

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

August 17, 2012

Via E-mail
Mr. Scott A. Holmes
Chief Accounting Officer, Vice President and Controller
AMAG Pharmaceuticals, Inc.
100 Hayden Avenue
Lexington, MA 02421

Re: AMAG Pharmaceuticals, Inc.

Form 10-K for the Fiscal Year Ended December 31, 2011

Filed March 8, 2012

Form 10-Q for the Quarterly Period Ended June 30, 2012

Filed August 7, 2012 File No. 001-10865

Dear Mr. Holmes:

We have reviewed your filings and have the following comments. In our comments, we ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within 10 business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response. Please furnish us a letter on EDGAR under the form type label CORRESP that keys your responses to our comments.

After reviewing any information you provide in response to our comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2011

Management's Discussion and Analysis of Financial Condition and Results of Operations
Results of Operations—Years Ended December 31, 2011, 2010 and 2009
Revenues, page 67

1. Based on the information in the table on page 69, discounts and chargebacks charged against sales increased as a percentage of gross sales from 3.6% in 2009 to 6.2% in 2010 and 18.7% in 2011. From your Form 10-Q for the quarter ended June 30, 2012 this percentage increases to 29.3% for the first half of 2012 and 30.2% for the second quarter of 2012. Meanwhile, government and other rebates stay relatively flat at 19.6% of gross sales in 2009 and 19.9% in 2010 but then decline to 11.6% in 2011 and 7.2% in the first

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half of 2012. Please provide us proposed revised disclosure to be included in future periodic reports that addresses the following comments:

- Please explain the underlying causes for your historical fluctuations in charges for your discounts and chargebacks and your government and other rebates.
- Although you indicate that you expect your total future reserves as a percentage of gross revenue to increase during 2012, please explain whether or not you expect the government and other rebates category to continue to decline and why.
- Please disclose the impact of recent healthcare reform legislation on your financial statements including:
 - o the amount of the reduction to revenues for the increased Medicaid rebate in 2011 and 2010 and for additional rebate associated with the Medicare Part D "donut hole" in 2011;
 - the amount of the branded prescription drug fee you recorded in your statement of earnings in 2011, in which line item it is classified therein and highlight that this fee is not tax deductible; and
 - o if you believe that the expected effects of health care reform legislation in 2012 and beyond will be materially different than the 2011 trends, include the expected effects in the proposed revised disclosure.

Form 10-Q for the Quarterly Period Ended June 30, 2012

Notes to Condensed Consolidated Financial Statements Note J: Collaborative Agreements, page 20

2. In the first paragraph of your discussion of your Takeda agreement on page 20 you indicate that your June 2012 amendment does not result in a material modification of the original agreement. Please provide us your analysis demonstrating why the changes you identify do not represent a material modification. In this regard, the removal of a geographic territory from the agreement, the change in manufacturing provisions given your planned divestiture of your manufacturing facility, the change in patent related provisions and the change in milestone consideration appear to be potential material changes.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings include the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

• the company is responsible for the adequacy and accuracy of the disclosure in the filings;

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- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Mark Brunhofer, Staff Accountant, at (202) 551-3638 or Gus Rodriguez, Accounting Branch Chief, at (202) 551-3752 if you have questions regarding the comments. In this regard, do not hesitate to contact me at (202) 551-3679.

Sincerely,

/s/ Gus Rodriguez for Jim Rosenberg

Jim B. Rosenberg Senior Assistant Chief Accountant