



DIVISION OF  
CORPORATION FINANCE

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

November 3, 2010

Roger L. Hawley  
Chief Executive Officer  
Zogenix, Inc.  
12671 High Bluff Drive, Suite 200  
San Diego, CA 92130

**Re: Zogenix, Inc.  
Amendment No. 2 to Registration Statement on Form S-1  
Filed October 27, 2010  
File No. 333-169210**

Dear Mr. Hawley:

We have reviewed your response letters filed October 27, 2010 and November 1, 2010 and the amended registration statement filed October 27, 2010 and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Consolidated Financial Statements  
Notes to Consolidated Financial Statements  
8. Convertible Preferred Stock Warrants, page F-38

1. With respect to the Amended Oxford Agreement, please revise to disclose under what circumstances the exercise price of the warrants can be adjusted and explain to us why you use the Black-Scholes option pricing model, instead of a binomial or lattice pricing model to value your warrants. It appears that binomial or lattice models are better suited to handle the potential changes to your warrant exercise price.

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Correspondence dated November 1, 2010  
Report of Independent Registered Public Accounting Firm, page F-2

2. The audit opinion contains conditional language. Please note that this language must be removed prior to effectiveness.

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 the information the Securities Act of 1933 and all applicable Securities 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.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Tabatha Akins at (202) 551-3658 or Don Abbott at (202) 551-3608 if you have questions regarding comments on the financial statements and related matters. Please contact Jennifer Riegel at (202) 551-3575 or me at (202) 551-3715 with any other questions.

Sincerely,

Jeffrey Riedler  
Assistant Director

cc: Scott N. Wolfe, Esq.  
Cheston J. Larson, Esq.  
Matthew T. Bush, Esq.  
Latham & Watkins LLP  
12636 High Bluff Drive, Suite 400  
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