James Luo, agissant en qualité de teneur du compte nanti :

1. Atteste par la présente le nantissement de compte de titres financiers sur un compte spécial ouvert au nom du Constituant et identifié sous le numéro 1bis (le « **Compte Nanti** ») ;

2. Donne inventaire des titres financiers dont la liste figure sur la Déclaration ;

3. Prend acte de l'interdiction du Constituant de disposer des titres financiers inscrits dans le Compte Nanti ; et

4. Accepte la mission de contrôle en résultant.

Cette attestation de nantissement de compte de titres financiers est signée le 19 juillet 2019 mais produit rétroactivement effet à compter du 22 juin 2019.

Fait à Rancho Cucamonga, CA

Le 19 July 2019

/s/ Ying Luo
Pour AMPHASTAR FRANCE PHARMACEUTICALS SAS
M. Ying Luo, également appelé James Luo

AMENDEMENT N°1 A LA CONVENTION DE SURETE NEGATIVE

ENTRE LES SOUSSIGNES :

AMPHASTAR PHARMACEUTICALS, Inc.
Société de droit de l'Etat du Delaware, ayant son siège social au 11570 6th Street, Rancho Cucamonga, Californie 91730, Etats-Unis, représentée par son représentant légal, M. Jason Shandell, dûment habilité aux fins des présentes,

Ci-après désignée, le « **Promettant Américain** »,

AMPHASTAR FRANCE PHARMACEUTICALS
Société par actions simplifiée au capital de 650.000 €, immatriculée au registre du commerce et des sociétés de Beauvais sous le numéro 801 531 427, ayant son siège social Usine Saint-Charles 60590 Eragny-sur-Epte, représentée par son Président M. Ying Luo, également appelé James Luo, dûment habilité aux fins des présentes,

Ci-après désignée, le « **Promettant Français** »,

D'une part,

Le Promettant Français et le Promettant Américain sont désignés ensemble les « **Promettants** »

ET :

CATHAY BANK
Société de droit de l'Etat de Californie ayant son siège social au 9650 Flair Drive, El Monte, Californie 91731, Etats-Unis, représentée par son représentant légal M. Ken Chan, dûment habilité aux fins des présentes

Ci-après désignée, le « **Bénéficiaire** »,

D'autre part,

Les Promettants et le Bénéficiaire sont ci-après désignés ensemble les « **Parties** » et séparément une « **Partie** ».

APRES AVOIR RAPPELE QUE :

Le 22 avril 2014, le Bénéficiaire a consenti au Promettant Américain un prêt d'un montant principal de vingt et un million neuf cent mille dollars américains (21.900.000 USD) (le « **Prêt** ») aux termes d'un contrat de prêt en date du 22 avril 2014 (le « **Contrat de Prêt** »), tel qu'amendé à plusieurs reprises, stipulant notamment les conditions de l'opération financée par le Prêt, la durée du Prêt et ses conditions de remboursement.

Le Promettant Américain est propriétaire de l'intégralité du capital social du Promettant Français

Le Promettant Français en qualité de bénéficiaire ultime des sommes (ou d'une partie substantielle) devant être versées aux termes du Contrat de Prêt a accepté la sûreté négative d'une partie de son actif, et les Parties ont conclu le 22 avril 2014 une convention de sûreté négative (la « **Convention de Sûreté Négative** »).

Conformément aux stipulations du neuvième amendement au Contrat de Prêt et autres documents relatifs au prêt, (le « **Neuvième Amendement** »), ainsi que du deuxième accord de prolongation signé le 19 juillet 2019 et ayant pris effet le 22 juin 2019, les Parties ont décidé de prolonger la date de maturité du Prêt du 22 juin 2019 au 1er juin 2024, et d'augmenter le taux d'intérêt du Prêt qui est maintenant le taux de plus élevé entre (i) cinq pourcent (5.00%) par an, ou (ii) le 'Wall Street Journal Prime Rate' comme le taux peut varier selon les périodes (ainsi que cela est précisé dans le Neuvième Amendement).

Dans ces conditions, les Parties sont convenues d'amender le Contrat de Prêt et les autres documents relatifs au Prêt, incluant la Convention de Sûreté Négative.

Par conséquent, les Parties se sont rapprochées pour conclure le présent premier amendement à la Convention de Sûreté Négative, qui sera signé le 19 juillet 2019, mais qui entrera rétroactivement en vigueur le 22 juin 2019 (cet « **Amendement** »).

IL A ETE CONVENU ET ARRETE CE QUI SUIT :

ARTICLE 1 - DÉFINITIONS

Les termes commençant par une majuscule (que cela soit au singulier ou au pluriel, qu'ils soient conjugués ou non) utilisés dans l'Amendement ont le sens qui leur est attribué dans la Convention de Sûreté Négative ou dans l'Amendement.

ARTICLE 2 - OBJET

2.1. Conformément à son Article 6, la Convention de Sûreté Négative est conclue pour une durée ferme (la « **Durée** ») qui se termine à la première des deux dates suivantes :

(i) dix (10) ans après sa conclusion ; ou

(ii) au jour de la notification par le Bénéficiaire à un des Promettants que la Dette a été entièrement payée.

2.2. La date initiale de maturité du Prêt était le 22 juin 2019, mais elle a été étendue jusqu'au 1er juin 2024 (l' « **Extension** »).

2.3. En conséquence, les Parties ont décidé d'amender l'Article 6 de la Convention de Sûreté Négative qui est maintenant rédigé ainsi qu'il suit :

« *La Convention est conclue pour une durée ferme (la « **Durée** »). Elle prendra fin lorsque toutes les obligations de l'Emprunteur conformément aux stipulations du Contrat de Prêt auront été intégralement exécutées et réglées, moment auquel le Créancier Nanti devra notifier la levée du Nantissement à Amphastar France, avec copie au Constituant.* »

ARTICLE 3 - PORTÉE ET EFFET

La Convention de Sûreté Négative reste inchangée (à l'exception de ce qui est expressément stipulé dans l'Amendement), pleinement applicable entre les Parties, et continue de les lier dans toutes ses stipulations.

ARTICLE 4 - LOI APPLICABLE ET JURIDICTION

L'Amendement est soumis au droit français.

La Cour d'appel de Paris et ses tribunaux sont compétents pour tout litige lié à sa validité, son interprétation ou son exécution.

ARTICLE 5 - VERSION CONTRÔLANTE

L'Amendement est rédigé en langue française et anglaise, pour son interprétation la version française prévaudra.

ARTICLE 6 - ÉLECTION DE DOMICILE

Pour l'exécution de l'Amendement, les Parties font élection de domicile en leurs adresses respectives, telle qu'elle sont indiquées en tête des présentes.

* *
*

Fait à Rancho Cucamonga, CA

Le 19 July 2019

En trois (3) exemplaires originaux
Faire précéder les signatures de la mention « *lu et approuvé* »

/s/ Jason Shandell
AMPHASTAR PHARMACEUTICALS Inc.
Représentée par M. Jason Shandell, Esq.

/s/ Ying Luo
AMPHASTAR FRANCE PHARMACEUTICALS
Représentée par M. Ying Luo, également appelé James Luo

/s/ Kenneth Chan
CATHAY BANK
Représentée par M. Ken Chan

AVENANT N°2 A LA
CONVENTION DE NANTISSEMENT DE COMPTE DE TITRES FINANCIERS

ENTRE LES SOUSSIGNES :

AMPHASTAR PHARMACEUTICALS, Inc.
Société de droit de l'Etat du Delaware, ayant son siège social au 11570 6th Street, Rancho Cucamonga, Californie 91730, Etats-Unis, représentée par son représentant légal M. Jason Shandell dûment habilité aux fins des présentes,

Ci-après désignée, le « **Constituant** »,

D'une part,

ET :

CATHAY BANK
Société de droit de l'Etat de Californie ayant son siège social au 9650 Flair Drive, El Monte, Californie 91731, Etats-Unis, représentée par son représentant légal M. Ken Chan, dûment habilité aux fins des présentes,

Ci-après désignée, le « **Créancier Nanti** »,

D'autre part,

Ensemble, les « **Parties** » ou séparément une « **Partie** »

EN PRESENCE DE :

AMPHASTAR FRANCE PHARMACEUTICALS
Société par actions simplifiée au capital de 650.000 €, immatriculée au registre du commerce et des sociétés de Beauvais sous le numéro 801 531 427, ayant son siège social Usine Saint-Charles 60590 Eragny-sur-Epte, représentée par son Président M. Ying Luo, également appelé James Luo, dûment habilité aux fins des présentes,

Ci-après désignée, « **Amphastar France** »,

APRES AVOIR RAPPELE QUE :

Le 22 avril 2014, le Créancier Nanti a consenti au Constituant un prêt d'un montant principal de vingt et un million neuf cent mille dollars américains (21.900.000 USD) (le « **Prêt** ») aux termes d'un contrat de prêt en date du 22 avril 2014 (le « **Contrat de Prêt** »), tel qu'amendé à plusieurs reprises, stipulant notamment les conditions de l'opération financée par le Prêt, la durée du Prêt et ses conditions de remboursement.

Le Constituant est propriétaire de l'intégralité du capital social d'Amphastar France et a consenti, afin de garantir l'exécution de ses obligations aux termes du Contrat de Prêt, un nantissement de compte de titres financiers (le « **Compte Nanti** ») en date du 22 avril 2014.

Les Parties ont conclu une convention de nantissement de titres financiers en date du 22 avril 2014 afin de définir leurs droits et obligations respectifs dans le cadre du nantissement ainsi consenti (la « **Convention de Nantissement** »).

Par décision de l'associé unique en date du 10 juin 2014, il a été décidé d'augmenter le capital d'Amphastar France à six cent cinquante mille (650.000) euros par émission de six cent quarante mille (640.000) actions nouvelles d'une valeur

nominale d'un (1) euro chacune (l'« **Augmentation de Capital** »).

Les Parties ont conclu un premier avenant à la Convention de Nantissement en date du 10 juin 2014, (l' « **Avenant n°1** ») pour acter qu'après l'Augmentation de Capital, le Compte Nanti était composé de quatre cent vingt-deux mille cinq cents (422.500) actions, soit les six mille cinq cents (6.500) titres initiaux augmentés des quatre cent seize mille (416.000) titres remplois.

Conformément aux stipulations du neuvième amendement au Contrat de Prêt et autres documents relatifs au prêt, (le « **Neuvième Amendement** »), ainsi que du deuxième accord de prolongation signé le 19 juillet 2019 et ayant pris effet le 22 juin 2019, les Parties ont décidé de prolonger la date de maturité du Prêt du 22 juin 2019 au 1er juin 2024, et d'augmenter le taux d'intérêt du Prêt qui est maintenant le taux de plus élevé entre (i) cinq pourcent (5,00%) par an, ou (ii) le 'Wall Street Journal Prime Rate' comme le taux peut varier selon les périodes (ainsi que cela est précisé dans le Neuvième Amendement).

Dans ces conditions, les Parties sont convenues d'amender le Contrat de Prêt et les autres documents relatifs au Prêt, incluant la Convention de Nantissement.

Par conséquent, les Parties se sont rapprochées pour conclure le présent deuxième avenant à la Convention de Nantissement, qui est signé le 19 juillet 2019, mais qui entrera rétroactivement en vigueur le 22 juin 2019 (cet « **Avenant** »).

IL A ETE CONVENU ET ARRETE CE QUI SUIT :

ARTICLE 1 - DÉFINITIONS

Les termes commençant par une majuscule (que cela soit au singulier ou au pluriel, qu'ils soient conjugués ou non) utilisés dans l'Amendement ont le sens qui leur est attribué dans la Convention de Nantissement ou dans cet Avenant.

ARTICLE 2 - OBJET

2.1. Conformément à son Article 9, la Convention de Nantissement est conclue pour une durée ferme (la « **Durée** ») qui se termine à la première des deux dates suivantes :

(iii) dix (10) ans après sa conclusion ; ou

(iv) au jour de la notification par le Créancier Nanti de la mainlevée du Nantissement à Amphastar France, avec copie au Constituant.

2.2. La date initiale de maturité du Prêt était le 22 juin 2019, mais elle a été étendue jusqu'au 1er juin 2024 (l' « **Extension** »).

2.3. En conséquence, les Parties ont décidé d'amender l'Article 9 de la Convention de Nantissement qui est maintenant rédigé ainsi qu'il suit :

« *La Convention est conclue pour une durée ferme (la « **Durée** »). Elle prendra fin lorsque toutes les obligations de l'Emprunteur conformément aux stipulations du Contrat de Prêt auront été intégralement exécutées et réglées, moment auquel le Créancier Nanti devra notifier la levée du Nantissement à Amphastar France, avec copie au Constituant.* »

ARTICLE 3 - PORTÉE ET EFFET

La Convention de Nantissement reste inchangée (à l'exception de ce qui est expressément stipulé dans cet Avenant), pleinement applicable entre les Parties, et continue de les lier dans toutes ses stipulations.

ARTICLE 4 - LOI APPLICABLE ET JURIDICTION

Cet Avenant est soumis au droit français.

La Cour d'appel de Paris et ses tribunaux sont compétents pour tout litige lié à sa validité, son interprétation ou son exécution.

ARTICLE 5 - VERSION CONTRÔLANTE

Cet Avenant est rédigé en langue française et anglaise, pour son interprétation la version française prévaudra.

ARTICLE 6 - ÉLECTION DE DOMICILE

Pour l'exécution de cet Avenant, les Parties font élection de domicile en leurs adresses respectives, telle qu'elle sont indiquées en tête des présentes.

* *
*

Fait à Rancho Cucamonga, CA

Le 19 July 2019

En trois (3) exemplaires originaux
Faire précéder les signatures de la mention « *lu et approuvé* »

/s/ Jason Shandell
AMPHASTAR PHARMACEUTICALS Inc.
Représentée par M. Jason Shandell, Esq.

/s/ Ying Luo
AMPHASTAR FRANCE PHARMACEUTICALS
Représentée par M. Ying Luo, également appelé James Luo

/s/ Kenneth Chan
CATHAY BANK
Représentée par M. Ken Chan

Certain identified information has been omitted from this document because it is not material and would be competitively harmful if publicly disclosed, and has been marked with "[***]" to indicate where omissions have been made.

FIFTH AMENDMENT TO SUPPLY AGREEMENT

This fifth amendment ("**Fifth Amendment**") to the Supply Agreement by and between MannKind Corporation ("**MannKind**") and Amphastar Pharmaceuticals, Inc. ("**Amphastar**"), originally dated July 31, 2014 and as previously amended on October 31, 2014 ("**First Amendment**"), November 9, 2016 ("**Second Amendment**"), April 11, 2018 ("**Third Amendment**"), and December 24, 2018 ("**Fourth Amendment**") (collectively, the "**Agreement**"), is hereby made as of the 2nd day of August, 2019, by and between MannKind on the one hand, and on the other hand, Amphastar.

RECITALS

WHEREAS, MannKind and Amphastar entered into the Agreement pursuant to which Amphastar is to manufacture and supply the Product to MannKind, and MannKind is to purchase certain minimum quantities of the Product; and

WHEREAS MannKind and Amphastar have determined it to be mutually beneficial to amend the Agreement as set forth herein.

NOW, THEREFORE, for good and valuable consideration, MannKind and Amphastar, hereby agree to amend the Agreement as follows:

1. Definitions. Unless otherwise defined herein, each of the capitalized terms used in this Fifth Amendment shall have the definition and meaning ascribed to it in the Agreement.

2. Amendment Fees. In order to compensate Amphastar and its subsidiaries for its unused manufacturing capacity related to 2019 production, MannKind shall make the following payments (in U.S. dollars) to Amphastar France Pharmaceuticals S.A.S., as manufacturer of the API, no later than the dates specified below:

Amount	Payment Due Date
$1,500,000	September 15, 2019
$1,250,000	December 15, 2019

In the event that MannKind fails to make timely payment in full of the Amendment Fees specified in this Section 2, the terms and conditions of the Agreement, as amended by the Fourth Amendment, shall be in full force and effect from and after January 1, 2020; provided, however, that MannKind will still be required to immediately pay in full the Amendment Fees and purchase an additional [***] kg of Purchase Commitment Quantities to be added to the 2020 Purchase Commitment Quantities specified in the Fourth Amendment (i.e., the Purchase Commitment Quantities for 2020 shall become [***] kg).

3. Amendments to the Agreement. Subject to Section 2 of this Fifth Amendment, the Agreement shall be, and hereby is, amended, as follows:

3.1 Section 6.1 of the Agreement, as amended by the First, Second, and Fourth Amendments, shall be amended and replaced in its entirety with the following:

"6.1 Purchase Commitment and Purchase Price. MannKind shall purchase from Amphastar the minimum quantities of Product (the "Purchase Commitment Quantities") at the purchase price per gram (the "Purchase Price") in each calendar year as provided in the table set forth below. This annual Purchase Commitment Quantities will be divided into four (4) equal quarterly commitments (the "Quarterly Commitment') for purchase commitments in years 2022 - 2026. In the event that MannKind fails to meet the Quarterly Commitment in any given calendar quarter, MannKind shall pay Amphastar for the difference in the amount of the Quarterly Commitment and the actual amount purchased for the corresponding calendar quarter (such difference, the "Payment Commitment Difference"). Amphastar shall issue an invoice and MannKind shall pay the Payment Commitment Difference no later than fifteen (15) business days after the close of the corresponding calendar quarter.

Calendar Year	Purchase Commitment Quantities (kg)	Purchase Price (per gram)	Delivery and Payment
2014	[***]	EUR [***]	Completed
2015	[***]	EUR [***]	Completed
2016	[***]	EUR [***]	
2017	[***]	EUR [***]	Completed
2018	[***]	EUR [***]	Completed
2019	[***]	EUR [***]	Completed
2020	[***]	EUR [***]	50% of the Purchase Commitment Quantities shall be purchased in each of the second Quarter and fourth Quarter.
2021	[***]	EUR [***]	50% of the Purchase Commitment Quantities shall be purchased in each of the second Quarter and fourth Quarter.
2022	[***]	EUR [***]	25% of the Purchase Commitment Quantities shall be purchased on a Quarterly basis.

2023	[***]	EUR [***]	25% of the Purchase Commitment Quantities shall be purchased on a Quarterly basis.
2024	[***]	EUR [***]	25% of the Purchase Commitment Quantities shall be purchased on a Quarterly basis.
2025	[***]	EUR [***]	25% of the Purchase Commitment Quantities shall be purchased on a Quarterly basis.
2026	[***]	EUR [***]	25% of the Purchase Commitment Quantities shall be purchased on a Quarterly basis.

All amounts due under this § 6.1 shall be due and payable by MannKind to Amphastar in U.S. dollars, and the conversion of the Purchase Price from euros (EUR) to U.S. dollars shall be made using the exchange rate at the close (Eastern time) of the last business day immediately prior to the shipment date, as reported by the Bloomberg Currency Spot Exchange Rate (http://www.bloomberg.com/guote/EURUSD:CUR), and otherwise in accordance with § 6.2.

(a) The Purchase Price will be subject to an obligatory annual adjustment on January 1 of each calendar year equal to the percentage change in the [***] (the *"Index"),* where the annual adjustment is calculated using the historical twelve (12) month percentage change of the Index, as of December 1 of the immediate prior year; provided, however, that if the percentage change (either increase or decrease, as applicable) of the Index equals or exceeds [***] percent (i.e., +/- [***]%), the Purchase Price adjustment shall not be obligatory, but instead the Parties shall attempt in good faith to negotiate an adjusted Purchase Price based on such change, which attempted negotiations shall be concluded no later than February 15 of that calendar year.

(b) In addition to any adjustment to the Purchase Price pursuant to §6.1(a), if for causes beyond Amphastar's reasonable control (including market shortage, market embargo, etc.), Amphastar has incurred any price increase(s) in its aggregate material and service costs (such increased costs measured on a per gram basis of Product, the *"Cost Excess")* which are in excess of [***] percent ([***]%) of the Purchase Price in a given calendar year, then the Purchase Price for the next calendar year shall be increased by the percentage increase of the Cost Excess as compared to the aggregate costs for such materials and services during the prior calendar year.

(c) If Amphastar delivers any Product Purchase Commitment Quantities, as defined in the Firm Order Period through a Purchase Order accepted by Amphastar, beyond sixty (60) days after the committed delivery date, then such quantities shall be subject to a [***] percent ([***]%) discount off the Purchase Price."

3.2 Section 6.2, as amended by the Second Amendment, shall be amended and replaced with the following:

"**6.2 Payment.** MannKind shall pay Amphastar for the Product within thirty (30) days from the shipment date of the Product. Notwithstanding anything to the contrary, in no event shall any of the Quarterly payments set forth in the table above [Section 6.1 of the Agreement] be payable to Amphastar later than fifteen (15) days after the close of the corresponding Quarter. Amphastar shall submit an invoice electronically to MannKind, Attention: Account Payable, ap@mannkindcorp.com. If any portion of an invoice is disputed then MannKind shall pay the undisputed amount and the Parties shall use good faith efforts to reconcile the disputed amount as soon as practicable."

3.3 The following sentence in Section 5.1 of the Agreement, as amended in the Second Amendment:

> "In calendar year 2017 and 2018, upon delivery to MannKind, Amphastar shall ensure that Product will have a remaining expiry date of not less than two (2) years. In calendar year 2019 and the remainder of the term of the Agreement, Amphastar shall ensure Product will have a remaining expiry date of not less than three (3) years."

is amended and replaced in its entirety with the following:

> "In calendar years 2019, 2020, and 2021, upon delivery to MannKind, Amphastar shall ensure that Product will have a remaining expiry date of not less than three (3) years. In calendar years 2022 and 2023, upon delivery to MannKind, Amphastar shall ensure that Product will have a remaining expiry date of not less than two (2) years. In calendar year 2024 and the remainder of the term of the Agreement, Amphastar shall ensure Product will have a remaining expiry date of not less than three (3) years."

3.4 Section 4.1 of the Agreement is amended and replaced in its entirety with the following:

"**4.1 Raw Materials**. Amphastar shall be responsible for obtaining, and shall store at no cost to MannKind, any and all materials required for the manufacture of the Product, in reasonable quantities consistent with MannKind's designated quantities and orders for the Product. Amphastar shall use and rotate all stock of materials on a first in, first out basis. Amphastar shall conduct on-site quality audits of its inclusion bodies supplier on a regular basis, but shall not be obligated to conduct more than one (1) such audit every calendar year. Amphastar represents, and warrants that Amphastar's long-term supply agreement with Merck Sharpe & Dohme B.V., combined with the alternate source described below, will provide Amphastar with a sufficient supply of inclusion bodies to support Amphastar's obligations with respect to the Purchase Commitment Quantities and Purchase Price (without resorting to § 6.1(b)) under this Agreement and covenants that during the term of this Agreement Amphastar shall not unreasonably terminate its sources or amend such supply agreement in a manner that would adversely affect Amphastar's ability to perform its obligations under this Agreement. If during the term of this Agreement Amphastar intends to qualify an appropriate alternate source of inclusion bodies to supplement or replace its supply from Merck Sharpe & Dohme B.V. then Amphastar must notify MannKind in writing and Amphastar agrees that such change shall not

adversely affect Amphastar's ability to perform its obligations under this Agreement. For the avoidance of doubt, the Parties agree that Amphastar had notified MannKind on April 24, 2018 that Amphastar intends to qualify an alternate source of inclusion bodies. Both parties shall cooperate diligently and in good faith to obtain any and all necessary approvals for the alternate source of inclusion bodies. MannKind agrees that Amphastar's use of an alternate source of inclusion bodies does not change the Purchase Commitments agreed upon in the table of Section 6.1."

3.5 Section 10.1 of the Agreement shall be extended until December 31, 2026. All other terms and conditions in Section 10.1 shall remain in full force and effect.

4. Final Agreement. From and after the execution of this Fifth Amendment, all references in the Agreement (or in the Fifth Amendment) to "this Agreement," "hereof," "herein," "hereto," and similar words or phrases shall mean and refer to the Agreement as amended by this Fifth Amendment. The Agreement as amended by this Fifth Amendment constitutes the entire agreement by and between the Parties as to the subject matter hereof. Except as expressly modified by this Fifth Amendment, all other terms and conditions of the Agreement shall remain in full force and effect

IN WITNESS WHEREOF, each of MannKind and Amphastar has caused this Fifth Amendment to be executed by their duly authorized officers.

MannKind Corporation		**Amphastar Pharmaceuticals, Inc.**	
By:	/s/ Michael Castagna	By:	/s/ Jason Shandell
Name:	Michael Castagna	Name:	Jason Shandell
Title:	Chief Executive Officer	Title:	President

Exhibit 31.1

Certification

I, Jack Y. Zhang, Ph.D., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Amphastar 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: August 9, 2019

By: **/s/ JACK Y. ZHANG**
Jack Y. Zhang
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

Certification

I, William J. Peters, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Amphastar 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: August 9, 2019

By: **/s/ WILLIAM J. PETERS**
William J. Peters
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 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

The undersigned officer of Amphastar Pharmaceuticals, Inc. (the "Company"), hereby certifies, to the best of such officer's knowledge, that:

(i) the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2019 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company at the dates and for the periods indicated.

Date: August 9, 2019

By: **/s/ JACK Y. ZHANG**
Jack Y. Zhang
Chief Executive Officer
(Principal Executive Officer)

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. §1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

Exhibit 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

The undersigned officer of Amphastar Pharmaceuticals, Inc. (the "Company"), hereby certifies, to the best of such officer's knowledge, that:

(i) the Quarterly Report on Form 10-Q of the Company for the quarter ended June 30, 2019 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company at the dates and for the periods indicated.

Date: August 9, 2019

By: **/s/ WILLIAM J. PETERS**
William J. Peters
Chief Financial Officer
(Principal Financial and Accounting Officer)

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. §1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.