Table of Contents

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

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2011

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission file number: 001-34705

Codexis, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**71-0872999**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
200 Penobscot Drive, Redwood City	**94063**
(Address of principal executive offices)	**(Zip Code)**

650 421 8100
(Registrant's telephone number, including area code)

(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☐ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒ (Do not check if a smaller reporting company)	Smaller reporting company	☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of April 30, 2011, there were 35,573,003 shares of the registrant's Common Stock, par value $0.0001 per share, outstanding.

Codexis, Inc.

Quarterly Report on Form 10-Q
For The Three Months Ended March 31, 2011

INDEX

Codexis, Inc.
Condensed Consolidated Balance Sheets
(Unaudited)
(In Thousands)

	March 31, 2011	December 31, 2010
Assets		
Current assets:		
Cash and cash equivalents	$ 53,152	$ 72,396
Marketable securities	12,540	—
Accounts receivable, net of allowance of $58 at December 31, 2010 and March 31, 2011, respectively	11,322	10,620
Related party accounts receivable	—	4,713
Inventories	3,224	2,817
Prepaid expenses and other current assets	2,617	1,646
Total current assets	82,855	92,192
Restricted cash	1,512	1,466
Non-current marketable securities	16,296	1,650
Property and equipment, net	20,239	21,452
Intangible assets, net	19,230	20,158
Goodwill	3,241	3,241
Other non-current assets	1,175	1,141
Total assets	$ 144,548	$ 141,300
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 10,245	$ 9,208
Accrued compensation	3,784	8,107
Other accrued liabilities	7,450	5,630
Deferred revenues	770	455
Related party deferred revenues	8,691	4,084
Total current liabilities	30,940	27,484
Deferred revenues, net of current portion	1,625	1,671
Related party deferred revenues, net of current portion	2,382	3,403
Other long-term liabilities	1,595	1,381
Commitments and contingencies	—	—
Stockholders' equity:		
Common stock	4	4
Additional paid-in capital	279,574	275,540
Accumulated other comprehensive income (loss)	49	(34)
Accumulated deficit	(171,621)	(168,149)
Total stockholder's equity	108,006	107,361
Total liabilities and stockholders' equity	$ 144,548	$ 141,300

Codexis, Inc.

Condensed Consolidated Statements of Operations
(Unaudited)
(In Thousands, Except Per Share Amounts)

	Three Months Ended March 31,	
	2011	2010
Revenues:		
Product	$ 12,932	$ 6,275
Related party collaborative research and development	14,823	16,042
Collaborative research and development	2,663	661
Government grants	616	2,722
Total revenues	31,034	25,700
Costs and operating expenses:		
Cost of product revenues	11,650	5,218
Research and development	13,750	12,982
Selling, general and administrative	9,013	8,600
Total costs and operating expenses	34,413	26,800
Loss from operations	(3,379)	(1,100)
Interest income	49	28
Interest expense and other, net	17	(358)
Loss before provision for income taxes	(3,313)	(1,430)
Provision for income taxes	158	(61)
Net loss	$ (3,471)	$ (1,369)
Net loss per share of common stock, basic and diluted	$ (0.10)	$ (0.50)
Weighted average common shares used in computing net loss per share of common stock, basic and diluted	35,116	2,714

Codexis, Inc.

Condensed Consolidated Statements of Cash Flows
(Unaudited)
(In Thousands)

	Three Months Ended March 31,	
	2011	2010
Operating activities:		
Net loss	$ (3,471)	$ (1,369)
Adjustments to reconcile net loss to net cash used in operating activities:		
Amortization of intangible assets	941	187
Depreciation and amortization of property and equipment	1,895	1,651
Revaluation of redeemable convertible preferred stock warrant liability	—	396
Gain from extinguishment of asset retirement obligation	(124)	—
Stock-based compensation	2,307	1,655
Accretion of asset retirement obligation	17	36
Amortization of debt discount	—	24
Accretion (amortization) of premium/discount on marketable securities	(3)	(119)
Changes in operating assets and liabilities:		
Accounts receivable	4,011	685
Inventories	(407)	3
Prepaid expenses and other current assets	(971)	(261)
Other assets	(48)	(71)
Accounts payable	1,037	(2,720)
Accrued compensation	(4,324)	(2,958)
Related party payable	—	(766)
Other accrued liabilities	2,570	(1,372)
Deferred revenues	3,856	(7,026)
Net cash provided by (used in) operating activities	7,286	(12,025)
Investing activities:		
(Increase) decrease in restricted cash	(46)	—
Purchase of property and equipment	(891)	(1,320)
Purchase of marketable securities	(27,104)	—
Proceeds from maturities of marketable securities	—	13,610
Net cash provided by (used in) investing activities	(28,041)	12,290
Financing activities:		
Principal payments on financing obligations	—	(1,339)
Payments in preparation for initial public offering	—	(1,636)
Proceeds from exercises of stock options	1,485	140
Net cash provided by (used in) financing activities	1,485	(2,835)
Effect of exchange rate changes on cash and cash equivalents	26	(18)
Net increase (decrease) in cash and cash equivalents	(19,244)	(2,588)
Cash and cash equivalents at the beginning of the period	72,396	31,785
Cash and cash equivalents at the end of the period	$ 53,152	$ 29,197

Codexis, Inc.

Notes to Condensed Consolidated Financial Statements
(UNAUDITED)

1. Description of Business

Codexis, Inc. ("we" or "Codexis") is a developer of proprietary biocatalysts, which are enzymes or microbes that initiate or accelerate chemical reactions. We are currently selling our biocatalysts to customers in the pharmaceutical industry and are engaged in a multi-year research and development collaboration with Equilon Enterprises LLC dba Shell Oil Products US ("Shell") to develop biocatalysts for use in producing advanced biofuels. We are also using our technology platform to pursue biocatalyst-enabled solutions in other bioindustrial markets, including carbon management, water treatment and chemicals. We were incorporated in Delaware in January 2002.

2. Summary of Significant Accounting Policies

Basis of Presentation and Consolidation

The accompanying interim condensed consolidated balance sheets as of March 31, 2011 and December 31, 2010, and the interim condensed consolidated statements of operations and cash flows for the three months ended March 31, 2011 and 2010 are unaudited. These interim condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") and the applicable rules and regulations of the Securities and Exchange Commission ("SEC") for interim financial information. Accordingly, they do not include all of the information and notes required by GAAP for complete financial statements. These interim condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto contained in our Annual Report on10-K filed with the SEC on February 10, 2011. The December 31, 2010 condensed consolidated balance sheet included herein was derived from the audited financial statements as of that date, but does not include all disclosures including notes required by GAAP for complete financial statements.

The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and, in the opinion of management, reflect all adjustments of a normal recurring nature considered necessary to present fairly our financial position as of March 31, 2011 and results of our operations and cash flows for the three months ended March 31, 2011 and 2010. The interim results for the three months ended March 31, 2011 are not necessarily indicative of the results that may be expected for the year ending December 31, 2011.

The unaudited interim condensed consolidated financial statements include the accounts of Codexis and our wholly-owned subsidiaries. We have subsidiaries in United States, Germany, Hungary, India, Mauritius, The Netherlands and Singapore. All significant intercompany balances and transactions have been eliminated in consolidation.

Initial Public Offering (IPO)

On April 27, 2010, we completed our initial public offering of common stock ("IPO") selling 6,000,000 shares at an offering price of $13.00 per share, resulting in net proceeds of approximately $67.7 million, after deducting underwriting discounts, commissions and other related transaction costs

Upon the closing of the IPO, our outstanding shares of redeemable convertible preferred stock were automatically converted into 25,307,446 shares of common stock, our outstanding preferred stock warrants were automatically converted into common warrants to purchase a total of 288,438 shares of common stock and the related redeemable convertible preferred stock warrant liability was reclassified to additional paid-in capital.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates and such differences may be material to the condensed consolidated financial statements.

Foreign Currency Translation

The assets and liabilities of foreign subsidiaries, where the local currency is the functional currency, are translated from their respective functional currencies into U.S. dollars at the exchange rates in effect at the balance sheet date, with resulting foreign currency translation adjustments recorded in accumulated other comprehensive income (loss) in the condensed consolidated balance sheets. Revenue and expense amounts are translated at average rates during the period. For the three months ended March 31, 2011 and 2010, we recorded a translation adjustment gain of $36,000 and loss of $28,000, respectively. Where the U.S. dollar is the functional currency, nonmonetary assets and liabilities originally acquired or assumed in other currencies are recorded in U.S. dollars at the exchange rates in effect at the date they were acquired or assumed. Monetary assets and liabilities denominated in other currencies are translated into U.S. dollars at the exchange rates in effect at the balance sheet date.

Fair Value of Financial Instruments

The carrying amounts of certain of our financial instruments, including cash and cash equivalents, restricted cash, accounts receivable and accounts payable, approximate fair value due to their short maturities.

Fair value is considered to be the price at which an asset could be exchanged or a liability transferred (an exit price) in an orderly transaction between knowledgeable, willing parties in the principal or most advantageous market for the asset or liability. Where available, fair value is based on or derived from observable market prices or other observable inputs. Where observable prices or inputs are not available, valuation models are applied. These valuation techniques involve some level of management estimation and judgment, the degree of which is dependent on the price transparency for the instruments or market and the instruments' complexity.

Cash, Cash Equivalents and Marketable Securities

We consider all highly liquid investments with maturity dates of three months or less at the date of purchase to be cash equivalents. Cash and cash equivalents consist of cash on deposit with banks and money market funds. The majority of our cash and cash equivalents are maintained with major financial institutions in North America. Deposits with these financial institutions may exceed the amount of insurance provided on such deposits. Marketable securities included in current assets are primarily comprised of commercial paper and corporate bonds. Marketable securities included in non-current assets are primarily comprised of corporate bonds, government-sponsored enterprise securities and U.S. Treasury obligations and that have a maturity date greater than 1 year. Our investment in common shares of CO_2 Solution, Inc. ("CO_2 Solution") is also included in non-current marketable securities.

Our investments in debt and equity securities are classified as available-for-sale and are carried at estimated fair value. Unrealized gains and losses are reported as a component of accumulated other comprehensive income (loss). Amortization of purchase premiums and accretion of purchase discounts, realized gains and losses of debt securities and declines in value deemed to be other than temporary, if any, are included in interest income or interest expense and other, net. The cost of securities sold is based on the specific-identification method. There were no significant realized gains or losses from sales of marketable securities during the three months ended March 31, 2011 and 2010. At March 31, 2011, we did not have any other than temporary declines in the fair value of our marketable securities.

Restricted Cash

Restricted cash consisted of amounts invested in money market accounts primarily for purposes of securing a standby letter of credit as collateral for our Redwood City, California facility lease agreement and for the purpose of securing a working capital line of credit. During the three months ended March 31, 2011, restricted cash increased by $46,000.

Revenue Recognition

In October 2009, the FASB amended the accounting standards for multiple-element revenue arrangements ("ASU 2009-13") to:

- provide updated guidance on whether multiple deliverables exist, how the elements in an arrangement should be separated, and how the consideration should be allocated;
- require an entity to allocate revenue in an arrangement using estimated selling prices ("ESP") of each element if a vendor does not have vendor-specific objective evidence of selling price ("VSOE") or third-party evidence of selling price ("TPE"); and
- eliminate the use of the residual method and require a vendor to allocate revenue using the relative selling price method.

In April 2010, the FASB amended the accounting standards for revenue recognition related to milestones ("ASU 2010-17") to:

- provide updated guidance on accounting for revenue using the milestone method, clarifying that the milestone method is a valid application of the proportional performance model when applied to research or development arrangements. The Company already applied a milestone method approach to its research or development arrangements, established the milestone method and provided guidance to the substantive nature of the milestone.

We adopted the above accounting guidance on January 1, 2011, for applicable arrangements entered into or materially modified after January 1, 2011 (the beginning of our fiscal year). We have determined that adoption of this new guidance did not have a material impact on our results of operations, cash flows or financial position. The potential future impact of the adoption of the ASU 2009-13 guidance will depend on the nature of any new arrangements or material modifications of existing arrangements that are entered into in the future.

Our primary sources of revenues consist of collaborative research and development agreements, product revenues and government grants. Collaborative research and development agreements typically provide us with multiple revenue streams, including up-front fees for licensing, exclusivity and technology access, fees for full-time employee equivalent ("FTE") services and the potential to earn milestone payments upon achievement of contractual criteria and royalty fees based on future product sales or cost savings by our customers. Our collaborative research and development revenues consist of revenues from related parties and revenues from other customers with collaborative research and development agreements.

For each source of collaborative research and development revenues, product revenues and grant revenues, we apply the following revenue recognition criteria:

- Up-front fees received in connection with collaborative research and development agreements, including license fees, technology access fees, and exclusivity fees, are deferred upon receipt, are not considered a separate unit of accounting and are recognized as revenues over the relevant performance periods.
- Revenues related to FTE services are recognized as research services are performed over the related performance periods for each contract. We are required to perform research and development activities as specified in each respective agreement. The payments received are not refundable and are based on a contractual reimbursement rate per FTE working on the project. When up-front payments are combined with FTE services in a single unit of accounting, we recognize the up-front payments using the proportionate performance method of revenue recognition based upon the actual amount of research and development labor hours incurred relative to the amount of the total expected labor hours to be incurred by us, up to the amount of cash received. In cases where the planned levels of research services fluctuate substantially over the research term, we are required to make estimates of the total hours required to perform our obligations. Research and development expenses related to FTE services under the collaborative research and development agreements approximate the research funding over the term of the respective agreements.
- A payment that is contingent upon the achievement of a substantive milestone is recognized in its entirety in the period in which the milestone is achieved. A milestone is an event (i) that can only be achieved based in whole or in part on either our performance or on the occurrence of a specific outcome resulting from our performance, (ii) for which there is substantive uncertainty at the date the arrangement is entered into that the event will be achieved and (iii) results in additional payments being due to us. Milestones are considered substantive when the consideration earned from the achievement of the milestone (i) is commensurate with either our performance to achieve the milestone or the enhancement of value of the item delivered as a result of a specific outcome resulting from our performance; (ii) relates solely to past performance and (iii) is reasonable relative to all deliverable and payment terms in the arrangement.
- Other payments received for which such payments are contingent solely upon the passage of time or the result of a collaborative partner's performance are recognized as revenue when earned in accordance with the contract terms and when such payments can be reasonably estimated and collectability is reasonably assured.
- We recognize revenues from royalties based on licensees' sales of products using our technologies. Royalties are recognized as earned in accordance with the contract terms when royalties from licensees can be reasonably estimated and collectability is reasonably assured.
- Product revenues are recognized once passage of title and risk of loss has occurred and contractually specified acceptance criteria have been met, provided all other revenue recognition criteria have also been met. Product revenues consist of sales of biocatalysts, intermediates, active pharmaceutical ingredients and Codex Biocatalyst Panels and Kits. Cost of product revenues includes both internal and third party fixed and variable costs including amortization of purchased technology, materials and supplies, labor, facilities and other overhead costs associated with our product revenues.
- We license mutually agreed upon third party technology for use in our research and development collaboration with Shell. We record the license payments to research and development expense and offset related reimbursements received from Shell. These payments made by Shell to us are direct reimbursements of our costs. We account for these direct reimbursable costs as a net amount, whereby no expense or revenue is recorded for the costs reimbursed by Shell. For any payments not reimbursed by Shell, we will recognize these as expenses in the statement of operations. We elected to present the reimbursement from Shell as a component of our research and development expense since presenting the receipt of payment from Shell as revenues does not reflect the substance of the arrangement.

- We receive payments from government entities in the form of government grants. Government grants are agreements that generally provide us with cost reimbursement for certain types of expenditures in return for research and development activities over a contractually defined period. Revenues from government grants are recognized in the period during which the related costs are incurred, provided that the conditions under which the government grants were provided have been met and we have only perfunctory obligations outstanding.
- Shipping and handling costs charged to customers are recorded as revenues. Shipping costs are included in our cost of product revenues. Such charges were not significant in any of the periods presented.

Income Taxes

We use the liability method of accounting for income taxes. Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the consolidated financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets are recognized for deductible temporary differences, along with net operating loss ("NOL") carryforwards, if it is more likely than not that the tax benefits will be realized. To the extent a deferred tax asset cannot be recognized under the preceding criteria, a valuation allowance is established. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the year in which those temporary differences are expected to be recovered or settled.

We recognize the financial statement effects of an uncertain tax position when it is more likely than not, based on the technical merits, that the position will be sustained upon examination.

Stock-Based Compensation

We account for stock-based transactions based on the fair value of the stock awards granted. We use the straight-line method to allocate stock-based compensation expense to the appropriate reporting periods. We account for stock options issued to non-employees based on their estimated fair value determined using the Black-Scholes option-pricing model. The fair value of the options granted to non-employees is remeasured as they vest, and the resulting change in value, if any, is recognized as an increase or decrease in stock compensation expense during the period the related services are rendered.

Comprehensive Loss

Comprehensive loss consists of net loss, unrealized gain (loss) on marketable securities and foreign currency translation adjustments. The following table presents comprehensive loss (in thousands):

	Three Months Ended March 31,	
	2011	2010
Net loss	$ (3,471)	$ (1,369)
Currency translation adjustments	36	(28)
Unrealized gain (loss) on marketable securities	47	286
Comprehensive loss	$ (3,388)	$ (1,111)

Net Loss per Share of Common Stock

Basic and diluted net loss per share of common stock is computed by dividing the net loss by the weighted average number of shares of common stock outstanding during the period, less the weighted-average number of shares common stock that remain subject to our right to repurchase. Basic and diluted net loss per share of common stock was the same for each period presented, because inclusion of all potential common shares outstanding was anti-dilutive. The following table presents the calculation of basic and diluted net loss per share of common stock (in thousands, except per share amounts):

	Three Months Ended March 31,	
	2011	2010
Numerator:		
Net loss	$ (3,471)	$ (1,369)
Denominator:		
Weighted-average shares of common stock outstanding	35,116	2,719
Less: Weighted-average shares of common stock subject to repurchase	—	(5)
Weighted-average shares of common stock used in computing net loss per share of common stock, basic and diluted	35,116	2,714
Net loss per share of common stock, basic and diluted	$ (0.10)	$ (0.50)

The following table presents the securities not included in the net loss per share calculations for the three months ended March 31, 2011 and 2010 (in thousands):

	Three Months Ended March 31,	
	2011	2010
Redeemable convertible preferred stock	—	25,307
Common stock subject to repurchase	—	4
Options to purchase common stock	8,335	8,485
Unvested restricted stock units	559	—
Warrants to purchase redeemable convertible preferred stock	—	288
Warrants to purchase common stock	266	39
Total	9,160	34,123

Reclassifications

Certain amounts in prior period financial statements including our investment CQ solution, asset retirement obligation and the composition of our deferred tax assets have been reclassified to conform to the current period presentation.

Recent Accounting Pronouncements

None

3. Collaborative Research and Development Agreements

Shell

In November 2006, we entered into a collaborative research agreement and a license agreement with Shell to develop biocatalysts and associated processes that use such biocatalysts.

In November 2007, we entered into a new and expanded five-year collaborative research agreement and a license agreement with Shell. In connection with the new and expanded collaborative research agreement and license agreement, Shell paid us a $20.0 million up-front exclusivity fee, purchased Series E redeemable convertible preferred stock for gross proceeds of $30.5 million, and agreed to pay us (1) research funding at specified rates per FTE working on the project during the research term, (2) milestone payments upon the achievement of milestones and (3) royalties on future product sales.

In March 2009, we amended our collaborative research agreement and license agreement with Shell. In connection with these amendments Shell purchased Series F redeemable convertible preferred stock for gross proceeds of $30.0 million and agreed to pay us (1) additional research funding at specified rates per FTE working on the project during the research term and (2) additional milestone payments upon the achievement of milestones. Shell has the right to reduce the number of funded FTEs, subject to certain limitations, with a required advance notice period ranging from 30 to 270 days and a subsequent period ranging from 90 to 360 days during which notices of further FTE reductions cannot be made by Shell. The length of these periods varies dependent on the number of funded FTEs reduced. We have not received any notice of FTE reduction as of the date of filing of this Quarterly Report on Form 10-Q.

In accordance with our revenue recognition policy, the $20.0 million up-front exclusivity fee and the research funding fees to be received for FTE services are recognized in proportion to the actual research efforts incurred relative to the amount of total expected effort to be incurred by us over the five-year research period commencing November 2007. Milestones payments to be earned under this agreement have been determined to be at risk at the inception of the arrangement and substantive and are expected to be recognized upon achievement of the applicable milestone and when collectability of such payment is reasonably assured. We recorded milestone revenues of zero and $1.4 million during the three months ended March 31, 2011 and 2010, respectively

Under the agreements with Shell, we have the right to license technology from third parties that will assist us in meeting objectives under the collaboration. If third-party technology to be licensed is identified and mutually agreed upon by both parties, Shell is obligated to reimburse us for the licensing costs of the technology. Payments made by us to the third-party providers were recorded as research and development expenses related to our collaborative research agreement with Shell. None of the acquired licenses are expected to be used in products that will be sold within the next year and the phase of the project has not reached technological feasibility. Shell reimbursed us for licensing costs of $65,000 and $35,000 for the three months ended March 31, 2011 and 2010, respectively. We record these reimbursements against the costs incurred.

Manufacturing Collaboration

Arch

We have partnered with Arch Pharmalabs, Ltd. (“Arch”), a company based in India engaged in the manufacturing and sale of active pharmaceutical ingredients (“APIs”), and intermediaries to pharmaceutical companies worldwide since October 2005.

In February 2010, we consolidated certain of the contractual terms in our agreements with Arch by simultaneously terminating all of our existing agreements with Arch, other than the Master Services Agreement with Arch entered into as of August 1, 2006, and entering into new agreements with Arch. The new agreements, among other things, provide for biocatalyst supply from us to Arch and intermediate supply from Arch to us. We sell the biocatalysts to Arch at cost, and Arch manufactures the intermediates on our behalf. Arch sells the intermediates to us at a formula-based or agreed upon price. We then directly market and sell the intermediates to a specified group of customers in the generic pharmaceutical industry. Under the new agreements, Arch may also sell intermediates directly to other customers, and a license royalty is owed by Arch to us based on the volume of product they sell to us and their other customers. Royalties earned from Arch under this arrangement were $162,000 and none for the three months ended March 31, 2011 and 2010, respectively.

4. Joint Development Agreement with CO_2 Solution

On December 15, 2009, we entered into an exclusive joint development agreement with CO_2 Solution, a company based in Quebec City, Quebec, Canada, whose shares are publicly traded in Canada on the TSX Venture Exchange. Under the agreement, we obtained a research license to CO_2 Solution's intellectual property and agreed to conduct research and development activities jointly with CO_2 Solution with the goal of advancing the development of carbon capture technology. We also purchased 10,000,000 common shares (approximately 16.6% of total common shares outstanding) of CO_2 Solution in a private placement subject to a four-month statutory resale restriction, which expired on April 15, 2010. In February of 2010, our Chief Executive Officer was appointed to the board of directors of CO_2 Solution.

The original joint development agreement with CO_2 Solution expired in January 2011, and at that time, we extended our joint development agreement with CO_2 Solution on essentially the same terms as the original agreement. The extended agreement will now expire on the later of June 30, 2012 or six months after the expiration of any third party collaborations.

We concluded that through March 31, 2011, we did not have the ability to exercise significant influence over CO_2 Solution's operating and financial policies. We consider our investment in CO_2 Solution common shares as an investment in a marketable security that is available for sale, and carry it at fair value in non-current marketable securities, with changes in fair value recognized in accumulated other comprehensive income (loss). We have estimated the fair value of common shares using the fair value as of March 31, 2011, as determined by trading on the TSX Venture Exchange. Accordingly, we have classified our investment in CO_2 Solution as a level 1 investment as discussed in Note 6.

At December 31, 2010, the estimated fair value of our investment in CO_2 Solution common stock was $1.7 million and the unrealized gain was $334,000. At March 31, 2011, the estimated fair value of our investment in CO_2 Solution common stock was $1.7 million and the unrealized gain was $416,000. The unrealized gain for the three months ended March 31, 2011 was recorded in accumulated other comprehensive income (loss), net of related tax expense of $149,000 on the condensed consolidated balance sheet.

5. Balance Sheets and Statements of Operations Details

Cash Equivalents and Marketable Securities At March 31, 2011, cash equivalents and marketable securities consisted of the following (in thousands):

	March 31, 2011				
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value	Average Contractual Maturities (in days)
Money market funds	$ 41,037	$ —	$ —	$41,037	n/a
Commercial paper	6,493	1		6,494	124
Corporate bonds	17,611	6	(13)	17,604	462
U.S. Treasury obligations	996	1		997	549
Government-sponsored enterprise securities	2,006	2	—	2,008	637
Common shares of CO_2 Solution	1,316	416	—	1,732	n/a
Total	$ 69,459	$ 426	$ (13)	$69,872	

The total cash and cash equivalents balance of $53.2 million as of March 31, 2011 was comprised of money market funds of $41.0 million and $12.2 million held as cash with major financial institutions in North America.

At December 31, 2010, cash equivalents and marketable securities consisted of the following (in thousands):

	December 31, 2010				
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value	Average Contractual Maturities (in days)
Money market funds	$ 64,956	$ —	$ —	$ 64,956	n/a
Common shares of CO_2 Solution	1,316	334	—	1,650	n/a
Total	$ 66,272	$ 334	$ —	$ 66,606	

Inventories

Inventories consisted of the following (in thousands):

	March 31, 2011	December 31, 2010
Raw materials	$ 2,256	$ 1,963
Work in process	143	38
Finished goods	825	816
Total inventories	$ 3,224	$ 2,817

Property and Equipment, net

Property and equipment consisted of the following (in thousands):

	March 31, 2011	December 31, 2010
Laboratory equipment	$ 30,588	$ 29,931
Leasehold improvements	10,677	10,961
Computer equipment and software	3,601	3,050
Office equipment and furniture	871	865
Construction in progress (1)	508	838
	46,245	45,645
Less: accumulated depreciation and amortization	(26,006)	(24,193)
Property and equipment, net	$ 20,239	$ 21,452

(1) Construction in progress includes equipment received but not yet placed into service pending installation.

Due to the extension of the lease period for certain currently occupied facilities, the Company has re-evaluated the depreciable lives of existing leasehold improvements, totaling $2.3 million in net book value at the time of reassessment in February, 2011. Since leasehold improvements are typically depreciated over the lesser of the assets' useful life or the remaining lease period, the extension of contracted facilities leases through 2020 has necessitated a change in the Company's estimate of depreciable lives on leasehold improvements.

While some lives will be shortened under this reassessment with the vacating of a portion of our facilities, the majority of depreciable lives will be extended up to as much as 5 years from the assets' in service date, in accordance with our leasehold improvements' standard useful lives. The net effect of this reassessment is lower monthly depreciation being recognized on leasehold improvements over a longer period of time. These changes' net effect on depreciation expense recognized is not expected to be material on a quarterly or annual basis.

Intangible Assets

Intangible assets consisted of the following (in thousands):

	March 31, 2011			December 31, 2010		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Customer relationships	$ 3,098	$ (2,967)	$ 131	$ 3,098	$ (2,943)	$ 155
Developed and core technology	1,534	(1,273)	261	1,534	(1,212)	322
Noncompete agreements	90	(90)	—	90	(90)	—
Intellectual property	20,244	(1,406)	18,838	20,244	(563)	19,681
	$24,966	$ (5,736)	$ 19,230	$24,966	$ (4,808)	$20,158

Amortization expense for intangible assets totaled $928,000 and $187,000 for the three months ended March 31, 2011 and 2010, respectively.

6. Fair Value

Assets and liabilities recorded at fair value in the condensed consolidated financial statements are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Hierarchical levels which are directly related to the amount of subjectivity associated with the inputs to the valuation of these assets or liabilities are as follows:

Level 1 — Inputs that are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date.

Level 2 — Inputs (other than quoted prices included in Level 1) that are either directly or indirectly observable for the asset or liability through correlation with market data at the measurement date and for the duration of the instrument's anticipated life.

Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities and which reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date.

The following table presents our financial instruments that were measured at fair value on a recurring basis at March 31, 2011 by level within the fair value hierarchy (in thousands):

	March 31, 2011			
	Level 1	Level 2	Level 3	Total
Financial Assets				
Money market funds	$41,036	$ —	$ —	$41,036
Commercial paper	—	6,494	—	6,494
U.S. Treasury obligations	—	997	—	997
Government-sponsored enterprise securities	—	2,008	—	2,008
Corporate bonds	—	17,604	—	17,604
Common shares of CO_2 Solution	1,732	—	—	1,732
Total	$42,768	$27,103	$ —	$69,871

The following table presents our financial instruments that were measured at fair value on a recurring basis at December 31, 2010 by level within the fair value hierarchy (in thousands):

	December 31, 2010			
	Level 1	Level 2	Level 3	Total
Financial Assets				
Money market funds	$64,956	$ —	$ —	$64,956
Common shares of CO_2 Solution	1,650	—	—	1,650
Total	$66,606	$ —	$ —	$66,606

7. Related Party Transactions

Exela PharmaSci, Inc.

We signed a license agreement with Exela PharmaSci, Inc. (“Exela”) in 2007. A member of our board of directors is also on the board of directors of Exela. Under the terms of the agreement, Exela would pay us a royalty based on their achievement of certain commercial goals.

During the three months ended March 31, 2011, we recognized $225,000 of revenue related to this arrangement shown in our condensed consolidated statement of operations as collaborative research and development revenue. We did not recognize any revenue from Exela prior to 2011. As of March 31, 2011, we have no amounts owed from Exela.

8. Commitments and Contingencies

Operating Leases

Our headquarters are located in Redwood City, California where we occupy approximately 91,000 square feet of office and laboratory space in four buildings. On March 16, 2011, we entered into a Fifth Amendment to Lease (the “Fifth Amendment”) with Metropolitan Life Insurance Company (“MetLife”) with respect to the Company’s offices located at 200 and 220 Penobscot Drive, Redwood City, California, (the “Penobscot Space”), 400 Penobscot Drive, Redwood City, California (the “Building 2 Space”) and 640 Galveston Drive, Redwood City, California (the “Galveston Space”), and with respect to approximately 29,921 square feet of additional space located at 101 Saginaw Drive, Redwood City, California (the “Saginaw Space”).

Under the Fifth Amendment, the term of the lease of the Penobscot Space, the Building 2 Space and the Saginaw Space lasts until January 31, 2020 with options to extend for two additional five year periods. The Fifth Amendment provides a number of incentives to the Company including forgiveness of rent payments for the initial two months of the lease term, $2.4 million of tenant improvement allowances ("TIA") plus additional special allowances for certain HVAC costs. The Company intends to apply TIA funds toward capital improvements to the expanded facility as well as upgrades and re-configuration of existing lab and office space. A portion of the tenant improvement allowances may be utilized by us to pay costs for furniture, furnishings and equipment. The TIA allowance will be recognized on a straight-line basis over the term of the lease as a reduction in rent expense. Additionally the Fifth Amendment waived our existing asset retirement obligations for the impacted buildings, resulting in a $0.3 million decrease in our obligation and a $0.1 million gain on extinguishment of asset retirement obligations recorded in our condensed consolidated statement of operation as sales, general and administrative expenses.

The lease of our fourth building on this property was not extended with the Fifth Amendment and will expire in January 2013 with an option for an additional term of two years.

Rent payments under the Fifth Amendment will increase at an annual rate of approximately 3% with rent expense recognized on a straight-line basis over the term of the lease. In accordance with the terms of the lease, we exercised our right to deliver a letter of credit in lieu of a security deposit. This letter of credit increased from $562,000 as of December 31, 2010, to $707,000 as of March 31, 2011 and is recorded as restricted cash on the consolidated balance sheets.

We also rent facilities in Singapore and Hungary. Rent expense is being recognized on a straight-line basis over the respective terms of these leases.

Future minimum payments under non-cancellable operating leases at March 31, 2011 are as follows (in thousands):

	Operating leases
9 months ending December 31:	
2011	$ 2,221
Years ending December 31:	
2012	3,192
2013	2,729
2014	2,431
2015	2,502
2016 and beyond	11,026
Total minimum payments	$ 24,101

Litigation

We have been subject to various legal proceedings related to matters that have arisen during the ordinary course of business. Although there can be no assurance as to the ultimate disposition of these matters, we have determined, based upon the information available, that the expected outcome of these matters, individually or in the aggregate, will not have a material adverse effect on our consolidated financial position, results of operations or cash flows.

Indemnifications

We are required to recognize a liability for the fair value of any obligations we assume upon the issuance of a guarantee. We have certain agreements with licensors, licensees and collaborators that contain indemnification provisions. In such provisions, we typically agree to indemnify the licensor, licensee and collaborator against certain types of third party claims. The maximum amount of the indemnifications is not limited. We accrue for known indemnification issues when a loss is probable and can be reasonably estimated. There were no accruals for expenses related to indemnification issues for any periods presented.

Other contingencies

In November 2009, one of our foreign subsidiaries sold intellectual property to us. Under the local laws, the sale of intellectual property to a nonresident legal entity is deemed an export and is not subject to value added tax. However, there is uncertainty regarding whether the items sold represented intellectual property or research and development services, which would subject the sale to value added tax. We believe that the uncertainty results in an exposure to pay value added tax that is more than remote but less than likely to occur and, accordingly, have not recorded an accrual for this exposure. Should the sale be deemed a sale of research and development services, we could be obligated to pay an estimated amount of $0.6 million.

9. Warrants

No warrants were exercised during the three months ending March 31, 2011. At March 31, 2011, the following warrants were issued and outstanding:

	March 31, 2011			
Issue Date	Class of Shares upon Exercise	Shares Subject to warrants	Exercise Price per Share	Expiration
October 25, 2005	Common	6,066	$ 1.05	October 25, 2012
May 25, 2006	Common	184,895	$ 5.96	May 25, 2013
July 17, 2007	Common	2,384	$ 12.45	February 9, 2016
September 28, 2007	Common	72,727	$ 8.25	September 28, 2017

10. Stockholders' Deficit

In 2002, we adopted the 2002 Stock Plan (the "2002 Plan"), under which our board of directors may issue incentive stock options, non-statutory stock options (options that do not qualify as incentive stock options) and restricted stock to our employees, officers, directors or consultants. In March, 2010, our board of directors and stockholders approved the 2010 Equity Incentive Award Plan (the "2010 Plan"), which became effective upon the completion of our IPO in April 2010. A total of 1,100,000 shares of common stock were initially reserved for future issuance under the 2010 Plan and any shares of common stock reserved for future grant or issuance under our 2002 Plan that remained unissued at the time of completion of the IPO became available for future grant or issuance under the 2010 Plan. In addition, the shares reserved for issuance pursuant to the exercise of any outstanding awards under the 2002 Plan that expire unexercised will also become available for future issuance under the 2010 Plan. The 2010 Plan also provides for automatic annual increases in the number of shares reserved for future issuance, and during the three months ended March 31, 2011 an additional 1,393,142 shares were reserved under the 2010 plan as a result of this provision. As of March 31, 2011, we had a total of 10,537,934 shares of common stock reserved for issuance under our 2010 Plan and no shares available for issuance under the 2002 Plan.

We granted 559,799 restricted stock units ("RSU") during the three months ended March 31, 2011. The RSU's vest over four years with 25% of the RSU's vesting on each annual anniversary. The fair value of the RSU's was calculated based the NASDAQ quoted stock price on the date of the grant with the expense recognized over the vesting period. For the three months ended March 31, 2011, we recorded $173,000 of stock compensation expense related to the RSU's.

During the three months ended March 31, 2011, we issued 586,325 common shares for stock options exercised.

Stock-Based Compensation Expense

We estimate the fair value of stock-based awards granted to employees and directors using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model requires the use of highly subjective and complex assumptions to determine the fair value of stock-based awards, including the expected life of the option and expected volatility of the underlying stock over the expected life of the related grants. Since we were not a publically traded entity prior to April 2010, company-specific historical volatility data is not available. As a result, we estimate the expected volatility based on the historical volatility of a group of unrelated public companies within our industry. We will continue to consistently apply this process until a sufficient amount of historical information regarding the volatility of our own stock price becomes available. Due to our limited history of grant activity, the expected life of options granted to employees is calculated using the "simplified method" permitted by the SEC as the average of the total contractual term of the option and its vesting period. The risk-free rate assumption was based on U.S. Treasury instruments whose terms were consistent with the terms of our stock options. The expected dividend assumption was based on our history and expectation of dividend payouts.

The following table presents total stock-based compensation expense included in the condensed consolidated statements of operations (in thousands):

	Three Months Ended March 31,	
	2011	2010
Research and development	$ 850	$ 709
Sales, general and administrative	1,457	946
	$ 2,307	$ 1,655

11. Segment Reporting

Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker, or decision making group, in deciding how to allocate resources and in assessing performance. Our chief operating decision makers are our Chief Executive Officer and our board of directors. The Chief Executive Officer and our board of directors review financial information presented on a consolidated basis, accompanied by information about revenues by geographic region, for purposes of allocating resources and evaluating financial performance. We have one business activity and there are no segment managers who are held accountable for operations, operating results beyond revenue goals or gross margins, or plans for levels or components below the consolidated unit level. Accordingly, we have a single reporting segment.

Operations outside of the United States consist principally of research and development and sales activities. Geographic revenues are identified by the location of the customer and consist of the following (in thousands):

	Three Months Ended March 31,	
	2011	2010
Revenues		
Americas(1)	$ 17,718	$ 16,531
Europe	11,681	3,046
Asia	1,635	6,123
	$ 31,034	$ 25,700

(1) Primarily United States

Geographic presentation of identifiable long-lived assets below shows those assets that can be directly associated with a particular geographic area and consist of the following (in thousands):

	March 31, 2011	December 31, 2010
Long-lived assets		
Americas(1)	$ 50,126	$ 37,023
Europe	3,735	3,980
Asia	3,079	3,398
	$ 56,940	$ 44,401

(1) Primarily United States

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the unaudited condensed consolidated financial statements and the related notes thereto included elsewhere in this Quarterly Report on Form 10-Q and the audited consolidated financial statements and notes thereto and management's discussion and analysis of financial condition and results of operations for the year ended December 31, 2010 included in our Annual Report on Form 10-K filed with the SEC on February 10, 2011. This Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended,(the "Exchange Act"). These statements are often identified by the use of words such as "may," "will," "expect," "believe," "anticipate," "intend," "could," "should," "estimate," or "continue," and similar expressions or variations. Such forward-looking statements are subject to risks, uncertainties and other factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the section titled "Risk Factors," set forth in Part II, Item 1A of this Quarterly Report on Form 10-Q and elsewhere in this Report. The forward-looking statements in this Quarterly Report on Form 10-Q represent our views as of the date of this Quarterly Report on Form 10-Q. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this Quarterly Report on Form 10-Q.

Overview

Our proprietary technology platform enables the creation of optimized biocatalysts that make existing industrial processes faster, cleaner and more efficient than current methods and has the potential to make new industrial processes possible on a commercial scale. We have focused our biocatalyst development efforts on large and rapidly growing markets, including pharmaceuticals and advanced biofuels. We have commercialized our biocatalysts in the pharmaceutical industry and are developing biocatalysts for use in producing advanced biofuels under a multi-year research and development collaboration with Shell. We have enabled biocatalyst-based drug manufacturing processes at commercial scale and have delivered biocatalysts and drug products to some of the world's leading pharmaceutical companies. In our research and development collaboration with Shell, we are developing biocatalysts for use in producing advanced biofuels from renewable sources of non-food plant materials, known as cellulosic biomass. We are also using our technology platform to pursue biocatalyst-enabled solutions in other bioindustrial markets, including carbon management, chemicals and water treatment.

Biocatalysts are enzymes or microbes that initiate or accelerate chemical reactions. Manufacturers have historically used naturally occurring biocatalysts to produce many goods used in everyday life. However, inherent limitations in naturally occurring biocatalysts have restricted their commercial use. Our proprietary technology platform is able to overcome many of these limitations, allowing us to evolve and optimize biocatalysts to perform specific and desired chemical reactions at commercial scale.

To date, we have generated revenues primarily from collaborative research and development funding, pharmaceutical product sales and government grants. Our revenues have increased in each of the last three fiscal years, growing from $50.5 million in 2008, to $82.9 million in 2009 to $107.1 million in 2010. Our revenues increased from $25.7 million for the three months ended March 31, 2010 to $31.0 million for the three months ended March 31, 2011. As of March 31, 2011, we had an accumulated deficit of $171.6 million. We incurred net losses of $45.1 million, $20.3 million and $8.5 million in the years ended December 31, 2008, 2009 and 2010, respectively and a net loss of $3.5 million for the three months ended March 31, 2011.

Most of our revenues since inception have been derived from collaborative research and development arrangements, which accounted for 66%, 78% and 66% of our revenues in 2010, 2009 and 2008, respectively. Collaborative research and development arrangements accounted for 56% and 65% of our revenues for the three months ended March 31, 2011 and 2010, respectively. Related party collaborative research and development received from Shell accounted for 62%, 76% and 60% of our revenues in 2010, 2009 and 2008, respectively. Related party collaborative research and development received from Shell accounted for the 48% and 62% of our revenues for the three months ended March 31, 2011 and 2010, respectively.

Our product sales accounted for 31%, 22% and 33% of our revenues in 2010, 2009 and 2008, respectively. Product sales accounted for 42% and 24% of our revenues for the three months ended March 31, 2011 and 2010, respectively. Our product sales on a dollar basis have increased in each of the last three fiscal years, from $16.9 million in 2008 to $18.6 million in 2009 and to $32.8 million in 2010. Our product sales increased from $6.3 million for the three months ended March 31, 2010 to $12.9 million for the three months ended March 31, 2011.

Notwithstanding our revenue growth, we have continued to experience significant losses as we have invested heavily in research and development and administrative infrastructure in connection with the growth in our business. In light of the growth in market acceptance of our products and services to date, we currently intend to increase our investment in research and development, such that we do not expect to achieve profitability on an annual basis prior to at least 2012.

Our revenue stream is diversified across various industries, which should mitigate our exposure to cyclical downturns or fluctuations in any one market. Revenues during 2008, 2009 and 2010 were derived from the pharmaceuticals and biofuels markets, and consisted of collaborative research and development revenues, product sales and government grants, which are separately identified in our consolidated statements of operations. Based on our existing arrangements, we believe that revenues from both our pharmaceutical and biofuels customers should be predictable over the near term. The revenues that we expect to recognize from our collaborative research agreement with Shell should provide a high degree of visibility into our aggregate revenues for the foreseeable future.

Revenues and Operating Expenses

Revenues

Our revenues are comprised of collaborative research and development revenues, product revenues and government grants.

- Collaborative research and development revenues include license, technology access and exclusivity fees, FTE payments, milestones, royalties, and optimization and screening fees. We report our collaborative research and development revenues under two categories consisting of revenues (i) from related parties and (ii) from all other collaborators. Related party collaborative research and development revenues consist of revenues from Shell.
- Product revenues consist of sales of biocatalysts, intermediates, APIs and Codex Biocatalyst Panels and Kits.
- Government grants consist of payments from government entities. The terms of these grants generally provide us with cost reimbursement for certain types of expenditures in return for research and development activities over a contractually defined period. Historically, we have received government grants from Germany, Singapore and the United States. We expect to receive additional grants from the United States and other governments in the future.

Cost of Product Revenues

Cost of product revenues includes both internal and third-party fixed and variable costs including amortization of purchased technology, materials and supplies, labor, facilities and other overhead costs associated with our product revenues.

Research and Development Expenses

Research and development expenses consist of costs incurred for internal projects as well as partner-funded collaborative research and development activities. These costs include, our direct and research-related overhead expenses, which include salaries and other personnel-related expenses, facility costs, supplies, depreciation of facilities, and laboratory equipment and amortization of acquired technologies, as well as research consultants and the cost of funding research at universities and other research institutions, and are expensed as incurred. As a result of our purchase of the directed evolution intellectual property assets from Maxygen (“Maxygen IP”) in 2010, our obligation to pay biofuels royalties to Maxygen terminated. License and royalty fees paid to Maxygen prior to our acquisition of the Maxygen IP fluctuated depending on the timing and type of consideration received in connection with our biofuels research and development collaboration with Shell. Costs to acquire technologies that are utilized in research and development and that have no alternative future use are expensed when incurred.

Selling, General and Administrative Expenses

Selling, general and administrative expenses consist of compensation expenses (including stock-based compensation), hiring and training costs, consulting and service provider expenses (including patent counsel related costs), marketing costs, occupancy-related costs, depreciation and amortization expenses and travel and relocation expenses.

Critical Accounting Policies and Estimates

The interim condensed consolidated financial statements have been prepared in conformity with generally accepted accounting principles in the United States and include our accounts and the accounts of our wholly-owned subsidiaries. The preparation of our condensed consolidated financial statements requires our management to make estimates, assumptions, and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the applicable periods. Management bases its estimates, assumptions and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances. Different assumptions and judgments would change the estimates used in the preparation of our condensed consolidated financial statements, which, in turn, could change the results from those reported. Our management evaluates its estimates, assumptions and judgments on an ongoing basis.

Financial Operations Overview

The following table shows the amounts from our condensed consolidated statements of operations for the periods presented (in thousands).

	Three Months Ended March 31,		% of Total Revenues	
	2011	2010	2011	2010
Revenues:				
Product	$ 12,932	$ 6,275	42%	24%
Related party collaborative R&D	14,823	16,042	48%	62%
Collaborative R&D	2,663	661	9%	3%
Government grants	616	2,722	2%	11%
Total revenues	31,034	25,700	100%	100%
Costs and operating expenses:				
Cost of product revenues	11,650	5,218	38%	20%
Research and development	13,750	12,982	44%	51%
Selling, general and administrative	9,013	8,600	29%	33%
Total costs and operating expenses	34,413	26,800	111%	104%
Loss from operations	(3,379)	(1,100)	nm	nm
Interest income	49	28	0%	0%
Interest expense and other, net	17	(358)	nm	nm
Loss before provision for income taxes	(3,313)	(1,430)	nm	nm
Provision for income taxes	158	(61)	1%	nm
Net loss	$ (3,471)	$ (1,369)	nm	nm

Revenues

(In Thousands)	Three Months Ended March 31,		Change	
	2011	2010	$	%
Product	$ 12,932	$ 6,275	$ 6,657	106%
Related party collaborative research and development	14,823	16,042	(1,219)	(8%)
Collaborative research and development	2,663	661	2,002	303%
Government grants	616	2,722	(2,106)	(77%)
Total revenues	$ 31,034	$ 25,700	$ 5,334	21%

Revenues increased during the three months ended March 31, 2011 compared to the three months ended March 31, 2010 primarily due to increased revenues from product sales and collaborative research and development projects which was partially offset by declines in revenues from government grants and our related party collaborative research and development projects.

Product revenues increased $6.7 million during the three months ended March 31, 2011 compared to the three months ended March 31, 2010 primarily due to increased sales to Merck and increased product sales to our generics customers.

Related party collaborative research and development revenues decreased $1.2 million during the three months ended March 31, 2011 compared to the three months ended March 31, 2010 due to a milestone payment of $1.4 million received in 2010. The decrease in related party collaborative research and development revenues was partially offset by the contractual increases in the billings rates for the FTEs engaged in our research and development collaboration with Shell. We had an average of 128 FTEs in this collaboration during the three months ended March 31, 2011 and March 31, 2010.

Collaborative research and development revenues increased $2.0 million during the three months ended March 31, 2011 compared to the three months ended March 31, 2010 primarily due to our collaborations in carbon management and collaborations with new pharmaceuticals customers.

Government grant revenues decreased $2.1 million during the three months ended March 31, 2011 compared to the three months ended March 31, 2010 primarily due to the recognition of a grant from the EDB for $2.7 million in the three months ended March 31, 2010. The decrease in government grant revenues was partially offset by a $0.6 million grant we received from the U.S. Department of Energy during the three months ended March 31, 2011 under the ARPA-E Recovery Act program.

Our top five customers accounted for 85% and 87% of our total revenues for the three months ended March, 31, 2011 and 2010, respectively. Shell accounted for 48% and 62% of our total revenues for the three months ended March, 31, 2011 and 2010, respectively.

Cost of Product Revenues

(In Thousands)	Three Months Ended March 31, 2011	2010	Change $	Change %
Cost of revenues:				
Product	$ 11,650	$ 5,218	$6,432	123%
Gross profit:				
Product	$ 1,282	$ 1,057	$ 225	21%
Product gross margin %	10%	17%		

Our cost of product revenues increased $6.4 million during the three months ended March 31, 2011 compared to the three months ended March 31, 2010 primarily due to the $6.6 million increase in our product sales. Gross margins decreased from 17% to 10% in the three months ended March 31, 2010 and 2011, respectively, due to a change in sales mix towards lower margin product sales in the first quarter of 2011.

Operating Expenses

(In Thousands)	Three Months Ended March 31, 2011	2010	Change $	Change %
Research and development	$ 13,750	$ 12,982	$ 768	6%
Selling, general and administrative	9,013	8,600	413	5%
Total operating expenses	$ 22,763	$ 21,582	$1,181	5%

Research and Development. Research and development expenses increased $0.8 million during the three months ended March 31, 2011 compared to the three months ended March 31, 2010 primarily due to the $0.8 million increase in amortization expense related to our acquisition of Maxygen's IP. We incurred additional expenses of $0.2 million for depreciation and amortization expense due to leasehold improvements and capital equipment acquisitions, $0.2 million due to increased travel costs and $0.2 million in increased stock compensation costs. This was partially offset by $0.5 million decrease in royalty fees paid to Maxygen as a consequence of our acquisition of Maxygen's IP and related termination of the IP license agreement. Research and development expenses included stock-based compensation expense of $0.9 million and $0.7 million during the periods ended March 31, 2011 and 2010, respectively.

Selling, General and Administrative. Selling, general and administrative expenses increased $0.4 million during the three months ended March 31, 2011 compared to the three months ended March 31, 2010 primarily due to a $0.9 million increase in compensation costs related to headcount and stock-based compensation. We also increased spending on travel costs by $0.2 million. This was partially offset by $0.6 million decrease in legal costs in the three months ended March 31, 2011 as we decreased our dependence on outside legal firms. Selling, general and administrative expenses included stock-based compensation expense of $1.5 million and $1.0 million during the three months ended March 31, 2011 and 2010, respectively.

Other Income (Expense), net

(In Thousands)	Three Months Ended March 31, 2011	2010	$ Change	% Change
Interest income	$ 49	$ 28	$ 21	75%
Interest expense and other, net	17	(358)	375	(105%)
	$ 66	$ (330)	$ 396	(120%)

Interest Income. Interest income increased due to higher average balances of cash, cash equivalents and marketable securities on hand during the three months ended March 31, 2011 compared to the three months ended March 31, 2010.

Interest Expense and Other, Net. Interest expense and other, net, decreased $0.4 million during the three months ended March 31, 2011 compared to the three months ended March 31, 2010 primarily related to decreased interest expense of $0.3 million due to the payoff of our debt obligation on the GE Capital Loan, the recognition of an increase in the fair value of our redeemable convertible preferred stock warrant liability in 2010 of $0.4 million and decreased other income of $0.4 million due to contractual arrangements with Arch. The preferred stock warrants converted to common stock warrants upon our IPO and subsequently no longer impact other expenses.

Provision (benefit) for Income Taxes. The tax provision (benefit) for the three months ended March 31, 2011 and 2010 primarily consisted of income taxes attributable to foreign operations.

Restructuring Charges. There was no change in our restructuring accruals during the three months ended March 31, 2011.

Liquidity and Capital Resources

(In Thousands)	March 31, 2011	December 31, 2010
Cash and cash equivalents	$53,152	$ 72,396
Marketable securities (1)	12,540	—
Accounts receivable, net	11,322	15,333
Accounts payable, accrued compensation and accrued liabilities	21,479	22,945
Working capital (2)	51,915	64,708

(1) Includes only the current portion of our marketable securities
(2) Working capital consists of total current assets less total current liabilities.

(In Thousands)	Three Months Ended March 31, 2011	2010
Net cash provided by (used in) operating activities	$ 7,286	$ (12,025)
Net cash provided by (used in) investing activities	(28,041)	12,290
Net cash provided by (used in) financing activities	1,485	(2,835)
Effect of foreign exchange rates on cash and cash equivalents	26	(18)
Net increase (decrease) in cash and cash equivalents	$ (19,244)	$ (2,588)

Cash Flows from Operating Activities

Operating activities provided $7.3 million of net cash during the three months ended March 31, 2011. We incurred a net loss of $3.5 million in the three months ended March 31, 2011, which included non-cash share-based compensation expense of $2.3 million and depreciation and amortization of $2.8 million. Changes in operating asset and liability accounts provided $5.7 million of net cash during the three months ended March 31, 2011

Operating activities used $12.0 million of net cash during the three months ended March 31, 2010. We incurred a net loss of $1.4 million in the three months ended March 31, 2010, which included non-cash share-based compensation expense of $1.7 million and depreciation and amortization of $1.8 million. Changes in operating asset and liability accounts used $14.5 million of net cash during the three months ended March 31, 2010.

Cash Flows from Investing Activities

Cash flows from investing activities primarily relate to capital expenditures to support our growth and our investments in marketable securities.

Cash used by investing activities totaled $28.0 million during the three months ended March 31, 2011 and consisted of capital expenditures of $0.9 million primarily related to the purchase of manufacturing and lab equipment and an increase of marketable securities of $27.1 million related to the investment of our cash and cash equivalents.

Cash provided by investing activities totaled $12.3 million during the three months ended March 31, 2010 and consisted of a decrease of marketable securities of $13.6 million offset by capital expenditures of $1.3 million primarily related to the purchase of manufacturing and lab equipment.

Cash Flows from Financing Activities

Cash flows provided by financing activities totaled $1.5 million during the three months ended March 31, 2011 related to the proceeds from the exercise of stock options.

Cash flows used in financing activities totaled $2.8 million during the three months ended March 31, 2010 and included payments on financing obligations of $1.3 million and payments in preparation for our IPO of $1.6 million.

Contractual Obligations and Commitments

Our contractual obligations relate primarily to operating leases. Our commitments for operating leases primarily relate to our leased facilities in Redwood City, California. As a result of our amended lease we increased our restricted cash balance by $145,000 in March, 2011. The following table summarizes the future commitments arising from our contractual obligations at March 31, 2011 (in thousands):

	Operating leases
9 months ending December 31:	
2011	$ 2,221
Years ending December 31:	
2012	3,192
2013	2,729
2014	2,431
2015	2,502
2016 and beyond	11,026
Total minimum payments	$ 24,101

Off-Balance Sheet Arrangements

As of March 31, 2011, we had no off-balance sheet arrangements as defined in Item 303(a)(4) of Regulation S-K as promulgated by the SEC.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market Risk Management

Our cash flow and earnings are subject to fluctuations due to changes in foreign currency exchange rates, interest rates and other factors. There were no significant changes in our market risk exposures during the three months ended March 31, 2011. This is discussed in further detail in our Annual Report in Form 10-K filed with the SEC on February 10, 2011.

Equity Price Risk

As described in Note 4 to the condensed consolidated financial statements, we have an investment in common shares of CO_2Solution, whose shares are publicly traded in Canada on the TSX Venture Exchange. This investment is exposed to fluctuations in both the market price of CO_2 Solution's common shares and changes in the exchange rates between the U.S. dollar and the Canadian dollar. The effect of a 10% adverse change in the market price of CO_2 Solution's common shares as of March 31, 2011 would have been an unrealized loss of approximately $173,000, recognized as a component of other comprehensive income (loss) in stockholders' deficit. The effect of a 10% adverse change in the exchange rates between the U.S. dollar and the Canadian dollar as of March 31, 2011 would have been an unrealized loss of approximately $173,000, recognized as a component of other comprehensive income (loss) in stockholders' deficit.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures. We maintain disclosure controls and procedures and internal controls that are designed to provide reasonable assurance that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures and internal controls, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable, and not absolute, assurance of achieving the desired control objectives. In reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost benefit relationship of possible controls and procedures and internal controls.

Management, including our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as required by Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended. Based on this review, our Chief Executive Officer and Chief Financial Officer concluded that these disclosure controls and procedures were effective as of March 31, 2011 at the reasonable assurance level.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

We are not currently a party to any material litigation or other material legal proceedings.

ITEM 1A. RISK FACTORS

You should carefully consider the risks described below together with the other information set forth in this Quarterly Report on Form 10-Q, which could materially affect our business, financial condition or future results. The risks described below are not the only risks facing our company. Risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and/or operating results.

Risks Relating to Our Business and Strategy

We have a limited operating history, which may make it difficult to evaluate our current business and predict our future performance.

Our company has been in existence since early 2002. From 2002 until 2005, our operations focused on organizing and staffing our company and developing our technology platform. In 2005, we recognized our first revenues from product sales. Since 2005, we have continued to generate revenues, but because our revenue growth has occurred in recent periods, our limited operating history may make it difficult to evaluate our current business and predict our future performance. Any assessments of our current business and predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history. We have encountered and will continue to encounter risks and difficulties frequently experienced by growing companies in rapidly changing industries. If we do not address these risks successfully, our business will be harmed.

Our quarterly operating results may fluctuate in the future. As a result, we may fail to meet or exceed the expectations of research analysts or investors, which could cause our stock price to decline.

Our financial condition and operating results have varied significantly in the past and may continue to fluctuate from quarter to quarter and year to year in the future due to a variety of factors, many of which are beyond our control. Factors relating to our business that may contribute to these fluctuations include the following factors, as well as other factors described elsewhere in this report:

- our ability to achieve or maintain profitability;
- our relationships with and dependence on collaborators in our principal markets;
- our dependence on Shell for the development and commercialization of biofuels;
- the feasibility of producing and commercializing biofuels derived from cellulose;

- our dependence on a limited number of customers;
- our dependence on a limited number of contract manufacturers of our biocatalysts and suppliers for our pharmaceutical intermediates and APIs;
- our dependence on a limited number of products in our pharmaceutical business;
- our ability to manage our growth;
- the outcomes of clinical trials conducted by our innovator customers;
- our ability to develop and successfully commercialize new products for the pharmaceuticals market;
- our ability to commercialize our technology in other bioindustrial markets;
- our ability to maintain license rights for commercial scale expression systems for cellulases;
- fluctuations in the price of and demand for petroleum-based fuels;
- the availability of non-food renewable cellulosic biomass sources;
- reductions or changes to existing fuel regulations and policies;
- the existence of government subsidies or regulation with respect to carbon dioxide emissions;
- our ability to obtain and maintain governmental grants;
- risks associated with the international aspects of our business;
- our ability to integrate any businesses we may acquire with our business;
- potential issues related to our ability to accurately report our financial results in a timely manner;
- our dependence on, and the need to attract and retain, key management and other personnel;
- our ability to obtain, protect and enforce our intellectual property rights;
- our ability to prevent the theft or misappropriation of our biocatalysts, the genes that code for our biocatalysts, know-how or technologies;
- potential advantages that our competitors and potential competitors may have in securing funding or developing products;
- our ability to obtain additional capital that may be necessary to expand our business;
- business interruptions such as earthquakes and other natural disasters;
- public concerns about the ethical, legal and social ramifications of genetically engineered products and processes;
- our ability to comply with laws and regulations;
- our ability to properly handle and dispose of hazardous materials used in our business;
- potential product liability claims; and
- our ability to use our net operating loss carryforwards to offset future taxable income.

Due to the various factors mentioned above, and others, the results of any prior quarterly or annual periods should not be relied upon as indications of our future operating performance.

We have a history of net losses, and we may not achieve or maintain profitability.

We have incurred net losses since our inception, including losses of $45.1 million, $20.3 million and $8.5 million in 2008, 2009 and 2010, respectively, and net loss of $3.5 million for the three months ended March 31, 2011. As of March 31, 2011, we had an accumulated deficit of $171.6 million. We expect to incur losses and negative cash flow from operating activities for the foreseeable future. To date, we have derived a substantial portion of our revenues from research and development agreements with our collaborators and expect to derive a substantial portion of our revenues from these sources for the foreseeable future. If we are unable to extend our existing agreements or enter into new agreements upon the expiration or termination of our existing agreements, our revenues could be adversely affected. In addition, some of our collaboration agreements provide for milestone payments and future royalty payments, the payment of which are uncertain as they are dependent on our and our collaborators' abilities and willingness to successfully develop and commercialize products. We expect to spend significant amounts to fund the development of additional pharmaceutical and potential bioindustrial products, including biofuels and bio-based chemicals. As a result, we expect that our expenses will exceed revenues for the foreseeable future and we do not expect to achieve profitability prior to at least 2012, if ever. If we fail to achieve profitability, or if the time required to achieve profitability is longer than we anticipate, we may not be able to continue our business. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis.

We are dependent on our collaborators, and our failure to successfully manage these relationships could prevent us from developing and commercializing many of our products and achieving or sustaining profitability.

Our ability to maintain and manage collaborations in our markets is fundamental to the success of our business. We currently have license agreements, research and development agreements, supply agreements and/or distribution agreements with various collaborators. We may have limited or no control over the amount or timing of resources that any collaborator is able or willing to devote to our partnered products or collaborative efforts. Any of our collaborators may fail to perform their obligations. These collaborators may breach or terminate their agreements with us or otherwise fail to conduct their collaborative activities successfully and in a timely manner. Further, our collaborators may not develop products arising out of our collaborative arrangements or devote sufficient resources to the development, manufacture, marketing, or sale of these products. Moreover, disagreements with a collaborator could develop and any conflict with a collaborator could reduce our ability to enter into future collaboration agreements and negatively impact our relationships with one or more existing collaborators. If any of these events occur, or if we fail to maintain our agreements with our collaborators, we may not be able to commercialize our existing and potential products, grow our business, or generate sufficient revenues to support our operations. Our collaboration opportunities could be harmed if:

- we do not achieve our research and development objectives under our collaboration agreements in a timely manner or at all;
- we develop products and processes or enter into additional collaborations that conflict with the business objectives of our other collaborators;
- we disagree with our collaborators as to rights to intellectual property that are developed during the collaboration, or their research programs or commercialization activities;
- we are unable to manage multiple simultaneous collaborations;
- our collaborators become competitors of ours or enter into agreements with our competitors;
- our collaborators become unable or less willing to expend their resources on research and development or commercialization efforts due to general market conditions, their financial condition or other circumstances beyond our control; or
- consolidation in our target markets limits the number of potential collaborators.

Additionally, our business could be negatively impacted if any of our collaborators or suppliers undergoes a change of control or were to otherwise assign the rights or obligations under any of our agreements. For example, under our license agreement with Shell, Shell may assign the agreement without our consent to controlled affiliates or in connection with a change of control. If Shell or any of our other collaborators were to assign these agreements to a competitor of ours or to a third party who is not willing to work with us on the same terms or commit the same resources as the current collaborator, our business and prospects could be harmed.

Our future success is heavily dependent on our collaborative research agreement with Shell.

Our current business plan for biofuels is heavily dependent on our collaborative research agreement with Shell, which will continue to be critical to researching and developing successful biocatalysts for producing biofuel products. Shell's efforts in commercializing those products profitably will be critical to the success of our business plan for biofuels. If we are unable to successfully execute on the development of products for Shell, our ability to expand into other bioindustrial areas may be significantly impaired, which will materially and adversely affect our ability to grow our business.

We cannot control the financial resources Shell devotes to our programs under the collaborative research agreement. Currently, we receive bi-monthly payments from Shell that are based on the number of full-time employee equivalents, or FTEs, that work on our research collaboration with Shell. The number of FTEs that work on the program, and the payments from Shell for these FTEs, are specified in our collaborative research agreement. Shell has the right to reduce the number of funded FTEs, with any one reduction not to exceed 98 funded FTEs, following advance written notice. The required notice period ranges from 30 to 270 days. Following any such reduction, Shell is subject to a standstill period of between 90 and 360 days during which period Shell cannot provide notice of any further FTE reductions. The notice and standstill periods are dependent on the number of funded FTEs reduced, with the length of notice and standstill periods increasing commensurate with the number of FTEs reduced. Any such reduction would have a material adverse impact on our revenues and business plan for biofuels. Moreover, disputes may arise between us and Shell, which could delay the programs on which we are working or could prevent the commercialization of products developed under our research and development collaboration. If that were to occur, we may have to use funds, personnel, equipment, facilities and other resources that we have not budgeted to undertake certain activities on our own. Disagreements with Shell could also result in expensive arbitration or litigation, which may not be resolved in our favor. Performance issues, program delay or termination or unbudgeted use of our resources may have a material adverse effect on our business and financial condition. Even if we successfully develop commercially viable technologies, our ability to derive revenues from those technologies will be dependent upon Shell's willingness and ability to commercialize them. Shell has the right, but not the obligation, to commercialize these technologies. If Shell decides to commercialize our technology, we would need to rely on Shell, or other parties selected by Shell, to design, finance and construct commercial scale biofuel facilities, and operate commercial scale facilities at costs that are competitive with traditional petroleum-based fuels and other alternative fuel technologies that may be developed. Shell could merge with or be acquired by another company or experience financial or other setbacks unrelated to our research collaboration agreement that could adversely affect us.

We have agreed to work exclusively with Shell until November 2012 in the field of converting cellulosic biomass into fermentable sugars that are used in the production of fuels and related products as well as the conversion of these sugars into fuels and related products. However, Shell is not required to work exclusively with us, and could develop or pursue alternative technologies that it decides to use for commercialization purposes instead of the technology developed under our collaborative research agreement with Shell. For example, Shell is currently working with Virent Energy Systems to develop a thermo-chemical approach to developing biogasoline and biodiesel. Even if Shell decides to commercialize products based on our technologies, they have no obligation to purchase their biocatalyst supply from us. If Shell does not pursue the commercialization of any cellulosic sugars, biofuels or related products that may be developed under our collaborative research agreement, our exclusive arrangement would prevent us from licensing any technology developed under the collaboration for the patent life of such technology, which could place us at a significant competitive disadvantage in the biofuels market.

We cannot guarantee that our relationship with Shell will continue. Shell can terminate its collaborative research agreement with us for any or no reason by providing us with nine months' notice. Each party also has the right to terminate the license agreement and the collaborative research agreement in the case of an uncured breach by the other party, and to terminate the collaborative research agreement if that party believes the other party has assigned the collaborative research agreement to a direct competitor of the terminating party. If our collaboration with Shell were to fail, we would likely need to find another collaborator to provide the financial assistance and infrastructure necessary for us to develop and commercialize our products and execute our strategy with respect to biofuels. Failure to maintain this relationship would have a material adverse effect on our business, financial condition and prospects.

The success of our cellulosic ethanol program may be dependent on the performance of other parties.

In connection with our research and development collaboration with Shell, we entered into a multiparty collaborative research and license agreement with Iogen and Shell in July 2009, which is focused on developing technology to convert cellulosic biomass to ethanol for commercial scale production. Either Shell or Iogen may fail to perform their obligations under this collaboration, may breach or terminate the collaboration agreement or otherwise fail to conduct their collaborative activities successfully and in a timely manner. Further, they may not devote sufficient resources to the development of technology to convert cellulosic biomass to ethanol or may fail to develop the technology altogether. Moreover, disagreements or conflicts amongst the parties could develop and could negatively impact our development efforts or our relationships with Shell and Iogen. Disagreements with Iogen or Shell could also result in expensive arbitration or litigation, which may not be resolved in our favor. If any of these events occur, or if we fail to maintain this collaboration with Shell and Iogen, we may be unable to develop technology for use in the production of cellulosic ethanol at commercial scale, which would have an adverse impact on our ability to grow our business. In addition, the collaborative research and license agreement with Iogen and Shell terminates in the event (i) our separate license agreements with Shell terminate or (ii) Iogen's separate technology license agreement with Shell terminates. In addition, Shell can terminate the collaborative research and license agreement for any or no reason by providing us and Iogen with 30 days notice. Any unilateral action by Shell to terminate either its separate license agreements with us or Iogen will prevent any further research and development activities under the multi-party collaboration. As a result, our ability to pursue research and development activities relating to the conversion of cellulosic biomass and our biofuels programs may be adversely impacted.

We do not yet know what impact, if any, the Shell and Cosan joint venture in Brazil will have on our business.

In August 2010, Shell International Petroleum Company Limited, or Shell International, an affiliate of Shell, announced that it had signed a binding agreement with Cosan S.A. to form a joint venture in Brazil for the production of ethanol, sugar and power, and the supply, distribution and retail of transportation fuels. According to the announcement, Shell International would contribute to the joint venture, among other assets, Shell's equity interest in us. If the joint venture is consummated, we do not know whether we will receive any benefits from it.

Production and commercialization of biofuels and bio-based chemicals derived from cellulose may not be feasible.

We are developing biocatalysts for use in producing two advanced biofuels, cellulosic ethanol and biohydrocarbon diesel, and bio-based chemicals. However, production and commercialization of cellulosic biofuels and bio-based chemicals may not be feasible for a variety of reasons. For example, the development of technology for converting sugar derived from non-food renewable biomass sources into a commercially viable biofuel or bio-based chemicals is still unproven, and we do not know whether this can be done commercially or at all. To date, there has been limited private and government funding for research and development in advanced biofuels relative to the scope of the challenges presented by this development effort. Furthermore, there have been only a few well-directed public policies emphasizing investment in the research and development of, and providing incentives for the commercialization of and transition to, biofuels.

As of the date of this report, we believe that there are no commercial scale cellulosic biofuel or cellulosic bio-based chemicals production plants in operation. There can be no assurance that anyone will be able or willing to develop and operate these production plants at commercial scale or that any of these facilities can be profitable. Additionally, different biocatalysts may need to be developed for use in different geographic locations to convert the cellulosic biomass available in each locale into sugars that can be used in the production of these biofuels or bio-based chemicals. This will make the development of biofuels or bio-based chemicals derived from cellulose more challenging and expensive. Moreover, substantial development of infrastructure will be required for the ethanol market to grow. Areas requiring expansion include, but are not limited to, additional rail capacity, additional storage facilities for ethanol, increases in truck fleets capable of transporting ethanol within localized markets, expansion of refining and blending facilities to handle ethanol, logistics for the collection and storage of biomass and growth in the fleet of end user vehicles capable of using ethanol blends. Substantial investments required for infrastructure changes and expansions may not be made on a timely basis or at all. Any delay or failure in making the changes to or expansion of infrastructure could harm demand or prices for ethanol and impose additional costs that would hinder its commercialization. Finally, if existing tax credits, subsidies and other incentives in the United States and foreign markets are phased out or reduced, the overall cost of commercialization of cellulosic biofuels will increase.

We are dependent on a limited number of customers.

Our current revenues are derived from a limited number of key customers. For the year ended December 31, 2009, our top five customers accounted for 90% of our total revenues, with Shell accounting for 76% of our total revenues. For the year ended December 31, 2010, our top five customers accounted for 85% of our total revenues, with Shell accounting for 62% of our total revenues. For the three months ended March 31, 2011, our top five customers accounted for 85% of our total revenues, with Shell accounting for 48% of our total revenues. We expect a limited number of customers to continue to account for a significant portion of our revenues for the foreseeable future. This customer concentration increases the risk of quarterly fluctuations in our revenues and operating results. The loss or reduction of business from one or a combination of our significant customers could materially adversely affect our revenues, financial condition and results of operations.

We are dependent on a limited number of products in our pharmaceutical business.

Our current product revenues are derived from a limited number of pharmaceutical products. For the year ended December 31, 2010, we derived 87% of our product revenue from three pharmaceutical product families: atorvastatin, boceprevir and sitagliptin. We expect a limited number of pharmaceutical products to continue to account for a significant portion of our pharmaceutical product revenues for the foreseeable future. This product concentration increases the risk of quarterly fluctuations in our revenues and operating results. The loss or reduction of business of one or a combination of our significant pharmaceutical products could materially adversely affect our revenues, financial condition and results of operations.

Our dependence on contract manufacturers for biocatalyst production exposes our business to risks.

We have limited internal capacity to manufacture biocatalysts and are unable to manufacture for all of our commercial scale production needs. As a result, we are dependent upon the performance and capacity of third party manufacturers for the commercial scale manufacturing of our biocatalysts.

We rely on two primary contract manufacturers, CPC Biotech srl, or CPC, and Lactosan GmbH & Co. KG, or Lactosan, to manufacture substantially all of the biocatalysts used in our pharmaceutical business. Our pharmaceutical business, therefore, faces risks of difficulties with, and interruptions in, performance by these contract manufacturers, the occurrence of which could adversely impact the availability, launch and/or sales of our enzymes in the future. We have identified other contract manufacturers to manufacture biocatalysts for our pharmaceutical business, but we do not have ongoing projects with any such contract manufacturers at this time. The failure of any manufacturers that we may use to supply manufactured product on a timely basis or at all, or to manufacture our biocatalysts in compliance with our specifications or applicable quality requirements or in volumes sufficient to meet demand would adversely affect our ability to sell pharmaceutical products, could harm our relationships with our collaborators or customers and could negatively affect our revenues and operating results. For example, in 2008, we were required to secure an alternative source of certain biocatalysts when viruses infected one of our contract manufacturer's facilities. If this or any similar event disrupts the operations of any of our suppliers in the future, we may be forced to secure alternative sources of supply, which may be unavailable on commercially acceptable terms, cause delays in our ability to deliver products to our customers, increase our costs and decrease our profit margins.

We do not currently have a long-term supply contract with CPC, Lactosan or any other contract manufacturers, which are under no obligation to manufacture our biocatalysts and could elect to discontinue their manufacture at any time. If we require additional manufacturing capacity and are unable to obtain it in sufficient quantity, we may not be able to increase our pharmaceutical sales, or we may be required to make substantial capital investments to build that capacity or to contract with other manufacturers on terms that may be less favorable than the terms we currently have with CPC or Lactosan. If we choose to build our own additional manufacturing capacity, it could take a year or longer before our facility is able to produce commercial volumes of our biocatalysts. Any resources we expend on acquiring or building internal manufacturing capabilities could be at the expense of other potentially more profitable opportunities. In addition, if we contract with other manufacturers, we may experience delays of several months in qualifying them, which could harm our relationships with our collaborators or customers and could negatively affect our revenues or operating results.

We are working to establish long-term supply contracts with contract manufacturers and are evaluating whether to invest in our own manufacturing capabilities. However, we cannot guarantee that we will be able to enter into long-term supply contracts on commercially reasonable terms, or at all, or to acquire, develop or contract for internal manufacturing capabilities. Any resources we expend on acquiring or building internal manufacturing capabilities could be at the expense of other potentially more profitable opportunities.

We rely on Arch to market our products in certain regions, and Arch may not be able to effectively market our products.

Using our biocatalysts, Arch manufactures certain specified APIs, and intermediates used in the manufacture of APIs, that we then purchase and have the right to sell to innovator pharmaceutical companies worldwide, generic pharmaceutical companies in the United States, Canada, Europe and Israel, and certain pharmaceutical companies in India. Arch has the exclusive right to manufacture market and sell such APIs and intermediaries to generic pharmaceutical companies in countries other than the United States, Canada, Europe and Israel, and certain other pharmaceutical companies in India. We must therefore rely on Arch for their financial resources and their marketing expertise for the commercialization of such APIs and intermediates in these regions. We cannot control Arch's level of activity or expenditure relating to the marketing of such products relative to the rest of their products or marketing efforts. Arch may fail to effectively market our products in these regions. Conflicting priorities, competing demands or other factors that we cannot control, and of which we may not be aware, may cause Arch to deemphasize such products. If we are unable to effectively leverage Arch's marketing capabilities or Arch does not successfully promote such products in the designated territories as our sole marketing partner, this could harm our business, our revenues and operating results, and our ability to bring such products to the marketplace.

If we are unable to implement and maintain effective internal control over financial reporting in the future, the accuracy and timeliness of our financial reporting may be adversely affected.

Based on the procedures performed as of December 31, 2010, we noted no control deficiencies in our internal control over financial reporting. We have not performed an evaluation of our internal control over financial reporting, such as required by Section 404 of the Sarbanes-Oxley Act, nor have we engaged our independent registered public accounting firm to perform an audit of our internal control over financial reporting as of any balance sheet date or for any period reported in our financial statements. Had we performed such an evaluation or had our independent registered public accounting firm performed an audit of our internal control over financial reporting, control deficiencies, including material weaknesses and significant deficiencies, in addition to those discussed above, may have been identified.

We have taken numerous steps to enhance our internal control over financial reporting, including the development and implementation of policies, improved processes and documented procedures, the retention of third-party experts and contractors, and the hiring of additional accounting and finance personnel with technical accounting, inventory accounting and financial reporting experience. We cannot assure you that in the future material weaknesses or significant deficiencies will not exist or otherwise be discovered, a risk that is significantly increased in light of the complexity of our business and multinational operations. If other deficiencies are discovered in the future, our ability to accurately and timely report our financial position, results of operations or cash flows could be impaired, which could result in late filings of our annual and quarterly reports under the Securities Exchange Act of 1934, as amended, restatements of our consolidated financial statements, a decline in our stock price, suspension or delisting of our common stock by The NASDAQ Global Market, or other material adverse effects on our business, reputation, results of operations, financial condition or liquidity.

We may continue to encounter difficulties managing our growth, which could adversely affect our business.

Our business has grown rapidly and we expect this growth to continue. Overall, we have grown from approximately 40 employees at the end of 2002 to approximately 294 employees as of March 31, 2011. Currently, we are working simultaneously on multiple projects targeting several markets. Furthermore, we are conducting our business across several countries, including countries in North America, South America, Europe and Asia. These diversified, global operations place increased demands on our limited resources and require us to substantially expand the capabilities of our administrative and operational resources and to attract, train, manage and retain qualified management, technicians, scientists and other personnel. As our operations expand domestically and internationally, we will need to continue to manage multiple locations and additional relationships with various customers, collaborators, suppliers and other third parties. Our ability to manage our operations, growth, and various projects effectively will require us to make additional investments in our infrastructure to continue to improve our operational, financial and management controls and our reporting systems and procedures and to attract and retain sufficient numbers of talented employees, which we may be unable to do effectively. As a result, we may be unable to manage our expenses in the future, which may negatively impact our gross margins or operating margins in any particular quarter. In addition, we may not be able to successfully improve our management information and control systems, including our internal control over financial reporting, to a level necessary to manage our growth and we may discover deficiencies in existing systems and controls that we may not be able to remediate in an efficient or timely manner.

Our business could be adversely affected if the clinical trials being conducted by our innovator customers fail or if the processes used by those customers to manufacture their final pharmaceutical products fail to be approved.

Our biocatalysts are used in the manufacture of intermediates and APIs which are then used in the manufacture of final pharmaceutical products by our existing and potential branded drug customers. These pharmaceutical products must be approved by the FDA in the United States and similar regulatory bodies in other markets prior to commercialization. If our customers who sell branded-drugs, which we refer to as innovators, experience adverse events or a lack of efficacy in their clinical trials, fail to receive regulatory approval for the drugs, fail to receive regulatory approval for new manufacturing processes for previously approved drugs, or decide for business or other reasons to discontinue their clinical trials or drug development activities, our revenues and prospects will be negatively impacted. For example, one of our customers that incorporated our biocatalysts in the manufacturing process for a drug candidate suspended its development efforts during clinical trials. As a result, we were unable to realize a potential long-term revenue stream that would otherwise be associated with a commercialized product. The process of producing these drugs, and their generic equivalents, is also subject to regulation by the FDA in the United States and equivalent regulatory bodies in other markets. If any pharmaceutical process that uses our biocatalysts does not receive approval by the appropriate regulatory body or if customers decide not to pursue approval, our business could be adversely affected.

Our pharmaceutical product gross margins are variable and may decline from quarter to quarter.

Our pharmaceutical product gross margins have varied significantly in the past and may continue to fluctuate from quarter to quarter and year to year in the future due to a variety of factors, including product mix, pricing pressure from our pharmaceutical customers and competition from other products or technologies. We do not expect product gross margins for our current generic products to improve in the near or long term, which may have a material adverse impact on our operating results and financial condition and cause our stock price to decline.

If we are unable to develop and commercialize new products for the pharmaceutical market, our business and prospects will be harmed.

We plan to launch new pharmaceutical products. These efforts are subject to numerous risks, including the following:

- pharmaceutical companies may be reluctant to adopt new manufacturing processes that use our biocatalysts;
- we may be unable to successfully develop the biocatalysts or manufacturing processes for our products in a timely and cost-effective manner, if at all;
- we may face difficulties in transferring the developed technologies to the contract manufacturers that we may use for commercial scale production;
- the contract manufacturers that we may use may be unable to scale their manufacturing operations to meet the demand for these products and we may be unable to secure additional manufacturing capacity;
- customers may not be willing to purchase these products from us on favorable terms, if at all;
- we may face product liability litigation, unexpected safety or efficacy concerns and product recalls or withdrawals;

- changes in laws or regulations relating to the pharmaceutical industry could cause us to incur increased costs of compliance or otherwise harm our business;
- our customers' pharmaceutical products may experience adverse events or face competition from new products, which would reduce demand for our products;
- we may face pressure from existing or new competitive products; and
- we may face pricing pressures from existing or new competitors, some of which may benefit from government subsidies or other incentives.

If we are unable to successfully commercialize our technology in other bioindustrial markets, we may be unable to grow our business.

In addition to biofuels, we expect to invest a significant amount of our future research and development efforts in other bioindustrial markets, including carbon management, chemicals and water treatment. Because we do not currently and may never possess the resources necessary to independently develop and commercialize all of the potential products that may result from our technologies, our ability to succeed in these target markets will likely depend on our ability to enter into collaboration agreements to develop and commercialize potential products. We intend to pursue such additional collaborations, but may be unable to do so on terms satisfactory to us, or at all. Even if we are able to enter into collaborations in one or more of these areas, the collaborations may be unsuccessful. Moreover, because we have limited financial and managerial resources, we will be required to prioritize our application of resources to particular development and commercialization efforts. Any resources we expend on one or more of these efforts could be at the expense of other potentially profitable opportunities. If we focus our efforts and resources on one or more of these areas and they do not lead to commercially viable products, our revenues, financial condition and results of operations could be adversely affected.

In October 2010, we purchased the directed evolution intellectual property assets from Maxygen, which eliminated certain constraints on our ability to enter the bio-based chemicals market. This sector will be a new market for us, and there are a number of competitors who have been active in this marketplace for several years. Our ability to compete in this market may be limited by our relatively late start.

If we are unable to maintain license rights to a commercial scale expression system for enzymes that convert cellulosic biomass to sugars, our business may be materially adversely affected.

We entered into a license agreement with Dyadic International, Inc. and its affiliate, or Dyadic, in November 2008 to obtain access to an expression system that is capable of producing the necessary biocatalysts for the commercialization of products derived from cellulose, including biofuels and bio-based chemicals. Under the license agreement with Dyadic, we obtained a non-exclusive license under intellectual property rights of Dyadic relating to Dyadic's proprietary fungal expression technology for the production of enzymes. We also obtained access to specified materials of Dyadic relating to such Dyadic technology. Our license is sublicenseable to Shell in the field of biofuels. Dyadic has the right to terminate our licenses under the license agreement if we challenge the validity of any of the patents licensed under the license agreement and for various other reasons. Our licenses and access to such materials of Dyadic, under the license agreement will terminate as a result of any termination of the license agreement other than due to Dyadic's material breach. If we are unable to maintain these rights on commercially reasonable terms or if the license agreement is terminated for any reason, we will need to buy or license this type of expression system from another party or develop this type of expression system ourselves, which may be difficult, costly and time consuming, in part because of the broad, existing intellectual property rights owned by Novozymes, Danisco A/S, which has entered into a definitive agreement to be acquired by E.I. Du Pont De Nemours and Company, and others. If any of these events occur, our business may be materially adversely affected.

Fluctuations in the price of and demand for petroleum-based products may reduce demand for biofuels and bio-based chemicals.

Biofuels and some bio-based chemicals are anticipated to be marketed as an alternative to petroleum-based products. Therefore, if the price of oil falls, any revenues that we generate from biofuel or bio-based chemical products could decline, and we may be unable to produce products that are a commercially viable alternative to petroleum-based products. Additionally, demand for liquid transportation fuels, including biofuels, may decrease due to economic conditions or otherwise. Demand for bio-based chemicals may also fluctuate if the price of oil is variable.

The royalties that we may earn under our agreements with Shell are indexed to the price of oil and generally increase as the price of oil increases. However, the index is set based on average prices between November 2007 and the date of first commercial sale. Therefore, if prices fall, our revenues would be negatively impacted.

Our approach to the advanced biofuels and bio-based chemicals markets may be limited by the availability or cost of non-food renewable cellulosic biomass sources.

Our approach to the advanced biofuels and bio-based chemicals markets may be dependent on the availability and price of the cellulosic biomass. If the availability of cellulosic biomass decreases or its price increases, this may reduce the market for our products, as well as the biofuels royalties that we collect from Shell and have a material adverse effect on our financial condition and operating results. At certain levels, prices may make these products uneconomical to use and produce.

The price and availability of cellulosic biomass may be influenced by general economic, market and regulatory factors. These factors include the availability of arable land to supply feedstock, weather conditions, farming decisions, logistics for collection and storage of biomass, government policies and subsidies with respect to agriculture and international trade, and global demand and supply. The significance and relative impact of these factors on the price of cellulosic biomass is difficult to predict, especially without knowing what types of cellulosic biomass materials we may need to use.

Reductions or changes to existing fuel regulations and policies may present technical, regulatory and economic barriers, all of which may significantly reduce demand for biofuels.

The market for biofuels is heavily influenced by foreign, federal, state and local government regulations and policies concerning the petroleum industry. For example, in 2007, the U.S. Congress passed an alternative fuels mandate that currently calls for approximately 36 billion gallons of liquid transportation fuels sold in 2022 to come from alternative sources, including biofuels. Of this amount, a minimum of 21 billion gallons must be advanced biofuels. In the United States and in a number of other countries, these regulations and policies have been modified in the past and may be modified again in the future. Any reduction in mandated requirements for fuel alternatives and additives to gasoline may cause demand for biofuels to decline and deter investment in the research and development of biofuels. Market uncertainty regarding future policies may also affect our ability to develop new biofuels products or to license our technologies to third parties. Any inability to address these requirements and any regulatory or policy changes could have a material adverse effect on our biofuels business, financial condition and operating results. Our other potential bioindustrial products may be subject to additional regulations.

If governmental incentives or other actions targeted at limiting carbon emissions are not adopted, a broad market for carbon management solutions may not develop.

Our strategy with respect to carbon management, although still in the research phase, would likely require an expansion of the market for the management of carbon dioxide emissions prior to us being able to recognize significant revenues from our research and continuing expenditures of resources. The development of a significant market will likely depend on the adoption of government subsidies or other government regulation requiring companies to limit their carbon emissions. In the United States, for example, there is no current market for carbon. The establishment of a carbon market in the United States could take years to develop, if ever. The United States Senate, for example, failed to pass carbon regulating legislation in 2010. In the absence of such additional government subsidies or regulation in major markets, this carbon management market may not develop and we would not be able to generate significant revenues from our carbon management operations. Even if a carbon market is established, we will not be able to commercialize our potential carbon solutions if the price of carbon is below the cost to deploy our solutions. In addition, the development of transportation and storage infrastructure for carbon dioxide will be necessary to deploy our carbon capture technology in certain markets.

Our government grants are subject to uncertainty, which could harm our business and results of operations.

We have received various government grants to complement and enhance our own resources. We may seek to obtain government grants and subsidies in the future to offset all or a portion of the costs of building additional manufacturing facilities and research and development activities. We cannot be certain that we will be able to secure any such government grants or subsidies. Any of our existing grants or new grants that we may obtain may be terminated, modified or recovered by the granting governmental body under certain conditions.

We may also be subject to routine audits by government agencies as part of our government grants contracts. As part of an audit, these agencies may review our performance, cost structures and compliance with applicable laws, regulations and standards. Funds available under grants must be applied by us toward the research and development programs specified by the granting agencies, rather than for all of our programs generally. If any of our costs are found to be allocated improperly, the costs may not be reimbursed and any costs already reimbursed may have to be refunded. Accordingly, an audit could result in an adjustment to our revenues and results of operations.

We face risks associated with our international business.

Significant portions of our operations are conducted outside of the United States and we expect to continue to have significant foreign operations in the foreseeable future. International business operations are subject to a variety of risks, including:

- changes in or interpretations of foreign regulations that may adversely affect our ability to sell our products, repatriate profits to the United States or operate our foreign-located facilities;
- the imposition of tariffs;
- the imposition of limitations on, or increase of, withholding and other taxes on remittances and other payments by foreign subsidiaries or joint ventures;
- the imposition of limitations on genetically-engineered products or processes and the production or sale of those products or processes in foreign countries;
- currency exchange rate fluctuations;
- uncertainties relating to foreign laws and legal proceedings including tax and exchange control laws;
- the availability of government subsidies or other incentives that benefit competitors in their local markets that are not available to us;
- economic or political instability in foreign countries;
- difficulties in staffing and managing foreign operations; and
- the need to comply with a variety of U.S. laws applicable to the conduct of overseas operations, including export control laws and the Foreign Corrupt Practices Act.

We manufacture many of our pharmaceutical intermediates in India, which has stringent local regulations that make it difficult for money earned in India to be taken out of the country without being subject to Indian taxes. While our Indian subsidiary can make use of some of the funds we earn in India, these regulations may limit the amount of profits we can repatriate from operations in India.

If we engage in any acquisitions, we will incur a variety of costs and may potentially face numerous risks that could adversely affect our business and operations.

We have made acquisitions in the past, and if appropriate opportunities become available, we expect to acquire additional businesses, assets, technologies, or products to enhance our business in the future. For example, in October 2010, we acquired substantially all of the patents and other intellectual property rights associated with Maxygen's directed evolution technology. In connection with any future acquisitions, we could:

- issue additional equity securities which would dilute our current stockholders;
- incur substantial debt to fund the acquisitions;
- use our cash to fund the acquisitions; or
- assume significant liabilities including litigation risk.

Acquisitions involve numerous risks, including problems integrating the purchased operations, technologies or products, unanticipated costs and other liabilities, diversion of management's attention from our core businesses, adverse effects on existing business relationships with current and/or prospective collaborators, customers and/or suppliers, risks associated with entering markets in which we have no or limited prior experience and potential loss of key employees. We do not have extensive experience in managing the integration process and we may not be able to successfully integrate any businesses, assets, products, technologies, or personnel that we might acquire in the future without a significant expenditure of operating, financial and management resources, if at all. The integration process could divert management time from focusing on operating our business, result in a decline in employee morale and cause retention issues to arise from changes in compensation, reporting relationships, future prospects or the direction of the business. Acquisitions may also require us to record goodwill and non-amortizable intangible assets that will be subject to impairment testing on a regular basis and potential periodic impairment charges, incur amortization expenses related to certain intangible assets, and incur large and immediate write offs and restructuring and other related expenses, all of which could harm our operating results and financial condition. In addition, we may acquire companies that have insufficient internal financial controls, which could impair our ability to integrate the acquired company and adversely impact our financial reporting. If we fail in our integration efforts with respect to any of our acquisitions and are unable to efficiently operate as a combined organization, our business and financial condition may be adversely affected.

We must rely on our suppliers, contract manufacturers and customers to deliver timely and accurate information in order to accurately report our financial results in the time frame and manner required by law.

We need to receive timely, accurate and complete information from a number of third parties in order to accurately report our financial results on a timely basis. We rely on third parties that sell our pharmaceutical products that are manufactured using our biocatalysts to provide us with complete and accurate information regarding revenues, costs of revenues and payments owed to us on a timely basis. In addition, we rely on suppliers and certain contract manufacturers, including Arch, to provide us with timely and accurate information regarding our inventories and manufacturing cost information, and we rely on current and former collaborators to provide us with product sales and cost saving information in connection with royalties owed to us. Any failure to receive timely information from one or more of these third parties could require that we estimate a greater portion of our revenues and other operating performance metrics for the period, which could cause our reported financial results to be incorrect. Moreover, if the information that we receive is not accurate, our financial statements may be materially incorrect and may require restatement, and we may not receive the full amount of revenues that we are entitled to under these arrangements. Although we typically have audit rights with these parties, performing such an audit could be harmful to our collaborative relationships, expensive and time consuming and may not be sufficient to reveal any discrepancies in a timeframe consistent with our reporting requirements.

If we lose key personnel, including key management personnel, or are unable to attract and retain additional personnel, it could delay our product development programs, harm our research and development efforts, and we may be unable to pursue collaborations or develop our own products.

Our business involves complex, global operations across a variety of markets and requires a management team and employee workforce that is knowledgeable in the many areas in which we operate. The loss of any key members of our management, including our Chief Executive Officer, Alan Shaw, or the failure to attract or retain other key employees who possess the requisite expertise for the conduct of our business, could prevent us from developing and commercializing our products for our target markets and entering into collaborations or licensing arrangements to execute on our business strategy. In addition, the loss of any key scientific staff, or the failure to attract or retain other key scientific employees, could prevent us from developing and commercializing our products for our target markets and entering into collaborations or licensing arrangements to execute on our business strategy. We may not be able to attract or retain qualified employees in the future due to the intense competition for qualified personnel among biotechnology and other technology-based businesses, particularly in the biofuels and bio-based chemicals area, or due to the availability of personnel with the qualifications or experience necessary for our business. If we are not able to attract and retain the necessary personnel to accomplish our business objectives, we may experience staffing constraints that will adversely affect our ability to meet the demands of our collaborators and customers in a timely fashion or to support our internal research and development programs. In particular, our product and process development programs are dependent on our ability to attract and retain highly skilled scientists and engineers. Competition for experienced scientists and other technical personnel from numerous companies and academic and other research institutions may limit our ability to do so on acceptable terms. All of our employees are at-will employees, which means that either the employee or we may terminate their employment at any time.

Our planned activities will require additional expertise in specific industries and areas applicable to the products and processes developed through our technology platform or acquired through strategic or other transactions, especially in the end markets that we seek to penetrate. These activities will require the addition of new personnel, and the development of additional expertise by existing personnel. The inability to attract personnel with appropriate skills or to develop the necessary expertise could impair our ability to grow our business. Additionally, we would be in breach of certain agreements, including our collaborative research agreement with Shell, if we fail to maintain a specified number of personnel.

Our ability to compete may decline if we do not adequately protect our proprietary technologies or if we lose some of our intellectual property rights.

Our success depends in part on our ability to obtain patents and maintain adequate protection of our intellectual property for our technologies and products and potential products in the United States and other countries. We have adopted a strategy of seeking patent protection in the United States and in foreign countries with respect to certain of the technologies used in or relating to our products and processes. As such, as of March 31, 2011, we owned approximately 255 issued patents and approximately 240 pending patent applications in the United States and in various foreign jurisdictions. Some of our gene shuffling patents will expire as early as 2014. We also have license rights to a number of issued patents and pending patent applications in the United States and in various foreign jurisdictions. Our owned and licensed patents and patent applications are directed to our enabling technologies and to our methods and products which support our business in the pharmaceuticals and bioindustrials markets. We intend to continue to apply for patents relating to our technologies, methods and products as we deem appropriate.

Numerous patents in our portfolio involve complex legal and factual questions and, therefore, enforceability cannot be predicted with any certainty. Issued patents and patents issuing from pending applications may be challenged, invalidated, or circumvented. Moreover, third parties could practice our inventions in territories where we do not have patent protection. Such third parties may then try to import products made using our inventions into the United States or other territories. Additional uncertainty may result from potential passage of patent reform legislation by the United States Congress, legal precedent as handed down by the United States Federal Circuit and Supreme Court as they determine legal issues concerning the scope and construction of patent claims and inconsistent interpretation of patent laws by the lower courts. Accordingly, we cannot ensure that any of our pending patent applications will result in issued patents, or even if issued, predict the breadth of the claims upheld in our and other companies' patents. Given that the degree of future protection for our proprietary rights is uncertain, we cannot ensure that: (i) we were the first to make the inventions covered by each of our pending applications, (ii) we were the first to file patent applications for these inventions, or (iii) the proprietary technologies we develop will be patentable.

In addition, unauthorized parties may attempt to copy or otherwise obtain and use our products or technology. Monitoring unauthorized use of our intellectual property is difficult, and we cannot be certain that the steps we have taken will prevent unauthorized use of our technology, particularly in certain foreign countries where the local laws may not protect our proprietary rights as fully as in the United States. If competitors are able to use our technology, our ability to compete effectively could be harmed. Moreover, others may independently develop and obtain patents for technologies that are similar to or superior to our technologies. If that happens, we may need to license these technologies, and we may not be able to obtain licenses on reasonable terms, if at all, which could cause harm to our business.

Third parties may claim that we are infringing their intellectual property rights or other proprietary rights, which may subject us to costly and time consuming litigation and prevent us from developing or commercializing our products.

Our commercial success also depends in part on our ability to operate without infringing patents and proprietary rights of third parties, and without breaching any licenses or other agreements that we have entered into with regard to our technologies, products and business. We cannot ensure that patents have not been issued to third parties that could block our ability to obtain patents or to operate as we would like. There may be patents in some countries that, if valid, may block our ability to make, use or sell our products in those countries, or import our products into those countries, if we are unsuccessful in circumventing or acquiring the rights to these patents. There also may be claims in patent applications filed in some countries that, if granted and valid, may also block our ability to commercialize products or processes in these countries if we are unable to circumvent or license them.

The industries in which we operate, and the biotechnology industry in particular, are characterized by frequent and extensive litigation regarding patents and other intellectual property rights. Many biotechnology companies have employed intellectual property litigation as a way to gain a competitive advantage. Our involvement in litigation, interferences, opposition proceedings or other intellectual property proceedings inside and outside of the United States, to defend our intellectual property rights or as a result of alleged infringement of the rights of others, may divert management time from focusing on business operations and could cause us to spend significant amounts of money. Any potential intellectual property litigation also could force us to do one or more of the following:

- stop selling, or using our products or technologies that use the subject intellectual property;
- pay monetary damages or substantial royalties;
- grant cross-licenses to third parties relating to our patents or proprietary rights;
- obtain from the third party asserting its intellectual property rights a license to sell or use the relevant technology, which license may not be available on reasonable terms, or at all; or
- redesign those products or processes that use any allegedly infringing technology, or relocate the operations relating to the allegedly infringing technology to another jurisdiction, which may result in significant cost or delay to us, could be technically infeasible or could prevent us from selling some of our products in the United States or other jurisdictions.

We are aware of a significant number of patents and patent applications relating to aspects of our technologies filed by, and issued to, third parties. We cannot assure you that if this third party intellectual property is asserted against us that we would ultimately prevail.

If any of our competitors have filed patent applications or obtained patents that claim inventions also claimed by us, we may have to participate in interference proceedings before the United States Patent and Trademark Office to determine priority of invention and, thus, the right to the patents for these inventions in the United States. These proceedings could result in substantial cost to us even if the outcome is favorable. Even if successful, any interference may result in loss of certain claims. Any litigation or proceedings could divert our management's time and efforts. Even unsuccessful claims could result in significant legal fees and other expenses, diversion of management time, and disruption in our business. Uncertainties resulting from initiation and continuation of any patent or related litigation could harm our ability to compete.

We may not be able to enforce our intellectual property rights throughout the world.

The laws of some foreign countries, including India, where we manufacture pharmaceutical intermediates and APIs through contract manufacturers, do not protect intellectual property rights to the same extent as the laws of the United States. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property, particularly those relating to biotechnology and/or bioindustrials technologies. Accordingly, our efforts to protect our intellectual property rights in such countries may be inadequate. This could make it difficult for us to stop the infringement of our patents or misappropriation of our other intellectual property rights. Additionally, proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business.

If our biocatalysts, or the genes that code for our biocatalysts, are stolen, misappropriated or reverse engineered, others could use these biocatalysts or genes to produce competing products.

Third parties, including our contract manufacturers, customers and those involved in shipping our biocatalysts often have custody or control of our biocatalysts. If our biocatalysts, or the genes that code for our biocatalysts, were stolen, misappropriated or reverse engineered, they could be used by other parties who may be able to reproduce these biocatalysts for their own commercial gain. If this were to occur, it would be difficult for us to challenge this type of use, especially in countries with limited intellectual property protection or in countries in which we do not have patents covering the misappropriated biocatalysts.

Confidentiality agreements with employees and others may not adequately prevent disclosures of trade secrets and other proprietary information.

We rely in part on trade secret protection to protect our confidential and proprietary information and processes. However, trade secrets are difficult to protect. We have taken measures to protect our trade secrets and proprietary information, but these measures may not be effective. We require employees and consultants to execute confidentiality agreements upon the commencement of an employment or consulting arrangement with us. These agreements generally require that all confidential information developed by the individual or made known to the individual by us during the course of the individual's relationship with us be kept confidential and not disclosed to third parties. These agreements also generally provide that inventions conceived by the individual in the course of rendering services to us shall be our exclusive property. Nevertheless, our proprietary information may be disclosed, third parties could reverse engineer our biocatalysts and others may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

Competitors and potential competitors who have greater resources and experience than we do may develop products and technologies that make ours obsolete or may use their greater resources to gain market share at our expense.

The biocatalysis industry and each of our target markets are characterized by rapid technological change. Our future success will depend on our ability to maintain a competitive position with respect to technological advances. We are aware that other companies, including Royal DSM N.V., or DSM, E.I. Du Pont De Nemours and Company, or DuPont, Danisco, which has entered into a definitive agreement to be acquired by Du Pont, Novozymes, and Vercipia Biofuels, an affiliate of BP, have alternative methods for obtaining and generating genetic diversity or use mutagenesis techniques to produce genetic diversity. Academic institutions such as the California Institute of Technology, the Max Planck Institute and the Center for Fundamental and Applied Molecular Evolution (FAME), a jointly sponsored initiative between Emory University and Georgia Institute of Technology, are also working in this field. Technological development by others may result in our products and technologies, as well as products developed by our customers using our biocatalysts, becoming obsolete.

We face intense competition in the pharmaceuticals market. There are a number of companies who compete with us throughout the various stages of a pharmaceutical product's lifecycle. Many large pharmaceutical companies have internal capabilities to develop and manufacture intermediates and APIs. These companies include many of our large innovator and generic pharmaceutical customers, such as Merck, Pfizer and Teva Pharmaceutical Industries Ltd. There are also many large, well-established fine chemical manufacturing companies, such as DSM, BASF Corporation and Lonza Group Ltd, that compete to supply pharmaceutical intermediates and APIs to our customers. We also face increasing competition from generic pharmaceutical manufacturers in low cost centers such as India and China.

In addition to competition from companies manufacturing APIs and intermediates, we face competition from companies that sell biocatalysts for use in the pharmaceutical market. There is competition from large industrial enzyme companies, such as Novozymes and Amano Enzyme Inc., whose industrial enzymes (for detergents, for example) are occasionally used in pharmaceutical processes. There is also competition in this area from several small companies with product offerings comprised primarily of naturally occurring biocatalysts or that offer biocatalyst optimization services.

We expect the biofuels industry to be extremely competitive, with competition coming from ethanol producers as well as other providers of alternative and renewable fuels. Significant competitors include companies such as: Novozymes, which has partnered with a number of companies and organizations on a regional basis to develop or produce biofuels, and recently opened a biofuel demonstration plant with Inbicon A/S of Denmark; Danisco, which has entered into a definitive agreement to be acquired by Dupont, has formed a joint venture with DuPont, called DuPont Danisco Cellulosic Ethanol, or DDCE, and is marketing a line of cellulases to convert biomass into sugar; DSM, which received a grant from the U.S. Department of Energy to be the lead partner in a technical consortium including Abengoa Bioenergy New Technologies, and is developing cost-effective enzyme technologies; Mossi & Ghisolfi Group, which is developing a commercial scale cellulosic ethanol facility in Italy; Mascoma Corporation, which has entered into a letter of intent with Valero Energy Corporation in January 2011 to build a commercial-scale cellulosic ethanol biorefinery; and BP, which is developing a commercial scale cellulosic ethanol facility through its affiliate Vercipia Biofuels. In addition, other companies are attempting to develop non-ethanol biofuels. DuPont has announced plans to develop and market biobutanol through Butamax Advanced Biofuels LLC, a joint venture with BP, and Virent Energy Systems Inc. is collaborating with Shell to develop thermochemical catalytic routes to produce biogasoline and biodiesel directly from sugars. Coskata, Inc. is developing a hybrid thermochemical-biocatalytic process to produce ethanol from a variety of feed stocks. Some or all of these competitors or other competitors, as well as academic, research and government institutions, are developing or may develop technologies for, and are competing or may compete with us in, the production of alternative fuels or biofuels.

As we pursue opportunities in other bioindustrial markets, including bio-based chemicals, we expect to face competition from numerous companies focusing on developing biocatalytic and other solutions for these markets, including a number of the companies described above.

Our ability to compete successfully will depend on our ability to develop proprietary products that reach the market in a timely manner and are technologically superior to and/or are less expensive than other products on the market. Many of our competitors have substantially greater production, financial, research and development, personnel and marketing resources than we do. They also started developing products earlier than we did, which may allow them to bring products to market before we can. In addition, certain of our competitors may also benefit from local government subsidies and other incentives that are not available to us. As a result, our competitors may be able to develop competing and/or superior technologies and processes, and compete more aggressively and sustain that competition over a longer period of time than we could. Our technologies and products may be rendered obsolete or uneconomical by technological advances or entirely different approaches developed by one or more of our competitors. As more companies develop new intellectual property in our markets, the possibility of a competitor acquiring patent or other rights that may limit our products or potential products increases, which could lead to litigation.

In addition, various governments have recently announced a number of spending programs focused on the development of clean technology, including alternatives to petroleum-based fuels and the reduction of carbon emissions, two of our target markets. Such spending programs could lead to increased funding for our competitors or the rapid increase in the number of competitors within those markets.

Our limited resources relative to many of our competitors may cause us to fail to anticipate or respond adequately to new developments and other competitive pressures. This failure could reduce our competitiveness and market share, adversely affect our results of operations and financial position, and prevent us from obtaining or maintaining profitability.

We may need substantial additional capital in the future in order to expand our business.

Our future capital requirements may be substantial, particularly as we continue to develop our business and expand our biocatalyst discovery and development process. Although we believe that, based on our current level of operations and anticipated growth, our existing cash, cash equivalents and marketable securities will provide adequate funds for ongoing operations, planned capital expenditures and working capital requirements for at least the next 12 months, we may need additional capital if our current plans and assumptions change. Our need for additional capital will depend on many factors, including the financial success of our pharmaceutical business, continued funding from Shell for our biofuels program, our spending to develop and commercialize our products, the effect of any acquisitions of other businesses, technologies or facilities that we may make in the future, our spending on new market opportunities, including bio-based chemicals, and the filing, prosecution and enforcement of patent claims.

If our capital resources are insufficient to meet our capital requirements, and we are unable to enter into or maintain collaborations with partners that are able or willing to fund our development efforts or commercialize any products that we develop or enable, we will have to raise additional funds to continue the development of our technology and products and complete the commercialization of products, if any, resulting from our technologies. If future financings involve the issuance of equity securities, our existing stockholders would suffer dilution. If we were permitted to raise debt financing, we may be subject to restrictive covenants that limit our ability to conduct our business. We may not be able to raise sufficient additional funds on terms that are favorable to us, if at all. If we fail to raise sufficient funds and continue to incur losses, our ability to fund our operations, take advantage of strategic opportunities, develop products or technologies, or otherwise respond to competitive pressures could be significantly limited. If this happens, we may be forced to delay or terminate research or development programs or the commercialization of products resulting from our technologies, curtail or cease operations or obtain funds through collaborative and licensing arrangements that may require us to relinquish commercial rights, or grant licenses on terms that are not favorable to us. If adequate funds are not available, we will not be able to successfully execute our business plan or continue our business.

Business interruptions could delay us in the process of developing our products and could disrupt our sales.

Our headquarters is located in the San Francisco Bay Area near known earthquake fault zones and is vulnerable to significant damage from earthquakes. We are also vulnerable to other types of natural disasters and other events that could disrupt our operations, such as riot, civil disturbances, war, terrorist acts, flood, infections in our laboratory or production facilities or those of our contract manufacturers and other events beyond our control. We do not have a detailed disaster recovery plan. In addition, we do not carry insurance for earthquakes and we may not carry sufficient business interruption insurance to compensate us for losses that may occur. Any losses or damages we incur could have a material adverse effect on our cash flows and success as an overall business. Furthermore, Shell may terminate our collaborative research agreement if a force majeure event interrupts our collaboration activities for more than ninety days.

Ethical, legal and social concerns about genetically engineered products and processes could limit or prevent the use of our products, processes, and technologies and limit our revenues.

Some of our products and processes are genetically engineered or involve the use of genetically engineered products or genetic engineering technologies. If we and/or our collaborators are not able to overcome the ethical, legal, and social concerns relating to genetic engineering, our products and processes may not be accepted. Any of the risks discussed below could result in increased expenses, delays, or other impediments to our programs or the public acceptance and commercialization of products and processes dependent on our technologies or inventions. Our ability to develop and commercialize one or more of our technologies, products, or processes could be limited by the following factors:

- public attitudes about the safety and environmental hazards of, and ethical concerns over, genetic research and genetically engineered products and processes, which could influence public acceptance of our technologies, products and processes;
- public attitudes regarding, and potential changes to laws governing ownership of genetic material, which could harm our intellectual property rights with respect to our genetic material and discourage collaborators from supporting, developing, or commercializing our products, processes and technologies; and
- governmental reaction to negative publicity concerning genetically modified organisms, which could result in greater government regulation of genetic research and derivative products. The subject of genetically modified organisms has received negative publicity, which has aroused public debate. This adverse publicity could lead to greater regulation and trade restrictions on imports of genetically altered products.

The biocatalysts that we develop have significantly enhanced characteristics compared to those found in naturally occurring enzymes or microbes. While we produce our biocatalysts only for use in a controlled industrial environment, the release of such biocatalysts into uncontrolled environments could have unintended consequences. Any adverse effect resulting from such a release could have a material adverse effect on our business and financial condition, and we may have exposure to liability for any resulting harm.

Compliance with stringent laws and regulations may be time consuming and costly, which could adversely affect the commercialization of our bioindustrial products.

Our bioindustrial products, including biofuels and chemicals, will need to meet a significant number of regulations and standards, including regulations imposed by the U.S. Department of Transportation, the U.S. Environmental Protection Agency, various state agencies and others. In addition, our bioindustrial products will be subject to foreign regulations if we attempt to produce or sell our products outside the United States. For example, our products and technologies may be subject to import and export controls when they are shipped internationally. Any failure to comply, or delays in compliance, with the various existing and evolving industry regulations and standards could prevent or delay the commercialization of any bioindustrial products developed using our technologies and subject us to fines and other penalties.

We use hazardous materials in our business and we must comply with environmental laws and regulations. Any claims relating to improper handling, storage or disposal of these materials or noncompliance of applicable laws and regulations could be time consuming and costly and could adversely affect our business and results of operations.

Our research and development processes involve the use of hazardous materials, including chemical, radioactive, and biological materials. Our operations also produce hazardous waste. We cannot eliminate entirely the risk of accidental contamination or discharge and any resultant injury from these materials. Federal, state, and local laws and regulations govern the use, manufacture, storage, handling and disposal of, and human exposure to, these materials. We may be sued for any injury or contamination that results from our use or the use by third parties of these materials, and our liability may exceed our total assets. Although we believe that our activities conform in all material respects with environmental laws, there can be no assurance that violations of environmental, health and safety laws will not occur in the future as a result of human error, accident, equipment failure or other causes. Compliance with applicable environmental laws and regulations may be expensive, and the failure to comply with past, present, or future laws could result in the imposition of fines, third party property damage, product liability and personal injury claims, investigation and remediation costs, the suspension of production, or a cessation of operations, and our liability may exceed our total assets. Liability under environmental laws can be joint and several and without regard to comparative fault. Environmental laws could become more stringent over time imposing greater compliance costs and increasing risks and penalties associated with violations, which could impair our research, development or production efforts and harm our business.

We may be sued for product liability.

The design, development, manufacture and sale of our products involve an inherent risk of product liability claims and the associated adverse publicity. We may be named directly in product liability suits relating to drugs that are produced using our biocatalysts or that incorporate our intermediates and APIs. The intermediates and APIs that we produce or are produced for us by our manufacturing partners could be subject to quality control or contamination issues of which we are not aware. Claims could be brought by various parties, including customers who are purchasing products directly from us, other companies who purchase products from our customers or by the end users of the drugs. We could also be named as co-parties in product liability suits that are brought against our contract manufacturers who manufacture our pharmaceutical intermediates and APIs, such as Arch. Insurance coverage is expensive and may be difficult to obtain, and may not be available in the future on acceptable terms, or at all. We cannot assure you that our contract manufacturers will have adequate insurance coverage to cover against potential claims. In addition, although we currently maintain product liability insurance for our products in amounts we believe to be commercially reasonable, if the coverage limits of these insurance policies are not adequate, a claim brought against us, whether covered by insurance or not, could have a material adverse effect on our business, results of operations, financial condition and cash flows. This insurance may not provide adequate coverage against potential losses, and if claims or losses exceed our liability insurance coverage, we may go out of business. Moreover, we have agreed to indemnify some of our customers for certain claims that may arise out of the use of our products, which could expose us to significant liabilities.

Our ability to use our net operating loss carryforwards to offset future taxable income may be subject to certain limitations.

In general, under Section 382 of the Internal Revenue Code, a corporation that undergoes an “ownership change” is subject to limitations on its ability to utilize its pre-change net operating loss carryforwards, or NOLs, to offset future taxable income. If the Internal Revenue Service challenges our analysis that our existing NOLs are not subject to limitations arising from previous ownership changes, our ability to utilize NOLs could be limited by Section 382 of the Internal Revenue Code. Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change under Section 382 of the Internal Revenue Code. Furthermore, our ability to utilize NOLs of companies that we may acquire in the future may be subject to limitations. For these reasons, we may not be able to utilize a material portion of the NOLs reflected on our balance sheet, even if we attain profitability.

Risks Related to Owning our Common Stock

We are subject to anti-takeover provisions in our certificate of incorporation and bylaws and under Delaware law that could delay or prevent an acquisition of our company, even if the acquisition would be beneficial to our stockholders.

Provisions in our amended and restated certificate of incorporation and our bylaws may delay or prevent an acquisition of us. Among other things, our amended and restated certificate of incorporation and bylaws provide for a board of directors which is divided into three classes, with staggered three-year terms and provide that all stockholder action must be effected at a duly called meeting of the stockholders and not by a consent in writing, and further provide that only our board of directors, the chairman of the board of directors, our chief executive officers or president may call a special meeting of the stockholders. These provisions may also frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, who are responsible for appointing the members of our management team. Furthermore, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits, with some exceptions, stockholders owning in excess of 15% of our outstanding voting stock from merging or combining with us. Finally, our charter documents establish advanced notice requirements for nominations for election to our board of directors and for proposing matters that can be acted upon at stockholder meetings. Although we believe these provisions together provide for an opportunity to receive higher bids by requiring potential acquirers to negotiate with our board of directors, they would apply even if an offer to acquire our company may be considered beneficial by some stockholders.

Concentration of ownership among our existing officers, directors and principal stockholders may prevent other stockholders from influencing significant corporate decisions and depress our stock price.

Based on the number of shares outstanding as of March 31, 2011, our officers, directors and existing stockholders who hold at least 5% of our stock together beneficially own approximately 55.0% of our outstanding common stock. As of March 31, 2011, Shell and Biomedical Sciences Investment Fund Pte Ltd beneficially owned approximately 15.7% and 9.5% of our common stock, respectively. If these officers, directors, and principal stockholders or a group of our principal stockholders act together, they will be able to exert a significant degree of influence over our management and affairs and control matters requiring stockholder approval, including the election of directors and approval of mergers or other business combination transactions. The interests of this concentration of ownership may not always coincide with our interests or the interests of other stockholders. For instance, officers, directors, and principal stockholders, acting together, could cause us to enter into transactions or agreements that we would not otherwise consider. Similarly, this concentration of ownership may have the effect of delaying or preventing a change in control of our company otherwise favored by our other stockholders. This concentration of ownership could depress our stock price.

Our share price may be volatile which may cause the value of our common stock to decline and subject us to securities class action litigation.

The market price of shares of our common stock could be subject to wide fluctuations in response to many risk factors listed in this section, and others beyond our control, including:

- actual or anticipated fluctuations in our financial condition and operating results;
- the position of our cash, cash equivalents and marketable securities;
- actual or anticipated changes in our growth rate relative to our competitors;
- actual or anticipated fluctuations in our competitors' operating results or changes in their growth rate;
- announcements of technological innovations by us, our collaborators or our competitors;
- announcements by us, our collaborators or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- any changes in Shell's biofuels strategy or timelines, or in our relationship with Shell, including any decision by Shell to terminate our collaboration or reduce the number of FTEs funded by Shell under our collaborative research agreement;
- any announcements or developments with respect to the Shell-Cosan joint venture;
- additions or losses of one or more significant pharmaceutical products;
- announcements or developments regarding pharmaceutical products manufactured using our biocatalysts, intermediates and APIs;
- the entry into, modification or termination of collaborative arrangements;

- additions or losses of customers;
- additions or departures of key management or scientific personnel;
- competition from existing products or new products that may emerge;
- issuance of new or updated research reports by securities or industry analysts;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- disputes or other developments related to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- changes in existing laws, regulations and policies applicable to our business and products, including the National Renewable Fuel Standard program, and the adoption or failure to adopt carbon emissions regulation;
- announcement or expectation of additional financing efforts;
- sales of our common stock by us, our insiders or our other stockholders;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- general market conditions in our industry; and
- general economic and market conditions, including the recent financial crisis.

Furthermore, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions such as recessions, interest rate changes or international currency fluctuations, may negatively impact the market price of shares of our common stock. In the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

If securities or industry analysts do not publish research or reports about our business, or publish negative reports about our business, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. If one or more of the analysts who cover us downgrade our stock or change their opinion of our stock in a negative manner, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our stock price or trading volume to decline.

We will incur significant increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives.

As a public company, we incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act, as well as related rules implemented by the Securities and Exchange Commission and The NASDAQ Stock Market, impose various requirements on public companies. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect these rules and regulations to make it more expensive for us to maintain director and officer liability insurance.

In addition, the Sarbanes-Oxley Act requires, among other things, that we maintain effective internal control over financial reporting and disclosure controls and procedures. In particular, commencing in 2011, we must perform system and process evaluation and testing of our internal control over financial reporting to allow management and our independent registered public accounting firm to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. Our compliance with Section 404 will require that we incur substantial accounting expense and expend significant management time on compliance-related issues. Moreover, if we are not able to comply with the requirements of Section 404 in a timely manner, our stock price could decline, and we could face sanctions, delisting or investigations by The NASDAQ Global Market, or other material adverse effects on our business, reputation, results of operations, financial condition or liquidity.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

(a) Sales of Unregistered Securities

None.

(b) Use of Proceeds from Public Offering of Common Stock

On April 27, 2010, we closed our IPO, in which we sold 6,000,000 shares of common stock at a price to the public of $13.00 per share. The aggregate offering price for shares sold in the offering was $78.0 million. The offer and sale of all of the shares in the IPO were registered under the Securities Act of 1933, as amended, pursuant to a registration statement on Form S-1 (File No. 333-164044), which was declared effective by the SEC on April 21, 2010.

There has been no material change in the planned use of proceeds from our IPO as described in our final prospectus filed with the SEC on April 22, 2010 pursuant to Rule 424(b). We invested the funds received in registered money market fund and other marketable securities.

Item 6. Exhibits

3.1	Amended and Restated Certificate of Incorporation of Codexis, Inc. filed with the Secretary of the State of the State of Delaware on April 27, 2010 and effective as of April 27, 2010 (incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, filed on May 28, 2010).
3.2	Amended and Restated Bylaws of Codexis, Inc. effective as of April 27, 2010 (incorporated by reference to Exhibit 3.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, filed on May 28, 2010).
4.1	Specimen Stock Certificate (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-1/A No. 333-164044, filed on March 31, 2010).
10.1	Fifth Amendment to Lease by and between the Company and Metropolitan Life Insurance Company dated as of March 16, 2011.
31.1	Certification of Principal Executive Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.2	Certification of Principal Financial Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32.1	Certification of Principal Executive Officer and Principal Financial Officer Required Under Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. §1350.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Codexis, Inc.

Date: May 6, 2011

By: /s/ ALAN SHAW
Alan Shaw
President and Chief Executive Officer
(Principal Executive Officer)

Date: May 6, 2011

By: /s/ ROBERT LAWSON
Robert Lawson
Senior Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)

EXHIBIT INDEX

Listed and indexed below are all Exhibits filed as part of this report.

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EXHIBIT 10.1

EXECUTION VERSION

FIFTH AMENDMENT TO LEASE

This Fifth Amendment to Lease ("Amendment") is entered into, and dated for reference purposes, as of March 16, 2011 (the "Execution Date") by and between METROPOLITAN LIFE INSURANCE COMPANY, a New York corporation ("Metropolitan"), as Landlord ("Landlord"), and CODEXIS, INC. a Delaware corporation ("Codexis"), as Tenant ("Tenant"), with reference to the following facts ("Recitals"):

A. Landlord and Tenant are the parties to that certain written lease which is comprised of the following: that certain written Lease, dated as of October ____, 2003 [sic], by and between Landlord and Tenant (the "Original Lease") for certain premises described therein and commonly known as 501 Chesapeake Drive which is a part of Building 3 (the "501 Chesapeake Space") and all the rentable area of Building 4 (consisting of 200 and 220 Penobscot Drive (collectively, the "200 & 220 Penobscot Space", and together with the 501 Chesapeake Space are referred to collectively as the "Original Premises"), all as more particularly described in the Original Lease; as amended by that certain First Amendment to Lease, dated as of June 1, 2004, by and between Landlord and Tenant (the "First Amendment"); as amended by that certain Second Amendment to Lease, dated as of March 9, 2007, by and between Landlord and Tenant (the "Second Amendment") for certain premises described therein and commonly known as 640 Galveston Drive, which is part of Building 5 (the "640 Galveston Space"), all as more particularly described in the Second Amendment; as amended by that certain Third Amendment to Lease, dated as of March 31, 2008, by and between Landlord and Tenant (the "Third Amendment") for certain premises described therein and commonly known as 400 Penobscot Drive, which is the entire Building 2 (the "Building 2 Space"), all as more particularly described in the Third Amendment; and as amended by that certain Fourth Amendment to Lease, dated as of September 17, 2010, by and between Landlord and Tenant (the "Fourth Amendment"). The Original Lease, as amended, is referred to for purposes of this Amendment as the "Existing Lease".

B. Landlord and Tenant desire to provide for (i) extension of the Term with respect to the 200 & 220 Penobscot Space and the Building 2 Space, (ii) the lease to Tenant of the 101 Saginaw Space (defined below) for the term specified herein; (iii) Tenant's vacation and surrender of the 640 Galveston Space; and (iv) other amendments of the Existing Lease as more particularly set forth below.

NOW, THEREFORE, in consideration of the foregoing, and of the mutual covenants set forth herein and of other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

Section 1. Scope of Amendment; Defined Terms; Retroactive Effect.

(a) Except as expressly provided in this Amendment, the Existing Lease shall remain in full force and effect. Should any inconsistency arise between this Amendment and the Existing Lease as to the specific matters which are the subject of this Amendment, the terms and conditions of this Amendment shall control. The term "Existing Lease" defined above shall refer to the Existing Lease as it existed before giving effect to the modifications set forth in this Amendment and the term "Lease" as used herein and in the Existing Lease shall refer to the Existing Lease as modified by this Amendment, except as expressly provided in this Amendment. All capitalized terms used in this Amendment and not defined herein shall have the meanings set forth in the Existing Lease unless the context clearly requires otherwise.

(b) Landlord and Tenant have executed this Amendment on the Execution Date, but intend and agree that it shall be effective as of February 1, 2011 (the "Effective Date") with the same force and effect as if executed on that date. Promptly after execution of this Amendment, Landlord shall bill Tenant for the amount of Monthly Base Rent and all other Rent due pursuant to this Amendment in excess of amounts actually paid by Tenant for the period from and after the Effective Date, and Tenant shall pay the amount due within ten (10) business days after receipt of such bill. In the event that amounts actually paid by Tenant on after the Effective Date and before execution of this Amendment exceed the amount due pursuant to this Amendment, Landlord shall credit any such overpayment to rent next coming due from Tenant hereunder.

Section 2. Confirmation of Term. Landlord and Tenant acknowledge and agree that notwithstanding any provision of the Existing Lease to the contrary: (a) as contemplated by the Existing Lease, the Expiration Date of the Term of the Lease of the 200 & 220 Penobscot Space is January 31, 2011; (b) as contemplated by the Existing Lease, the 640 Galveston Expiration Date is April 30, 2012; (c) as contemplated by the Existing Lease, the Building 2 Expiration Date is March 31, 2013; and (d) as contemplated by the Existing Lease, the 501 Chesapeake Expiration Date is January 31, 2013.

Section 3. Extension of Term for 200 & 220 Penobscot Space and Building 2 Space. Notwithstanding any provision of the Existing Lease to the contrary, the Existing Lease is hereby amended to provide that the Building 2 Expiration Date shall be January 31, 2011, and then with respect to the 200 & 220 Penobscot Space and the Building 2 Space, this Lease shall continue for a term of nine (9) years (the "Extended Term") beginning on February 1, 2011 (the "Extended Term Commencement Date") and expiring on January 31, 2020 (hereafter, the "Expiration Date" or, as applicable, the "200 & 220 Penobscot Expiration Date" or "Building 2 Expiration Date"), unless sooner terminated pursuant to the terms of the Lease. Landlord and Tenant acknowledge and agree that this Amendment provides all rights and obligations of the parties with respect to extension of the current Term for the 200 & 220 Penobscot Space and the Building 2 Space only, whether or not in accordance with any other provisions, if any, of the Existing Lease regarding renewal or extension of such space. Any such provisions, options or rights for renewal or extension provided in the Existing Lease with respect to the 200 & 220 Penobscot Space and the Building 2 Space, including, without limiting the generality of the foregoing, Section 26.21 of the Original Lease (as it applies to such space) and Section 8 of the Third Amendment are hereby deleted in their entireties.

Section 4. Monthly Rent for Extended Term. Notwithstanding any provision of the Lease to the contrary, commencing on the Extended Term Commencement Date and continuing through the Expiration Date of the Extended Term, the amount of Monthly Base Rent due and payable by Tenant for the 200 & 220 Penobscot Space and the Building 2 Space shall be as follows:

Period from /to	Monthly
February 1, 2011 - January 31, 2012	$136,787.67
February 1, 2012 - January 31, 2013	$140,891.30
February 1, 2013 - January 31, 2014	$145,118,04
February 1, 2014 - January 31, 2015	$149,471.58
February 1, 2015 - January 31, 2016	$153,955.73
February 1, 2016 - January 31, 2017	$158,574.40
February 1, 2017 - January 31, 2018	$163,331.63
February 1, 2018 - January 31, 2019	$168,231.58
February 1, 2019 - January 31, 2020	$173,278.53

*Notwithstanding anything in the foregoing to the contrary, provided that a monetary Default (as defined in Section 11.01 of the Original Lease) by Tenant has not previously occurred, Landlord agrees to forbear in the collection of and abate the Monthly Base Rent due and payable for the period between February 1, 2011 to March 31, 2011, totaling not more than Two Hundred Seventy-Three Thousand Five Hundred Seventy-Five and 34/100 Dollars ($273,575.34) in the aggregate (collectively, "Abated Rent"); provided, further, that in the event of a monetary Default by Tenant at any time during the Extended Term, all previously Abated Rent shall be immediately due and payable in full at that time without the necessity of further notice or action by Landlord.

Section 5. "AS IS" Condition. Tenant acknowledges and agrees that Tenant presently occupies and has occupied the 200 & 220 Penobscot Space and Building 2 Space, and Tenant accepts the 200 & 220 Penobscot Space and Building 2 Space in their AS-IS condition, without any express or implied representations or warranties of any kind by Landlord, its brokers, manager or agents, or the employees of any of them regarding the Premises. Landlord shall not have any obligation to construct or install any tenant improvements or alterations or to pay for any such construction or installation in any portion of the Premises, except as expressly set forth in the Workletter (Exhibit B to this Amendment).

Section 6. Lease of 101 Saginaw Space.

(a) Landlord hereby leases to Tenant and Tenant hereby hires from Landlord the 101 Saginaw Space (defined below) upon and subject to all of the terms, covenants and conditions of the Existing Lease except as expressly provided herein. "101 Saginaw Space" is part of Building Number 1 located in Phase I of Seaport Centre at the street address of 101 Saginaw Drive, Redwood City, California 94063, as shown on Exhibit A to this Amendment. Landlord and Tenant hereby agree that the 101 Saginaw Space is conclusively presumed to be 29,921 rentable square feet.

(b) Delivery; Construction & Construction Period; Commencement Date; Term; Other Provisions. Notwithstanding any provision of the Existing Lease to the contrary, the following provisions shall govern the 101 Saginaw Space:

(1) Delivery; Construction; Construction Period; Commencement Date; Term. Landlord shall tender to Tenant possession of the 101 Saginaw Space in the condition specified in the Workletter (Exhibit B to this Amendment) no later than one (1) business day after execution of this Amendment by both Tenant and Landlord (the "Projected Commencement Date"). The date on which Landlord actually tenders to Tenant possession of the 101 Saginaw Space in the condition specified in the Workletter shall be the "101 Saginaw Commencement Date" on which the Term of this Lease of the 101 Saginaw Space commences, and on and after such date all the terms and conditions of the Lease shall apply, and Tenant shall observe and perform all terms and conditions of the Lease, except that until the sixtieth (60th) day after the 101 Saginaw Commencement Date (the "101 Saginaw Rent Start Date"), Tenant shall not be obligated to pay Monthly Base Rent or Rent Adjustments. The Term of this Lease of the 101 Saginaw Space ("101 Saginaw Term") shall start on the 101 Saginaw Commencement Date and end on the Expiration Date.

(2) Tenant Additions/Tenant Improvements . Subject to Section 4 of the Third Amendment, (i) all improvements permanently affixed to or on Building Number 1 by Tenant under this Amendment or hereafter under this Lease, including, without limitation, walls, ceilings, flooring, building fixtures (such as plumbing, power, lighting and HVAC systems), and (ii) all improvements made as part of the Special Tenant Work (described in Exhibit B-2 to the Workletter), shall, without compensation or credit to Tenant, become part of the applicable Building and the property of Landlord at the time of their installation and shall remain in such Building, unless pursuant to Section 4 of the Third Amendment, other express provision of this Lease or a subsequent written agreement between the parties hereto, Tenant is permitted or required to remove them. For the avoidance of doubt, the term "permanently affixed" shall not be construed to mean otherwise free-standing equipment that has been secured to the Premises for the primary purpose of seismic stability and/or the prevention of theft.

(3) Confirmation of Commencement Date. Upon request by Landlord, Tenant and Landlord shall enter into an agreement (the form of which isExhibit C to this Amendment) confirming the 101 Saginaw Commencement Date and the 101 Saginaw Expiration Date. If within ten (10) business days after Landlord's request enclosing the proposed agreement, Tenant fails either (i) to enter into such agreement, or (ii) to give Landlord written notice of any item(s) therein which Tenant believes are incorrect, the corrections(s) proposed by Tenant and reasons therefor, then the 101 Saginaw Commencement Date and the 101 Saginaw Expiration Date shall be the dates designated by Landlord in such agreement.

(4) Failure to Deliver Possession. If Landlord shall be unable to give possession of the 101 Saginaw Space on the Projected Commencement Date by reason of the following: (i) the holding over or retention of possession of any tenant, tenants or occupants, or (ii) for any other reason, then Landlord shall not be subject to any liability for the failure to give possession on said date. Under such circumstances, by operation of Subsection (1) above, the 101 Saginaw Commencement Date is automatically adjusted and determined in relation to the date Landlord actually tenders possession of the 101 Saginaw Space to Tenant. If Landlord tenders possession

after March 31, 2011, the 101 Saginaw Rent Start Date shall be the date on which Landlord tenders possession. Failure to deliver possession on the originally scheduled Projected Commencement Date shall not affect the validity of this Lease or the obligations of the Tenant hereunder.

(5) Premises. From and after the delivery of the 101 Saginaw Space to Tenant, the term "Premises" as used in the Lease shall mean the Existing Premises together with the 101 Saginaw Space.

(c) Monthly Base Rent for 101 Saginaw Space. Notwithstanding any provision of the Existing Lease to the contrary, Monthly Base Rent for the 101 Saginaw Space shall be payable on the 101 Saginaw Rent Start Date and thereafter on the first day of each calendar month of the 101 Saginaw Term, in the manner required for Monthly Base Rent in the Existing Lease, but the amounts are additional to rent payable under the Existing Lease, and the amount of Monthly Base Rent due and payable by Tenant for the 101 Saginaw Space and monthly schedule therefor starting on the 101 Saginaw Commencement Date shall be as set forth in the schedule below:

Period from/to	Monthly
101 Saginaw Rent Start Date –	
Month 12 (of 101 Saginaw Rent Start Date)*	$49,369.65
Month 13 – Month 23	$50,850.74
Month 24 – Month 35	$52,376.26
Month 36 – Month 47	$53,947.55
Month 48 – Month 59	$55,565.98
Month 60 – Month 71	$57,232.96
Month 72 – Month 83	$58,949.94
Month 84 – Month 95	$60,718.44
Month 96 – January 30, 2020	$62,540.00

*Notwithstanding anything in the foregoing to the contrary, provided that a monetary Default by Tenant has not previously occurred, Landlord agrees to forbear in the collection of and abate the Monthly Base Rent due and payable for Month 1 and Month 2 following the 101 Saginaw Rent Start Date, totaling not more than Ninety-Eight Thousand Seven Hundred Thirty-Nine and 30/100 Dollars ($98,739.30) in the aggregate (collectively, "101 Saginaw Abated Rent"); provided, further, that in the event of a monetary Default by Tenant at any time during the 101 Saginaw Term, all previously abated 101 Saginaw Abated Rent shall be immediately due and payable in full at that time without the necessity of further notice or action by Landlord.

(d) Tenant's Share of Operating Expenses. Notwithstanding any provision of the Existing Lease to the contrary, in addition to Tenant's payment of Rent Adjustment Deposits and Rent Adjustments with respect to the Existing Premises, Tenant shall pay Rent Adjustment Deposits and Rent Adjustments with respect to the 101 Saginaw Space starting on the 101 Saginaw Rent Start Date and continuing during the 101 Saginaw Term, which shall be payable as set forth in the Existing Lease, except that for such purposes Tenant's 101 Saginaw Share shall be as set forth below, and Tenant's Phase Share and Tenant's Project Share shall be modified as set forth below:

Tenant's Building 1 Share:	48.78%
Tenant's Phase 1 Share:	9.91%*
Tenant's Project Share:	5.57%*

* If the 501 Chesapeake Extended Term is not extended, then from the later of such expiration or the date Tenant vacates the 501 Chesapeake Space for the remaining Extended Term, Tenant's Phase 1 Share shall be reduced by 3.7% and Tenant's Project Share shall be reduced by 2.08%.

(e) Parking. Notwithstanding any provision of the Existing Lease to the contrary, on and after the 101 Saginaw Commencement Date during the 101 Saginaw Term, Tenant shall have the right to use, on an unassigned basis, an additional ninety-nine (99) Parking Spaces. Upon the Surrender Date (as defined below) for the 640 Galveston Space, the total number of Parking Spaces shall be reduced by thirty-one (31). In addition, if the 501 Chesapeake Extended Term is not extended, then from the later of such expiration or the date Tenant vacates the 501 Chesapeake Space for the remaining Extended Term, the total number of Parking Spaces shall be reduced by thirty-seven (37).

(f) Signage.

(1) Grant of Right. Notwithstanding any provision of the Existing Lease to the contrary, on and after the 101 Saginaw Commencement Date for the 101 Saginaw Term, Tenant shall have the right to (1) place its company name and logo on the door(s) at the main entry to Building Number 1 (the "Entry Signage"); and (2) only for so long as Tenant leases, is continuously conducting regular, active, ongoing business in, and is in occupancy (and occupancy by a subtenant, licensee or other party permitted or suffered by Tenant shall not satisfy such condition) of not less than fifty percent (50%) of the entire 101 Saginaw Space, place its company name and logo on its pro-rata share of the signage area on the existing, exterior monument sign for Building Number 1, subject to the terms and conditions set forth in this Section ("Monument Signage")(collectively, the Entry Signage and Monument Signage are referred to as the "Exterior Sign Right").

(2) General Conditions & Requirements. The size, type, style, materials, color, method of installation and exact location of the sign, and the contractor for and all work in connection with the sign, contemplated by this Section shall (i) be subject to Tenant's compliance with all applicable laws, regulations and ordinances and with any covenants, conditions and restrictions of record which affect the Property; (ii) be subject to Tenant's compliance with all requirements of Landlord's current Project signage criteria at the time of installation; (iii) be consistent with the design of Building Number 1 and the Project; (iv) be further subject to Landlord's prior written consent. Tenant shall, at its sole cost and expense, procure, install, maintain in first class appearance and condition, and remove such sign.

(3) Removal & Restoration. Upon the expiration or termination of the Exterior Sign Right, but in no event later than the expiration of the 101 Saginaw Term or earlier termination of the Lease, Tenant shall, at its sole cost and expense, remove such sign and shall repair and restore the area in which the sign was located to its condition prior to installation of such sign.

(4) Right Personal. The right to Monument Signage under this Section is personal to Codexis and may not be used by, and shall not be transferable or assignable (voluntarily or involuntarily) to, any person or entity.

Section 7. Surrender of 640 Galveston Space.

(a) Surrender Date. On or before 11:59 p.m. of the date which is ninety (90) days after the 101 Saginaw Rent Start Date (the "Surrender Date"), Tenant shall vacate and deliver to Landlord exclusive possession of the 640 Galveston Space pursuant to the same provisions and requirements of the Existing Lease as would apply to surrender of the Premises upon expiration of the Existing Lease. Tenant shall deliver to Landlord any plans and specifications, maintenance records, warranties, permits, approvals and licenses pertaining to the 640 Galveston Space or to any improvements remaining thereon, or to both (but not pertaining to Tenant's business conducted therein) in the possession of Tenant.

(b) Obligations Until Surrender; Proration. Through and including the Surrender Date Tenant must continue to pay all Monthly Base Rent and Rent Adjustments as they become due and payable under the Existing Lease and all of the terms, covenants, agreements and conditions of the Lease shall remain in full force and effect with respect to the 640 Galveston Space except as follows: (i) during the period between the 101 Saginaw Rent Start Date through the Surrender Date, Tenant shall not be liable for any Monthly Base Rent for the 640 Galveston Space, but shall pay only the Rent Adjustments and other Rent (if any) for such

space as they become due and payable; (ii) any and all options or rights of Tenant to expand the 640 Galveston Space or add space to it, including, without limiting the generality of the foregoing, the Negotiation Right with respect to the 600 Galveston Negotiation Space as set forth in Section 7 of the Third Amendment, are hereby terminated, null and void as of the Execution Date; and (iii) any and all options or rights of Tenant to extend the 640 Galveston Term (including, without limiting the generality of the foregoing, the Option to Extend with respect to the 640 Galveston Space as set forth in Section 26.14 of the Original Lease, as amended by Section 7 of the Second Amendment) are hereby terminated, null and void as of the Execution Date.

(c) Effect on Lease After Surrender Date. After the Surrender Date, the Lease shall continue in full force and effect for the remainder of the term of the Lease upon and subject to all of the terms and provisions of the Lease, including, without limitation, the following modifications of the Lease:

(i) Tenant shall have no right to possession, use or lease of the 640 Galveston Space or any options or other rights with respect to the 640 Galveston Space unless and except as provided in this Amendment; and

(ii) the regular Monthly Base Rent and Rent Adjustments allocable to the 640 Galveston Space shall no longer accrue.

(d) Holding Over. In the event that Tenant fails timely to vacate and deliver exclusive possession of the 640 Galveston Space to Landlord on or before the Surrender Date as required under this Amendment and the Lease, then:

(i) Tenant shall be deemed to be holding over with respect to the 640 Galveston Space without the express written consent of Landlord and shall be liable to Landlord for rent with respect to the 640 Galveston Space at the holdover rate provided in the Lease without regard to Section 7(b)(i) above (but only for the actual number of weeks that Tenant remains in possession of the 640 Galveston Space and fails to vacate and deliver exclusive possession to Landlord), and shall indemnify Landlord against loss or liability resulting from any delay of Tenant in not surrendering such premises on the Surrender Date, including, but not limited to, additional costs or losses incurred by Landlord in preparing such space for third parties to whom it is now or hereafter leased, any amounts required to be paid to third parties who were to have occupied all or part of such premises and Landlord's loss of income and profit if any lease to a third party is cancelled or lost due to Tenant's failure timely to vacate and deliver possession, and any attorneys' fees related to the foregoing;

(ii) such failure shall constitute an event of default and breach of the Lease without any applicable grace period, notice from Landlord or period to cure; and

(iii) no such holding over shall constitute a renewal, extension, a month to month tenancy or other permitted tenancy, but such continued possession shall be subject to the other covenants, conditions and agreements of the Lease, except as otherwise expressly provided in this Amendment.

(e) No Release. Notwithstanding any provision of the foregoing to the contrary, neither this Amendment nor the acceptance by Landlord of the 640 Galveston Space shall in any way:

(i) be deemed to excuse or release Tenant from any obligation or liability with respect to the 640 Galveston Space (including, without limitation, any obligation or liability under provisions of the Lease to indemnify, defend and hold harmless Landlord or other parties, or with respect to any breach or breaches of the Lease) which obligation or liability (i) first arises on or prior to the date on which Tenant delivers to Landlord possession of the 640 Galveston Space or (ii) arises out of or is incurred in connection with events or other matters which took place on or prior to such date, or

(ii) affect any obligation under the Lease which by its terms is to survive the expiration or sooner termination of the Lease.

Section 8. Moving Costs. Tenant acknowledges and agrees that it is responsible for, at Tenant's sole cost and expense, moving out of the 640 Galveston Space, and any moving or reinstallation in 101 Saginaw Space of furnishings, moveable partitions, moveable work stations, equipment, personal property and trade fixtures belonging to Tenant, and that Landlord has no responsibility for the foregoing.

Section 9. Adjustment to the Security. Notwithstanding any provision of the Existing Lease to the contrary:

(a) Tenant and Landlord acknowledge that pursuant to Section 5.02 of the Existing Lease, Tenant elected to deliver the Letter of Credit in lieu of cash Security Deposit, and immediately prior to execution of this Amendment, the amount of the Letter of Credit required under the Existing Lease and held by Landlord is Five Hundred Sixty-Two Thousand Four Dollars ($562,004.00).

(b) The amount of Security Deposit and Letter of Credit required as of the Execution Date of this Amendment is hereby increased by One Hundred Forty-Five Thousand Four Hundred Fifty-Two Dollars ($145,452.00) and within ten (10) business days following the Execution Date, Tenant shall deliver to Landlord an amendment or replacement of the Letter of Credit which increases the amount of the Letter of Credit to Seven Hundred Seven Thousand Four Hundred Fifty-Six Dollars ($707,456.00).

(c) Section 5.02(c) of the Existing Lease (as amended by Section 4(c) of the Second Amendment and Section 5(c) of the Third Amendment) is hereby deleted in its entirety.

(d) The second sentence of Section 5.02(a) (as amended by Section 4(d) of the Second Amendment and Section 5(d) of the Third Amendment) is deleted and the following is inserted in its place: "The Letter of Credit shall be maintained in effect until January 31, 2020 (the "LOC Expiration Date"), and provided that on the LOC Expiration Date, Tenant shall not be in Default, Landlord shall return to Tenant the Letter of Credit and any Letter of Credit Proceeds then held by Landlord (other than those held for application by Landlord on account of a Default as provided below)."

Section 10. Tenant Additions.

(a) Tenant Additions Existing as of the Execution Date. Notwithstanding any provision of the Lease to the contrary (including, without limitation, Section 12.01 of the Original Lease and Section 4(a) of the Third Amendment), Tenant shall not be required to remove any Tenant Additions existing as of the Execution Date at the 501 Chesapeake Space, 200 & 220 Penobscot Space, Building 2 Space and 640 Galveston Space upon the Termination Date with respect to the applicable space.

(b) 640 Galveston. Landlord and Tenant hereby confirm that Section 4(a) of the Third Amendment shall be applicable to the Premises (including, without limitation, the 640 Galveston Space).

Section 11. Negotiation Right.

(a) Landlord and Tenant confirms that the Negotiation Right with respect to 525 Chesapeake Drive (as set forth in Section 6 of the Second Amendment) continues to be in effect. As provided in Section 7(b)(ii) above, the Negotiation Right with respect to the 600 Galveston Negotiation Space (as set forth in Section 7 of the Third Amendment) is terminated.

(b) Landlord hereby grants Tenant a one-time right to negotiate the lease of the 123 Saginaw Negotiation Space (defined below). if and to the extent such space is Available (defined below) during the period beginning on the Execution Date of this Amendment and expiring twenty-four (24) months prior to the Expiration Date of the 101 Saginaw Term (the "Negotiation Period"), upon and subject to the terms and conditions of this Section (the "Negotiation Right"), and provided that at the time of exercise of such right: (i) Tenant must be conducting regular, active, ongoing business in, and be in occupancy (and occupancy by a

subtenant, licensee or other party permitted or suffered by Tenant shall not satisfy such condition) of the entire 101 Saginaw Space; and (ii) there has been no material adverse change in Tenant's financial position from such position as of the date of execution of the Lease, as certified by Tenant's independent certified public accountants, and as supported by Tenant's certified financial statements, copies of which shall be delivered to Landlord with Tenant's written notice exercising its right hereunder. Without limiting the generality of the foregoing, Landlord may reasonably conclude there has been a material adverse change if Tenant's independent certified public accountants do not certify there has been no such change.

(c) The "123 Saginaw Negotiation Space" shall mean the leaseable space with a street address of 123 Saginaw Drive and Rentable Area of approximately 26,067 square feet. For purposes of this Negotiation Right, the term "Available" shall mean that the space in question is either: (1) vacant and free and clear of all "Prior Rights" (defined below); or (2) space as to which Landlord has received a proposal, or Landlord is making a proposal, for a lease or rights of any nature applicable in the future when such space would be free and clear of all Prior Rights. For purposes of this Negotiation Right, the term "Prior Rights" shall mean rights of other parties, including without limitation, a lease, lease option, or option or other right of extension, renewal, expansion, refusal, negotiation or other right, either: (i) pursuant to any lease or written agreement with the tenant currently occupying the 123 Saginaw Negotiation Space; or (ii) pursuant to any extensions or renewal of any of the foregoing, whether or not set forth in such lease or written agreement, and Landlord shall be free at any time to enter such extension or renewal; or (iii) pursuant to any amendment or modification of any of the foregoing, and Landlord shall be free at any time to enter such amendment or modification.

(d) Nothing herein shall be deemed to limit or prevent Landlord from marketing, discussing or negotiating with any other party for a lease of, or rights of any nature as to, any part of the 123 Saginaw Negotiation Space, but during the Negotiation Period before Landlord makes any written proposal to any other party (other than a party with Prior Rights) for any 123 Saginaw Negotiation Space which becomes Available (including giving a written response to any proposal or offer received from another party), or contemporaneously with making any such proposal, and in any event within thirty (30) days after such space becomes vacant and free and clear of all Prior Rights, Landlord shall give Tenant written notice ("Landlord's Notice"), which notice identifies the space Available and Landlord's estimate of the projected date such space will be vacant and deliverable to Tenant. Notwithstanding any of the foregoing to the contrary, Tenant acknowledges that Landlord has disclosed that as of the date of execution of this Lease, the 123 Saginaw Negotiation Space is leased for a term that will expire approximately March 31, 2011, and as set forth more fully in Subsection (c) above, Landlord shall remain free at any time to enter into an extension or renewal of such lease, whether or not any such right is set forth in such lease, and to enter into any amendment or modification of such lease, all of which constitute Prior Rights with respect to the Negotiation Space. For a period of five (5) business days after Landlord gives Landlord's Notice (the "Election Notice Period"), Tenant shall have the right to initiate negotiations in good faith for the lease of all (and not less than all) the space identified in Landlord's Notice by giving Landlord written notice ("Election Notice") of Tenant's election to exercise its Negotiation Right to lease such space.

(e) If Tenant timely and properly gives the Election Notice, Landlord and Tenant shall, during the five (5) business day period (the "Second Period") following Landlord's receipt of the Election Notice, negotiate in good faith for the lease of the 123 Saginaw Negotiation Space which is the subject of the Landlord Notice as set forth below. Any lease by Tenant pursuant to this Negotiation Right: (1) shall be for all (and not less than all) the 123 Saginaw Negotiation Space which is the subject of the Landlord Notice; (2) the subject 123 Saginaw Negotiation Space shall, upon delivery, be part of the Premises under the Lease, such that the term "Premises" thereafter shall include the subject 123 Saginaw Negotiation Space; (3) starting on such delivery date, with respect to the subject 123 Saginaw Negotiation Space Tenant shall additionally pay Tenant's Share of Operating Expenses, with Tenant's Share recalculated to reflect addition of the 123 Saginaw Negotiation Space; (4) the number of parking spaces applicable to the subject 123 Saginaw Negotiation Space shall be calculated at the rate of 3.3 spaces per 1000 square feet of Rentable Area of the subject 123 Saginaw Negotiation Space, and the type of, location of and charge for such spaces shall be as otherwise provided in the Lease; and (5) such lease shall be upon and subject to all the other terms, covenants and conditions provided in the Lease, except that the following terms shall be subject to such negotiation and agreement of the parties: (aa) the amount of the Monthly Base Rent with respect to the

123 Saginaw Negotiation Space; (bb) the term of the lease of the 123 Saginaw Negotiation Space shall be subject to negotiation, but shall not be less than the Term of the Lease of the 101 Saginaw Space (including any extension pursuant to the Option to Extend); (cc) any improvements or alterations to be done, or allowance therefor, if any, specifically agreed upon, and absent such agreement, Tenant shall accept the 123 Saginaw Negotiation Space in its then AS IS condition without any obligation of Landlord to repaint, remodel, improve or alter the subject 123 Saginaw Negotiation Space for Tenant's occupancy or to provide Tenant any allowance therefor, but such space shall be delivered broom clean and free of all tenants or occupants (and their personal property); (dd) increase in the Security; and (ee) Landlord shall deliver the subject 123 Saginaw Negotiation Space to Tenant in such AS IS condition no later than thirty (30) days after Landlord regains possession of such space, but in no event shall Landlord have any liability for failure to deliver the subject 123 Saginaw Negotiation Space to Tenant on any projected delivery date due to the failure of any occupant to timely vacate and surrender such space or due to Force Majeure, and such failure shall not be a default under the Lease or impair its validity. The foregoing obligation of Landlord to negotiate is non-exclusive and nothing herein shall be deemed to prevent Landlord from negotiating with any other party for the 123 Saginaw Negotiation Space, whether or not Landlord and Tenant are negotiating for the same, but any other such negotiation shall be subject to the aforesaid obligation to negotiate with Tenant in good faith.

(f) If Tenant either fails or elects not to exercise its Negotiation Right as to the 123 Saginaw Negotiation Space covered by Landlord's Notice by not giving its Election Notice within the Election Notice Period, or if Tenant gives Tenant's Election Notice but Tenant and Landlord do not execute (1) a written letter of intent reflecting the significant business terms for the lease of the 123 Saginaw Negotiation Space within five (5) business days after delivery of the Election Notice, and (2) a corresponding amendment prepared by Landlord within five (5) days after Landlord gives Tenant such proposed amendment, then in any such event Tenant's Negotiation Right shall terminate, and be null and void, as to the subject space identified in the applicable Landlord's Notice (but not as to any 123 Saginaw Negotiation Space subject to this Negotiation Right which has not become Available and been included in a Landlord's Notice), and at any time thereafter Landlord shall be free to lease and/or otherwise grant options or rights to the subject space on any terms and conditions whatsoever free and clear of the Negotiation Right.

(g) During any period that Tenant does not occupy the entire Premises or that there is an uncured default by Tenant under the Lease, or any state of facts which with the passage of time or the giving of notice, or both, would constitute such a default, the Negotiation Right shall not apply and shall be ineffective and suspended, and Landlord shall not be obligated to give a Landlord's Notice as to any space which becomes Available during such suspension period, and Landlord shall not be obligated to negotiate (or enter into any amendment) with respect to any 123 Saginaw Negotiation Space which was the subject of a pending Landlord's Notice for which an amendment has not been fully executed, and during such suspension period Landlord shall be free to lease and/or otherwise grant options or rights to such space on any terms and conditions whatsoever free and clear of the Negotiation Right. The Negotiation Right shall terminate upon any of the following: (1) the termination of the Lease, whether by Landlord upon the occurrence of a Tenant default or otherwise; or (2) the failure of Tenant timely to exercise, give any notices, perform or agree, within any applicable time period specified above, with respect to any 123 Saginaw Negotiation Space which was the subject of any Landlord's Notice.

(h) The Negotiation Right is personal to Codexis and may not be used by, and shall not be transferable or assignable (voluntarily or involuntarily) to any person or entity.

Section 12. Option to Extend.

(a) Landlord and Tenant confirms that the Option to Extend with respect to 501 Chesapeake Drive (as set forth in Section 26.21 of the Original Lease, as amended by Section 3 of the Fourth Amendment) continues to be in effect. As provided in Sections 3 and 7(b)(iii) above, the following Options to Extend are terminated: (i) the Option to Extend with respect to the 200 & 220 Penobscot Space (as set forth in Section 26.21 of the Original Lease), (ii) the Option to Extend with respect to the Building 2 Space (as set forth in Section 26.21 of the Original Lease, as amended by Section 8 of the Third Amendment), and (iii) the Option to Extend with respect to the 640 Galveston Space (as set forth in Section 26.21 of the Original Lease, as amended by Section 7 of the Second Amendment).

(b) Landlord hereby grants Tenant two (2) consecutive options (individually an "Option" and collectively the "Options") to extend the Term of the Lease for an additional period of five (5) years per Option (each such period may be referred to as the "Option Term"), as to the portion of the Premises consisting of the 200 & 220 Penobscot Space, Building 2 Space and 101 Saginaw Space (all references in this Section 12 to the "Premises" shall instead be deemed to mean such space only), as it may then exist, upon and subject to the terms and conditions of this Section (the "Option To Extend"), and provided that at the time of exercise of the applicable Option: (i) Tenant must be in occupancy of the entire Premises; and (ii) there has been no material adverse change in Tenant's financial position from such position as of the date of execution of the Lease, as certified by Tenant's independent certified public accountants, and as supported by Tenant's certified financial statements, copies of which shall be delivered to Landlord with Tenant's written notice exercising its right hereunder.

(c) Tenant's election (the "Election Notice") to exercise an Option must be given to Landlord in writing no earlier than the date which is twelve months (12) months before the expiration of the then-current Term and no later than the date which is nine (9) months before the expiration of the then-current Term. If Tenant either fails or elects not to exercise an Option by not timely giving its Election Notice, then the Option to Extend shall be null and void, including the then applicable Option and all further Options.

(d) Each Option Term shall commence immediately after the expiration of the preceding Term of the Lease. Tenant's leasing of the Premises during an Option Term shall be upon and subject to the same terms and conditions contained in the Lease except that (i) the Monthly Base Rent, plus payment of Tenant's Share of Operating Expenses pursuant to the Lease (in addition to all expenses paid directly by Tenant to the utility or service provider, which direct payments shall continue to be Tenant's obligation) shall be amended to equal the "Option Term Rent", defined and determined in the manner set forth in the immediately following Subsection; (ii) the Security Deposit, if any, shall be increased within fifteen (15) days after the Prevailing Market Rent has been determined to equal one hundred percent (100%) of the highest monthly installment of Monthly Base Rent thereunder, but in no event shall the Security Deposit be decreased; (iii) Tenant shall accept the Premises in its "AS-IS" condition without any obligation of Landlord to repaint, remodel, repair, improve or alter the Premises or to provide Tenant any allowance therefor; and (iv) following the exercise o the second Option, there shall be no further option or right to extend the term of the Lease. If Tenant timely and properly exercises an Option, references in the Lease to the Term shall be deemed to mean the preceding Term as extended by the Option Term unless the context clearly requires otherwise.

(e) The "Option Term Rent" shall mean the greater of (i) the Monthly Base Rent payable by Tenant under this Lease calculated at the rate applicable for the last full month of the preceding Term, plus payment of Tenant's Share of Operating Expenses pursuant to the Lease (in addition to all expenses paid directly by Tenant to the utility or service provider, which direct payments shall continue to be Tenant's obligation) (collectively, "Preceding Rent") or (ii) the "Prevailing Market Rent". As used in this Section, "Prevailing Market Rent" shall mean the rent and all other monetary payments, escalations and triple net payables by Tenant, including consumer price increases, that Landlord could obtain from a third party desiring to lease the Premises for a term equal to the Option Term and commencing when the applicable Option Term is to commence under market leasing conditions, and taking into account the following: the size, location and floor levels of the Premises; the type and quality of tenant improvements (including Tenant's Improvements); age and location of the Project; quality of construction of the Project; services to be provided by Landlord or by tenant; the rent, all other monetary payments and escalations obtainable for new leases of space comparable to the Premises in the Project and in comparable buildings in the mid-Peninsula area, and other factors that would be relevant to such a third party in determining what such party would be willing to pay therefor, provided, however, that Prevailing Market Rent shall be determined without reduction or adjustment for "Tenant Concessions" (as defined below), if any, being offered to prospective new tenants of comparable space. For purposes of the preceding sentence, the term "Tenant Concessions" shall include, without limitation, so-called free rent, tenant improvement allowances and work, moving allowances, and lease takeovers. The determination of Prevailing Market Rent based upon the foregoing criteria shall be made by Landlord, in the good faith exercise of Landlord's business judgment. Within thirty (30) days after Tenant's exercise of the Option To Extend, Landlord shall

notify Tenant of Landlord's determination of Option Term Rent for the Premises. If Landlord's determination of Prevailing Market Rent is greater than the Preceding Rent, and if Tenant, in Tenant's sole discretion, disagrees with the amount of Prevailing Market Rent determined by Landlord, Tenant may elect to revoke and rescind the exercise of the option by giving written notice thereof to Landlord within thirty (30) days after notice of Landlord's determination of Prevailing Market Rent.

(f) This Option to Extend is personal to Codexis Inc. and may not be used by, and shall not be transferable or assignable (voluntarily or involuntarily) to any person or entity except for a Tenant Affiliate.

(g) Upon the occurrence of any of the following events, Landlord shall have the option, exercisable at any time prior to commencement of the applicable Option Term, to terminate all of the provisions of this Section with respect to such Option to Extend, with the effect of canceling and voiding any prior or subsequent exercise so this Option to Extend is of no force or effect:

(i) Tenant's failure to timely exercise such Option to Extend in accordance with the provisions of this Section.

(ii) The existence at the time Tenant exercises such Option to Extend or at the commencement of the applicable Option Term of any default on the part of Tenant under the Lease or of any state of facts which with the passage of time or the giving of notice, or both, would constitute such a default.

(iii) Tenant's third default under the Lease prior to the commencement of the applicable Option Term, notwithstanding that all such defaults may subsequently be cured.

In the event of Landlord's termination of the Option to Extend pursuant to this Section, Tenant shall reimburse Landlord for all costs and expenses Landlord incurs in connection with Tenant's exercise of the Option to Extend including, without limitation, costs and expenses with respect to any brokerage commissions and attorneys' fees, and with respect to the design, construction or making of any tenant improvements, repairs or renovation or with respect to any payment of all or part of any allowance for any of the foregoing.

Section 13. Tenant's Financial Statements. Landlord acknowledges that Codexis Inc. is currently a publicly traded company. Landlord hereby acknowledges and agrees that, so long as Codexis Inc. remains a publicly traded company, notwithstanding anything in the Existing Lease or this Amendment to the contrary, Codexis Inc. shall have no obligation to deliver any financial statements to or at the request of Landlord. Landlord may procure information regarding Codexis Inc.'s financial status from Codexis Inc.'s filings with the Securities and Exchange Commission (the "SEC"), including, without limitation, Codexis Inc.'s 10-Q, 10-K, and 8-K filings, all of which are available online through the SEC's EDGAR database.

Section 14. Time of the Essence. Without limiting the generality of any provision of the Lease, time shall be of the essence with respect to all of the provisions of this Section.

Section 15. Brokers. Notwithstanding any other provision of the Existing Lease to the contrary, Tenant represents that in connection with this Amendment it is represented by CB Richard Ellis ("Tenant's Broker") and, except for Tenant's Broker and Cornish & Carey Commercial Newmark Knight Frank ("Landlord's Broker") identified below, Tenant has not dealt with any real estate broker, sales person, or finder in connection with this Amendment, and no such person initiated or participated in the negotiation of this Amendment. Tenant hereby indemnifies and agrees to protect, defend and hold Landlord and Landlord's Broker harmless from and against all claims, losses, damages, liability, costs and expenses (including, without limitation, attorneys' fees and expenses) by virtue of any broker, agent or other person claiming a commission or other form of compensation by virtue of alleged representation of, or dealings or discussions with, Tenant with respect to the subject matter of this Amendment, except for Landlord's Broker and except for a commission payable to Tenant's Broker to the extent provided for in a separate written agreement between Tenant's Broker and Landlord's Broker. Tenant is not obligated to pay or fund any

amount to Landlord's Broker, and Landlord hereby agrees to pay such commission, if any, to which Landlord's Broker is entitled in connection with the subject matter of this Amendment pursuant to Landlord's separate written agreement with Landlord's Broker. Such commission shall include an amount to be shared by Landlord's Broker with Tenant's Broker as agreed to by Tenant's Broker and Landlord's Broker in a separate agreement between themselves to share the commission paid to Landlord's Broker by Landlord. The provisions of this Section shall survive the expiration or earlier termination of the Lease.

Section 16. Attorneys' Fees. Each party to this Amendment shall bear its own attorneys' fees and costs incurred in connection with the discussions preceding, negotiations for and documentation of this Amendment. In the event that either party brings any suit or other proceeding with respect to the subject matter or enforcement of this Amendment or the Lease, the parties acknowledge and agree that the provisions of Section 11.03 of the Existing Lease shall apply.

Section 17. Effect of Headings; Recitals: Exhibits. The titles or headings of the various parts or sections hereof are intended solely for convenience and are not intended and shall not be deemed to or in any way be used to modify, explain or place any construction upon any of the provisions of this Amendment. Any and all Recitals set forth at the beginning of this Amendment are true and correct and constitute a part of this Amendment as if they had been set forth as covenants herein. Exhibits, schedules, plats and riders hereto which are referred to herein are a part of this Amendment.

Section 18. Entire Agreement; Amendment. This Amendment taken together with the Existing Lease, together with all exhibits, schedules, riders and addenda to each, constitutes the full and complete agreement and understanding between the parties hereto and shall supersede all prior communications, representations, understandings or agreements, if any, whether oral or written, concerning the subject matter contained in this Amendment and the Existing Lease, as so amended, and no provision of the Lease as so amended may be modified, amended, waived or discharged, in whole or in part, except by a written instrument executed by all of the parties hereto.

Section 19. OFAC. Landlord advises Tenant hereby that the purpose of this Section is to provide to the Landlord information and assurances to enable Landlord to comply with the law relating to OFAC.

Tenant hereby represents, warrants and covenants to Landlord, either that (i) Tenant is regulated by the SEC, FINRA or the Federal Reserve (a "Regulated Entity") or (ii) neither Tenant nor any person or entity that directly or indirectly (a) controls Tenant or (b) has an ownership interest in Tenant of twenty-five percent (25%) or more, appears on the list of Specially Designated Nationals and Blocked Persons ("OFAC List") published by the Office of Foreign Assets Control ("OFAC") of the U.S. Department of the Treasury.

If, in connection with the Lease, there is one or more Guarantors of Tenant's obligations under the Lease, then Tenant further represents, warrants and covenants either that (i) any such Guarantor is a Regulated Entity or (ii) neither Guarantor nor any person or entity that directly or indirectly (a) controls such Guarantor or (b) has an ownership interest in such Guarantor of twenty-five percent (25%) or more, appears on the OFAC List.

Tenant covenants that during the term of the Lease to provide to Landlord information reasonably requested by Landlord including without limitation, organizational structural charts and organizational documents which Landlord may deem to be necessary ("Tenant OFAC Information") in order for Landlord to confirm Tenant's continuing compliance with the provisions of this Section. Tenant represents and warrants that the Tenant OFAC Information it has provided or to be provided to Landlord or Landlord's Broker in connection with the execution of this Amendment is true and complete.

Section 20. Ratification. Tenant represents to Landlord, as of the Execution Date, that: (a) the Existing Lease is in full force and effect and has not been modified except as provided by this Amendment; (b) to Tenant's actual knowledge, there are no uncured defaults or unfulfilled obligations on the part of Landlord or Tenant; and (c) Tenant is currently in possession of the entire Premises as of the

Execution Date, and neither the Premises, nor any part thereof, is occupied by any subtenant or other party other than Tenant. Landlord represents to Tenant, as of the Execution Date, that: (a) the Existing Lease is in full force and effect and has not been modified except as provided by this Amendment, and (b) to Landlord's actual knowledge, there are no uncured monetary defaults on the part of Tenant.

Section 21. Authority. Each person executing this Amendment represents and warrants that he or she is duly authorized and empowered to execute it, and does so as the act of and on behalf of the party indicated below. Each party represents and warrants to the other that it has full authority and power to enter into and perform its obligations under this Amendment, that the person executing this Amendment is fully empowered to do so, and that no consent or authorization is necessary from any third party. Landlord may request that Tenant provide Landlord evidence of due authorization and execution of this Amendment.

Section 22. Counterparts. This Amendment may be executed in duplicates or counterparts, or both, and such duplicates or counterparts together shall constitute but one original of the Amendment. Each duplicate and counterpart shall be equally admissible in evidence, and each original shall fully bind each party who has executed it.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first set forth above.

TENANT: **CODEXIS, INC.,**
a Delaware corporation

By: /s/ Alan Shaw

Print Name: Alan Shaw

Title: President and Chief Executive Officer
(Chairman of Board, President or Vice President)

By: /s/ Robert Lawson

Print Name: Robert Lawson

Title: Chief Financial Officer
(Secretary, Assistant Secretary, CFO or Assistant Treasurer)

LANDLORD: **METROPOLITAN LIFE INSURANCE COMPANY,**
a New York corporation

By: /s/ Greg Hill

Print Name: Greg Hill

Title: Director

EXHIBIT A

101 SAGINAW SPACE

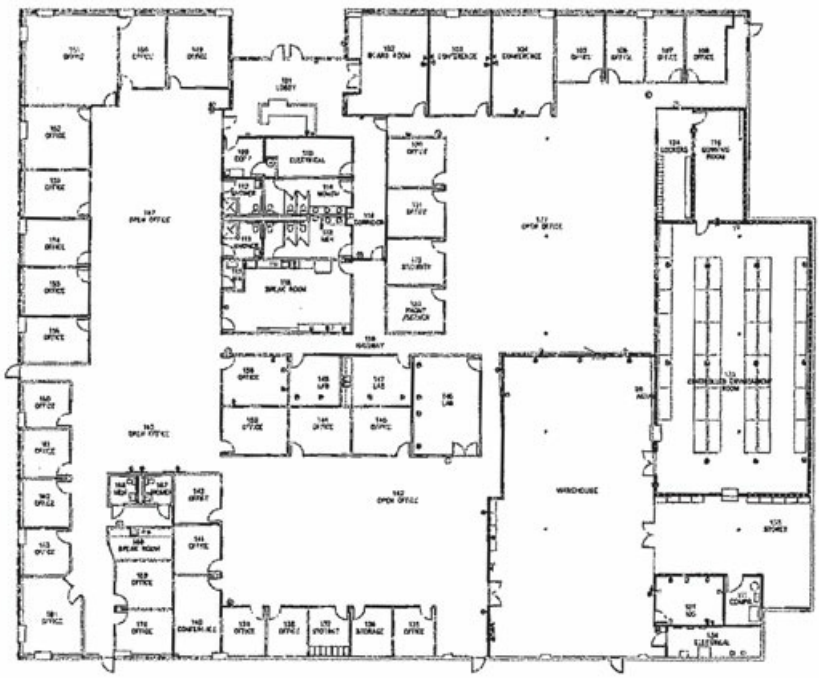

EXHIBIT B
WORKLETTER AGREEMENT
(TENANT BUILD WITH ALLOWANCE)

This Workletter Agreement ("Workletter") is attached to and a part of a certain Fifth Amendment to Lease by and between Metropolitan Life Insurance Company, a New York corporation, as Landlord, and Codexis, Inc., a Delaware corporation, as Tenant, for the 200 & 220 Penobscot Space, Building 2 Space and 101 Saginaw Space (the "Amendment" and the original lease, as amended shall be referred to as the "Lease"). All references below to the Premises shall instead be deemed to mean the 200 & 220 Penobscot Space, Building 2 Space and/or 101 Saginaw Space, as applicable, and all references to the Building shall instead be deemed to Building Number 4, Building Number 2 and/or Building Number 1, as applicable. Terms used herein but not defined herein shall have the meaning of such terms as defined elsewhere in the Lease. For purposes of this Workletter, references to "State" and "City" shall mean the State and City in which the Building is located.

1. AS IS Condition; Delivery.

(a) Tenant acknowledges and agrees that Tenant presently occupies and has occupied the 200 & 220 Penobscot Space and Building 2 Space, and Tenant accepts the 200 & 220 Penobscot Space and Building 2 Space in their AS-IS condition, without any express or implied representations or warranties of any kind by Landlord, its brokers, manager or agents, or the employees of any of them regarding the Premises. Landlord shall not have any obligation to construct or install any tenant improvements or alterations or to pay for any such construction or installation in any portion of the Premises, except as expressly set forth in the Amendment and all exhibits thereto.

(b) Landlord shall deliver the 101 Saginaw Space broom clean in its current "as built" configuration with existing build-out of the tenant space, with the 101 Saginaw Space and Building Number 1 (including the "Base Building", as defined below) in their AS IS condition, without any express or implied representations or warranties of any kind by Landlord, its brokers, manager or agents, or the employees of any of them; and Landlord shall not have any obligation to construct or install any tenant improvements or alterations or to pay for any such construction or installation except to the extent expressly provided in the Amendment and all exhibits thereto. For purposes hereof, the "Base Building" (sometimes also referred to as the "Base Building Work") shall mean the improvements made and work performed during the applicable Building's initial course of construction and modifications thereto, excluding all original and modified build-outs of any tenant spaces. Notwithstanding any provision of this Workletter or the Lease to the contrary, to the extent that within three (3) business days after the Commencement Date (i) the roof and roof membrane (but not including the roof insulation) above the 101 Saginaw Space, (ii) foundation and structural components of the Base Building (for Building Number 1), (iii) Landlord's fire sprinkler and life-safety systems, if any, of the Base Building (for Building Number 1), and (iv) the electrical, water, sewer and plumbing systems of the Base Building serving the 101 Saginaw Space (but only from the local utility's systems to the point of entry into the 101 Saginaw Space or to the meter or other point after which such system serves exclusively the 101 Saginaw Space) are not in good working condition, except to the extent any of the foregoing are to be removed, demolished or altered by Tenant, and within three (3) business days after the Commencement Date Tenant gives Landlord written notice specifying what is not in good working condition, Landlord shall make necessary repairs to put such item or items in good working condition at Landlord's sole cost and expense. Further, Tenant acknowledges and agrees that Tenant has been afforded ample opportunity to inspect the 101 Saginaw Space, Building Number 1 and the Project, and has investigated their condition to the extent Tenant desires to do so.

2. Landlord Work.

2.1. Notwithstanding any of the foregoing to the contrary, subject to delays caused by Force Majeure or Tenant Delay (defined below), Landlord, at Landlord's sole cost and expense, shall perform the

work set forth on Exhibit B-1 hereto ("Landlord Work"), and within ninety (90) days after the 101 Saginaw Commencement Date shall Substantially Complete (defined below) the Landlord Work and leave the affected area in broom-clean condition with respect to Landlord Work (but Landlord shall not be obligated to do any clean-up or refuse removal related to construction of Tenant Work).

2.2. Tenant acknowledges and agrees that in order to deliver the Premises to Tenant on the schedule contemplated by this Lease, preparation for and performance of the Landlord Work will require access, work and construction within the Premises after delivery of possession to Tenant, and that Landlord and Landlord's representatives and contractors shall have the right to enter the Premises at all times to perform such work until the Landlord Work is completed, and that such entry and work shall not constitute an eviction of Tenant in whole or in part and shall in no way excuse Tenant from performance of its obligations under the Lease. Tenant and Landlord acknowledge and agree that the Landlord Work and necessary coordination and cooperation to accomplish it will cause certain unavoidable level of disturbance, inconvenience, annoyance to Tenant's use and enjoyment of the Premises, and that in performing such Landlord Work Landlord shall use commercially reasonable efforts not to unreasonably and materially interfere with Tenant's construction, installations and business operations. Tenant shall cooperate with Landlord and Landlord's contractors(s) to allow the Landlord Work and shall move Tenant's trade fixtures, furnishings and equipment as reasonably requested by Landlord or Landlord's contractor(s). The costs of such cooperation and moving, and any related disconnections and installations of Tenant's trade fixtures, equipment, phones, furnishings and other personal property, shall be at Tenant's sole cost and expense. To the extent that Tenant, its contractors or subcontractors delay the Substantial Completion of the Landlord Work, such delay shall be a "Tenant Delay" and the Landlord Work shall be deemed Substantially Complete on the date such Landlord Work would have been completed but for the delay caused by Tenant, its contractors or subcontractors.

2.3. For purposes of this Workletter, "Substantially Complete" and "Substantial Completion" of the Landlord Work shall mean the completion of the Landlord Work, except for minor insubstantial details of construction, decoration or mechanical adjustments which remain to be done and which shall not unreasonably and materially interfere with Tenant's regular business operations in the Premises. Substantial Completion shall be deemed to have occurred notwithstanding a requirement to complete "punchlist" or similar minor corrective work. Contemporaneously with or promptly after Substantial Completion of the Landlord Work, Tenant shall have the right to submit a written "punch list" to Landlord, setting forth any incomplete or defective item of construction. Landlord shall complete with reasonable diligence "punch list" items mutually agreed upon by Landlord and Tenant with respect to the Landlord Work. In addition, Landlord shall repair all latent defects in workmanship and materials of the Landlord Work, provided that Tenant gives Landlord written notice of any such latent defects within six (6) months after the date of Substantial Completion of the Landlord Work. For purposes of this Section, the term "latent defects" shall mean defects which were not readily apparent at the time the "punchlist" was formulated. All construction and installation resulting from the Landlord Work shall immediately become and remain the property of Landlord.

3. Tenant's Plans.

3.1. Description. At its expense, Tenant shall employ:

(i) one or more architects reasonably satisfactory to Landlord and licensed by the State ("Tenant's Architect") to prepare architectural drawings and specifications for all layout and Premises improvements not included in, or requiring any change or addition to, the AS IS condition and Landlord Work, if any.

(ii) one or more engineers reasonably satisfactory to Landlord and licensed by the State ("Tenant's Engineers") to prepare structural, mechanical and electrical working drawings and specifications for all Premises improvements not included in, or requiring any change or addition to, the AS IS condition and Landlord Work, if any.

All such drawings and specifications are referred to herein as "Tenant's Plans". Tenant's Plans shall be in form and detail sufficient to secure all applicable governmental approvals. Tenant's Architect shall be responsible for coordination of all engineering work for Tenant's Plans and shall coordinate with any consultants of Tenant (the use of which is subject to Landlord's consent), and Landlord's space planner or architect to assure the consistency of Tenant's Plans with the Base Building Work and Landlord Work (if any).

Tenant shall pay Landlord, within forty-five (45) days of receipt of each invoice from Landlord, the cost incurred by Landlord for Landlord's architects and engineers to review Tenant's Plans for consistency of same with the Base Building Work and Landlord Work, if any (but in no event exceeding Five Thousand Dollars ($5,000.00)). Tenant's Plans shall also include the following:

(a) Final Space Plan: The "Final Space Plan" for the Premises shall include a full and accurate description of room titles, floor loads, alterations to the Base Building or Landlord Work (if any) or requiring any change or addition to the AS IS condition, and the dimensions and location of all partitions, doors, aisles, plumbing (and furniture and equipment to the extent same affect floor loading). The Final Space Plan shall (i) be compatible with the design, construction, systems and equipment of the Base Building and Landlord Work, if any; (ii) specify only materials, equipment and installations which are new and of a grade and quality no less than existing components of the Building when they were originally installed (collectively, (i) and (ii) may be referred to as "Building Standard" or "Building Standards"); (iii) comply with Laws, (iv) be capable of logical measurement and construction, and (v) contain all such information as may be required for the preparation of the Mechanical and Electrical Working Drawings and Specifications (including, without limitation, a capacity and usage report, from engineers designated by Landlord pursuant to Section 3.1(b). below, for all mechanical and electrical systems in the Premises).

(b) Mechanical and Electrical Working Drawings and Specifications: Tenant shall employ engineers approved by Landlord to prepare Mechanical and Electrical Working Drawings and Specifications showing complete plans for electrical, life safety, automation, plumbing, water, and air cooling, ventilating, heating and temperature control (collectively, the "Mechanical and Electrical Working Drawings and Specifications") and shall employ engineers designated by Landlord to prepare for Landlord a capacity and usage report ("Capacity Report") for all mechanical and electrical systems in the Premises.

(c) Issued for Construction Documents: The "Issued for Construction Documents" shall consist of all drawings (1/8" scale) and specifications necessary to construct all Premises improvements including, without limitation, architectural and structural working drawings and specifications and Mechanical and Electrical Working Drawings and Specifications and all applicable governmental authorities plan check corrections.

3.2. Approval by Landlord. Tenant's Plans and any revisions thereof shall be subject to Landlord's approval, which approval or disapproval:

(i) shall not be unreasonably withheld, provided however, that Landlord may disapprove Tenant's Plans in its sole and absolute discretion if they (a) adversely affect the structural integrity of the Base Building, including applicable floor loading capacity; (b) adversely affect any of the Building Systems (as defined below), the Common Areas or any other tenant space (whether or not currently occupied); (c) fail to fully comply with Laws, (d) affect the exterior appearance of the Building; (e) provide for improvements which do not meet or exceed the Building Standards; or (f) involve any installation on the roof, or otherwise affect the roof, roof membrane or any warranties regarding either. Building Systems collectively shall mean the structural, electrical, mechanical (including, without limitation, heating, ventilating and air conditioning), plumbing, fire and life-safety (including, without limitation, fire protection system and any fire alarm), communication, utility, gas (if any), and security (if any) systems in the Building.

(ii) shall not be delayed beyond ten (10) business days with respect to initial submissions and major change orders (those which impact Building Systems or any other item listed in subpart (i) of Section 3.2 above) and beyond five (5) business days with respect to required revisions and any other change orders.

If Landlord disapproves of any of Tenant's Plans, Landlord shall advise Tenant of what Landlord disapproves in reasonable detail. After being so advised by Landlord, Tenant shall submit a redesign, incorporating the revisions required by Landlord, for Landlord's approval. The approval procedure shall be repeated as necessary until Tenant's Plans are ultimately approved. Approval by Landlord shall not be deemed to be a representation or warranty by Landlord with respect to the safety, adequacy, correctness, efficiency or compliance with Laws of Tenant's Plans. Tenant shall be fully and solely responsible for the safety, adequacy, correctness and efficiency of Tenant's Plans and for the compliance of Tenant's Plans with any and all Laws.

Concurrently with Landlord's approval of Tenant's Plans, Landlord shall advise Tenant in writing as to which, if any, of the Tenant Work reflected in such Tenant's Plans Landlord will require Tenant to remove at the end of the Term of the Lease with respect to the affected portion of the Premises; provided, however, regardless of the foregoing, in any event, Landlord may require at the end of the applicable Term removal of any Tenant Work containing Hazardous Material, Tenant's trade fixtures, and subject to Section 6.03 of the Original Lease, cabling and wiring installed for Tenant's personal property or trade fixtures.

3.3. Landlord Cooperation. Landlord shall cooperate with Tenant and make good faith efforts to coordinate Landlord's construction review procedures to expedite the planning, commencement, progress and completion of Tenant Work. Landlord shall complete its review of each stage of Tenant's Plans and any revisions thereof and communicate the results of such review within the time periods set forth in Section 3.2 above.

3.4. City Requirements. Any changes in Tenant's Plans which are made in response to requirements of the applicable governmental authorities and/or changes which affect the Base Building Work shall be immediately submitted to Landlord for Landlord's review and approval.

3.5. "As-Built" Drawings and Specifications. A CADD-DXF file on CD-ROM, pdf versions of the drawings on CD-ROM, and a set of "Xerox" type blackline on bond prints of all "as-built" drawings and specifications of the Premises (reflecting all field changes and including, without limitation, architectural, structural, mechanical and electrical drawings and specifications) prepared by Tenant's Architect and Engineers or by Contractors (defined below) shall be delivered by Tenant at Tenant's expense to the Landlord within thirty (30) days after completion of the Tenant Work. If Landlord has not received such drawings and CD-ROM(s) within thirty (30) days, Landlord may give Tenant written notice of such failure. If Tenant does not produce such drawings and CD-ROM(s) within ten (10) days after Landlord's written notice, Landlord may, at Tenant's sole cost which may be deducted from the Allowance, produce such drawings and CD-ROM(s) using Landlord's personnel, managers, and outside consultants and contractors. Landlord shall receive an hourly rate reasonable for such production.

4. Tenant Work.

4.1. Tenant Work Defined.

(a) All tenant improvement work required by the Issued for Construction Documents (including, without limitation, any approved changes, additions or alterations pursuant to Section 7 below) is referred to in this Workletter as "Tenant Work."

(b) As part of the Tenant Work Tenant shall perform the work set forth onExhibit B-2 hereto.

4.2. Tenant to Construct. Tenant shall construct all Tenant Work pursuant to this Workletter, and except to the extent modified by or inconsistent with express provisions of this Workletter, pursuant with the provisions of the terms and conditions of Article Nine of the Lease, governing Tenant Alterations (except to the extent modified by this Workletter) and all such Tenant Work shall be considered "Tenant Alterations" for purposes of the Lease.

4.3. Construction Contract. All contracts and subcontracts for Tenant Work shall include any commercially reasonable terms and conditions required by Landlord.

4.4. Contractor. Tenant shall select one or more contractors to perform the Tenant Work ("Contractor") subject to Landlord's prior written approval, which shall not unreasonably be withheld.

4.5. Division of Landlord Work and Tenant Work. Tenant Work is defined in Section 4.1. above and Landlord Work, if any, is defined in Section 2.

5. Tenant's Expense; Allowance; Special Allowances.

5.1. Tenant agrees to pay for all Tenant Work, including, without limitation, the costs of design thereof, whether or not all such costs are included in the "Permanent Improvement Costs" (defined below). Subject to the terms and conditions of this Workletter, Tenant shall apply the "Allowance" (defined below) to payment of the Permanent Improvement Costs. The term "Permanent Improvement Costs" shall mean the actual and reasonable costs of construction of that Tenant Work which constitutes permanent improvements to the Premises, actual and reasonable cost of design thereof and governmental permits therefor, costs incurred by Landlord for Landlord's architects and engineers pursuant to (and subject to the cap in) Section 3.1, and Landlord's construction administration fee (defined in Section 8.10 below). Provided, however, Permanent Improvement Costs shall exclude costs of "Tenant's FF& E" (defined below). For purposes of this Workletter, "Tenant's FF& E" shall mean furniture, furnishings, telephone systems, computer systems, equipment, any other personal property or fixtures, and installation thereof. Landlord shall provide Tenant a tenant improvement allowance ("Allowance") in the amount equal to Two Million Four Hundred Twenty-Five Thousand Fifty Dollars ($2,425,050.00). The Allowance shall be used solely to reimburse Tenant for the Permanent Improvement Costs; provided that of the total Allowance (i) up to Twenty-Five Thousand Dollars ($25,000.00) shall be reserved solely to reimburse Tenant for the reasonable cost of replacing the roof insulation on the roof any Building, (ii) a minimum of Four Hundred Thousand Dollars ($400,000.00) shall be reserved solely to reimburse Tenant for the Permanent Improvement Costs in the 101 Saginaw Space, (iii) a minimum of Four Hundred Thousand Dollars ($400,000.00) shall be reserved solely to reimburse Tenant for the Permanent Improvement Costs in the 200 & 220 Penobscot Space, and (iv) a minimum of Four Hundred Thousand Dollars ($400,000.00) shall be reserved solely to reimburse Tenant for the Permanent Improvement Costs in the Building 2 Space. Notwithstanding the foregoing, Tenant may, upon written application to Landlord use up to a maximum of Two Hundred Eighty-Eight Thousand Six Dollars ($288,006.00) (the "Special FF&E Allowance") from the unused portion of the Allowance to reimburse Tenant's reasonable cost of acquiring and installing Tenant's FF&E, as more particularly specified on Exhibit B-2 hereto.

5.2. If Tenant does not utilize one hundred percent (100%) of the Allowance for the purposes specified above by June 30, 2012, Tenant shall have no right to the unused portion of the Allowance.

5.3 In addition to the Allowance set forth above, Landlord shall provide Tenant those certain allowances to be used solely to reimburse Tenant for the actual and reasonable costs incurred by Tenant for the Tenant Work specified on Exhibit B-2 hereto, which allowances consist of the following: the Special AC Allowance for 101 Saginaw (as defined in Exhibit B-2), the Special AC Allowance for 200 Penobscot (as defined in Exhibit B-2), and the Special Chiller/Boiler/Air Handler Allowance for 400 Penobscot (as defined in Exhibit B-2) (collectively, together with the Special FF&E Allowance, the "Special Allowances").

6. Application and Disbursement of the Allowance.

6.1. Landlord acknowledges that Tenant will perform the Tenant Work as three separate projects, one for 101 Saginaw Space project, the 200 & 220 Penobscot Space project and the Building 2 Space project (each a "Tenant Project" and, collectively, the "Projects"), and that for each Tenant Project, Tenant may apply the applicable portion of the Allowance (as set forth In Section 5.1 of this Workletter) until either such portion of the Allowance is exhausted or the time period during which the Allowance may be used has expired.

6.2. Tenant shall pay and disburse from its own funds all of costs of the Tenant Work for the Projects. Following the completion of the Tenant Work with respect to any Tenant Project, Tenant shall submit to Landlord the following items: (i) "As Built" drawings and specifications for such Tenant Project pursuant to Section 3.5 above, (ii) all unconditional lien releases from all general contractor(s) and subcontractor(s) performing work with respect to such Tenant Project, (iii) a "Certificate of Completion" prepared by Tenant's Architect with respect to such Tenant Project, (iv) a final budget with supporting documentation detailing all costs associated with the Permanent Improvement Costs for such Tenant Project together with an affidavit from Tenant stating that all of such costs have been paid in full by Tenant and all such costs qualify as Permanent Improvement Costs, and (v) a request for payment (in form reasonably approved by Landlord) of a portion of the Allowance to reimburse Tenant in an amount equal to the lesser of (a) the Permanent Improvement Costs for such Tenant Project and (b) the undisbursed amount of the applicable Project Allowance. Within forty-five (45) days of Landlord's receipt of such submission from Tenant, Landlord shall disburse the requested portion of the Allowance to Tenant.

7. Changes, Additions or Alterations.

If Tenant desires to make any non-de minimis change, addition or alteration or desires to make any change, addition or alteration to any of the Building Systems after approval of the Issued for Construction Documents, Tenant shall prepare and submit to Landlord plans and specifications with respect to such change, addition or alteration. Any such change, addition or alteration shall be subject to Landlord's approval in accordance with the provisions of Section 3.2 of this Workletter. Tenant shall be responsible for any submission to and plan check and permit requirements of the applicable governmental authorities. Tenant shall be responsible for payment of the cost of any such change, addition or alteration if it would increase the Budget and Excess Cost previously submitted and approved pursuant to Section 6 above.

8. Miscellaneous.

8.1. Scope. Except as otherwise set forth in the Lease, this Workletter shall not apply to any space added to the Premises by Lease option or otherwise.

8.2. Tenant Work shall include (at Tenant's expense) for all of the Premises:

(a) Landlord approved lighting sensor controls as necessary to meet applicable Laws;

(b) Building Standard fluorescent fixtures in all Premises office areas;

(c) Building Standard meters for each of electricity and chilled water used by Tenant shall be connected to the Building's system and shall be tested and certified prior to Tenant's occupancy of the Premises by a State certified testing company;

(d) Building Standard ceiling systems (including tile and grid) and;

(e) Building Standard air conditioning distribution and Building Standard air terminal units.

8.3. Sprinklers. Subject to any terms, conditions and limitations set forth herein, Landlord shall provide an operative sprinkler system consisting of mains, laterals, and heads "AS IS" on the date of delivery of the Premises to Tenant. Tenant shall pay for piping distribution, drops and relocation of, or additional, sprinkler system heads and Premises firehose or firehose valve cabinets, if Tenant's Plans and/or any applicable Laws necessitate such.

8.4. Floor Loading. Floor loading capacity shall be within building design capacity. Tenant may exceed floor loading capacity with Landlord's consent, at Landlord's sole discretion and must, at Tenant's sole cost and expense, reinforce the floor as required for such excess loading.

8.5. Work Stoppages. If any work on the Real Property other than Tenant Work is delayed, stopped or otherwise affected by construction of Tenant Work, Tenant shall immediately take those actions necessary or desirable to eliminate such delay, stoppage or effect on work on the Real Property other than Tenant Work.

8.6. Life Safety. Tenant (or Contractor) shall employ the services of a fire and life-safety subcontractor reasonably satisfactory to Landlord for all fire and life-safety work at the Building.

8.7. Locks. Tenant agrees to purchase from Landlord or its representative all cylinders and keys used in locks used in the 101 Saginaw Space.

8.8. Authorized Representatives. Tenant has designated Loren Barrett to act as Tenant's representative with respect to the matters set forth in this Workletter. Such representative(s) shall have full authority and responsibility to act on behalf of Tenant as required in this Workletter. Tenant may add or delete authorized representatives upon five (5) business days notice to Landlord.

8.9. Access to Premises. Promptly after execution of this Amendment, Tenant and its architects, engineers, consultants, and contractors shall have access at reasonable times and upon advance notice and coordination with the Building management, to the Premises for the purpose of planning and conducting Tenant Work. Such access shall not in any manner interfere with Landlord Work, if any. Such access, and all acts and omissions in connection with it, shall be subject to and governed by all other provisions of the Lease, including, without limitation, Tenant's indemnification obligations, insurance obligations, etc, except for the payment of Base Rent and Additional Rent. To the extent that such access by Tenant delays the Substantial Completion of the Landlord Work (if any), such delay shall be a Tenant Delay and the Landlord Work shall be deemed Substantially Complete on the date such Landlord Work would have been completed but for such access.

8.10. Fee. Landlord shall receive a construction administration fee equal to two percent (2.0%) of the Allowance in connection with the construction of the Tenant Work. Such fee is in addition to Tenant's reimbursement of costs incurred by Landlord pursuant to other provisions hereof, including, without limitation, for Landlord's architects and engineers to review Tenant's Plans.

9. Force and Effect.

The terms and conditions of this Workletter shall be construed to be a part of the Lease and shall be deemed incorporated in the Lease by this reference. Should any inconsistency arise between this Workletter and the Lease as to the specific matters which are the subject of this Workletter, the terms and conditions of this Workletter shall control.

EXHIBIT B-1
TO WORKLETTER AGREEMENT

LANDLORD WORK

Landlord Work shall mean the following work, to be performed by Landlord's contractor(s):

1. With respect to the 101 Saginaw Space, Landlord shall construct a new paver ramp at the lobby entrance and replace one ADA ramp at the rear of Building Number 1, in order to comply with the applicable code(s) effective as of the Execution Date.

2. With respect to the 200 & 220 Penobscot Space, Landlord shall repair the rear exit ramp to comply with ADA effective as of the Execution Date.

EXHIBIT B-2
TO WORKLETTER AGREEMENT

SPECIAL ALLOWANCES

A. SPECIAL TENANT WORK; SPECIAL ALLOWANCES FOR SUCH WORK ONLY

"Special Tenant Work" shall mean the work set forth below, subject to reimbursement by Landlord to the extent of each Special Allowance as specified below. All such work, including the design thereof, plans and specifications, contractors, work and procedure for reimbursement to Tenant of costs of such work, shall be subject to and governed by the provisions of the Workletter applicable to Tenant Work and the Allowance, except that the amounts of the Special Allowances, time such allowances shall be available and purposes for which each such allowance may be used, shall be as specified below. Upon installation, all such Special Tenant Work shall be deemed to be part of the Building and owned by Landlord.

1. 101 Saginaw Drive Replacement of 13 Package HVAC Units on the Building's Roof. Within one (1) year after the Execution Date, Tenant shall, subject to reimbursement by Landlord to the extent of the "Special HVAC Allowance for 101 Saginaw" specified below, replace the existing thirteen (13) rooftop heating, ventilation and air conditioning ("HVAC") units serving the 101 Saginaw Space with new equipment of good quality (which includes rooftop HVAC units, certain associated controls and ductwork, and related materials and expenses, as well as all structural, engineering and permit costs related thereto) ("HVAC Units"), sufficient to provide HVAC heating and cooling capacity for the entire 101 Saginaw Space (no less than sixty-eight (68) tons of AC cooling capacity in the aggregate) (collectively, the "101S HVAC Replacement Work"). The vendors, contractors and contracts for such 101S HVAC Replacement Work shall be subject to Landlord's prior written approval, including among other things, providing for warranties acceptable to Landlord and that such warranties shall name Landlord and be issued directly for the benefit of and enforceable by Landlord. Tenant shall provide a replacement schedule to Landlord. Landlord shall provide the amount of Two Hundred Thirty-Six Thousand Eight Hundred Twelve Dollars ($236,812.00) solely to reimburse Tenant's actual and reasonable costs of the 101S HVAC Replacement Work, and only for such purpose ("Special HVAC Allowance for 101 Saginaw"). If Tenant does not utilize one hundred percent (100%) of the Special HVAC Allowance for 101 Saginaw for the specified purpose within one (1) year after the Execution Date, Tenant shall have no right to the unused portion of the Special HVAC Allowance for 101 Saginaw. The Special HVAC Allowance for 101 Saginaw shall be in addition to, and shall not diminish the Tenant's Allowance, the Special HVAC Allowance for 200 Penobscot or the Special Chiller/Boiler/Air Handler Allowance for 400 Penobscot. Tenant shall pay and disburse from its own funds all of costs of the 101S HVAC Replacement Work. Following the completion of the 101S HVAC Replacement Work, Tenant shall submit to Landlord the following items: (i) all unconditional lien releases from all general contractor(s) and subcontractor(s) performing the 101S HVAC Replacement Work, (ii) a final budget with supporting documentation detailing all costs associated with the 101S HVAC Replacement Work together with an affidavit from Tenant stating that all of such costs have been paid in full by Tenant, and (iii) a request for payment (in form reasonably approved by Landlord) of the Special HVAC Allowance for 101 Saginaw to reimburse Tenant in an amount equal to the lesser of (a) the cost for the 101S HVAC Replacement Work, and (b) the undisbursed amount of the Special HVAC Allowance for 101 Saginaw. Within forty-five (45) days of Landlord's receipt of such submission from Tenant, Landlord shall disburse the requested portion of the Special HVAC Allowance for 101 Saginaw to Tenant.

2. 200 Penobscot Drive Replacement of 15 Package HVAC Units on the Building's Roof. Within two (2) years after the Execution Date, Tenant shall, subject to reimbursement by Landlord to the

extent of the "Special HVAC Allowance for 200 Penobscot" specified below, replace the existing fifteen rooftop HVAC Units serving the 200 & 220 Penobscot Space with new HVAC Units, sufficient to provide HVAC heating and cooling capacity for the entire 200 & 220 Penobscot Space (no less than one hundred forty-four (141) tons of AC cooling capacity in the aggregate), as well as all structural, engineering and permit costs related thereto (collectively, the "200P HVAC Replacement Work"). The vendors, contractors and contracts for such 200P HVAC Replacement Work shall be subject to Landlord's prior written approval, including among other things, providing for warranties acceptable to Landlord and that such warranties shall name Landlord and be issued directly for the benefit of and enforceable by Landlord. Tenant shall provide a replacement schedule to Landlord. Landlord shall provide the amount of Three Hundred Seventy-Two Thousand Five Hundred Eighty Dollars ($372,580.00) solely to reimburse Tenant's actual and reasonable costs of the 200P HVAC Replacement Work, and only for such purpose ("Special HVAC Allowance for 200 Penobscot"). If Tenant does not utilize one hundred percent (100%) of the Special HVAC Allowance for 200 Penobscot for the specified purpose within two (2) years after the Execution Date, Tenant shall have no right to the unused portion of the Special HVAC Allowance for 200 Penobscot. The Special HVAC Allowance for 200 Penobscot shall be in addition to, and shall not diminish the Tenant's Allowance, the Special HVAC Allowance for 101 Saginaw or the Special Chiller/Boiler/Air Handler Allowance for 400 Penobscot. Tenant shall pay and disburse from its own funds all of costs of the 101S HVAC Replacement Work. Following the completion of the 200P HVAC Replacement Work, Tenant shall submit to Landlord the following items: (i) all unconditional lien releases from all general contractor(s) and subcontractor(s) performing the 200P HVAC Replacement Work, (ii) a final budget with supporting documentation detailing all costs associated with the 200P HVAC Replacement Work together with an affidavit from Tenant stating that all of such costs have been paid in full by Tenant, and (iii) a request for payment (in form reasonably approved by Landlord) of the Special HVAC Allowance for 200 Penobscot to reimburse Tenant in an amount equal to the lesser of (a) the cost for the 200P HVAC Replacement Work, and (b) the undisbursed amount of the Special HVAC Allowance for 200 Penobscot. Within forty-five (45) days of Landlord's receipt of such submission from Tenant, Landlord shall disburse the requested portion of the Special HVAC Allowance for 200 Penobscot to Tenant.

3. 400 Penobscot Drive Chiller & Boiler Supporting the Air Handlers on the Building's Roof and Equipment Pad Within one (1) year after the Execution Date, Tenant shall, subject to reimbursement by Landlord to the extent of the "Special Chiller/Boiler/Air Handler Allowance for 400 Penobscot" specified below, repair and/or replace the existing chiller and boiler on the roof of the Building 2 Space and on the Equipment Pad in order to put such items in good working condition, as well as all structural, engineering and permit costs related thereto (collectively, the "Chiller/Boiler/Air Handler Work"). The vendors, contractors and contracts for such Chiller/Boiler/Air Handler Work shall be subject to Landlord's prior written approval, including among other things, providing for warranties acceptable to Landlord and that such warranties shall name Landlord and be issued directly for the benefit of and enforceable by Landlord. Landlord shall provide the amount of One Hundred Fifty-Three Thousand Eight Hundred Fifteen Dollars ($153,815.00) solely to reimburse Tenant's actual and reasonable costs of such Chiller/Boiler/Air Handler Work, and only for such purpose ("Special Chiller/Boiler/Air Handler Allowance for 400 Penobscot"). If Tenant does not utilize one hundred percent (100%) of the Special Chiller/Boiler/Air Handler Allowance for 400 Penobscot for the specified purpose within one (1) year after the Execution Date, Tenant shall have no right to the unused portion of the Special Chiller/Boiler/Air Handler Allowance for 400 Penobscot. The Special Chiller/Boiler/Air Handler Allowance for 400 Penobscot shall be in addition to, and shall not diminish the Tenant's Allowance, the Special HVAC Allowance for 101 Saginaw or the Special HVAC Allowance for 200 Penobscot. Tenant shall pay and disburse from its own funds all of costs of the Chiller/Boiler/Air Handler Work. Following the completion of the Chiller/Boiler/Air Handler Work, Tenant shall submit to Landlord the following

items: (i) all unconditional lien releases from all general contractor(s) and subcontractor(s) performing the Chiller/Boiler/Air Handler Work, (ii) a final budget with supporting documentation detailing all costs associated with the Chiller/Boiler/Air Handler Work together with an affidavit from Tenant stating that all of such costs have been paid in full by Tenant, and (iii) a request for payment (in form reasonably approved by Landlord) of the Special Chiller/Boiler/Air Handler Allowance for 400 Penobscot to reimburse Tenant in an amount equal to the lesser of (a) the cost for the Chiller/Boiler/Air Handler Work, and (b) the undisbursed amount of the Special Chiller/Boiler/Air Handler Allowance for 400 Penobscot. Within forty-five (45) days of Landlord's receipt of such submission from Tenant, Landlord shall disburse the requested portion of the Special Chiller/Boiler/Air Handler Allowance for 400 Penobscot to Tenant.

A cost summary showing the derivation of the Special HVAC Allowance for 200 Penobscot, Special Chiller/Boiler/Air Handler Allowance for 400 Penobscot, and Special Chiller/Boiler/Air Handler Allowance for 400 Penobscot, as agreed to by Landlord and Tenant, is attached hereto.

B. TENANT'S FF&E; SPECIAL ALLOWANCES FOR SUCH WORK ONLY.

Upon Tenant's written request made at any time after the Execution Date and before June 30, 2012 (but not more frequently than once in any calendar month and only if the disbursement is for Fifty Thousand Dollars ($50,000.00) or more) and accompanied by Supporting Evidence (as hereinafter defined), Landlord shall disburse to Tenant, within thirty (30) days of such request, the amount requested by Tenant up to a maximum aggregate amount equal to the Special FF&E Allowance. "Supporting Evidence" shall mean bills and invoices for Tenant's FF&E and an affidavit from Tenant stating that all of such bills and invoices have either been paid in full by Tenant or are due and owing, and all such costs qualify as Tenant's FF&E. If Tenant does not submit requests to Landlord pursuant to this Paragraph B to utilize one hundred percent (100%) of the Special FF&E Allowance on or before June 30, 2012, Tenant shall have no right to the unused portion of the Special FF&E Allowance.

Landlord HVAC Work		
	MJ Mechanical	**Comments**
101 Saginaw		
HVAC rooftop equipment	$ 136,306.00	13 New Carrier Rooftop Units
Structural	$ 85,506.00	Generous allowance for potential structural enhancement that may be required by the City.
Engineering	$ 5,000.00	Used the allowances provided by Valley Process Systems as
Permits	$ 10,000.00	place holder for structural, engineering, permits, controls and air balance.
101 Saginaw Totals	**$ 236,812.00**	
200 Penobscot		
HVAC rooftop equipment	$ 226,742.00	15 New Carrier Rooftop Units, MJ Mech quote includes overtime work for Sat and Sun
AHU Systems	$ —	AHU Systems for labs, should be part of TI
Structural	$ 120,838.00	Generous allowance for potential structural enhancement that may be required by the City.
Engineering	$ 10,000.00	Used the allowances provided by Valley Process Systems as
Permits	$ 15,000.00	place holder for structural, engineering, permits, controls and air balance.
Controls	$ —	
Air Balance	$ —	
200 Penobscot Totals	**$ 372,580.00**	
400 Penobscot		
HVAC rooftop equipment	$ —	
Structural	$ 10,000.00	

120 Ton Chiller	$ 90,065.00	waiting for the MJ Mechanical estimates for chiller and
2M BTU Roof top Boiler	$ 33,750.00	boiler, extended the VPS pricing to get total less repair work
Pumps	$ —	
Roof piping Upgrades	$ —	
Roof Piping Insulation	$ —	
Engineering	$ 5,000.00	
Permits	$ 15,000.00	
Controls	$ —	
Balance	$ —	
Repairs & Maintenance	$ —	
400 Penobscot Totals	**$ 153,815.00**	
Grand Totals	**$ 763,207.00**	

Yellow is Owners Cost items

EXHIBIT C
COMMENCEMENT DATE AGREEMENT

METROPOLITAN LIFE INSURANCE COMPANY, a New York corporation ("Landlord"), and CODEXIS, INC., a Delaware corporation ("Tenant"), have entered into a certain Fifth Amendment to Lease, which Amendment is dated as of _____, 2011 (the "Amendment"). The original Lease, as amended, may be referred to as the "Lease".

WHEREAS, Landlord and Tenant wish to confirm and memorialize the 101 Saginaw Space Commencement Date as provided for in the Amendment;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants contained herein and in the Amendment, Landlord and Tenant agree as follows:

1. Unless otherwise defined herein, all capitalized terms shall have the same meaning ascribed to them in the Amendment and the Lease.

2. The 101 Saginaw Space Commencement Date, as defined in the Amendment, is_____.

3. The Expiration Date of the Lease, as extended by the Amendment, is January 31, 2020.

4. Tenant hereby confirms the following:

(a) that it has accepted possession of 101 Saginaw Space pursuant to the terms of the Amendment;

(b) that the Landlord Work is Substantially Complete; and

(c) that the Lease is in full force and effect.

5. Except as expressly modified hereby, all terms and provisions of the Lease are hereby ratified and confirmed and shall remain in full force and effect and binding on the parties hereto.

6. The Lease and this Commencement Date Agreement contain all of the terms, covenants, conditions and agreements between the Landlord and the Tenant relating to the subject matter herein. No prior other agreements or understandings pertaining to such matters are valid or of any force and effect.

TENANT: **CODEXIS, INC.,**
a Delaware corporation

By: _____

Print Name: _____

Title: _____

LANDLORD: **METROPOLITAN LIFE INSURANCE COMPANY,**
a New York corporation

By: _____

Print Name: _____

Title: _____

Exhibit 31.1

CERTIFICATION

I, Alan Shaw, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Codexis, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 6, 2011

/s/ Alan Shaw
Alan Shaw
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Robert Lawson, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Codexis, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 6, 2011

/s/ Robert Lawson
Robert Lawson
Senior Vice President and Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Codexis, Inc. (the "Company") on Form 10-Q for the fiscal quarter ended March 31, 2011, as filed with the Securities and Exchange Commission (the "Report"), Alan Shaw, President and Chief Executive Officer of the Company and Robert Lawson, Senior Vice President and Chief Financial Officer of the Company, respectively, do each hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- The information in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 6, 2011

/s/ Alan Shaw
Alan Shaw
President and Chief Executive Officer

/s/ Robert Lawson
Robert Lawson
Senior Vice President and Chief Financial Officer