AMAG PHARMACEUTICALS INC.

Form 10-Q May 05, 2016 Table of Contents

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10 Q

(Mark One)

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

For the quarterly period ended March 31, 2016

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 10865

AMAG Pharmaceuticals, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware 04 2742593 (State or Other Jurisdiction of Incorporation or Organization) 04 2742593 (I.R.S. Employer Identification No.)

1100 Winter Street

Waltham, Massachusetts 02451 (Address of Principal Executive Offices) (Zip Code)

(617) 498 3300

(Registrant's Telephone Number, Including Area Code)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non accelerated filer, or a smaller reporting company. See definition of "accelerated filer," "large accelerated filer" and "smaller reporting company" in Rule 12b 2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non accelerated filer Smaller Reporting Company
(Do not check if a smaller reporting company)

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

As of May 2, 2016, there were 34,578,855 shares of the registrant's Common Stock, par value \$0.01 per share, outstanding.

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AMAG PHARMACEUTICALS, INC.

FORM 10 Q

FOR THE QUARTER ENDED MARCH 31, 2016

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

AMAG PHARMACEUTICALS, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS

(IN THOUSANDS, EXCEPT SHARE AND PER SHARE DATA)

(Unaudited)

	Marc	ch 31, 2016	De	ecember 31, 2015
ASSETS				
Current assets:				
Cash and cash equivalents	\$ 20	03,389	\$	228,705
Investments	27	76,816		237,626
Accounts receivable, net	82	2,754		85,678
Inventories	42	2,002		40,645
Receivable from collaboration	18	33		428
Prepaid and other current assets	17	7,089		13,592
Total current assets	62	22,233		606,674
Property, plant and equipment, net	27	7,937		28,725
Goodwill	63	39,484		639,188
Intangible assets, net	1,	180,124		1,196,771
Restricted cash	2,	593		2,593
Other long-term assets	1,	290		2,259
Total assets	\$ 2,	473,661	\$	2,476,210
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	\$ 3,	427	\$	4,906
Accrued expenses	10	01,895		106,363
Current portion of long-term debt	17	7,500		17,500
Current portion of acquisition-related contingent consideration	98	3,436		96,967
Deferred revenues	27	7,336		20,185
Total current liabilities	24	48,594		245,921
Long-term liabilities:				
Long-term debt, net	80	00,158		803,669
Convertible 2.5% notes, net	17	72,822		170,749
Acquisition-related contingent consideration	12	29,114		125,592
Deferred tax liabilities	18	88,634		189,145
Deferred revenues	7,	659		5,093

Other long-term liabilities	3,708	3,777
Total liabilities	1,550,689	1,543,946
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, par value \$0.01 per share, 2,000,000 shares authorized;		
none issued		_
Common stock, par value \$0.01 per share, 117,500,000 shares		
authorized; 34,568,568 and 34,733,117 shares issued and outstanding at		
March 31, 2016 and December 31, 2015, respectively	346	347
Additional paid-in capital	1,231,090	1,233,786
Accumulated other comprehensive loss	(3,273)	(4,205)
Accumulated deficit	(305,191)	(297,664)
Total stockholders' equity	922,972	932,264
Total liabilities and stockholders' equity	\$ 2,473,661	\$ 2,476,210

The accompanying notes are an integral part of these condensed consolidated financial statements.

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AMAG PHARMACEUTICALS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(IN THOUSANDS, EXCEPT PER SHARE DATA)

(Unaudited)

	Three Months Ended March 31,	
	2016	2015
Revenues:		
U.S. product sales, net	\$ 89,564	\$ 77,415
Service revenues, net	19,520	_
License fee, collaboration and other revenues	216	12,090
Total revenues	109,300	89,505
Costs and expenses:		
Cost of product sales	18,300	21,026
Cost of services	5,526	_
Research and development expenses	14,229	6,988
Selling, general and administrative expenses	63,175	32,112
Restructuring expenses	622	571
Total costs and expenses	101,852	60,697
Operating income	7,448	28,808
Other income (expense):		
Interest expense	(18,443)	(10,367)
Interest and dividend income	708	71
Other income (expense)	220	_
Total other income (expense)	(17,515)	(10,296)
Net income (loss) before income taxes	(10,067)	18,512
Income tax expense (benefit)	(2,540)	5,608
Net income (loss)	\$ (7,527)	\$ 12,904
Net income (loss) per share:		
Basic	\$ (0.22)	\$ 0.47
Diluted	\$ (0.22)	\$ 0.39
Weighted average shares outstanding used to compute net income (loss) per share:		
Basic	34,739	27,213
Diluted	34,739	38,245

The accompanying notes are an integral part of these condensed consolidated financial statements.

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AMAG PHARMACEUTICALS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(IN THOUSANDS)

(Unaudited)

	Three Months Ended March 31,		
	2016	2015	
Net income (loss)	\$ (7,527)	\$ 12,904	
Other comprehensive income (loss):			
Unrealized gains on securities:			
Holding gains arising during period, net of tax	932	68	
Net unrealized gains on securities	932	68	
Total comprehensive income (loss)	\$ (6,595)	\$ 12,972	

The accompanying notes are an integral part of these condensed consolidated financial statements.

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AMAG PHARMACEUTICALS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(IN THOUSANDS)

(Unaudited)

	There Mandle Full Mand 21	
	ths Ended March 31,	
2016	2015	
Cash flows from operating activities:	¢ 12.004	
Net income (loss) \$ (7,527)	\$ 12,904	
Adjustments to reconcile net income (loss) to net cash provided by (used in)		
operating activities:	14.510	
Depreciation and amortization 19,644	14,519	
Amortization of premium/discount on purchased securities 177	56	
Non-cash equity-based compensation expense 6,160	2,668	
Amortization of debt discount and debt issuance costs 2,937	2,401	
Change in fair value of contingent consideration 5,056	2,599	
Deferred income taxes (1,469)	5,608	
Changes in operating assets and liabilities:		
Accounts receivable, net 2,924	(18,004)	
Inventories (2,157)	3,326	
Receivable from collaboration 246	4,518	
Prepaid and other current assets (3,078)	3,076	
Accounts payable and accrued expenses (6,647)	4,852	
Deferred revenues 9,717	(10,813)	
Other assets and liabilities 593	1,686	
Net cash provided by operating activities 26,576	29,396	
Cash flows from investing activities:		
Proceeds from sales or maturities of investments 25,500	1,459	
Purchase of investments (63,413)	(93,895)	
Capital expenditures, net of proceeds from sale of assets (681)	(55)	
Net cash used in investing activities (38,594)	(92,491)	
Cash flows from financing activities:		
Proceeds from the issuance of common stock, net of underwriting discount		
and other expenses —	189,150	
Long-term debt principal payments (4,375)	(8,185)	
Payment of contingent consideration (65)	(84)	
Payments for repurchases of common stock (7,562)		
Proceeds from the exercise of stock options 400	6,719	
Payments of employee tax withholding related to equity-based compensation (1,696)		
Net cash (used in) provided by financing activities (13,298)	187,600	
Net (decrease) increase in cash and cash equivalents (25,316)		
Cash and cash equivalents at beginning of the period 228,705	119,296	
Cash and cash equivalents at end of the period \$ 203,389	\$ 243,801	

Supplemental data of cash flow information:

 Cash paid for taxes
 \$ 2,400
 \$ 238

 Cash paid for interest
 \$ 27,964
 \$ 8,880

The accompanying notes are an integral part of these condensed consolidated financial statements.

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AMAG PHARMACEUTICALS, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

A. DESCRIPTION OF BUSINESS

AMAG Pharmaceuticals, Inc., a Delaware corporation, was founded in 1981. We use our business and clinical expertise to develop and commercialize products that provide clear benefits and improve people's lives. We have a diverse portfolio of products and services with a focus on maternal health, anemia management and cancer supportive care, including our product Makena® (hydroxyprogesterone caproate injection), which we acquired in November 2014, services related to the collection, processing and storage of umbilical cord blood stem cell and cord tissue units (the "CBR Services") operated through Cord Blood Registry® ("CBR"), which we acquired in August 2015, our product Feraheme® (ferumoxytol) for intravenous ("IV") use and MuGard® Mucoadhesive Oral Wound Rinse.

Throughout this Quarterly Report on Form 10-Q, AMAG Pharmaceuticals, Inc. and our consolidated subsidiaries are collectively referred to as "the Company," "AMAG," "we," "us," or "our."

B. BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

These condensed consolidated financial statements are unaudited and, in the opinion of management, include all adjustments necessary for a fair statement of the financial position and results of operations of the Company for the interim periods presented. Such adjustments consisted only of normal recurring items. The year-end condensed consolidated balance sheet data was derived from audited financial statements, but does not include all disclosures required by accounting principles generally accepted in the United States of America ("GAAP").

In accordance with GAAP for interim financial reports and the instructions for Form 10-Q and the rules of the Securities and Exchange Commission, certain information and footnote disclosures normally included in annual financial statements have been condensed or omitted. Our accounting policies are described in the Notes to the Financial Statements in our Annual Report on Form 10-K for the year ended December 31, 2015 (our "Annual Report"). Interim results are not necessarily indicative of the results of operations for the full year. These interim financial statements should be read in conjunction with our Annual Report.

Principles of Consolidation

The accompanying condensed consolidated financial statements include our accounts and the accounts of our wholly-owned subsidiaries. Our results of operations for the three months ended March 31, 2016, include the results of CBR, which we acquired in August 2015. All intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates and Assumptions

The preparation of condensed consolidated financial statements in conformity with GAAP requires management to make certain estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses,

and the related disclosure of contingent assets and liabilities. The most significant estimates and assumptions are used to determine amounts and values of, but are not limited to: revenue recognition related to product and services sales; product sales allowances and accruals; allowance for doubtful accounts; investments; inventory; acquisition date fair value and subsequent fair value estimates used to assess impairment of long-lived assets, including goodwill, in-process research and development ("IPR&D") and other intangible assets; contingent consideration; debt obligations; certain accrued liabilities, including clinical trial accruals and restructuring liabilities; income taxes and equity-based compensation expense. Actual results could differ materially from those estimates.

Concentrations and Significant Customer Information

Financial instruments which potentially subject us to concentrations of credit risk consist principally of cash and cash equivalents, investments, and accounts receivable. As of March 31, 2016, our cash, cash equivalents and

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investments amounted to approximately \$480.2 million. We currently hold our excess cash primarily in institutional money market funds, corporate debt securities, U.S. treasury and government agency securities, commercial paper and municipal securities. As of March 31, 2016, approximately \$36.3 million of our total \$203.4 million cash and cash equivalents balance was invested in institutional money market funds.

Our operations are located entirely within the U.S. We focus on developing, manufacturing, and commercializing Makena and Feraheme, commercializing MuGard, and marketing and selling the CBR Services. We perform ongoing credit evaluations of our product sales customers and generally do not require collateral. The following table sets forth customers or partners who represented 10% or more of our total revenues for the three months ended March 31, 2016 and 2015:

	Three Months Ended March 31,			
	2016 2015			
AmerisourceBergen Drug Corporation	24	%	30	%
McKesson Corporation	<10	%	10	%
Takeda Pharmaceuticals Company Limited	_	%	13	%

In addition, approximately 28% and 23% of our Feraheme end-user demand during the three months ended March 31, 2016 and 2015, respectively, was generated by members of a single group purchasing organization with whom we have contracted. Revenues from outside of the U.S. amounted to approximately 13% of our total revenues for the three months ended March 31, 2015 and were principally related to deferred Feraheme revenue recognized in connection with the December 2014 termination of our license, development and commercialization agreement (the "Takeda Agreement") with Takeda Pharmaceutical Company Limited ("Takeda"), which is headquartered in Japan. Primarily all of the revenue generated during the three months ended March 31, 2016 was generated within the U.S.

Our net accounts receivable primarily represented amounts due for products sold directly to wholesalers, distributors, and specialty pharmacies and amounts due for CBR Services sold directly to consumers. Accounts receivable for our products and services are recorded net of reserves for estimated chargeback obligations, prompt payment discounts and any allowance for doubtful accounts. One company, AmerisourceBergen Drug Corporation, accounted for 36% and 43% of our accounts receivable balances as of March 31, 2016 and December 31, 2015, respectively. No other company accounted for more than 10% of our accounts receivable balances during these periods.

We are currently dependent on a single supplier for Feraheme drug substance (produced in two separate facilities) and finished drug product and a single supply chain for Makena finished drug product. In addition, we rely on single sources for certain materials required to support the CBR Services. We would be exposed to a significant loss of revenue from the sale of our products and services if our suppliers and/or manufacturers cannot fulfill demand for any reason.

Revenue Recognition

Our primary sources of revenue during the reporting periods were: (a) product revenues from Makena and Feraheme; (b) service revenues associated with the CBR Services; and (c) license fees, collaboration and other revenues, which primarily included milestone payments received from our collaboration agreements, royalties received from our license agreements, and international product revenues of Feraheme derived from our former collaboration agreement with Takeda. Revenue is recognized when the following criteria are met:

- · Persuasive evidence of an arrangement exists;
- · Delivery of product has occurred or services have been rendered;
- · The sales price charged is fixed or determinable; and
- · Collection is reasonably assured.

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Product Revenue

Our U.S. product sales, which primarily represented revenues from Makena and Feraheme for the three months ended March 31, 2016 and 2015, were offset by provisions for allowances and accruals as follows (in thousands):

	Three Months Ended March 31,	
	2016	2015
Gross U.S. product sales	\$ 152,192	\$ 125,517
Provision for U.S. product sales allowances and accruals:		
Contractual adjustments	45,581	35,134
Governmental rebates	17,047	12,968
Total provision for U.S. product sales allowances and accruals	62,628	48,102
U.S. product sales, net	\$ 89,564	\$ 77,415

We recognize U.S. product sales net of certain allowances and accruals in our condensed consolidated statement of operations at the time of sale. Our contractual adjustments include provisions for returns, pricing and prompt payment discounts, as well as wholesaler distribution fees, and volume-based and other commercial rebates. Governmental rebates relate to our reimbursement arrangements with state Medicaid programs.

We did not materially adjust our product sales allowances and accruals during the three months ended March 31, 2016 or 2015. If we determine in future periods that our actual experience is not indicative of our expectations, if our actual experience changes, or if other factors affect our estimates, we may be required to adjust our allowances and accruals estimates, which would affect our net product sales in the period of the adjustment and could be significant.

Multiple Element Arrangements

For multiple element arrangements, we allocate revenue to all deliverables based on their relative selling prices. We determine the selling price to be used for allocating revenue to deliverables as follows: (a) vendor specific objective evidence; (b) third-party evidence of selling price and (c) the best estimate of the selling price. Vendor specific objective evidence generally exists only when we sell the deliverable separately and it is the price actually charged by us for that deliverable. Any discounts given to the customer are allocated by applying the relative selling price method.

Amounts received prior to satisfying the above revenue recognition criteria are recorded as deferred revenue in our condensed consolidated balance sheets. Deferred revenue associated with our service revenues includes (a) amounts collected in advance of unit processing and (b) amounts associated with unearned storage fees collected at the beginning of the storage contract term, net of allocated discounts. Amounts not expected to be recognized within the next year are classified as long-term deferred revenues.

Service Revenue

Our service revenues for the CBR Services include the following two deliverables: (a) enrollment, including the provision of a collection kit and cord blood and cord tissue unit processing, which are delivered at the beginning of the relationship (the "processing services"), with revenue for this deliverable recognized after the collection and successful processing of the cord blood and cord tissue; and (b) the storage of newborn cord blood and cord tissue units (the

"storage services"), for either an annual fee or a prepayment of 18 years or the lifetime of the newborn donor (the "lifetime option"), with revenue for this deliverable recognized ratably over the applicable storage period. For the lifetime option, storage fees are not charged during the lifetime of the newborn donor. However, if the newborn donor dies and his/her legal guardian chooses to continue to store the newborn stem cells and/or cord tissue, the number of remaining years of storage covered by the lifetime option without additional charge is calculated by taking the average of male and female life expectancies based on lifetime actuarial tables published by the Social Security Administration in effect at the time of the newborn's birth and subtracting the age at death. As there are other vendors who provide processing services and storage services at separately stated list prices, the processing services and storage services, including the first year storage, each have standalone value to the customer, and therefore represent separate deliverables. The selling price for the processing services is estimated based on the best estimate of selling price because we do not have vendor specific objective evidence or third-party evidence of selling price for these elements. The selling price for the storage services is determined based on vendor specific objective evidence as we have standalone renewals to support the selling price.

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Reclassifications

Certain amounts in the prior period have been reclassified in order to conform to the current period presentation. In accordance with Accounting Standards Update ("ASU") No. 2015-03, Interest - Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs, we reclassified total debt issuance costs related to our outstanding debt obligations from other long-term assets to the carrying amount of our debt, as a direct deduction, in our condensed consolidated balance sheets as of March 31, 2016 and December 31, 2015. See Note S, "Recently Issued and Proposed Accounting Pronouncements" for additional information.

C. BUSINESS COMBINATIONS

As part of our strategy to expand our portfolio, in August 2015, we acquired CBR and the CBR Services and in November 2014, we acquired Lumara Health and its product Makena. In addition, in June 2013, we entered into a license agreement (the "MuGard License Agreement") with Abeona Therapeutics, Inc. ("Abeona") pursuant to which we acquired the U.S. commercial rights to MuGard for the management of oral mucositis and stomatitis.

CBR Acquisition

On August 17, 2015 (the "CBR Acquisition Date"), we acquired CBR for \$700.0 million in cash consideration, subject to estimated working capital, indebtedness and other adjustments. We believe CBR is a strong strategic fit for our growing business and offers a unique opportunity to reach a broader population of expectant mothers who may benefit from our product offerings in the maternal health space, including Makena.

We accounted for the acquisition of CBR as a business combination using the acquisition method of accounting. Under the acquisition method of accounting, the total purchase price of an acquisition is allocated to the net tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values as of the date of acquisition. We have made a preliminary allocation of the purchase price to the net tangible and intangible assets acquired and liabilities assumed, based on available information and various assumptions we believe are reasonable, with the remaining purchase price recorded as goodwill.

The following table summarizes the components of the total purchase price paid for CBR, as adjusted for the final net working capital, indebtedness and other adjustments (in thousands):

	Acquisition Date Fair Value
Cash consideration	\$ 700,000
Estimated working capital, indebtedness and other adjustments	(17,837)
Purchase price paid at closing	682,163
Cash paid on finalization of the net working capital, indebtedness and other adjustments	193
Total purchase price	\$ 682,356

Total

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The following table summarizes the preliminary fair values assigned to the CBR assets acquired and liabilities assumed by us along with the resulting goodwill at the CBR Acquisition Date, as adjusted for certain measurement period adjustments for CBR recorded during the first quarter of 2016 (in thousands):

	Total
	Acquisition
	Date Fair
	Value
Accounts receivable	\$ 8,660
Inventories	3,825
Prepaid and other current assets	8,480
Restricted cash - short-term	30,752
Property, plant and equipment	29,401
Customer relationships	297,000
Trade name and trademarks	65,000
Favorable lease asset	358
Deferred income tax assets	5,062
Other long-term assets	496
Accounts payable	(2,853)
Accrued expenses	(13,770)
Deferred revenues - short-term	(3,100)
Payable to former CBR shareholders	(37,947)
Deferred income tax liabilities	(149,873)
Other long-term liabilities	(506)
Total estimated identifiable net assets	\$ 240,985
Goodwill	441,371
Total	\$ 682,356

During the three months ended March 31, 2016, we recorded measurement period adjustments related to the filing of pre-acquisition federal and state income tax returns and the finalization of other tax-related matters. These measurement period adjustments resulted in a net increase to goodwill of \$0.3 million and have been reflected as current period adjustments in the first quarter of 2016 in accordance with the guidance in ASU 2015-16, Business Combinations (Topic 805): Simplifying the Accounting for Measurement-Period Adjustments ("ASU 2015-16"). Any remaining adjustments to the preliminary fair value of these acquired assets and liabilities assumed will be made as soon as practicable but not later than one year from the CBR Acquisition Date.

The gross contractual amount of accounts receivable at the CBR Acquisition Date of \$11.7 million was adjusted to its fair value of \$8.7 million. The fair value amounts for CBR's customer relationships, trade names and trademarks were determined based on assumptions that market participants would use in pricing an asset, based on the most advantageous market for the assets (i.e., its highest and best use). We determined the fair value of the customer relationships, using an income approach, which is a valuation technique that provides an estimate of the fair value of an asset based on market participant expectations of the cash flows an asset would generate over its remaining life. Some of the more significant assumptions used in the income approach from the perspective of a market participant include the estimated net cash flows for each year for the identifiable intangible asset, the discount rate that measures the risk inherent in each cash flow stream, as well as other factors. The fair value of the trade names and trademarks

was determined using the relief from royalty method, which is also an income approach. We believe the fair values assigned to the CBR customer relationships, and the trade names and trademarks are based upon reasonable estimates and assumptions given available facts and circumstances as of the CBR Acquisition Date. If these assets are not successful, sales and profitability may be adversely affected in future periods, and as a result, the value of the assets may become impaired.

The customer relationships will be amortized to selling, general and administrative expenses based on an economic consumption model over an expected useful life of approximately 20 years. The trade names and trademark intangible asset is deemed to be an indefinite-lived asset, which is not amortized but will be subject to periodic assessments of impairment.

Based on the fair value adjustments primarily related to deferred revenue and identifiable intangible assets acquired, we recorded a net deferred tax liability of \$144.8 million in acquisition accounting using a combined federal and state statutory income tax rate of 37%. The net deferred tax liability represents the \$149.9 million of deferred tax liabilities

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recorded in acquisition accounting, primarily related to the fair value adjustments to CBR's deferred revenue and identifiable intangible assets, partially offset by \$5.1 million of deferred tax assets acquired from CBR. These tax estimates are preliminary and subject to change based on, among other things, any adjustments to management's determination of the fair values of the tangible and identifiable intangible assets acquired and liabilities assumed by jurisdiction and management's assessment of the combined company's ability to utilize the future benefits from acquired and legacy deferred tax assets.

Lumara Health Acquisition

On November 12, 2014 (the "Lumara Health Acquisition Date"), we acquired Lumara Health at which time Lumara Health became our wholly-owned subsidiary. By virtue of the acquisition, we acquired Lumara Health's existing commercial product, Makena. Under the terms of the acquisition agreement, we acquired 100% of the equity ownership of Lumara Health, excluding the assets and liabilities of the Women's Health Division and certain other assets and liabilities, which were divested by Lumara Health prior to closing, for \$600.0 million in cash, subject to certain net working capital and other adjustments, and issued approximately 3.2 million shares of our common stock, having a value of approximately \$112.0 million at the time of closing, to the holders of common stock of Lumara Health. The acquisition of Lumara Health provided a strategic commercial entry into the maternal health business. The addition of Lumara Health's rapidly growing Makena product, the only FDA-approved therapy to reduce the risk of preterm birth in certain at-risk women, added a complementary commercial platform to our portfolio and transformed us into a multi-product specialty pharmaceutical company.

We agreed to pay additional merger consideration, up to a maximum of \$350.0 million, based upon the achievement of certain net sales milestones of Makena for the period from December 1, 2014 through December 31, 2019. This contingent consideration is recorded as a liability and measured at fair value based upon significant unobservable inputs. See Note E, "Fair Value Measurements," to our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q and Note C, "Business Combinations," to the Financial Statements in our Annual Report for additional information.

The following table summarizes the components of the total purchase price paid for Lumara Health, as adjusted for the final net working capital and other adjustments (in thousands):

	rotar
	Acquisition
	Date Fair
	Value
Cash consideration	\$ 600,000
Fair value of AMAG common stock issued	111,964
Fair value of contingent milestone payments	205,000
Estimated working capital and other adjustments	821
Purchase price paid at closing	917,785
Less:	
Cash received on finalization of the net working capital and other adjustments	(562)
Cash acquired from Lumara Health	(5,219)
Total purchase price	\$ 912,004

At the closing, \$35.0 million of the cash consideration was contributed to and is still maintained in a separate escrow fund to secure the former Lumara Health security holders' obligations to indemnify us for certain matters, including

Total

breaches of representations and warranties, covenants included in the Lumara Health acquisition agreement, payments made by us to dissenting stockholders, specified tax claims, excess parachute claims, and certain claims related to the Women's Health Division of Lumara Health, which was divested by Lumara Health prior to the closing.

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The following table summarizes the fair values assigned to assets acquired and liabilities assumed by us along with the resulting goodwill at the Lumara Health Acquisition Date, as adjusted for certain measurement period adjustments for Lumara Health recorded during 2015 (in thousands):

	Total
	Acquisition
	Date Fair
	Value
Accounts receivable	\$ 36,852
Inventories	30,300
Prepaid and other current assets	3,322
Deferred income tax assets	102,355
Property and equipment	60
Makena base technology	797,100
IPR&D	79,100
Restricted cash - long term	1,997
Other long-term assets	3,412
Accounts payable	(3,807)
Accrued expenses	(36,561)
Deferred income tax liabilities	(295,676)
Other long-term liabilities	(4,563)
Total estimated identifiable net assets	\$ 713,891
Goodwill	198,113
Total	\$ 912,004

During 2015, we finalized the fair values assigned to the assets acquired and liabilities assumed by us at the Lumara Health Acquisition Date. See Note C, "Business Combinations," to the Financial Statements in our Annual Report for additional information.

Goodwill

In connection with the CBR acquisition, we recognized \$441.4 million of goodwill, primarily due to the synergies expected from combining our operations with CBR and to deferred tax liabilities recorded on the fair value adjustments, primarily those relating to intangible assets and deferred revenue. In connection with the Lumara Health acquisition, we recognized \$198.1 million of goodwill, primarily due to the net deferred tax liabilities recorded on the fair value adjustments to Lumara Health's inventories and identifiable intangible asset. The \$639.5 million of goodwill resulting from the CBR and Lumara Health acquisitions is not deductible for income tax purposes.

D. INVESTMENTS

As of March 31, 2016 and December 31, 2015, our investments equaled \$276.8 million and \$237.6 million, respectively, and consisted of securities classified as available-for-sale in accordance with accounting standards which provide guidance related to accounting and classification of certain investments in debt and equity securities.

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The following is a summary of our investments as of March 31, 2016 and December 31, 2015 (in thousands):

	March 31, 2016				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value	
Corporate debt securities					
Due in one year or less	\$ 56,886	\$ 7	\$ (43)	\$ 56,850	
Due in one to three years	193,452	596	(89)	193,959	
U.S. treasury and government agency securities					
Due in one year or less	4,496	32	_	4,528	
Commercial paper					
Due in one year or less	18,973	4	_	18,977	
Municipal securities					
Due in one year or less	2,500	2	_	2,502	
Total investments	\$ 276,307	\$ 641	\$ (132)	\$ 276,816	

	December 3	1, 2015		
		Gross	Gross	Estimated
	Amortized	Unrealized	Unrealized	Fair
	Cost	Gains	Losses	Value
Corporate debt securities				
Due in one year or less	\$ 27,964	\$ —	\$ (38)	\$ 27,926
Due in one to three years	173,652	3	(904)	172,751
Commercial paper				
Due in one year or less	34,452	2	(5)	34,449
Municipal securities				
Due in one year or less	2,500			2,500
Total investments	\$ 238,568	\$ 5	\$ (947)	\$ 237,626

Impairments and Unrealized Gains and Losses on Investments

We did not recognize any other-than-temporary impairment losses in our condensed consolidated statements of operations related to our securities during the three months ended March 31, 2016 and 2015. We considered various factors, including the length of time that each security was in an unrealized loss position and our ability and intent to hold these securities until the recovery of their amortized cost basis occurs. As of March 31, 2016, none of our investments has been in an unrealized loss position for more than one year. Future events may occur, or additional information may become available, which may cause us to identify credit losses where we do not expect to receive cash flows sufficient to recover the entire amortized cost basis of a security and may necessitate the recording of

future realized losses on securities in our portfolio. Significant losses in the estimated fair values of our investments could have a material adverse effect on our earnings in future periods.

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E. FAIR VALUE MEASUREMENTS

The following tables represent the fair value hierarchy as of March 31, 2016 and December 31, 2015, for those assets and liabilities that we measure at fair value on a recurring basis (in thousands):

	Fair Value Measurements at March 31, 2016 Using:						
		Qu	oted Prices in			Si	gnificant
		Ac	tive Markets for	Sig	gnificant Other	U	nobservable
		Ide	entical Assets	Ob	servable Inputs	In	puts
	Total	(Le	evel 1)	(L	evel 2)	(L	evel 3)
Assets:							
Money market funds	\$ 36,339	\$	36,339	\$	_	\$	
Corporate debt securities	250,809				250,809		
U.S. treasury and government agency							
securities	4,528				4,528		
Commercial paper	18,977				18,977		
Municipal securities	2,502				2,502		
Total Assets	\$ 313,155	\$	36,339	\$	276,816	\$	
Liabilities:							
Contingent consideration - Lumara Health	\$ 219,581	\$		\$		\$	219,581
Contingent consideration - MuGard	7,969						7,969
Total Liabilities	\$ 227,550	\$	_	\$	_	\$	227,550

	Fair Value M	Measurements at Dece	mber 31, 2015 Using:	
		Quoted Prices in		Significant
		Active		
		Markets for	Significant Other	Unobservable
		Identical Assets	Observable Inputs	Inputs
	Total	(Level 1)	(Level 2)	(Level 3)
Assets:				
Money market funds	\$ 73,676	\$ 73,676	\$ —	\$ —
Corporate debt securities	200,677	_	200,677	
Commercial paper	34,449	_	34,449	
Municipal securities	2,500	_	2,500	
Total Assets	\$ 311,302	\$ 73,676	\$ 237,626	\$ —
Liabilities:				
Contingent consideration - Lumara				
Health	\$ 214,895	\$ —	\$ —	\$ 214,895
Contingent consideration - MuGard	7,664	_	_	7,664
Total Liabilities	\$ 222,559	\$ —	\$ —	\$ 222,559

Investments

Our money market funds are classified as Level 1 assets under the fair value hierarchy as these assets have been valued using quoted market prices in active markets and do not have any restrictions on redemption. Our investments are classified as Level 2 assets under the fair value hierarchy as these assets were primarily determined from independent pricing services, which normally derive security prices from recently reported trades for identical or similar securities, making adjustments based upon other significant observable market transactions. At the end of each reporting period, we perform quantitative and qualitative analyses of prices received from third parties to determine whether prices are reasonable estimates of fair value. After completing our analyses, we did not adjust or override any fair value measurements provided by our pricing services as of March 31, 2016. In addition, there were no transfers or reclassifications of any securities between Level 1 and Level 2 during the three months ended March 31, 2016.

Contingent consideration

We accounted for the acquisitions of Lumara Health and CBR and the licensing of the MuGard Rights as business combinations under the acquisition method of accounting. Additional details regarding our acquisitions and license

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agreements can be found in Note C, "Business Combinations." There were no contingent consideration obligations related to the CBR acquisition. The fair value measurements of contingent consideration obligations and the related intangible assets arising from business combinations are classified as Level 3 assets under the fair value hierarchy as these assets have been valued using unobservable inputs. These inputs include: (a) the estimated amount and timing of projected cash flows; (b) the probability of the achievement of the factors on which the contingency is based; and (c) the risk adjusted discount rate used to present value the probability weighted cash flows. Significant increases or decreases in any of those inputs in isolation could result in a significantly lower or higher fair value measurement.

The following table presents a reconciliation of contingent consideration obligations related to the acquisition of Lumara Health and the MuGard Rights (in thousands):

Balance as of December 31, 2015	\$ 222,559
Payments made	(65)
Adjustments to fair value of contingent consideration	5,056
Balance as of March 31, 2016	\$ 227,550

The \$5.1 million of adjustments to the fair value of the contingent consideration liability during the three months ended March 31, 2016 was due to a \$4.7 million increase to the Makena contingent consideration and a \$0.4 million increase to the MuGard contingent consideration related to the time value of money. These adjustments were included in selling, general and administrative expenses in our condensed consolidated statements of operations. We have classified \$97.5 million of the Makena contingent consideration and \$0.9 million of the MuGard contingent consideration as short-term liabilities in our condensed consolidated balance sheet as of March 31, 2016.

The fair value of the contingent milestone payments payable by us to the former stockholders of Lumara Health was determined based on our probability-adjusted discounted cash flows estimated to be realized from the net sales of Makena from December 1, 2014 through December 31, 2019. The cash flows were discounted at a rate of 5%, which we believe is reasonable given the estimated likelihood of the pay-out. As of March 31, 2016, the total undiscounted milestone payment amounts we could pay in connection with the Lumara Health acquisition is \$350.0 million over the period from December 1, 2014 to December 31, 2019.

The fair value of the contingent royalty payments payable by us to Abeona was determined based on various market factors, including an analysis of estimated sales using a discount rate of approximately 9%. As of March 31, 2016, we estimate that the undiscounted royalty amounts we could pay under the MuGard License Agreement, based on current projections, may range from \$9.0 million to \$13.0 million over a ten year period beginning on June 6, 2013, the acquisition date, which is our best estimate of the period over which we expect the majority of the asset's cash flows to be derived.

We believe the estimated fair values of Lumara Health and the MuGard Rights are based on reasonable assumptions, however, our actual results may vary significantly from the estimated results.

Debt

We estimate the fair value of our debt obligations by using quoted market prices obtained from third-party pricing services, which is classified as a Level 2 input. As of March 31, 2016, the estimated fair value of our 2023 Senior Notes, Convertible Notes and 2015 Term Loan Facility (each as defined below) was \$445.0 million, \$215.0 million

and \$335.3 million, respectively, which differed from their carrying values. See Note Q, "Debt" for additional information on our debt obligations.

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F. INVENTORIES

Our major classes of inventories were as follows as of March 31, 2016 and December 31, 2015 (in thousands):

	March 31, 2016		De	cember 31, 2015
Raw materials	\$	17,802	\$	19,673
Work in process		1,858		1,985
Finished goods		22,342		18,987
Total inventories	\$	42,002	\$	40,645

G. PROPERTY, PLANT AND EQUIPMENT, NET

Property, plant and equipment, net consisted of the following as of March 31, 2016 and December 31, 2015 (in thousands):

	March	December
	31, 2016	31, 2015
Land	\$ 700	\$ 700
Land improvements	300	300
Building and improvements	9,500	9,500
Computer equipment and software	13,372	13,193
Furniture and fixtures	1,749	1,725
Leasehold improvements	1,717	1,717
Laboratory and production equipment	5,726	5,683
Construction in progress	1,949	786
	35,013	33,604
Less: accumulated depreciation	(7,076)	(4,879)
Property, plant and equipment, net	\$ 27,937	\$ 28,725

H. GOODWILL AND INTANGIBLE ASSETS, NET

Goodwill

Our \$639.5 million goodwill balance consisted \$198.1 million of goodwill acquired through the November 2014 Lumara Health acquisition and \$441.4 million acquired through the August 2015 CBR acquisition. During the three months ended March 31, 2016, the CBR goodwill increased by \$0.3 million related to net tax adjustments. These measurement period adjustments have been reflected as current period adjustments in accordance with ASU 2015-16, discussed below in Note S, "Recently Issued and Proposed Accounting Pronouncements." As of March 31, 2016, we had no accumulated impairment losses related to goodwill.

Intangible Assets

As of March 31, 2016 and December 31, 2015, our identifiable intangible assets consisted of the following (in thousands):

	March 31, 2	2016 Accumulated		December 31,	2015 Accumulated	
	Cost	Amortization	Net	Cost	Amortization	Net
Amortizable	Cost	Amortization	NCt	Cost	Amortization	Net
intangible assets:						
Makena base						
technology	\$ 797,100	\$ 69,904	\$ 727,196	\$ 797,100	\$ 56,540	\$ 740,560
CBR customer	Ψ 777,100	Ψ 0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Ψ 727,170	Ψ 777,100	Ψ 20,210	Ψ 7 10,500
relationships	297,000	4,193	292,807	297,000	1,061	295,939
Favorable lease	358	106	252	358	63	295
MuGard Rights	16,893	1,124	15,769	16,893	1,016	15,877
THE CALL THE SILE	1,111,351	75,327	1,036,024	1,111,351	58,680	1,052,671
Indefinite-lived	-,,	,	-,	-,,	2 3,000	-,,
intangible assets:						
Makena IPR&D	79,100		79,100	79,100	_	79,100
CBR trade names	,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,,		.,,_,
and trademarks	65,000		65,000	65,000	_	65,000
Total intangible	,		,	,		,
assets	\$ 1,255,451	\$ 75,327	\$ 1,180,124	\$ 1,255,451	\$ 58,680	\$ 1,196,771
			•			•

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As of March 31, 2016, the weighted average remaining amortization period for our finite-lived intangible assets was approximately 9 years.

The Makena base technology and IPR&D intangible assets were acquired in November 2014 in connection with our acquisition of Lumara Health. Amortization of the Makena base technology asset is being recognized using an economic consumption model over twenty years, which we believe is an appropriate amortization period due to the estimated economic lives of the product rights and related intangibles.

The CBR intangible assets (the CBR customer relationships, favorable lease and trade names and trademarks) were acquired in August 2015 in connection with our acquisition of CBR. Amortization of the CBR customer relationships is being recognized using an estimated useful life of twenty years, which we believe is an appropriate amortization period due to the estimated economic lives of the CBR intangible assets. The favorable lease is being amortized on a straight-line basis over the remaining term of the lease.

The MuGard Rights were acquired from Abeona in June 2013. Amortization of the MuGard Rights is being recognized using an economic consumption model over ten years, which represents our best estimate of the period over which we expect the majority of the asset's cash flows to be derived. We have assessed the MuGard Rights for potential impairment as of December 31, 2015 and concluded that the projected undiscounted cash flows continued to exceed the carrying value of this intangible asset. However, if we are not able to expand reimbursement and coverage for MuGard as planned and therefore revenues do not increase as projected, this intangible asset may be subject to future impairment.

See Note C, "Business Combinations," for additional information on our intangible assets.

Total amortization expense for the three months ended March 31, 2016 and 2015, was \$16.6 million and \$11.5 million, respectively. Amortization expense for Makena and MuGard is recorded in cost of product sales in our condensed consolidated statements of operations. Amortization expense for the CBR related intangibles is recorded in selling, general and administrative expenses in our condensed consolidated statements of operations. We expect amortization expense related to our finite-lived intangible assets to be as follows (in thousands):

	Estimated
	Amortization
Period	Expense
Remainder of Year Ending December 31, 2016	\$ 63,825
Year Ending December 31, 2017	92,532
Year Ending December 31, 2018	99,941
Year Ending December 31, 2019	71,253
Year Ending December 31, 2020	48,752
Thereafter	659,721
Total	\$ 1,036,024

I. CURRENT AND LONG-TERM LIABILITIES

Accrued Expenses

Accrued expenses consisted of the following as of March 31, 2016 and December 31, 2015 (in thousands):

	March 31, 2016	December 31, 201	5
Commercial rebates, fees and returns	\$ 52,561	\$ 45,161	
Professional, license, and other fees and expenses	31,564	27,070	
Interest expense	5,832	18,411	
Salaries, bonuses, and other compensation	9,845	12,838	
Restructuring expense	2,093	2,883	
Total accrued expenses	\$ 101,895	\$ 106,363	

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Deferred Revenues

Our deferred revenues balance as of March 31, 2016 is primarily related to our CBR service revenues and includes: (a) amounts collected in advance of unit processing and (b) amounts associated with unearned storage fees collected at the beginning of the storage contract term, net of allocated discounts.

J. INCOME TAXES

The following table summarizes our effective tax rate and income tax expense (benefit) for the three months ended March 31, 2016 and 2015 (in thousands except for percentages):

	Three Months Ended March 31,					
	20	16		20	15	
Effective tax rate		25	%		30	%
Income tax expense (benefit)	\$	(2,540)		\$	5,608	

For the three months ended March 31, 2016, we recognized an income tax benefit of \$2.5 million, representing an effective tax rate of 25%. The difference between the expected statutory federal tax rate of 35% and the 25% effective tax rate for the three months ended March 31, 2016, was primarily attributable to the impact of state income taxes, stock compensation, and federal research and development and orphan drug tax credits, partially offset by non-deductible contingent consideration expense associated with Lumara Health.

For the three months ended March 31, 2015, we recognized income tax expense of \$5.6 million, representing an effective tax rate of 30%. The difference between the expected statutory federal tax rate of 35% and the 30% effective tax rate for the three months ended March 31, 2015, was attributable to the impact of state income taxes, partially offset by the net benefit of federal orphan drug tax credits and the impact of a valuation allowance release related to certain deferred tax assets.

K. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

The table below presents information about the effects of net income (loss) of significant amounts reclassified out of accumulated other comprehensive income (loss) ("AOCI"), net of tax, associated with unrealized gains (losses) on securities during the three months ended March 31, 2016 and 2015 (in thousands):

	Three Months H	Ended March 31,
	2016	2015
Beginning balance	\$ (4,205)	\$ (3,617)
Other comprehensive income (loss) before reclassifications	932	68
Ending balance	\$ (3,273)	\$ (3,549)

L. BASIC AND DILUTED NET INCOME (LOSS) PER SHARE

We compute basic net income (loss) per share by dividing net income (loss) by the weighted average number of common shares outstanding during the relevant period. Diluted net income (loss) per common share has been computed by dividing net income (loss) by the diluted number of common shares outstanding during the period. Except where the result would be antidilutive to net income (loss), diluted net income (loss) per common share would be computed assuming the impact of the conversion of the \$200.0 million of 2.5% convertible senior notes due February 15, 2019 (the "Convertible Notes"), the exercise of outstanding stock options, the vesting of restricted stock units ("RSUs"), and the exercise of warrants.

We have a choice to settle the conversion obligation under the Convertible Notes in cash, shares or any combination of the two. Pursuant to certain covenants in our six-year \$350.0 million term loan facility (the "2015 Term Loan Facility"), which we entered into in 2015 to partially fund the acquisition of CBR, we may be restricted from settling the conversion obligation in whole or in part with cash unless certain conditions in the 2015 Term Loan Facility are satisfied. We utilize the if converted method to reflect the impact of the conversion of the Convertible Notes. This method

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assumes the conversion of the Convertible Notes into shares of our common stock and reflects the elimination of the interest expense related to the Convertible Notes.

The dilutive effect of the warrants, stock options and RSUs has been calculated using the treasury stock method.

The components of basic and diluted net income (loss) per share for the three months ended March 31, 2016 and 2015, were as follows (in thousands, except per share data):

	Three Months E	March 31, 015
Net income (loss)	\$ 6 (7,527)	\$ 12,904
Weighted average common shares outstanding Effect of dilutive securities:	34,739	27,213
Stock options and RSUs		1,552
Warrants	_	7,382
Convertible 2.5% notes	_	2,098
Shares used in calculating dilutive net income (loss) per share	34,739	38,245
Net income (loss) per share:		
Basic	\$ 6(0.22)	\$ 0.47
Diluted	\$ 6(0.22)	\$ 0.39

The following table sets forth the potential common shares issuable upon the exercise of outstanding options, the vesting of RSUs, the exercise of warrants (prior to consideration of the treasury stock method), and the conversion of the Convertible Notes, which were excluded from our computation of diluted net income (loss) per share because their inclusion would have been anti-dilutive (in thousands):

	Three months ended	d March 31,
	2016	2015
Options to purchase shares of common stock	2,455	856
Shares of common stock issuable upon the vesting of RSUs	904	298
Warrants	7,382	
Convertible 2.5% notes	7,382	_
Total	18,123	1,154

In connection with the issuance of the Convertible Notes, in February 2014, we entered into convertible bond hedges. The convertible bond hedges are not included for purposes of calculating the number of diluted shares outstanding, as their effect would be anti-dilutive. The convertible bond hedges are generally expected, but not guaranteed, to reduce the potential dilution and/or offset the cash payments we are required to make upon conversion of the Convertible Notes.

M. EQUITY BASED COMPENSATION

We currently maintain four equity compensation plans, namely our Third Amended and Restated 2007 Equity Incentive Plan, as amended (the "2007 Plan"), our Amended and Restated 2000 Stock Plan (the "2000 Plan"), the Lumara Health Inc. Amended and Restated 2013 Incentive Compensation Plan (the "Lumara Health 2013 Plan") and our 2015 Employee Stock Purchase Plan ("2015 ESPP"). All outstanding stock options granted under each of our equity compensation plans other than our 2015 ESPP (discussed below) have an exercise price equal to the closing price of a share of our common stock on the grant date.

Our 2007 Plan was originally approved by our stockholders in November 2007, and succeeded our 2000 Plan, under which no further grants may be made. Any shares that remained available for issuance under the 2000 Plan as of the date of adoption of the 2007 Plan are included in the number of shares that may be issued under the 2007 Plan. Any shares subject to outstanding awards granted under the 2000 Plan that expire or terminate for any reason prior to exercise will be added to the total number of shares of our stock available for issuance under the 2007 Plan. The total number of

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shares issuable pursuant to awards under this plan is 6,215,325. As of March 31, 2016, there were 1,048,949 shares remaining available for issuance under the 2007 Plan, which excludes shares subject to outstanding awards under the 2000 Plan. All outstanding options under the 2007 Plan have either a seven or ten-year term and all outstanding options under the 2000 Plan have a ten-year term.

In November 2014, we assumed the Lumara Health 2013 Plan in connection with the acquisition of Lumara Health. The total number of shares issuable pursuant to awards under this plan as of the effective date of the acquisition and after taking into account any adjustments as a result of the acquisition, was 200,000 shares. As of March 31, 2016, there were 74,219 shares remaining available for issuance under the Lumara Health 2013 Plan, which are available for grants to certain employees, officers, directors, consultants, and advisors of AMAG and our subsidiaries who are newly-hired or who previously performed services for Lumara Health. All outstanding options under the Lumara Health 2013 Plan have a ten-year term.

In May 2015, our stockholders approved our 2015 ESPP, which authorizes the issuance of up to 200,000 shares of our common stock to eligible employees. The terms of the 2015 ESPP permit eligible employees to purchase shares (subject to certain plan and tax limitations) in semi-annual offerings through payroll deductions of up to an annual maximum of 10% of the employee's "compensation" as defined in the 2015 ESPP. Shares are purchased at a price equal to 85% of the fair market value of our common stock on either the first or last business day of the offering period, whichever is lower. Plan periods consist of six-month periods typically commencing June 1 and ending November 30 and commencing December 1 and ending May 31. As of March 31, 2016, no shares have been issued under our 2015 ESPP.

During the three months ended March 31, 2016, we also granted equity through inducement grants outside of these plans to certain employees to induce them to accept employment with us (collectively, "Inducement Grants"). The options were granted at an exercise price equal to the fair market value of a share of our common stock on the respective grant dates and will be exercisable in four equal annual installments beginning on the first anniversary of the respective grant dates. The RSU grants will vest in three equal annual installments beginning on the first anniversary of the respective grant dates. The foregoing grants were made pursuant to inducement grants outside of our stockholder approved equity plans as permitted under the NASDAQ Stock Market listing rules. We assessed the terms of these awards and determined there was no possibility that we would have to settle these awards in cash and therefore, equity accounting was applied.

Stock Options

The following table summarizes stock option activity for the three months ended March 31, 2016:

	2007 Equity	2000 Equity	2013 Lumara	Inducement	
	Plan	Plan	Equity Plan	Grants	Total
Outstanding at December 31, 2015	1,963,162	14,040	96,000	830,975	2,904,177
Granted	334,000	_	_	45,000	379,000
Exercised	(25,315)	_	_	_	(25,315)
Expired or terminated	(96,878)	_	(30,000)	(38,000)	(164,878)
Outstanding at March 31, 2016	2,174,969	14,040	66,000	837,975	3,092,984

Restricted Stock Units

The following table summarizes RSU activity for the three months ended March 31, 2016:

	2007 Equity	2000 Equity	2013 Lumara	Inducement	
	Plan	Plan	Equity Plan	Grants	Total
Outstanding at December 31, 2015	446,330	_	52,350	155,675	654,355
Granted	599,300			32,000	631,300
Vested	(175,971)		(16,749)	(5,000)	(197,720)
Expired or terminated	(36,364)		(4,235)	(2,500)	(43,099)
Outstanding at March 31, 2016	833,295	_	31,366	180,175	1,044,836

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Equity based compensation expense

Equity based compensation expense for the three months ended March 31, 2016 and 2015 consisted of the following (in thousands):

	Tł	ree Months	Ended	March 31,
	20	16	20)15
Cost of product sales	\$	320	\$	41
Research and development		756		478
Selling, general and administrative		5,084		2,149
Total equity-based compensation expense	\$	6,160	\$	2,668
Income tax effect		(1,674)		(1,035)
After-tax effect of equity-based compensation expense	\$	4,486	\$	1,633

We reduce the compensation expense being recognized to account for estimated forfeitures, which we estimate based primarily on historical experience, adjusted for unusual events such as corporate restructurings, which may result in higher than expected turnover and forfeitures. Under current accounting guidance, forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

We have not recognized any excess tax benefits from equity-based compensation in additional paid-in capital because the excess tax benefits have not yet reduced cash taxes paid. Accordingly, there was no impact recorded in cash flows from financing activities or cash flows from operating activities as reported in the accompanying condensed consolidated statements of cash flows.

N. STOCKHOLDERS' EQUITY

Share Repurchase Program

In January 2016, we announced that our board of directors authorized a program to repurchase up to \$60.0 million in shares of our common stock. The repurchase program does not have an expiration date and may be suspended for periods or discontinued at any time. Under the program, we may purchase our stock from time to time at the discretion of management in the open market or in privately negotiated transactions. The number of shares repurchased and the timing of the purchases will depend on a number of factors, including share price, trading volume and general market conditions, along with working capital requirements, general business conditions and other factors. We may also from time to time establish a trading plan under Rule 10b5-1 of the Securities and Exchange Act of 1934 to facilitate purchases of our shares under this program. During the three months ended March 31, 2016, we repurchased and retired 320,000 shares of common stock under this repurchase program for \$7.6 million, at an average purchase price of \$23.63 per share.

Change in Stockholders' Equity

Total stockholders' equity decreased by \$9.3 million during the three months ended March 31, 2016. This decrease was primairily driven by \$7.5 million from our net loss, \$7.6 million related to the repurchase of our securities under

our stock repurchase program, partially offset by \$0.4 million from the exercise of stock options and \$6.2 million related to equity-based compensation expense.

O. COMMITMENTS AND CONTINGENCIES

Commitments

Our long-term contractual obligations include commitments and estimated purchase obligations entered into in the normal course of business. These include commitments related to our facility leases, purchases of inventory and other purchases related to our products, debt obligations, and other purchase obligations.

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Purchase Commitments

In connection with our acquisition of CBR, we have certain minimum purchase commitments associated with an agreement entered into by CBR prior to our acquisition. This agreement expires in December 2018, with the remaining amount of minimum purchase commitments totaling \$7.2 million as of March 31, 2016.

Contingencies

Legal Proceedings

We accrue a liability for legal contingencies when we believe that it is both probable that a liability has been incurred and that we can reasonably estimate the amount of the loss. We review these accruals and adjust them to reflect ongoing negotiations, settlements, rulings, advice of legal counsel and other relevant information. To the extent new information is obtained and our views on the probable outcomes of claims, suits, assessments, investigations or legal proceedings change, changes in our accrued liabilities would be recorded in the period in which such determination is made. For certain matters referenced below, the liability is not probable or the amount cannot be reasonably estimated and, therefore, accruals have not been made. In addition, in accordance with the relevant authoritative guidance, for any matters in which the likelihood of material loss is at least reasonably possible, we will provide disclosure of the possible loss or range of loss. If a reasonable estimate cannot be made, however, we will provide disclosure to that effect. We expense legal costs as they are incurred.

Sandoz Paragraph IV Certification Letter

On February 5, 2016, we received a Paragraph IV certification notice letter regarding an Abbreviated New Drug Application submitted to the FDA by Sandoz Inc. ("Sandoz") requesting approval to engage in commercial manufacture, use and sale of a generic version of ferumoxytol. A generic version of Feraheme can be marketed only with the approval of the FDA of the respective application for such generic version. The Drug Price Competition and Patent Term Restoration Act of 1984, as amended, requires an applicant whose subject drug is a drug listed in the FDA publication, "Approved Drug Products with Therapeutic Equivalence Evaluations," also known as the "Orange Book," to notify the patent holder of their application and potential infringement of their patent rights. The Paragraph IV certification notice is required to contain a detailed factual and legal statement explaining the basis for the applicant's opinion that the proposed product does not infringe the subject patents, that such patents are invalid, or both. Receipt of the certification notice triggers a 45 day window during which a patent infringement suit may be filed in federal district court against the applicant seeking approval of a product. In its notice letter, Sandoz claims that our ferumoxytol patents are invalid, unenforceable and/or not infringed by Sandoz's manufacture, use, sale or offer for sale of the generic version. In March 2016, we initiated a patent infringement suit alleging that Sandoz' ANDA filing itself constituted an act of infringement and that if it is approved, the manufacture, use, offer for sale, sale or importation of Sandoz' ferumoxytol products would infringe our patents. By the filing of this complaint, the FDA is generally prohibited from granting approval of Sandoz' application until the earliest of 30 months from the date the FDA accepted the application for filing, the conclusion of litigation in the generic's favor, or expiration of the patent(s) (though such stay may be shortened or lengthened if either party fails to cooperate in the litigation). On May 2, 2016, Sandoz filed a response to our patent infringement suit. If the litigation is resolved in favor of the applicant or the challenged patent expires during the 30 month stay period, the stay is lifted and the FDA may thereafter approve the application based on the applicable standards for approval. Any future unfavorable outcome in this matter could negatively affect the magnitude and timing of future revenues. We intend to vigorously enforce our intellectual property rights relating to ferumoxytol.

European Patent Organization Appeal

In July 2010, Sandoz filed with the European Patent Office (the "EPO") an opposition to a previously issued patent which covers ferumoxytol in EU jurisdictions. In October 2012, at an oral hearing, the Opposition Division of the EPO revoked this patent. We recorded a notice of appeal at the EPO in December 2012, which suspended the revocation of our patent. The oral proceedings for the appeal occurred on June 16, 2015, where the decision revoking the patent was set aside and remitted back to the Opposition Division for further consideration. In the event that we do not experience a successful outcome at the Opposition Division, under EU regulations ferumoxytol would still be entitled to eight years of data protection and ten years of market exclusivity from the date of approval, which we believe would create barriers to entry for any generic version of ferumoxytol into the EU market until sometime between 2020 and 2022. This decision had no impact on our revenues in the first quarter of 2016. However, any future unfavorable outcome in this matter could

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negatively affect the magnitude and timing of future revenues, if we were to resume commercialization efforts in the EU. We do not expect to incur any related liability regardless of the outcome of the appeal and therefore did not record any liability as of March 31, 2016. We continue to believe the patent is valid and intend to vigorously prosecute the patent before the Opposition Division.

Other

On July 20, 2015, the Federal Trade Commission (the "FTC") notified us that it is conducting an investigation into whether Lumara Health or its predecessor has engaged in unfair methods of competition with respect to Makena or any hydroxyprogesterone caproate product. We are fully cooperating with the FTC and provided a thorough response to the FTC in August 2015 and are awaiting their review of our response. The FTC noted in its letter that the existence of the investigation does not indicate that the FTC has concluded that Lumara Health or its predecessor has violated the law and we believe that our contracts and practices comply with relevant law and policy, including the federal Drug Quality and Security Act (the "DQSA"), which was enacted in November 2013, and public statements from and enforcement actions by the FDA regarding its implementation of the DQSA. We have provided the FTC with a response that provides a brief overview of the DQSA for context, which we believe will be helpful, including: (a) how the statute outlined that large-scale compounding of products that are copies or near-copies of FDA-approved drugs (like Makena) is not in the interests of public safety; (b) our belief that the DQSA has had a significant impact on the compounding of hydroxyprogesterone caproate; and (c) how our contracts with former compounders allow those compounders to continue to serve physicians and patients with respect to supplying medically necessary alternative/altered forms of hydroxyprogesterone caproate.

On or about April 6, 2016 we received Notice of a Lawsuit and Request to Waive Service of a Summons in a case entitled Plumbers' Local Union No. 690 Health Plan v. Actavis Group et. al., which was filed in the Court of Common Pleas of Philadelphia County, First Judicial District of Pennsylvania and, after removal to federal court, is now pending in the United States District Court for the Eastern District of Pennsylvania (Civ. Action No. 16-0065-AB). Thereafter, we were also made aware of a related complaint entitled Delaware Valley Health Care Coalition v. Actavis Group et. al., which was filed with the Court of Common Pleas of Philadelphia County, First Judicial District of Pennsylvania District Court of Pennsylvania (Case ID: 160200806). The complaints name K-V Pharmaceutical Company ("KV") (Lumara Health's predecessor company), along with a number of other pharmaceutical companies. We acquired Lumara Health in November 2014, a year after KV emerged from bankruptcy protection, at which time it became our wholly-owned subsidiary. We have not been served with process or waived service of summons in either case. The actions are being brought alleging unfair and deceptive trade practices with regard to certain pricing practices that allegedly resulted in certain payers overpaying for certain of KV's generic products. Because these cases are in their earliest stages and we have not been served with process in either case, we are currently unable to predict the outcome or reasobly estimate the range of potential loss associated with this matter, if any.

We may periodically become subject to other legal proceedings and claims arising in connection with ongoing business activities, including claims or disputes related to patents that have been issued or that are pending in the field of research on which we are focused. Other than the above actions, we are not aware of any material claims against us as of March 31, 2016.

P. COLLABORATION, LICENSE AND OTHER STRATEGIC AGREEMENTS

Our commercial strategy includes expanding our portfolio through the in-license or acquisition of additional pharmaceutical products or companies, including revenue-generating commercial products and late-state development

assets. As of March 31, 2016, we were a party to the following collaborations:

Velo

In July 2015, we entered into an option agreement with Velo Bio, LLC ("Velo"), a privately held life-sciences company that granted us an option to acquire the rights (the "DIF Rights") to an orphan drug candidate, digoxin immune fab ("DIF"), a polyclonal antibody in clinical development for the treatment of severe preeclampsia in pregnant women. We made an upfront payment of \$10.0 million in the third quarter of 2015 for the option to acquire the DIF Rights. DIF has been granted both orphan drug and fast-track review designations by the FDA for use in treating severe preeclampsia. Under the option agreement, Velo will complete a dose ranging study and a Phase 2b/3a clinical study.

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Following the conclusion of the DIF Phase 2b/3a study, we may terminate, or, for additional consideration, exercise or extend, our option to acquire the DIF Rights. If we exercise the option to acquire the DIF Rights, we would be responsible for additional costs in pursuing FDA approval, and would be obligated to pay certain milestone payments and single-digit royalties based on regulatory approval and commercial performance of the product to Velo. If we exercise the option, we will be responsible for payments totaling up to \$65.0 million (including the payment of the option exercise price and the regulatory milestone payments) and up to an additional \$250.0 million in sales milestone payments based on the achievement of annual sales milestones at targets ranging from \$100.0 million to \$900.0 million. We anticipate that results from the pivotal Phase 2b/3a study could be available as early as 2018.

We have determined that Velo is a variable interest entity ("VIE") as it does not have enough equity to finance its activities without additional financial support. As we do not have the power to direct the activities of the VIE that most significantly affect its economic performance, which we have determined to be the Phase 2b/3a clinical study, we are not the primary beneficiary of and do not consolidate the VIE.

Antares

In September 2014, Lumara Health entered into a development and license agreement (the "Antares Agreement") with Antares Pharma, Inc. ("Antares"), which in connection with our acquisition of Lumara Health in November of 2014, grants us an exclusive, worldwide, royalty-bearing license, with the right to sublicense, to certain intellectual property rights, including know-how, patents and trademarks, to develop, use, sell, offer for sale and import and export an Antares' auto-injection system for use with hydroxyprogesterone caproate (the "Product"). In consideration for the license, to support joint meetings and a development strategy with the FDA, and for initial tooling and process validation, Lumara Health paid Antares an up-front payment in October 2014. Under the Antares Agreement, we are responsible for the clinical development and preparation, submission and maintenance of all regulatory applications in each country where we desire to market and sell the Product, including the U.S. We are required to pay royalties to Antares on net sales of the Product commencing on Product launch in a particular country until the Product is no longer developed, marketed, sold or offered for sale in such country ("Antares Royalty Term"). The royalty rates range from high single digit to low double digits and are tiered based on levels of net sales of Products and decrease after the expiration of licensed patents or where there are generic equivalents to the Product being sold in a particular country. Antares is the exclusive supplier of our requirements for the auto-injection system devices for the Products and Antares remains responsible for the manufacture and supply of the devices and assembly of the Product. We are responsible for the supply of the drug to be used in the assembly of the finished Product. The development and license agreement terminates at the end of the Antares Royalty Term, but is subject to early termination by us for convenience, by Antares if we do not submit regulatory filings in the U.S. by a certain date and by either party upon an uncured breach by or bankruptcy of the other party.

Abeona

Please refer to Note C, "Business Combinations," to the Financial Statements in our Annual Report for a detailed description of the MuGard License Agreement.

Q. DEBT

Our outstanding debt obligations as of March 31, 2016 and December 31, 2015 consisted of the following (in thousands):

March 31, 2016 December 31, 2015 \$ 488,754 \$ 488,481

2015 Term Loan Facility	328,904		332,688
Convertible Notes	172,822		170,749
Total long-term debt	990,480		991,918
Less: current maturities	17,500		17,500
Long-term debt, net of current maturities	\$ 972,980	\$	974,418

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2023 Senior Notes

On August 17, 2015, in connection with the CBR acquisition, we completed a private placement of \$500.0 million aggregate principal amount of 2023 Senior Notes. The 2023 Senior Notes were issued pursuant to an Indenture, dated as of August 17, 2015 (the "Indenture"), by and among us, certain of our subsidiaries acting as guarantors of the 2023 Senior Notes and Wilmington Trust, National Association, as trustee. The Indenture contains certain customary negative covenants, which are subject to a number of limitations and exceptions. Certain of the covenants will be suspended during any period in which the 2023 Senior Notes receive investment grade ratings.

The 2023 Senior Notes, which are senior unsecured obligations of the Company, will mature on September 1, 2023 and will bear interest at a rate of 7.875% per year, with interest payable semi-annually on September 1 and March 1 of each year, beginning on March 1, 2016. We may redeem some or all of the 2023 Senior Notes at any time, or from time to time, on or after September 1, 2018 at the redemption prices listed in the Indenture, plus accrued and unpaid interest to, but not including, the date of redemption. In addition, prior to September 1, 2018, we may redeem up to 35% of the aggregate principal amount of the 2023 Senior Notes utilizing the net cash proceeds from certain equity offerings, at a redemption price of 107.875% of the principal amount thereof, plus accrued and unpaid interest to, but not including, the date of redemption; provided that at least 65% of the aggregate amount of the 2023 Senior Notes originally issued under the Indenture remain outstanding after such redemption. We may also redeem all or some of the 2023 Senior Notes at any time, or from time to time, prior to September 1, 2018, at a price equal to 100% of the principal amount of the 2023 Senior Notes to be redeemed, plus a "make-whole" premium plus accrued and unpaid interest, if any, to the date of redemption. Upon the occurrence of a "change of control," as defined in the Indenture, we are required to offer to repurchase the 2023 Senior Notes at 101% of the aggregate principal amount thereof, plus any accrued and unpaid interest to, but not including, the repurchase date. The Indenture contains customary events of default, which allow either the trustee or the holders of not less than 25% in aggregate principal amount of the then-outstanding 2023 Senior Notes to accelerate, or in certain cases, will automatically cause the acceleration of, the amounts due under the 2023 Senior Notes.

At March 31, 2016, the carrying value of the outstanding borrowings, net of issuance costs and other lender fees and expenses, was \$488.8 million.

2015 Term Loan Facility

On August 17, 2015, to fund a portion of the purchase price of CBR, we entered into a credit agreement with a group of lenders, including Jefferies Finance LLC as administrative and collateral agent, that provided us with, among other things, a six-year \$350.0 million term loan facility. We borrowed the full \$350.0 million available under the 2015 Term Loan Facility on August 17, 2015. The credit agreement also allows for the incurrence of incremental loans in an amount up to \$225.0 million. At March 31, 2016, the carrying value of the outstanding borrowings, net of issuance costs and other lender fees and expenses, was \$328.9 million. The unamortized original issue costs and other lender fees and expenses from our then existing five-year term loan facility (the "2014 Term Loan Facility") as a result of accounting guidance for the modification of debt arrangements.

The 2015 Term Loan Facility bears interest, at our option, at the London Interbank Offered Rate ("LIBOR") plus a margin of 3.75% or the prime rate plus a margin of 2.75%. The LIBOR is subject to a 1.00% floor and the prime rate is subject to a 2.00% floor. As of March 31, 2016, the stated interest rate, based on the LIBOR, was 4.75%, and the effective interest rate was 5.65%.

We must repay the 2015 Term Loan Facility in installments of \$4.4 million per quarter due on the last day of each quarter beginning with the quarter ending December 31, 2015. The 2015 Term Loan Facility matures on August 17,

2021.

The 2015 Term Loan Facility includes an annual mandatory prepayment of the debt in an amount equal to 50% of our excess cash flow (as defined in the 2015 Term Loan Facility) as measured on an annual basis, beginning with the year ending December 31, 2016. On or after December 31, 2016, the applicable excess cash flow percentage shall be reduced based on the total net leverage ratio as of the last day of the period. Excess cash flow is generally defined as our adjusted Earnings Before Interest, Taxes, Depreciation and Amortization ("EBITDA") less debt service costs,

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unfinanced capital expenditures, unfinanced acquisition expenditures, contingent consideration paid, and current income taxes as well as other adjustments specified in the credit agreement.

The 2015 Term Loan Facility has a lien on substantially all of our assets, including a pledge of 100% of the equity interests in our domestic subsidiaries and a pledge of 65% of the voting equity interests and 100% of the non-voting equity interests in our direct foreign subsidiaries. The 2015 Term Loan Facility contains customary events of default and affirmative and negative covenants for transactions of this type. All obligations under the 2015 Term Loan Facility are unconditionally guaranteed by substantially all of our direct and indirect domestic subsidiaries, with certain exceptions. These guarantees are secured by substantially all of the present and future property and assets of such subsidiaries, with certain exclusions.

2.5% Convertible Notes

On February 14, 2014, we issued \$200.0 million aggregate principal amount of the Convertible Notes. We received net proceeds of \$193.3 million from the sale of the Convertible Notes, after deducting fees and expenses of \$6.7 million. We used \$14.1 million of the net proceeds from the sale of the Convertible Notes to pay the cost of the convertible bond hedges, as described below (after such cost was partially offset by the proceeds to us from the sale of warrants in the warrant transactions described below).

The Convertible Notes are governed by the terms of an indenture between us, as issuer, and Wilmington Trust, National Association, as the trustee. The Convertible Notes are senior unsecured obligations and bear interest at a rate of 2.5% per year, payable semi-annually in arrears on February 15 and August 15 of each year. The Convertible Notes will mature on February 15, 2019, unless earlier repurchased or converted. Upon conversion of the Convertible Notes, at a holder's election, such Convertible Notes will be convertible into cash, shares of our common stock, or a combination thereof, at our election (subject to certain limitations in the 2015 Term Loan Facility,) at a conversion rate of approximately 36.9079 shares of common stock per \$1,000 principal amount of the Convertible Notes, which corresponds to an initial conversion price of approximately \$27.09 per share of our common stock.

The conversion rate is subject to adjustment from time to time upon the occurrence of certain events, including, but not limited to, the issuance of stock dividends and payment of cash dividends. At any time prior to the close of business on the business day immediately preceding May 15, 2018, holders may convert their Convertible Notes at their option only under the following circumstances:

- (1) during any calendar quarter (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day;
- (2) during the five business day period after any five consecutive trading day period (the "measurement period") in which the trading price per \$1,000 principal amount of the Convertible Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our common stock and the conversion rate on each such trading day; or
- (3) upon the occurrence of specified corporate events.

On or after May 15, 2018 until the close of business on the second scheduled trading day immediately preceding the maturity date, holders may convert all or any portion of their Convertible Notes, in multiples of \$1,000 principal amount, at the option of the holder regardless of the foregoing circumstances. Based on the last reported sale price of our common stock during the last 30 trading days of the first quarter of 2016, the Convertible Notes were not convertible as of March 31, 2016.

In accordance with accounting guidance for debt with conversion and other options, we separately account for the liability and equity components of the Convertible Notes by allocating the proceeds between the liability component and the embedded conversion option ("equity component") due to our ability to settle the Convertible Notes in cash, common stock or a combination of cash and common stock, at our option (subject to certain limitations in the 2015 Term Loan Facility). The carrying amount of the liability component was calculated by measuring the fair value of a similar liability that does not have an associated convertible feature. The allocation was performed in a manner that reflected our non-convertible debt borrowing rate for similar debt. The equity component of the Convertible Notes was recognized as a

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debt discount and represents the difference between the proceeds from the issuance of the Convertible Notes and the fair value of the liability of the Convertible Notes on their respective dates of issuance. The excess of the principal amount of the liability component over its carrying amount ("debt discount") is amortized to interest expense using the effective interest method over five years. The equity component is not remeasured as long as it continues to meet the conditions for equity classification.

Our outstanding Convertible Note balances as of March 31, 2016 consisted of the following (in thousands):

	March 31, 20			
Liability component:				
Principal	\$	200,000		
Less: debt discount and issuance costs, net		(27,178)		
Net carrying amount	\$	172,822		
Equity component	\$	38,188		

In connection with the issuance of the Convertible Notes, we incurred approximately \$6.7 million of debt issuance costs, which primarily consisted of underwriting, legal and other professional fees, and allocated these costs to the liability and equity components based on the allocation of the proceeds. Of the total \$6.7 million of debt issuance costs, \$1.3 million was allocated to the equity component and recorded as a reduction to additional paid-in capital and \$5.4 million was allocated to the liability component and is now recorded as a reduction of the Convertible Notes in our condensed consolidated balance sheets. The portion allocated to the liability component is amortized to interest expense using the effective interest method over five years.

We determined the expected life of the debt was equal to the five year term on the Convertible Notes. As of March 31, 2016, the carrying value of the Convertible Notes was \$172.8 million. The effective interest rate on the liability component was 7.23% for the period from the date of issuance through March 31, 2016. As of March 31, 2016, the "if-converted value" did not exceed the remaining principal amount of the Convertible Notes.

The following table sets forth total interest expense recognized related to the Convertible Notes during the three months ended March 31, 2016 and 2015 (in thousands):

	Three Months Ended March				
	2016	2015			
Contractual interest expense	\$ 1,250	\$ 1,250			
Amortization of debt issuance costs	258	234			
Amortization of debt discount	1,815	1,649			
Total interest expense	\$ 3,323	\$ 3,133			

Convertible Bond Hedge and Warrant Transactions

In connection with the pricing of the Convertible Notes and in order to reduce the potential dilution to our common stock and/or offset cash payments due upon conversion of the Convertible Notes, in February 2014, we entered into convertible bond hedge transactions covering approximately 7.4 million shares of our common stock underlying the

\$200.0 million aggregate principal amount of the Convertible Notes with the call spread counterparties. The convertible bond hedges have an exercise price of approximately \$27.09 per share, subject to adjustment upon certain events, and are exercisable when and if the Convertible Notes are converted. If upon conversion of the Convertible Notes, the price of our common stock is above the exercise price of the convertible bond hedges, the call spread counterparties will deliver shares of our common stock and/or cash with an aggregate value approximately equal to the difference between the price of our common stock at the conversion date and the exercise price, multiplied by the number of shares of our common stock related to the convertible bond hedges being exercised. The convertible bond hedges are separate transactions entered into by us and are not part of the terms of the Convertible Notes or the warrants, discussed below. Holders of the Convertible Notes will not have any rights with respect to the convertible bond hedges. We paid \$39.8 million for these convertible bond hedges and recorded this amount as a reduction to additional paid-in capital, net of tax, in 2014.

In February 2014, we also entered into separate warrant transactions with each of the call spread counterparties relating to, in the aggregate, approximately 7.4 million shares of our common stock underlying the \$200.0 million aggregate principal amount of the Convertible Notes. The initial exercise price of the warrants is \$34.12 per share, subject to adjustment upon certain events, which is 70% above the last reported sale price of our common stock of

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\$20.07 on February 11, 2014. The warrants would separately have a dilutive effect to the extent that the market value per share of our common stock, as measured under the terms of the warrants, exceeds the applicable exercise price of the warrants. The warrants were issued to the call spread counterparties pursuant to the exemption from registration set forth in Section 4(a)(2) of the Securities Act of 1933, as amended. We received \$25.7 million for these warrants and recorded this amount to additional paid-in capital in 2014.

Aside from the initial payment of \$39.8 million to the call spread counterparties for the convertible bond hedges, which was partially offset by the receipt of \$25.7 million for the warrants, we are not required to make any cash payments to the call spread counterparties under the convertible bond hedges and will not receive any proceeds if the warrants are exercised.

R. RESTRUCTURING

In connection with the CBR and Lumara Health acquisitions, we initiated restructuring programs in the third quarter of 2015 and the fourth quarter of 2014, respectively, which included severance benefits primarily related to certain former CBR and Lumara Health employees. As a result of these restructurings, we recorded charges of approximately \$0.6 million in the three months ended March 31, 2016. In addition, we may record approximately \$0.3 million of additional restructuring charges. We expect to pay substantially all of these restructuring costs by the end of 2016.

The following table outlines the components of our restructuring expenses which were included in current liabilities for the three months ended March 31, 2016 and 2015 (in thousands):

	Three Months l	Ended March 31,
	2016	2015
Accrued restructuring, beginning of period	\$ 2,883	\$ 1,953
Employee severance, benefits and related costs	809	571
Payments	(1,599)	(406)
Accrued restructuring, end of period	\$ 2,093	\$ 2,118

S. RECENTLY ISSUED AND PROPOSED ACCOUNTING PRONOUNCEMENTS

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (FASB") or other standard setting bodies that are adopted by us as of the specified effective date.

In March 2016, the FASB issued ASU No. 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting ("ASU 2016-09"). The new standard involves several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities and classification on the statement of cash flows. ASU 2016-09 will be effective for us on January 1, 2017. We are currently evaluating the potential impact that this standard may have on our financial position, results of operations and statement of cash flows.

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842) ("ASU 2016-02"). This statement requires entities to recognize on its balance sheet assets and liabilities associated with the rights and obligations created by leases with terms greater than twelve months. This statement is effective for annual reporting periods beginning after December 15, 2018, and interim periods within those annual periods and early adoption is permitted. We are currently evaluating the impact of ASU 2016-02 in our condensed consolidated financial statements and we currently expect that most of our operating lease commitments will be subject to the new standard and recognized as operating lease liabilities and right-of-use assets upon our adoption of ASU 2016-02.

In January 2016, the FASB issued ASU 2016-01, Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities ("ASU 2016-01"), which addresses certain aspects of recognition, measurement, presentation, and disclosure of financial instruments. ASU 2016-01 is effective for us on January 1, 2018. We are currently evaluating the impact of our pending adoption of ASU 2016-01 in our condensed consolidated financial statements.

In July 2015, the FASB issued ASU No. 2015-11, Inventory (Topic 330): Simplifying the Measurement of Inventory. The new standard applies only to inventory for which cost is determined by methods other than last-in, first-out and the

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retail inventory method, which includes inventory that is measured using first-in, first-out or average cost. Inventory within the scope of this standard is required to be measured at the lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. The new standard will be effective for us on January 1, 2017. The adoption of this standard is not expected to have a material impact on our results of operations, cash flows or financial position.

In April 2015, the FASB issued ASU No. 2015-03, Interest - Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs ("ASU 2015-03"). The amendments in ASU 2015-03 require that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. In August 2015, the FASB issued ASU No. 2015-15, Interest – Imputation of Interest (Subtopic 835-30): Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line-of-Credit Arrangements ("ASU 2015-15"), which allows presentation of debt issuance costs related to line-of-credit arrangements as either in accordance with the amendments in ASU 2015-03, or as an asset with subsequent amortization of the debt issuance costs ratably over the term of the arrangement. We adopted this guidance retrospectively in the first quarter of 2016. As a result, we presented \$10.7 million and \$11.2 million of unamortized debt issuance costs as of March 31, 2016 and December 31, 2015, respectively, as direct deductions from the carrying amounts of the related debt liabilities. We previously included the \$11.2 million of unamortized debt issuance costs in "other long-term assets" in our condensed consolidated balance sheet as of December 31, 2015.

In August 2014, the FASB issued ASU No. 2014 15, Presentation of Financial Statements - Going Concern: Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern ("ASU 2014-15"). ASU 2014 15 is intended to define management's responsibility to evaluate whether there is substantial doubt about an organization's ability to continue as a going concern and to provide related footnote disclosures, if required. ASU 2014 15 will be effective for annual reporting periods ending after December 15, 2016, which will be our fiscal year ending December 31, 2016, and to annual and interim periods thereafter. We are in the process of evaluating the impact of adoption of ASU 2014 15 in our condensed consolidated financial statements and related disclosures and do not expect it to have a material impact our results of operations, cash flows or financial position.

In May 2014, the FASB issued ASU 2014 09, Revenue from Contracts with Customers, as a new Topic, Accounting Standards Codification Topic 606 ("ASU 2014-09"). The new revenue recognition standard provides a five step analysis of transactions to determine when and how revenue is recognized. The core principle is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In March 2016, the FASB issued ASU No. 2016-08, Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations, which clarifies the implementation guidance on principal versus agent considerations. We are currently evaluating the method of adoption and the potential impact that Topic 606 may have on our financial position and results of operations. These ASUs are effective for entities for interim and annual reporting periods beginning after December 15, 2017, including interim periods within that year, which for us is January 1, 2018. Early adoption is permitted any time after the original effective date, which for us is January 1, 2017. Entities have the choice to apply these ASUs either retrospectively to each reporting period presented or by recognizing the cumulative effect of applying these standards at the date of initial application and not adjusting comparative information. We have not yet selected a transition method and are currently evaluating the impact of this standard in our condensed consolidated financial statements.

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Item 2. Managements' Discussion and Analysis of Financial Condition and Results of Operation

The following information should be read in conjunction with the unaudited financial information and the notes thereto included in this Quarterly Report on Form 10-Q and the audited financial information and the notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2015 (our "Annual Report").

Except for the historical information contained herein, the matters discussed in this Quarterly Report on Form 10-Q may be deemed to be forward looking statements that involve risks and uncertainties. We make such forward looking statements pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and other federal securities laws. In this Quarterly Report on Form 10-Q terminology such as "may," "will," "could," "should," "would," "expect," "anticipate," "continue," "believe," "plan," "estimate," "intend" or other similar words and expressions (as well as ot words or expressions referencing future events, conditions or circumstances) are intended to identify forward looking statements.

Examples of forward-looking statements contained in this report include, without limitation, statements regarding the following: plans to bring to market medical therapies and other innovations that provide clear benefits and improve patients' lives; our plans to continue to expand the impact of our portfolio by delivering on our growth strategy; expectations that results from the Velo pivotal Phase 2b/3a study could be available as early as 2018; expectations and plans as to regulatory and commercial developments and activities, including the pursuit of a broader indication for Feraheme and the expected timing for completion of the enrollment and potential decision from the FDA, requirements and initiatives for clinical trials and studies, post-approval commitments for our products and the next generation development program for Makena; expectations regarding timing of a decision by the U.S. Food and Drug Administration ("FDA") regarding the approval of the manufacture of the single-dose preservative-free Makena at Coldstream; expectations regarding the regulatory timelines and planned studies for the Makena auto-injector, including expectations of the related filing date and launch; the growth of our maternal health portfolio; expectations as to what impact recent regulatory developments will have on our business and competition, expectations regarding our intellectual property, including patent protection and related litigation, and the impact generic and other competition could have on our business; the market opportunities for each of our products and services; plans regarding our sales and marketing initiatives, including our contracting and discounting strategy and efforts to increase patient compliance and continue educational programs for patients and physicians; our expectation of costs to be incurred in connection with and revenue sources to fund our future operations; our expectations regarding the contribution of revenues from our products or services to the funding of our on going operations; expectations regarding the manufacture of all drug substance, drug products and key materials at our third-party manufacturers or suppliers; the strategic fit of the CBR Services into our maternal health portfolio; our expectations regarding customer returns and other revenue-related reserves and accruals; estimates regarding our effective tax rate and our ability to realize our net operating loss carryforwards and other tax attributes; the impact of accounting pronouncements; the effect of product price increases; expected increases in research and development expenses and the timing of our planned research and development projects; expectations regarding our financial results, including revenues, cost of product sales and services, selling, general and administrative expenses, restructuring costs, amortization and other income (expense); our investing activities; estimates and beliefs related to our debt, including our 2023 Senior Notes, Convertible Notes and the 2015 Term Loan Facility; the impact of volume-based and other rebates and incentives; the valuation of certain intangible assets, goodwill, contingent consideration, debt and other assets and liabilities, including our methodology and assumptions regarding fair value measurements; our expectations regarding

competitive pressures and the impact on growth on our product revenues; our plans regarding manufacturing; the manner in which we intend or are required to settle the conversion of our Convertible Notes; and our expectations for our cash, revenue, cash equivalents, investments balances, capital needs and information with respect to any other plans and strategies for our business. Our actual results and the timing of certain events may differ materially from the results discussed, projected, anticipated or indicated in any forward-looking statements.

Any forward looking statement should be considered in light of the factors discussed in Part II, Item 1A below under "Risk Factors" in this Quarterly Report on Form 10-Q and and in Part I, Item 1A in our Annual Report. We caution readers not to place undue reliance on any such forward looking statements, which speak only as of the date they are made. We disclaim any obligation, except as specifically required by law and the rules of the U.S. Securities and Exchange Commission, to publicly update or revise any such statements to reflect any change in company expectations

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or in events, conditions or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward looking statements.

Overview

AMAG Pharmaceuticals, Inc., a Delaware corporation, was founded in 1981. We use our business and clinical expertise to develop and commercialize products that provide clear benefits and improve people's lives. We have a diverse portfolio of products and services in the areas of maternal health, anemia management and cancer supportive care, including Makena® (hydroxyprogesterone caproate injection), services related to the preservation of umbilical cord blood stem cell and cord tissue units operated through Cord Blood Registry® ("CBR"), Feraheme® (ferumoxytol) for Intravenous ("IV") use and MuGard® Mucoadhesive Oral Wound Rinse. We intend to expand the impact of these and future products and services for patients by delivering on our growth strategy, which includes organic growth, as well as the pursuit of products and companies that align with our existing therapeutic areas or those that could benefit from our proven core competencies. Currently, our primary sources of revenue are from sales of Makena, CBR Services and Feraheme.

AMAG's Portfolio of Products and Services

In August 2015, we acquired CBR. CBR is the largest private newborn stem cell bank in the world that offers pregnant women and their families the ability to preserve their newborns' umbilical cord blood and cord tissue for potential future use (the "CBR Services"), which we market and sell directly to consumers. As of March 31, 2016, CBR stored approximately 644,000 umbilical cord blood and cord tissue units. Additional details regarding the acquisition of CBR can be found in Note C, "Business Combinations," to our condensed consolidated financial statements included in this Quarterly Report on Form 10 Q.

In July 2015, we entered into an option agreement with Velo Bio, LLC ("Velo"), a privately held life-sciences company that granted us an option to acquire the rights (the "DIF Rights") to an orphan drug candidate, digoxin immune fab ("DIF"), a polyclonal antibody in clinical development for the treatment of severe preeclampsia in pregnant women. Under the option agreement, Velo will complete a dose ranging study and a Phase 2b/3a clinical study. Following the conclusion of the DIF Phase 2b/3a study, we may terminate, or, for additional consideration, exercise or extend, our option to acquire the DIF Rights. We anticipate that results from the pivotal Phase 2b/3a study could be available as early as 2018. Additional details regarding the Velo agreement can be found in Note P, "Collaboration, License and Other Strategic Agreements," to our condensed consolidated financial statements included in this Quarterly Report on Form 10 Q.

In November 2014, we acquired Lumara Health Inc. ("Lumara Health") and its product Makena, a progestin indicated to reduce the risk of preterm birth in women pregnant with a single baby who have a history of singleton spontaneous preterm birth. Makena was approved by the FDA in February 2011 and was granted orphan drug exclusivity through February 3, 2018. We sell Makena primarily to specialty pharmacies, specialty distributors, which, in turn, sell

Makena to healthcare providers, hospitals, government agencies and integrated delivery systems. Additional details regarding the Lumara Health acquisition can be found in Note C, "Business Combinations," to our condensed consolidated financial statements included in this Quarterly Report on Form 10 Q.

Feraheme was approved for marketing in the U.S. in June 2009 by the FDA for use as an IV iron replacement therapy for the treatment of iron deficiency anemia ("IDA") in adult patients with chronic kidney disease ("CKD"). We began selling Feraheme in July 2009 through our commercial organization, including a specialty sales force. We sell Feraheme to authorized wholesalers and specialty distributors, who, in turn, sell Feraheme to healthcare providers who administer Feraheme primarily within hospitals, hematology and oncology centers, and nephrology clinics.

In June 2013, we entered into a license agreement with Abeona Therapeutics, Inc., under which we acquired the U.S. commercial rights to MuGard for the management of oral mucositis and stomatitis (the "MuGard Rights"). Additional details regarding the acquisition of the MuGard Rights can be found in Note C, "Business Combinations," in our Annual Report.

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Makena Developments

In February 2016, the FDA approved our prior approval supplement to the original Makena New Drug Application ("NDA") filed with the FDA in July 2015 seeking approval of a single-dose (1 mL) preservative-free formulation of Makena to be manufactured by Hospira, Inc., which also manufactures our multidose vial. We began promoting the single-dose preservative-free formulation of Makena to physicians in the second quarter of 2016. We are also pursuing approval of our October 2014 prior approval supplement for Coldstream Laboratories, Inc. ("Coldstream") to be approved to also manufacture the single-dose preservative-free formulation. In May 2015, we received a complete response letter from the FDA for the Coldstream prior approval supplement requesting additional information related to manufacturing procedures for the single-dose preservative-free formulation. We submitted our response to the FDA in March 2016 and are currently expecting a decision from the FDA in the third quarter of 2016. In addition, during the first quarter of 2016, we entered into a new agreement with a leading provider of home nursing services, which had previously utilized compounded hydroxyprogesterone caproate and now will exclusively provide at-home administration of Makena.

We continue to advance our next generation development program for Makena, seeking to enhance the product profile for patients and their healthcare providers. We are working to develop an auto-injector device for subcutaneous administration of Makena, including chemistry, manufacturing and controls ("CMC") development with Antares Pharma, Inc. and pilot clinical studies to establish the appropriate subcutaneous dose. We are planning to conduct a definitive pharmacokinetics ("PK") bioequivalence study to support our regulatory filing, which, based on our current timelines and assumptions, we anticipate filing in the second quarter of 2017. In addition, we expect to conduct an additional study intended to capture certain measures to support clinical superiority of the auto-injector over the existing intramuscular injection, which may provide the basis for new orphan exclusivity.

Makena was approved under the provisions of the FDA's "Subpart H" Accelerated Approval regulations. As a condition of approval under Subpart H, the FDA required that Makena's sponsor perform certain adequate and well-controlled post-approval clinical studies to verify and describe the clinical benefit of Makena as well as fulfill certain other post-approval commitments. We have completed a PK trial of women taking Makena and are currently conducting two other studies to fulfill these obligations, one of which is due to the FDA by December 2018 and the other by October 2020.

Feraheme Developments

In March 2015, following discussions with the FDA, we updated our Feraheme label to include (a) the addition of a boxed warning related to the risks of serious hypersensitivity reactions or anaphylaxis, which risks were previously described only in the Warnings and Precautions section; (b) revisions to the Dosing and Administration section to indicate that Feraheme should only be administered by IV infusion; and (c) modifications to the Warnings and Precautions section to include a statement that patients with a history of multiple drug allergies may have a greater risk of anaphylaxis with parenteral iron products.

In pursuit of a broader indication for Feraheme to include the treatment of IDA in adult patients who had failed or could not tolerate oral iron or in whom oral iron was contraindicated, we have recently begun enrolling patients in a new head-to-head Phase 3 clinical trial evaluating Feraheme in adults with IDA, excluding patients on hemodialysis. This new trial is a randomized, double-blind multicenter non-inferiority trial that will evaluate the incidence of moderate to severe hypersensitivity reactions (including anaphylaxis) and moderate to severe hypotension with Feraheme compared to ferric carboxymaltose infusion. Two thousand patients will be randomized in a 1:1 ratio into one of two treatment groups, those receiving 1.02 grams of Feraheme IV infusion or those receiving 1.5 grams of ferric carboxymaltose IV infusion. We initiated this trial in the first quarter of 2016 and expect to complete enrollment in 2017 with a potential regulatory decision in late 2018.

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Results of Operations - Three Months Ended March 31, 2016 and 2015

Total revenues for the three months ended March 31, 2016 and 2015 consisted of the following (in thousands):

	Three Months Ended March 31,			2	016 to 2015	5		
	20)16	20	15	\$	Change	% Change	e
U.S. product sales, net								
Makena	\$	65,032	\$	55,529	\$	9,503	17	%
Feraheme		24,195		21,458		2,737	13	%
MuGard		337		428		(91)	(21)	%
Total		89,564		77,415		12,149	16	%
Service revenues, net		19,520		_		19,520	N/A	
License fee, collaboration and other revenues		216		12,090		(11,874)	(98)	%
Total Revenues	\$	109,300	\$	89,505	\$	19,795	22	%

Our total revenues for the three months ended March 31, 2016 increased by \$19.8 million as compared to the same period in 2015, primarily as the result of \$19.5 million of CBR service revenue in the three months ended March 31, 2016 following our August 2015 acquisition of CBR and a \$12.1 million increase in our product revenues. This increase in revenues was partially offset by an \$11.9 million decrease in license fee, collaboration and other revenues during the three months ended March 31, 2016 as compared to the same period in 2015 due to the recognition of \$10.0 million of previously deferred revenues in the first quarter of 2015 from the December 2014 termination of a license, development and commercialization agreement (as amended, the "Takeda Agreement") with Takeda Pharmaceutical Company Limited.

Product Sales

Net U.S. product sales increased by \$12.1 million during the three months ended March 31, 2016 as compared to the same period in 2015 primarily due a \$9.5 million increase in net Makena sales and a \$2.7 million increase in net Feraheme sales. We anticipate that sales of Makena will increase for the remainder of 2016 as compared to the first quarter of 2016 as we continue to gain market share from compounded product due to the availability of the single-dose, preservative-free formulation of Makena, which was approved in February 2016. We anticipate that we will also continue to gain market share through broader reimbursement of Makena, improved patient compliance and continued educational programs for patients and physicians regarding treatment with Makena. For example, we recently entered into a relationship with a leading provider of home nursing services, which will offer at-home administration of Makena by a trained professional. In addition, we anticipate that sales of Feraheme will be relatively consistent for the remainder of the year as compared to the first quarter of 2016.

Total gross U.S. product sales were offset by product sales allowances and accruals for the three months ended March 31, 2016 and 2015 as follows (in thousands):

	Three Month	is Ended Marcl	h 31,	,					
	2016	Percent of gross U.S.		2015	Percent of gross U.S.		2016 to 201		
	2016	product sales		2015	product sales		\$ Change	% Change	;
Gross U.S. product									
sales	\$ 152,192			\$ 125,517			\$ 26,675	21	%
Less provision for									
product sales									
allowances and									
accruals:									
Contractual									
adjustments	45,581	30	%	35,134	28	%			
Governmental rebates	17,047	11	%	12,968	10	%			
Total	62,628	41	%	48,102	38	%			
Net U.S. product sales	\$ 89,564			\$ 77,415			\$ 12,149	16	%

Gross U.S. product sales increased by \$26.7 million during the three months ended March 31, 2016 as compared to the same period in 2015 primarily due to increases of \$19.1 million and \$7.7 million of Makena and Feraheme gross

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sales for the three months ended March 31, 2016 as compared to the same period in 2015, respectively. Of the \$19.1 million increase in gross Makena sales in 2015, \$14.4 million was due to increased volume of Makena and \$4.7 million was due to price increases. Of the \$7.7 million increase in gross Feraheme sales, \$4.8 million was due to price increases and \$2.9 million was due to increased volume sold. This total increase in gross product sales was partially offset by \$14.5 million of additional allowances and accruals in the first quarter of 2016 as compared to the same period in 2015. As a result, total net product sales increased by \$12.1 million, or approximately 16%, during the three months ended March 31, 2016 as compared to the same period in 2015. We expect gross product sales to increase for the remainder of 2016 based on increased units sold and projected price increases to our products.

We recognize U.S. product sales net of certain allowances and accruals in our condensed consolidated statement of operations at the time of sale. Our contractual adjustments include provisions for returns, pricing and prompt payment discounts, as well as wholesaler distribution fees, and volume-based and other commercial rebates. Governmental rebates relate to our reimbursement arrangements with state Medicaid programs. The increases in contractual adjustments and governmental rebates primarily relate to the growth in sales to state Medicaid agencies.

Service Revenues

The \$19.5 million in service revenues recorded in the three months ended March 31, 2016 was due to the addition of the CBR Services to our portfolio in August 2015. We expect service revenues to increase for the remainder of 2016 due to certain purchase accounting adjustments that contribute to revenue as well as an increased the number of cord blood and cord tissue units in our storage facility and a decrease in the magnitude and prevalence of discounting programs.

License Fee, Collaboration and Other Revenues

Our license fee, collaboration and other revenues for the three months ended March 31, 2016 decreased by \$11.9 million as compared to the same period in 2015 primarily as the result of the December 2014 termination of the Takeda Agreement.

We expect that our license fee, collaboration and other revenues, if any, will be immaterial for the remainder of 2016 due to the termination of the Takeda Agreement.

Costs and Expenses

Cost of Product Sales

Cost of product sales for the three months ended March 31, 2016 and 2015 were as follows (in thousands):

Three Months Ended March 31, 2016 to 2015 2016 2015 \$ Change % Change

Cost of product sales	\$ 18,300		\$ 21,026	\$ (2,726)	(13)	%
Percentage of net product sales	20	%	27	%		

Our cost of product sales are primarily comprised of manufacturing costs, costs of managing our contract manufacturers, and costs for quality assurance and quality control associated with our U.S. product sales, and the amortization of product-related intangible assets and inventory step up in connection with the November 2014 acquisition of Lumara Health. The \$2.7 million decrease in our cost of product sales for the three months ended March 31, 2016 as compared to the same period in 2015 was primarily attributable to a \$2.1 million decrease of amortization of the Makena inventory step-up and a \$3.6 million decrease related to inventory reserves, partially offset by a \$2.0 million increase in amortization of the Makena product intangible asset.

We expect our cost of product sales as a percentage of net product sales excluding any impact from the amortization of the Makena intangible asset and the amortization of inventory step-up of Makena inventory to increase slightly for the remainder of 2016 as compared to the first quarter of 2016 primarily due to increased sales of Makena.

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Cost of Services

Cost of services for the three months ended March 31, 2016 and 2015 were as follows (in thousands):

	Three Months Ended March 31,					2016 to 2015 \$		
	2016			2015		Change	% Change	e
Cost of services	\$	5,526		\$		\$ 5,526	N/A	%
Percentage of service revenues		28	%		— %	,		

Cost of services includes the transportation of the umbilical cord blood stem cells and cord tissue from the hospital and direct material plus labor costs for processing, cryogenic storage and collection kit materials. The \$5.5 million in cost of services recorded in the three months ended March 31, 2016 was due to the addition of the CBR Services to our portfolio in August 2015.

Research and Development Expenses

Research and development expenses for the three months ended March 31, 2016 and 2015 consisted of the following (in thousands):

	Three Months Ended March 31,				2016 to 2015		
	2016		6 2015		\$ Change	% Chan	ge
External research and development expenses					_		
Feraheme-related costs	\$	5,891	\$	2,052	\$ 3,839	>100	%
Makena-related costs		3,608		1,518	2,090	>100	%
Other external costs		844		348	496	>100	%
Total		10,343		3,918	6,425	>100	%
Internal research and development expenses		3,886		3,070	816	27	%
Total research and development expenses	\$	14,229	\$	6,988	\$ 7,241	>100	%

Total research and development expenses incurred in the three months ended March 31, 2016 increased by \$7.2 million, or greater than 100%, as compared to the same period in 2015. The increase was primarily due to approximately \$5.2 million in new costs related to our Phase 3 clinical trial evaluating Feraheme in adults with IDA, which was initiated in the first quarter of 2016, and approximately \$2.0 million in costs related to our Makena next generation development program.

We expect our research and development expenses to continue to increase during the remainder of 2016 as compared to the first quarter of 2016 due to the Phase 3 clinical trial evaluating Feraheme in adults with IDA, the ongoing clinical trials related to Makena's post-approval commitments and the Makena next generation development program.

Research and Development Activities

We track our external costs on a major project basis, in most cases through the later of the completion of the last trial in the project or the last submission of a regulatory filing to the FDA. We do not track our internal costs by project since our research and development personnel work on a number of projects concurrently and much of these costs benefit multiple projects or our operations in general. The following major research and development projects were ongoing as of March 31, 2016:

· Makena: This project currently includes studies conducted as part of the post-approval commitments under the provisions of the FDA's "Subpart H" Accelerated Approval regulations as well as certain research and development expenses associated with our next generation development program, including: (a) an ongoing efficacy and safety clinical study of Makena; (b) an ongoing follow-up study of the children born to mothers from the efficacy and safety clinical study; (c) a completed PK trial of women taking Makena; and (d) studies associated with our auto-injector device.

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- · Feraheme to treat IDA in CKD patients: This project currently includes the following: (a) a completed clinical study evaluating Feraheme treatment as compared to treatment to another IV iron; (b) a pediatric program as part of our post-approval Pediatric Research Equity Act requirement to support pediatric CKD labeling of Feraheme, which we have elected to terminate due to difficulty in enrollment, and we plan to work with the FDA to discuss the path forward regarding this post-approval commitment for Feraheme; and (c) a completed global multi-center randomized clinical trial to determine the safety and efficacy of repeat doses of Feraheme as compared to iron sucrose for the treatment of IDA in patients with hemodialysis dependent CKD ("FACT"). This study has recently been completed and we are in the process of analyzing the data.
- · Feraheme to treat IDA regardless of the underlying cause: This project currently includes a randomized, double-blind multicenter non-inferiority trial that will evaluate the incidence of moderate to severe hypersensitivity reactions (including anaphylaxis) and moderate to severe hypotension with Feraheme compared to ferric carboxymaltose infusion in adults with IDA, which was initiated in the first quarter of 2016.

From November 12, 2014 (the date of the Lumara Health acquisition) through March 31, 2016, we have incurred aggregate external research and development expenses of approximately \$11.9 million related to our current program for Makena, described above. We currently estimate that the total remaining external costs associated with this development project will be in the range of approximately \$20.0 million to \$25.0 million over the next several years.

Through March 31, 2016, we have incurred aggregate external research and development expenses of approximately \$42.1 million related to our current program for the development of Feraheme to treat IDA in CKD patients, described above. We currently estimate that the total remaining external costs associated with this development project will be less than \$2.0 million.

We incurred approximately \$57.8 million of aggregate external research and development expenses related to our program for the development of Feraheme to treat IDA regardless of the underlying cause up to the submission of our sNDA in 2013. In January 2014, we received a complete response letter from the FDA for the sNDA informing us that our sNDA could not be approved in its present form and stating that we had not provided sufficient information to permit labeling of Feraheme for safe and effective use for the proposed broader indication. In the third quarter of 2015, based on feedback received from the FDA on a proposed clinical trial to address certain deficiencies noted by the FDA in our complete response letter, we commenced start up activities related to this program, including a head-to-head Phase 3 clinical trial, described above. We began enrolling patients in the first quarter of 2016 and currently estimate that the total remaining external costs associated with this development project will be in the range of approximately \$25.0 million to \$30.0 million through the end of 2017.

Selling, General and Administrative Expenses

Selling, general and administrative expenses for the three months ended March 31, 2016 and 2015 consisted of the following (in thousands):

	Three Months Ended March 31,				2016 to 2015		
	2016		2015		\$ Change	% Change	
Compensation, payroll taxes and benefits	\$	20,760	\$	13,217	\$ 7,543	57	%
Professional, consulting and other outside services		29,137		14,147	14,990	>100	%
Fair value of contingent consideration liability		5,056		2,599	2,457	95	%
Amortization expense related to customer							
relationship intangible		3,132			3,132	N/A	
Equity-based compensation expense		5,090		2,149	2,941	>100	%
Total selling, general and administrative expenses	\$	63,175	\$	32,112	\$ 31,063	97	%

Total selling, general and administrative expenses incurred in the three months ended March 31, 2016 increased by \$31.1 million, or approximately 97%, as compared to the same period in 2015 for the following reasons:

^{• \$7.5} million increase in compensation, payroll taxes and benefits primarily due to increased costs associated with additional personnel in connection with the August 2015 CBR acquisition;

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- \$6.7 million increase in sales and marketing consulting, professional fees, and other expenses primarily due to costs related to CBR marketing activities and pre-approval activities of the single-dose formulation of Makena;
- \$8.3 million increase in general and administrative consulting, professional fees and other expenses primarily due to increased costs associated with CBR acquisition;
- \$2.5 million increase to the contingent consideration liability due to a \$2.3 million increase to the Makena related contingent consideration and a \$0.2 million increase to the MuGard related contingent consideration;
- \$3.1 million increase in amortization expense related to the CBR customer relationship intangible; and
- \$2.9 million increase in equity based compensation expense due primarily to the expense associated with equity awards to new and existing employees, including additional employees from the CBR acquisition.

We expect that total selling, general and administrative expenses will remain relatively consistent for the remainder of 2016 as compared to first quarter of 2016.

Restructuring Expenses

In connection with the August 2015 CBR acquisition and the November 2014 Lumara Health acquisition, we initiated restructuring programs, which included severance benefits related to former CBR and Lumara Health employees. As a result of these restructurings, we recorded charges of approximately \$0.6 million in each of the three months ended March 31, 2016 and 2015. In addition, we may record approximately \$0.3 million of additional restructuring charges. We expect to pay substantially all of the restructuring costs by the end of 2016.

Other Income (Expense)

Other income (expense) for the three months ended March 31, 2016 decreased by \$7.2 million as compared to the same period in 2015 primarily as the result of the recognition of an additional \$8.1 million in interest expense in the first quarter of 2016, which was primarily comprised of the amortization of debt discount, contractual interest expense and amortization of debt issuance costs in connection with our current debt obligations as compared to the same quarter in 2015.

We expect our net other income (expense) to remain constant for the remainder of 2016 as compared to the first quarter of 2016 as a result of the increase in interest expense due to our 2015 debt financings.

Income Tax Expense (Benefit)

For the three months ended March 31, 2016, we recognized an income tax benefit of \$2.5 million, representing an effective tax rate of 25%. The difference between the expected statutory federal tax rate of 35% and the 25% effective tax rate for the three months ended March 31, 2016, was primarily attributable to the impact of state income taxes, stock compensation, and federal research and development and orphan drug tax credits, partially offset by non-deductible contingent consideration expense associated with the Lumara Health acquisition. For the three months ended March 31, 2015, we recognized income tax expense of \$5.6 million, representing an effective tax rate of 30%. The difference between the expected statutory federal tax rate of 35% and the 30% effective tax rate was attributable to the impact of state income taxes offset by the net benefit of federal orphan drug tax credits and the impact of a valuation allowance release related to certain deferred tax assets.

Liquidity and Capital Resources

General

We currently finance our operations primarily from the sale of our products and services and cash generated from our investing and financing activities. We expect to continue to incur significant expenses as we continue to market, sell

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and contract for the manufacture of Makena and Feraheme, as we market and sell the CBR Services and MuGard, as we pursue the next generation development program for Makena, and as we further develop and seek U.S. regulatory approval for Feraheme for the treatment of IDA in a broad range of patients. For a detailed discussion regarding the risks and uncertainties related to our liquidity and capital resources, please refer to our Risk Factors in Part I, Item 1A of our Annual Report.

Cash, cash equivalents, investments and certain financial obligations as of March 31, 2016 and December 31, 2015 consisted of the following (in thousands):

	March 31,	December			
	2016	31, 2015	\$ Change	% Change	
Cash and cash equivalents	\$ 203,389	\$ 228,705	\$ (25,316)	(11)	%
Investments	276,816	237,626	39,190	16	%
Total	\$ 480,205	\$ 466,331	\$ 13,874	3	%
Outstanding principal on 2023 Senior Notes	\$ 500,000	\$ 500,000	\$ —		%
Outstanding principal on Convertible Notes	200,000	200,000	—		%
Outstanding principal on 2015 Term Loan					
Facility	341,250	345,625	(4,375)	(1)	%
Total	\$ 1,041,250	\$ 1,045,625	\$ (4,375)	(0)	%

The \$13.9 million increase in cash, cash equivalents and investments as of March 31, 2016, as compared to December 31, 2015, was primarily due to cash flow from product and service sales, partially offset by expenditures to fund our operations, service our debt, and \$7.6 million of cash used to repurchase our common stock.

In March 2015, we sold approximately 4.6 million shares of our common stock at a public offering price of \$44.00 per share, resulting in net proceeds to us of approximately \$188.8 million. In addition, in August 2015, we sold approximately 3.6 million shares of our common stock at a public offering price of \$63.75 per share, resulting in net proceeds to us of approximately \$218.6 million.

We expect that our cash, cash equivalents and investments balances, in the aggregate, will increase due to increased net product sales during the remainder of 2016, partially offset by potential milestone payments and debt-related payments. Our expectation assumes our continued investment in the development and commercialization of our products. We believe that our cash, cash equivalents and investments as of March 31, 2016, and the cash we currently expect to receive from sales of our products and services, earnings on our investments, will be sufficient to satisfy our cash flow needs for the foreseeable future, including a potential \$100.0 million milestone payment expected to be paid in 2016 to the former Lumara Health security holders based on the achievement of a net sales milestone of Makena.

In August 2015, in connection with the CBR acquisition, we completed a private placement of \$500.0 million aggregate principal amount of 7.875% Senior Notes due 2023 (the "2023 Senior Notes") and entered into a credit agreement with a group of lenders and Jefferies Finance LLC, as administrative and collateral agent, that provided us with, among other things, a six-year \$350.0 million term loan facility (the "2015 Term Loan Facility"). The 2023 Senior Notes, which are senior unsecured obligations, will mature on September 1, 2023 and will bear interest at a rate of 7.875% per year, with interest payable semi-annually on September 1 and March 1 of each year, beginning on March 1, 2016. We borrowed the full \$350.0 million available under the 2015 Term Loan Facility in August 2015. In addition, the 2015 Term Loan Facility includes an annual mandatory prepayment of the debt in an amount equal to 50% of our excess cash flow (as defined in the 2015 Term Loan Facility) as measured on an annual basis, beginning with the fiscal year ending December 31, 2016. On or after December 31, 2016, the applicable excess cash flow percentage shall be reduced based on the total net leverage ratio as of the last day of the period. For additional information, see Note Q, "Debt," to our condensed consolidated financial statements included in this Quarterly Report on Form 10 Q.

In February 2014, we issued \$200.0 million aggregate principal amount of 2.5% convertible senior notes due February 15, 2019 (the "Convertible Notes"), as discussed in more detail in Note Q, "Debt," to our condensed

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consolidated financial statements included in this Quarterly Report on Form 10 Q. The Convertible Notes are senior unsecured obligations and bear interest at a rate of 2.5% per year, payable semi-annually in arrears on February 15 and August 15 of each year. The Convertible Notes will mature on February 15, 2019, unless repurchased or converted earlier. The Convertible Notes will be convertible into cash, shares of our common stock, or a combination thereof, at our election (subject to certain limitations in the 2015 Term Loan Facility), at a conversion rate of approximately 36.9079 shares of common stock per \$1,000 principal amount of the Convertible Notes, which corresponds to a conversion price of approximately \$27.09 per share of our common stock. The conversion rate is subject to adjustment from time to time. Based on the last reported sale price of our common stock during the last 30 trading days of the first quarter of 2016, the Convertible Notes were not convertible as of March 31, 2016.

Share Repurchase Program

In January 2016, we announced that our board of directors had authorized a program to repurchase up to \$60.0 million in shares of our common stock. The repurchase program does not have an expiration date and may be suspended for periods or discontinued at any time. Under the program, we may purchase our stock from time to time at the discretion of management in the open market or in privately negotiated transactions. The number of shares repurchased and the timing of the purchases will depend on a number of factors, including share price, trading volume and general market conditions, along with working capital requirements, general business conditions and other factors. We may also from time to time establish a trading plan under Rule 10b5-1 of the Securities and Exchange Act of 1934 to facilitate purchases of our shares under this program. During the three months ended March 31, 2016, we repurchased and retired 320,000 shares of common stock under this repurchase program for \$7.6 million, at an average purchase price of \$23.63 per share.

Cash flows from operating activities

Net cash provided by operating activities for the three months ended March 31, 2016 was \$26.6 million as compared to net cash provided by operating activities of \$29.4 million for the same period in 2015. The decrease in net cash provided by operating activities was primarily due to an increase in net loss of approximately \$20.4 million, partially offset by changes within operating activities of approximately \$17.6 million. We expect to generate cash from operations as we continue to grow our business, partially offset by increased expenditures to support our growth.

Cash flows from investing activities

Net cash used in investing activities in the three months ended March 31, 2016 was \$38.6 million as compared to net cash used in investing activities of \$92.5 million for the same period in 2015. Cash used in investing activities decreased during the three months ended March 31, 2016 primarily due to a \$30.5 million decrease in cash used to purchase investments and a \$24.0 million increase in net proceeds from the sales or maturities of investments. The

cash flows from investing activities during the three months ended March 31, 2015 reflect the investment of a portion of the \$188.8 million we received following the sale of 4.6 million shares of our common stock in an underwritten public offering in the first quarter of 2015.

Cash flows from financing activities

Net cash used in financing activities in the three months ended March 31, 2016 was \$13.3 million as compared to \$187.6 million net cash provided by financing activities in the three months ended March 31, 2015. Cash flows from financing activities decreased during the three months ended March 31, 2016 as compared to the same period in 2015 primarily due to the \$189.1 million net proceeds we received in March 2015 in an underwritten public offering and by \$7.6 million of cash used to repurchase shares of our common stock under our share repurchase program in the first quarter of 2016.

Off Balance Sheet Arrangements

As of March 31, 2016, we did not have any off balance sheet arrangements as defined in Regulation S K, Item 303(a)(4)(ii).

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Impact of Recently Issued and Proposed Accounting Pronouncements

See Note S, "Recently Issued and Proposed Accounting Pronouncements," to our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for information regarding new accounting pronouncements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

There have been no material changes with respect to the information appearing in Part II, Item 7A, "Quantitative and Qualitative Disclosures About Market Risk," in our Annual Report.

Item 4. Controls and Procedures.

Managements' Evaluation of our Disclosure Controls and Procedures

Our principal executive officer and principal financial officer, after evaluating the effectiveness of our "disclosure controls and procedures" (as defined in the Exchange Act Rule 13a-15(e), or Rule 15d-15(e)), with the participation of our management, have each concluded that, as of the end of the period covered by this Quarterly Report on Form 10-Q, our disclosure controls and procedures were effective and were designed to ensure that information we are required to disclose in the reports that we file or submit under the Securities Exchange Act of 1934, as amended, is accumulated and communicated to management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure, and is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms. It should be noted that any system of controls is designed to provide reasonable, but not absolute, assurances that the system will achieve its stated goals under all reasonably foreseeable circumstances. Our principal executive officer and principal financial officer have each concluded that our disclosure controls and procedures as of the end of the period covered by this report are effective at a level that provides such reasonable assurances.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting (as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) that occurred during the three months ended March 31, 2016 that have materially affected, or that are reasonably likely to materially affect, our internal control over financial reporting.

Item 1. Legal Proceedings

See Note O, "Commitments and Contingencies," to our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q for information regarding our legal proceedings, including how we accrue liabilities for legal contingencies.

Item 1A. Risk Factors

There have been no material changes from the Risk Factors disclosed in Part I, Item 1A, of our Annual Report.

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

The following table provides certain information with respect to our purchases of shares of our stock during the three months ended March 31, 2016.

	Total Number of Shares		verage Price id per	Total Number of Shares Purchased as Part of Publicly Announced	Maximum Number of Shares that May Yet Be Purchased Under the
Period	Purchased(1)	Sh	are	Plans or Programs (2)	Plans or Programs (2)
January 1, 2016					
through January 31,					
2016	7,933	\$	25.20		
February 1, 2016					
through February					
29, 2016	41,599		26.96		
March 1, 2016 through					
March 31, 2016	338,052		23.70	320,000	2,219,145
Total	387,584	\$	24.08	320,000	2,219,145

⁽¹⁾ Consists of the surrender of 67,584 shares of our common stock withheld by us to satisfy the minimum tax withholding obligations in connection with the vesting of restricted stock units held by our employees.

⁽²⁾ During the first quarter of 2016, we repurchased 320,000 shares of our common stock in open-market transactions for \$7.6 million at an average purchase price of \$23.63 per share. These shares were purchased pursuant to a repurchase program authorized by our board of directors that was announced in January 2016 to repurchase up to \$60.0 million of our common stock. The repurchase program does not have an expiration date and may be suspended for periods or discontinued at any time.

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Item 6. Exhibits

Exhibit	
Number	Description
31.1+	Certification Pursuant to Rule 13a 14(a)/15d 14(a) of the Exchange Act, as Adopted Pursuant to
	Section 302 of the Sarbanes Oxley Act of 2002
31.2+	Certification Pursuant to Rule 13a 14(a)/15d 14(a) of the Exchange Act, as Adopted Pursuant to
	Section 302 of the Sarbanes Oxley Act of 2002
32.1++	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the
	Sarbanes Oxley Act of 2002
32.2++	Certification 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.DEF+	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB+	XBRL Taxonomy Extension Label Linkbase Document
101.PRE+	XBRL Taxonomy Extension Presentation Linkbase Document

- + Exhibits marked with a plus sign ("+") are filed herewith.
- ++ Exhibits marked with a double plus sign ("++") are furnished herewith.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

AMAG

PHARMACEUTICALS, INC.

By: /s/ William

K. Heiden William K. Heiden Chief Executive Officer

(Principal Executive Officer)

Date: May 5, 2016

AMAG

PHARMACEUTICALS, INC.

By: /s/ Edward

Edward Myles Senior Vice President of Finance, Chief Financial Officer and Treasurer (Principal Financial and

Myles

Accounting Officer)

Date: May 5, 2016

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Exhibit

Number Description

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101.CAL+	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF+	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB+	XBRL Taxonomy Extension Label Linkbase Document
101.PRE+	XBRL Taxonomy Extension Presentation Linkbase Document

- + Exhibits marked with a plus sign ("+") are filed herewith.
- ++ Exhibits marked with a double plus sign ("++") are furnished herewith.