



DIVISION OF  
CORPORATION FINANCE

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

Mail Stop 4631

April 12, 2010

**Via U.S. Mail**

Douglas T. Sheehy  
Senior Vice President, General Counsel and Secretary  
Codexis, Inc.  
200 Penobscot Drive  
Redwood City, CA 94063

**RE: Codexis, Inc.  
Amendment No. 7 to Form S-1  
Filed April 5, 2010  
File No. 333-164044**

Dear Mr. Sheehy:

We have reviewed your filing and have the following comments.

Principal Stockholders, page 140

1. We note your new disclosure that the beneficial ownership table “exclude[es] any additional shares of common stock we may have to issue upon conversion of our Series E preferred stock and Series F preferred stock, as discussed in “Capitalization — Conversion of Our Preferred Stock”).” Please revise the footnotes to the table as necessary to disclose for each affected stockholder the potential increase in that stockholder’s holdings that would result from the additional shares you may have to issue due to preferred stock conversion ratio adjustments. In doing so, to calculate the number of shares potentially issuable, you may use one or more of the hypothetical and illustrative initial offering prices used in the “Conversion of Preferred Stock” disclosure on page 11. For example, for each affected stockholder, you may wish to disclose the range of the number of shares issuable assuming initial offering prices of \$13.50 and \$10.50. In addition, please update your beneficial ownership information here and throughout the prospectus as of the most recent practicable date.

\* \* \* \*

Mr. Douglas T. Sheehy  
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As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

You may contact Tracey McKoy, Staff Accountant, at (202) 551-3772 or Al Pavot, Staff Accountant, at (202) 551-3738 if you have questions regarding comments on the financial statements and related matters. Please contact Hagen Ganem, Staff Attorney, at (202) 551-3330 or Dietrich King, Staff Attorney, at (202) 551-3338 with any other questions.

Sincerely,

Pamela A. Long  
Assistant Director

cc: Patrick A. Pohlen (via facsimile to (650) 463-2600)  
Latham & Watkins LLP