

Via Facsimile and U.S. Mail
Mail Stop 4720

May 20, 2010

Michael R. Dougherty
President, Chief Executive Officer and Director
Adolor Corporation
700 Pennsylvania Drive
Exton, Pennsylvania 19341

Re: Adolor Corporation
Form 10-K for the fiscal year ended December 31, 2009
Filed February 26, 2010
Schedule 14A filed April 5, 2010
File No. 000-30039

Dear Mr. Dougherty:

We have reviewed the above listed filings and have the following comments. In our comments, we ask you to provide us with information to better understand your disclosure. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the filing in which you intend to first include it. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. After reviewing the information provided, we may raise additional comments and/or request that you amend your filing.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the fiscal year ended December 31, 2009

Item 1. Business, page 3

1. We note your discussion of collaboration and license agreements relating to ENTEREG starting on page 4. Please provide draft disclosure to be included in your next Form 10-K which includes the following information:

- The total potential milestone payments to be received under your collaboration agreement with Glaxo Group Limited;
- The total potential milestone payments due under the Roberts license agreement to Shire U.S. Inc. and Eli Lilly and Company;
- The range of royalties within ten percent to be paid under the Roberts license agreement; and
- The range of royalties within ten percent to be received under your collaboration agreement with Pfizer Inc.

Intellectual Property Position and Regulatory Exclusivity, page 5

2. We note the following statement on page 5: "We have rights to patents related to ENTEREG that will expire between 2011 and 2020, including U.S. patents claiming the composition of alvimopan that will expire in 2011 and 2013...We have rights to other patents and patent applications that also may protect ENTEREG. These patents include U.S. patents claiming the use of ENTEREG that expire in 2020 and various formulation patents." Please provide draft disclosure to be included in your next Form 10-K which discloses the number of patents related to ENTEREG to which the company currently holds rights and the jurisdictions of each. Also, to the extent you have not discussed the license agreements under which these patent rights are held and you consider the patents material to your business, please disclose the material terms of the license agreements including the parties thereto, the term and termination provisions, the total potential milestone payments and any royalties to be paid under each.

Schedule 14A filed April 5, 2010

Has the Company considered whether its compensation policies and practices are reasonably likely to have a material adverse effect on the Company? page 8

3. We note your disclosure in response to Item 402(s) of Regulation S-K on page 8 of the filing. Please describe the process you undertook to reach the conclusion that your compensation policies are not reasonably likely to have a material adverse effect on the Company.

Discussion and Analysis of our 2009 Compensation Program and Awards, page 16

Bonus Plan, page 17

4. We note your discussion of your 2009 Corporate Objectives on page 17. Please provide draft disclosure to be included in your next Form 10-K which quantifies

the “commercial objective” and “financial objective” listed as bullet points one and three, respectively. Please also discuss how individual performance is evaluated in the context of the bonus plan. Finally, please confirm that you will discuss how the level of achievement of each of the Corporate Objectives and individual performance translate into the compensation awarded in your next Form 10-K.

Long-term Incentive Compensation, page 19

5. We note the following statement on page 19: “In determining the mix of stock options and deferred stock, the Committee considers the following factors: the total shares available under the Plans and the most efficient use of the available shares; Peer Group comparisons; and retention of the NEO’s.” Please confirm that you will discuss how each of these factors translates into the stock options and DSUs awarded in your next Form 10-K.

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Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your response to our comments and provides the requested information. Detailed letters greatly facilitate our review. Please furnish the letter to us via EDGAR under the form type label CORRESP.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in your letter, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; 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.

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In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

Please contact Laura Crotty, Staff Attorney, at (202) 551-3563 or myself at (202) 551-3715 with any questions.

Sincerely,

Jeffrey P. Riedler
Assistant Director