

May 17, 2013

VIA EDGAR

Mr. Terence O'Brien
Accounting Branch Chief
Securities and Exchange Commission
Division of Corporation Finance
Washington, DC 20549

RE: Codexis, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2012
Filed April 2, 2013
Form 10-Q for the Fiscal Quarter Ended September 30, 2012
Filed November 7, 2012
File No. 001-34705

Dear Mr. O'Brien:

This letter is in response to your letter of May 6, 2013 to John Nicols, President and Chief Executive Officer of Codexis, Inc. (the "**Company**" or "**Codexis**"), concerning our Form 10-Q for the fiscal quarter ended September 30, 2012, which was filed with the Securities and Exchange Commission (the "**Commission**") on November 7, 2012 and our Form 10-K for the fiscal year ended December 31, 2012, which was filed with the Commission on April 2, 2013 (the "**Form 10-K**"). For ease of review, we have set forth below in **bold** type each of the numbered comments received from the staff of the Commission (the "**Staff**") and have followed each comment with the Company's response thereto.

Form 10-Q for the Fiscal Quarter Ended September 30, 2012

Impairment of Goodwill and Intangible Assets and Other Long-lived Assets, page 76

1. **We have read your response to comment 3 from our letter dated March 8, 2013. You state that your impairment analysis of long-lived assets and intangible assets as of December 31, 2012, reflects different underlying estimates and assumptions than your impairment analysis as of September 30, 2012, due to changes in your business focus and strategy since the earlier impairment analysis. In future filings please disclose changes in your assumptions used to test for impairment, including a discussion of the reasons for the change in your assumptions.**

Response:

We agree to disclose in future filings changes in the assumptions used to test for impairment, including a discussion of the reasons for any change in our assumptions.

2. **We note your response to prior comment 4. The disclosures you reference are generic and provide little insight as to whether you are experiencing any of the triggering events you identify. Specifically, on page 23 you have a risk factor related to impairment of your long-term assets. You identify triggering events and negative trends that could cause you to test for impairment and possibly record an impairment charge. However, your disclosure does not connect the events that would trigger an impairment test to the negative indicators that you are currently experiencing. Refer to Item 303 of Regulation S-K, and Sections 216, 501.02 and 501.12.b.3, 501.12.b.4, and 501.14**
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of the Financial Reporting Codification regarding forewarning disclosures. Please provide disclosure in future filings that addresses these concerns.

Response:

In response to the Staff's comment, we included the following disclosure in Part II, Item 1A-"Risk Factors" of our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2013, filed with the Commission on May 9, 2013, which includes added disclosure (underlined below) as compared to prior disclosure in the Form 10-K:

If goodwill or our intangible or other long-lived assets become impaired we may be required to record a significant charge to earnings.

Our total assets reflect substantial goodwill, intangible assets and other long-lived assets. Under accounting principles generally accepted in the United States, or GAAP, we review goodwill for impairment on at least an annual basis and at any interim date whenever events or changes in circumstances indicate that the carrying value may not be recoverable. We review our long lived and intangible assets with finite lives for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. Events or changes in circumstances (i.e., information that indicates an impairment might exist), could include: a significant decrease in the market price of the Company's common stock; current period cash flow losses or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the assets; slower growth rates in our industry; significant adverse changes in the business climate or legal factors; accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of the assets; loss of significant customers or partners; or the current expectation that the assets will more likely than not be sold or disposed of significantly before the end of their estimated useful life. For example, as described in Item 7 of our Annual Report on Form 10-K filed with the SEC on April 2, 2013, we conducted an analysis of our long-lived assets and intangible assets for impairment as of December 31, 2012 after we determined that our continued operating losses and the termination of the Shell Research Agreement were indications of impairment. An example of another specific event that may, if it occurs, require us to conduct an impairment analysis of our long-lived assets and intangible assets in the future would be an assessment by management that our planned efforts to deploy our technology platform in adjacent market spaces had not proven to be as viable as we currently expect. We may be required to record a significant charge to earnings in our financial statements during the period in which any impairment of our goodwill, intangible assets or other long-lived assets is determined, resulting in an adverse impact on our financial position and results of operations.

We agree to include disclosure in future filings connecting the events that would trigger an impairment test to the negative indicators that we are then experiencing.

Form 10-K for the Fiscal Year Ended December 31, 2012

Management's Report on Internal Control over Financial Reporting, page 101

3. **You state that you recorded adjustments for the period ended December 31, 2012. Please tell us the amount of each adjustment, the period(s) the errors relate to and how you concluded that it was not appropriate to restate prior period financial statements. As part of your response please tell us the income statement and balance sheet line items that were impacted and quantify the adjustments.**

Response:

The recorded adjustments for the period ended December 31, 2012 related to a specific and singular revenue recognition event in December 2012, described in more detail below in our response to Comment 4. No restatement of the Company's prior period financial statements is required because the adjustment does not affect any previously reported period. Please see our response to Comment 4 below for a description of the income statement and balance sheet line items that were impacted and the amount of the adjustments.

4. **Please describe to us the nature of the errors related to your revenue recognition and contractual arrangements.**
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Response:

Arch Pharmed Labs of Mumbai, India (“**Arch**”) is a long-standing business partner for Codexis. We collaborate with Arch in the supply of enzymes used in the manufacture and sale of certain specified active pharmaceutical ingredients (“**APIs**”) and intermediates used in the manufacture of APIs.

On November 1, 2012, the Company entered into a new Enzyme Supply Agreement with Arch (the “**New Arch Enzyme Supply Agreement**”) in which Arch agreed to exclusively purchase enzymes from us for use in the manufacture of certain of Arch's products and we agreed to exclusively supply, with limited exceptions, certain of our proprietary enzymes to Arch at an agreed upon price for use in such manufacture. The New Arch Enzyme Supply Agreement replaced a number of existing agreements with Arch, including an existing supply agreement (the “**Prior Arch Supply Agreement**”).

The New Arch Enzyme Supply Agreement provided that Arch would purchase from us our entire existing enzyme inventory intended to be supplied under the Prior Arch Supply Agreement. In early December 2012, Arch and Codexis mutually agreed on a purchase price of \$2.5 million for the remaining enzyme inventory stored at Arch.

We sent invoices to Arch in December 2012 totaling \$2.5 million, and we initially recognized the revenue based on our established revenue recognition processes in accordance with generally accepted accounting principles (“**GAAP**”):

Revenue generally is realized or realizable and earned when all of the following criteria are met:

1. Persuasive evidence of an arrangement exists,
2. Delivery has occurred or services have been rendered,
3. The seller's price to the buyer is fixed or determinable, and
4. Collectability is reasonably assured.

At the time we initially recognized this revenue in December 2012, the Company was aware that Arch was experiencing working capital and financing issues and was past due over 90 days-but less than one year-for approximately \$1.3 million in receivables under the Prior Arch Enzyme Supply Agreement. We considered these facts in assessing whether collectability is reasonably assured and concluded that, in light of Arch's favorable credit rating (ICRA rating of BB+ [stable]) and its past payment history, they continued to be creditworthy and that payment was ultimately probable.

However, subsequent to year end, the Company determined that we had in the past “implicitly” provided a concession to Arch under the New Arch Supply Agreement by continuing shipments and allowing payments from Arch under the Prior Arch Enzyme Supply Agreement to be delinquent longer than our contractual payment terms. In December 2012 we understood that payment may not be forthcoming on the December 2012 invoices until Arch resolved its working capital issues. GAAP provides that explicitly or implicitly granting extended payment terms to a customer could cause the price not to be “fixed or determinable” because the risk that a seller will grant concessions to a customer increases as the contractual payment terms become longer.

Since we have no significant history of collection under such implicit extended payment terms, the Company determined that the revenue associated with the inventory transaction was not fixed or determinable. Therefore, we concluded that it would not be appropriate, consistent with ASC 605 and SAB 104, to recognize the \$2.5 million in revenues based on circumstances existing as of December 31, 2012.

Accordingly, the product revenue and accounts receivables totaling \$2.5 million, as well as the cost of product revenue totaling \$1.1 million, initially recorded for the quarter ended December 31, 2012 were reversed.

On our consolidated balance sheet as of December 31, 2012, this reversal had the effect of decreasing product revenues and accounts receivable by \$2.5 million and increasing prepaid expenses and other current assets by \$1.1 million. On our consolidated statement of operations for the twelve months ended December 31, 2012, this reversal had the effect of decreasing product revenues and total revenues by \$2.5 million, as well as decreasing cost of product revenues and total costs and operating expenses by \$1.1 million.

The \$2.5 million will be recognized as revenue upon collection from Arch, and the associated cost of product revenue totaling \$1.1 million will be expensed.

Upon settlement by Arch of a majority of the underlying inventory-related invoices, we recognized \$2.1 million of such product revenue and \$1.0 million of the related cost of product revenues during the three months ended March 31, 2013.

Please do not hesitate to contact me at (650) 421-8152 with any questions or comments regarding this correspondence.

Sincerely,

/s/ David O'Toole

David O'Toole
Senior Vice President and Chief Financial Officer

cc: John Nicols, Codexis, Inc.
Douglas T. Sheehy, Codexis, Inc.
Patrick A. Pohlen, Latham & Watkins, LLP
Christian W. Nolet, Ernst & Young, LLP
Nick Prior, Ernst & Young, LLP