

**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 September 30, 2016

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

(State or other jurisdiction of
incorporation or organization)

71-0872999

(I.R.S. Employer
Identification No.)

200 Penobscot Drive, Redwood City, California

(Address of principal executive offices)

94063

(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 October 31, 2016, there were 41,220,166 shares of the registrant's Common Stock, par value \$0.0001 per share, outstanding.

Codexis, Inc.
Quarterly Report on Form 10-Q

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

Codexis, Inc.
Condensed Consolidated Balance Sheets
(Unaudited)
(In Thousands, Except Per Share Amounts)

	September 30, 2016	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	\$ 14,918	\$ 23,273
Restricted cash, current	883	—
Accounts receivable, net of allowances of \$421 at September 30, 2016 and December 31, 2015	11,965	7,329
Inventories	1,076	992
Prepaid expenses and other current assets	1,264	1,245
Total current assets	30,106	32,839
Restricted cash	783	787
Marketable securities	1,527	1,549
Property and equipment, net	2,301	3,109
Intangible assets, net	281	2,812
Goodwill	3,241	3,241
Other non-current assets	272	310
Total assets	\$ 38,511	\$ 44,647
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 2,123	\$ 3,399
Accrued compensation	3,024	3,331
Other accrued liabilities	2,339	2,013
Deferred revenue	4,221	6,098
Total current liabilities	11,707	14,841
Deferred revenue, net of current portion	745	3,120
Lease incentive obligation, net of current portion	992	1,310
Other long-term liabilities	2,230	2,497
Total liabilities	15,674	21,768
Commitments and contingencies (Note 10)		
Stockholders' equity:		
Preferred stock, \$0.0001 par value per share; 5,000 shares authorized; none issued and outstanding	—	—
Common stock, \$0.0001 par value per share; 100,000 shares authorized; 41,218 shares and 40,343 shares issued and outstanding at September 30, 2016 and December 31, 2015, respectively	4	4
Additional paid-in capital	309,258	305,981
Accumulated other comprehensive income	384	405
Accumulated deficit	(286,809)	(283,511)
Total stockholders' equity	22,837	22,879
Total liabilities and stockholders' equity	\$ 38,511	\$ 44,647

See accompanying notes to the unaudited condensed consolidated financial statements

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Revenues:				
Biocatalyst product sales	\$ 4,052	\$ 1,818	\$ 11,072	\$ 6,915
Biocatalyst research and development	10,373	14,517	25,971	19,247
Revenue sharing arrangement	445	1,066	1,825	4,056
Total revenues	14,870	17,401	38,868	30,218
Costs and operating expenses:				
Cost of biocatalyst product sales	2,756	1,302	7,466	4,009
Research and development	5,467	4,994	16,265	15,457
Selling, general and administrative	5,229	5,415	18,451	16,289
Total costs and operating expenses	13,452	11,711	42,182	35,755
Income (loss) from operations	1,418	5,690	(3,314)	(5,537)
Interest income	12	4	40	12
Other income (expenses)	7	(26)	(39)	(147)
Income (loss) before income taxes	1,437	5,668	(3,313)	(5,672)
Provision for (benefit from) income taxes	—	274	(15)	(144)
Net income (loss)	\$ 1,437	\$ 5,394	\$ (3,298)	\$ (5,528)
Net income (loss) per share, basic	\$ 0.04	\$ 0.14	\$ (0.08)	\$ (0.14)
Net income (loss) per share, diluted	\$ 0.03	\$ 0.13	\$ (0.08)	\$ (0.14)
Weighted average common stock shares used in computing net income (loss) per share, basic	40,940	39,767	40,504	39,340
Weighted average common stock shares used in computing net income (loss) per share, diluted	42,134	40,970	40,504	39,340

See accompanying notes to the unaudited condensed consolidated financial statements

Codexis, Inc.
Condensed Consolidated Statements of Comprehensive Income (Loss)
(Unaudited)
(In Thousands)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Net income (loss)	\$ 1,437	\$ 5,394	\$ (3,298)	\$ (5,528)
Other comprehensive income (loss)				
Unrealized gain (loss) on marketable securities, net of tax expense of \$0 and \$263 for the three months ended September 30, 2016 and 2015, respectively, and tax benefit of \$0 and \$200 for the nine months ended September 30, 2016 and 2015, respectively.	413	(449)	(21)	343
Other comprehensive income (loss)	413	(449)	(21)	343
Total comprehensive income (loss)	\$ 1,850	\$ 4,945	\$ (3,319)	\$ (5,185)

See accompanying notes to the unaudited condensed consolidated financial statements

Codexis, Inc.
Condensed Consolidated Statements of Cash Flows
(Unaudited)
(In Thousands)

	Nine Months Ended September 30,	
	2016	2015
Operating activities:		
Net loss	\$ (3,298)	\$ (5,528)
Adjustments to reconcile net loss to net cash used in operating activities:		
Amortization of intangible assets	2,531	2,531
Depreciation and amortization of property and equipment	1,365	1,569
Gain on disposal of property and equipment	(35)	(5)
Income tax benefit related to marketable securities	—	(200)
Stock-based compensation	3,861	3,759
Changes in operating assets and liabilities:		
Restricted cash, current	(883)	—
Accounts receivable, net	(4,636)	(9,738)
Inventories	(84)	717
Prepaid expenses and other assets, current	(18)	163
Other assets	38	29
Accounts payable	(1,046)	(3,606)
Accrued compensation	(307)	(393)
Other accrued liabilities	60	(523)
Long term lease incentive	(319)	(319)
Deferred revenues	(4,252)	3,955
Net cash used in operating activities	(7,023)	(7,589)
Investing activities:		
Purchase of property and equipment	(787)	(288)
Proceeds from disposal of property and equipment	35	5
Decrease (increase) in restricted cash	4	(75)
Net cash used in investing activities	(748)	(358)
Financing activities:		
Proceeds from exercises of options	939	235
Taxes paid related to net share settlement of equity awards	(1,523)	(1,812)
Net cash used in financing activities	(584)	(1,577)
Net decrease in cash and cash equivalents	(8,355)	(9,524)
Cash and cash equivalents at the beginning of the period	23,273	26,487
Cash and cash equivalents at the end of the period	\$ 14,918	\$ 16,963

See accompanying notes to the unaudited condensed consolidated financial statements

Notes to Condensed Consolidated Financial Statements
(Unaudited)

Note 1. Description of Business

In these notes to the condensed consolidated financial statements, the "Company," "we," "us," and "our" refer to Codexis, Inc. and its subsidiaries on a consolidated basis.

We develop biocatalysts for the pharmaceutical and fine chemicals markets. Our proven technologies enable scale-up and implementation of biocatalytic solutions to meet customer needs for rapid, cost-effective and sustainable process development, from research to manufacturing.

Biocatalysts are enzymes that initiate and/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 CodeEvolver® protein engineering technology platform, which introduces genetic mutations into microorganisms in order to give rise to changes in enzymes that they produce, 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.

Once potentially beneficial mutations are identified through this proprietary process, combinations of these mutations can then be tested until variant enzymes have been created that exhibit marketable performance characteristics superior to competitive products. This process allows for continuous, efficient improvements to the performance of enzymes. In the past, we implemented the CodeEvolver® protein engineering technology platform through paid collaborations with our customers. In July 2014, we entered into our first license agreement pursuant to which we granted a license to GlaxoSmithKline ("GSK"), a global pharmaceutical company, to use the CodeEvolver® protein engineering technology platform for its internal development purposes. In August 2015, we entered into a second license agreement involving the CodeEvolver® protein engineering technology platform with Merck Sharp and Dohme Corp., known as MSD outside the United States and Canada ("Merck"), a global pharmaceutical company, and we continue to pursue licensing opportunities with additional customers.

We have commercialized our technology and products in the pharmaceuticals market, which is our primary business focus. Our customers, which include several large global pharmaceutical companies, use our technology, products and services in their manufacturing processes and process development.

We also use our technology to develop biocatalysts for use in the fine chemicals market. The fine chemicals market consists of several large market verticals, including food, animal feed, flavors, fragrances, and agricultural chemicals.

We are also using our technology to develop an early stage, novel enzyme therapeutic product candidate for the potential treatment of phenylketonuria ("PKU") in humans. PKU is an inherited metabolic disorder in which the enzyme that converts the essential amino acid phenylalanine into tyrosine is deficient.

We are actively collaborating with new and existing customers in the pharmaceutical and other markets.

Note 2. Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The accompanying 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 on Form 10-K for the year ended December 31, 2015. The condensed consolidated balance sheet at December 31, 2015 has been derived from the audited consolidated financial statements at 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 September 30, 2016 and results of our operations and comprehensive income (loss) for the three and nine months ended September 30, 2016 and 2015, and cash flows for the nine months ended September 30, 2016 and 2015. The interim results are not necessarily indicative of the results for any future

interim period or for the entire year. Certain prior period amounts have been reclassified to conform to current period presentation.

The unaudited interim condensed consolidated financial statements include Codexis, Inc. and its wholly owned subsidiaries in the United States, India, Mauritius and the Netherlands. All significant intercompany balances and transactions have been eliminated in consolidation.

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 revenue and expenses during the reporting period. We regularly assess these estimates which primarily affect revenue recognition, accounts receivable, inventories, the valuation of investment securities and marketable securities, intangible assets, goodwill arising out of business acquisitions, accrued liabilities, stock awards and the valuation allowances associated with deferred tax assets. Actual results could differ from those estimates and such differences may be material to the condensed consolidated financial statements.

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 maker is our Chief Executive Officer. The Chief Executive Officer reviews 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 plans for levels or components below the consolidated unit level. Accordingly, we have a single reportable segment.

Revenue Recognition

We recognize revenues from the sale of our biocatalyst products, biocatalyst research and development agreements and a revenue sharing arrangement. Revenue is recognized when the related costs are incurred and the four basic criteria of revenue recognition are met: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or services have been rendered; (3) the fee is fixed or determinable; and (4) collectability is reasonably assured. Where the revenue recognition criteria are not met, we defer the recognition of revenue by recording deferred revenue until such time that all criteria of revenue recognition are met.

We account for revenues from multiple element arrangements, such as license and platform technology transfer agreements and collaborative arrangements in which a licensee may purchase several deliverables, in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Subtopic 605-25, "Multiple Element Arrangements." For new or materially amended multiple element arrangements, we identify the deliverables at the inception of the arrangement and each deliverable within a multiple deliverable revenue arrangement is accounted for as a separate unit of accounting if both of the following criteria are met: (1) the delivered item or items have value to the customer on a standalone basis and (2) for an arrangement that includes a general right of return relative to the delivered item(s), delivery or performance of the undelivered item(s) is considered probable and substantially in our control. Revenue allocated to each element is then recognized based on when the basic four revenue recognition criteria are met for each element.

Biocatalyst Product Sales

Biocatalyst product sales consist of sales of biocatalyst enzymes, chemical intermediates and Codex[®] Biocatalyst Panels and Kits. Biocatalyst product sales are recognized once passage of title and risk of loss has occurred and contractually specified acceptance criteria, if any, have been met, provided all other revenue recognition criteria have also been met. Shipping and handling costs charged to customers are recorded as revenue.

Biocatalyst Research and Development

Biocatalyst research and development agreements typically provide us with multiple revenue streams, including research services fees for full time employee ("FTE") research services, up-front licensing fees, technology access fees, contingent payments upon achievement of contractual criteria, and royalty fees based on the licensees' product sales or cost savings achieved by our customers. We perform biocatalyst research and development activities as specified in each respective customer agreement. Payments for services received are not refundable. Certain research agreements are based on a contractual reimbursement rate per FTE working on the project. We recognize revenues from research services as those services are performed over the contractual performance periods. When up-front payments are combined with FTE services in a single unit of accounting, we recognize the up-front payments as revenue using the proportionate performance method of revenue recognition based upon the actual amount of research 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.

We recognize revenues from non-refundable, up-front license fees or technology access payments that are not dependent on any future performance by us when such amounts are earned. If we have continuing obligations to perform under the arrangement, such fees are recorded as deferred revenues and recognized over the estimated period of performance. Estimated performance periods are periodically reviewed based on the progress of the related program. The effect of any change made to an estimated performance period, and therefore to revenue recognized, would occur on a prospective basis in the period that the change was made.

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, as of the date the arrangement is entered into, substantive uncertainty 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 the value of the item delivered as a result of a specific outcome resulting from its performance, (ii) relates solely to past performance and (iii) is reasonable relative to all deliverable and payment terms in the arrangement.

We recognize revenues from other contingent payments based on the passage of time or when earned as the result of a customer's performance in accordance with contractual terms and when such payments can be reasonably estimated and collectability of such payments is reasonably assured.

We recognize revenues from royalties based on licensees' sales of our biocatalyst products or 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. For the majority of our royalty revenues, estimates are made using notification of the sale of licensed products from the licensees.

Revenue Sharing Arrangement

We recognize revenues from a revenue sharing arrangement based upon sales of licensed products by our revenue share partner Exela PharmSci, Inc. ("Exela") (see Note 11, "Related Party Transactions"). We recognize revenues net of product and selling costs upon notification from our revenue share partner of our portion of net profit based on the contractual percentage from the sale of licensed product.

Sales Allowances

Sales allowances primarily relate to product returns and prompt pay sales discounts and are recorded in the same period that the related revenues are recognized, resulting in a reduction in biocatalyst product sales revenue.

Cost of Biocatalyst Product Sales

Cost of biocatalyst product sales comprises both internal and third party fixed and variable costs including materials and supplies, labor, facilities and other overhead costs associated with our biocatalyst product sales. Shipping costs are included in our cost of biocatalyst product sales. Such charges were not significant in any of the periods presented.

Cost of Research and Development Services

Cost of research and development services related to services under research and development agreements approximates the research funding over the term of the respective agreements and is included in research and development expense. Costs of services provided under license and platform technology transfer agreements are included in research and development expenses and are expensed in the periods in which such costs are incurred.

Research and Development Expenses

Research and development expenses consist of costs incurred for internal projects, partner-funded collaborative research and development activities, as well as license and platform technology transfer agreements, as mentioned above. These costs include our direct and research-related overhead expenses, which include salaries and other personnel-related expenses (including stock-based compensation), occupancy-related costs, supplies, depreciation of facilities and laboratory equipment and amortization of acquired technologies, as well as external costs, and are expensed as incurred. Costs to acquire technologies that are utilized in research and development and that have no alternative future use are expensed when incurred.

Stock-Based Compensation

We use the Black-Scholes-Merton option pricing model to estimate the fair value of options granted under our equity incentive plans. The Black-Scholes-Merton option pricing model requires the use of assumptions, including the expected term of the award and the expected stock price volatility. We had, due to insufficient historical data, used the "simplified method," as described in SEC Staff Accounting Bulletin No. 107, "Share-Based Payment," to determine the expected term of all stock options granted from the inception of our equity plans through the first half of 2015. Beginning in the third quarter of 2015, we believe we have sufficient historical data to calculate expected terms for stock options granted. Thus, the expected term was based on historical exercise behavior on similar awards, giving consideration to the contractual terms, vesting schedules and expectations of future employee behavior. We used historical volatility to estimate expected stock price volatility. The risk-free rate assumption was based on United States Treasury instruments whose terms were consistent with the expected term of the stock options. The expected dividend assumption was based on our history and expectation of dividend payouts.

Restricted Stock Units ("RSUs"), Restricted Stock Awards ("RSAs") and performance-contingent restricted stock units ("PSUs") were measured based on the fair market values of the underlying stock on the dates of grant. PSUs awarded may be conditional upon the attainment of one or more performance objectives over a specified period. At the end of the performance period, if the goals are attained, the awards are granted.

Stock-based compensation expense was calculated based on awards ultimately expected to vest and was reduced for estimated forfeitures at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differed from those estimates. The estimated annual forfeiture rates for stock options, RSUs, PSUs, and RSAs are based on historical forfeiture experience.

The estimated fair value of stock options, RSUs and RSAs is expensed on a straight-line basis over the vesting term of the grant and the estimated fair value of PSUs is expensed using an accelerated method over the term of the award once management has determined that it is probable that the performance objective will be achieved. Compensation expense is recorded over the requisite service period based on management's best estimate as to whether it is probable that the shares awarded are expected to vest. Management assesses the probability of the performance milestones being met on a continuous basis.

We have not recognized, and do not expect to recognize in the near future, any excess income tax benefits related to employee stock-based compensation expense as a result of the full valuation allowance on our deferred tax assets including deferred tax assets related to net operating loss carryforwards.

Foreign Currency Translation

The United States dollar is the functional currency for our operations outside the United States. Accordingly, nonmonetary assets and liabilities originally acquired or assumed in other currencies are recorded in United States 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 United States dollars at the exchange rates in effect at the balance sheet date. Translation adjustments are recorded in other expense in the accompanying condensed consolidated statements of operations. Gains and losses realized from non-U.S. dollar transactions, including intercompany balances not considered as permanent investments, denominated in currencies other than an entity's functional currency are included in other expense in the accompanying condensed consolidated statements of operations.

Cash and Cash Equivalents

We consider all highly liquid investments with maturity dates of three months or less at the date of purchase to be cash equivalents. Our cash and cash equivalents consist of cash on deposit with banks and money market funds. The majority of cash and cash equivalents is maintained with major financial institutions in North America. Deposits with these financial institutions may exceed the amount of insurance provided on such deposits. Cash and cash equivalents totaled \$14.9 million at September 30, 2016 and were comprised of cash of \$3.7 million and money market funds of \$11.2 million. At December 31, 2015, cash and cash equivalents totaled \$23.3 million and were comprised of cash of \$12.2 million and money market funds of \$11.1 million.

Restricted Cash

In connection with our effort to increase cost efficiencies, in the quarter ended September 30, 2016, we began the process of liquidating our Indian subsidiary. In order to accomplish this, we are legally required to maintain our subsidiary's cash balance in an account managed by a legal trustee to satisfy our financial obligations. This balance is included in restricted cash under Current Assets on our consolidated balance sheets and totaled \$0.9 million and \$0 at September 30, 2016 and December 31, 2015, respectively.

In addition, pursuant to the terms of the lease agreement for our Redwood City, CA facilities, our letters of credit are collateralized by deposit balances of \$0.7 million as of September 30, 2016 and December 31, 2015, which is recorded as non-current restricted cash on the consolidated balance sheets (see Note 10, "Commitments and Contingencies" for details).

Inventories

Inventories are stated at the lower of cost or market value. Cost is determined using a weighted-average approach, assuming full absorption of direct and indirect manufacturing costs, based on our product capacity utilization assumptions. If inventory costs exceed expected market value due to obsolescence or lack of demand, valuation adjustments are recorded for the difference between the cost and the estimated market value. These valuation adjustments are determined based on significant estimates.

Marketable Securities

We invest in equity securities and we classify those investments as available-for-sale. These securities are carried at estimated fair value (see Note 5, "Cash Equivalents and Marketable Securities") with unrealized gains and losses included in accumulated other comprehensive income in stockholders' equity. Available-for-sale equity securities with remaining maturities of greater than one year or which we currently do not intend to sell are classified as long-term.

We review several factors to determine whether a loss is other-than-temporary. These factors include, but are not limited to, the intent and ability to retain the investment in the issuer for a period of time sufficient to allow for any anticipated recovery in market value, the length of time and the extent to which the market value of the investment has been less than cost and the financial condition and near-term prospects of the issuer. Unrealized losses are charged against "Other expense" when a decline in fair value is determined to be other-than-temporary. Amortization of purchase premiums and accretion of purchase discounts and realized gains and losses of debt securities are included in interest income. The cost of securities sold is based on the specific identification method.

Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In determining fair value, we utilize valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible and we consider counterparty credit risk in our assessment of fair value. Carrying amounts of financial instruments, including cash and cash equivalents, restricted cash, marketable securities, accounts receivable, prepaid expenses and other current assets, accounts payable, accrued compensation, deferred revenue, and other accrued liabilities, approximate their fair values as of the balance sheet dates because of their generally short maturities.

The fair value hierarchy distinguishes between (1) market participant assumptions developed based on market data obtained from independent sources (observable inputs) and (2) an entity's own assumptions about market participant assumptions developed based on the best information available in the circumstances (unobservable inputs). The fair value hierarchy consists of three broad levels, giving the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are described below:

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

Concentrations of Credit Risk

Our financial instruments that are potentially subject to concentration of credit risk primarily consist of cash equivalents, accounts receivable, marketable securities and restricted cash. We invest cash that is not required for immediate operating needs principally in money market funds.

Intangible Assets

Our intangible assets are finite-lived and consist of developed core technology and the intellectual property ("IP") rights associated with the acquisition of Maxygen Inc.'s ("Maxygen") directed evolution technology in 2010. Intangible assets were recorded at their fair values at the date we acquired the assets and, for those assets having finite useful lives, are amortized using the straight-line method over their estimated useful lives.

Impairment of Long-Lived Assets

Our long-lived assets include property and equipment and intangible assets. We determined that we have a single entity wide asset group ("Asset Group"). The directed evolution technology patent portfolio acquired from Maxygen ("Core IP") is the most significant component of the Asset Group since it is the base technology for all aspects of our research and development activities, and represents the basis for all of our identifiable cash flow generating capacity. Consequently, we do not believe that identification of independent cash flows associated with long-lived assets is currently possible at any lower level than the Asset Group.

The Core IP is the only finite-lived intangible asset on our condensed consolidated balance sheet as of September 30, 2016. There has been no material change in the utilization or estimated life of the Core IP since we acquired the technology patent portfolio from Maxygen.

The carrying value of our long-lived assets in the Asset Group may not be recoverable based upon the existence of one or more indicators of impairment which could include: a significant decrease in the market price of our common stock; current period cash flow losses or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the assets; slower growth rates in our industry; significant adverse changes in the business climate or legal factors; accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of the assets; loss of significant customers or partners; or the current expectation that the assets will more likely than not be sold or disposed of significantly before the end of their estimated useful life.

We evaluate recoverability of intangible assets based on the sum of the undiscounted cash flows expected to result from the use and the eventual disposal of the Asset Group. We make estimates and judgments about the future undiscounted cash flows over the remaining useful life of the Asset Group. Our anticipated future cash flows include our estimates of existing or in process product sales, production and operating costs, future capital expenditures, working capital needs, and assumptions regarding the ultimate sale of the Asset Group at the end of the life of the primary asset. The useful life of the Asset Group was based on the estimated useful life of the Core IP, the primary asset at the time of acquisition. There has been no change in the estimated useful life of the Asset Group. Although our cash flow forecasts are based on assumptions that are consistent with our plans, there is significant judgment involved in determining the cash flows attributable to the Asset Group over its estimated remaining useful life.

In the fourth quarter of 2015, we determined that there were no events or changes in circumstances that indicated that the carrying value of the Asset Group might not be recoverable. We concluded that the fair value of the reporting unit exceeded its carrying value and no impairment existed. During the nine months ended September 30, 2016, we did not identify any indicators of potential impairment of intangible assets or new information that would have a material impact on the forecast or the impairment analysis prepared as of December 31, 2015.

Goodwill

We determined that we operate in one segment and reporting unit under the criteria in ASC 280, "Segment Reporting." Accordingly, our review of goodwill impairment indicators is performed at the consolidated level. We review goodwill impairment annually in the fourth quarter of each fiscal year and whenever events or changes in circumstances indicate the carrying value of goodwill may not be recoverable.

The goodwill impairment test consists of a two-step process. The first step of the goodwill impairment test used to identify potential impairment compares the fair value of the reporting unit to carrying value. If the fair value of the reporting unit exceeds its carrying amount, goodwill of the reporting unit is considered not impaired, and the second step of the impairment test is not required.

We use our market capitalization as an indicator of fair value. We believe that because our reporting unit is publicly traded, the ability of a controlling stockholder to benefit from synergies and other intangible assets that arise from control might cause the fair value of our reporting unit as a whole to exceed its market capitalization. Therefore, we believe that the fair value measurement need not be based solely on the quoted market price of an individual share of our common stock, but also can consider the impact of a control premium in measuring the fair value of its reporting unit.

If we were to use an income approach, it would establish a fair value by estimating the present value of our projected future cash flows expected to be generated from our business. The discount rate applied to the projected future cash flows to arrive at the present value would be intended to reflect all risks of ownership and the associated risks of realizing the stream of projected future cash flows. Our discounted cash flow methodology would consider projections of financial performance for a period of several years combined with an estimated residual value. The most significant assumptions we would use in a discounted cash flow methodology are the discount rate, the residual value and expected future revenue, gross margins and operating costs, along with considering any implied control premium.

Should our market capitalization be less than total stockholders' equity as of our annual test date or as of any interim impairment testing date, we would also consider market comparables, recent trends in our stock price over a reasonable period and, if appropriate, use an income approach to determine whether the fair value of our reporting unit is greater than the carrying amount.

The second step, if required, compares the implied fair value of the reporting unit goodwill with the carrying amount of that goodwill. If the carrying amount of the reporting unit's goodwill exceeds its implied fair value, an impairment charge is recognized in an amount equal to that excess. Implied fair value is the excess of the fair value of the reporting unit over the fair value of all identified assets and liabilities. We base our fair value estimates on assumptions we believe to be reasonable. Actual future results may differ from those estimates.

Goodwill was tested for impairment in the fourth quarter of 2015. We determined that the fair value of the reporting unit exceeded the carrying value and no impairment existed. Based on the results obtained, we concluded there was no impairment of our goodwill as of December 31, 2015. During the nine months ended September 30, 2016, we did not identify any indicators of potential impairment of goodwill or new information that would have a material impact on the forecast or the impairment analysis prepared as of December 31, 2015.

Income Taxes

We use the liability method of accounting for income taxes, whereby deferred tax assets or liability account balances are calculated at the balance sheet date using current tax laws and rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are provided when necessary to reduce deferred tax assets to the amount that will more likely than not be realized.

We make certain estimates and judgments in determining income tax expense for financial statement purposes. These estimates and judgments occur in the calculation of tax credits, benefits and deductions and in the calculation of certain tax assets and liabilities, which arise from differences in the timing of recognition of revenue and expenses for tax and financial statement purposes. Significant changes to these estimates may result in an increase or decrease to our tax provision in a subsequent period.

In assessing the realizability of deferred tax assets, we consider whether it is more likely than not that some portion or all of the deferred tax assets will be realized on a jurisdiction by jurisdiction basis. The ultimate realization of deferred tax assets is dependent upon the generation of taxable income in the future. We have recorded a deferred tax asset in jurisdictions where ultimate realization of deferred tax assets is more likely than not to occur.

We make estimates and judgments about future taxable income that are based on assumptions that are consistent with our plans and estimates. Should the actual amounts differ from our estimates, the amount of our valuation allowance could be materially impacted. Any adjustment to the deferred tax asset valuation allowance would be recorded in the income statement for the periods in which the adjustment is determined to be required.

We account for uncertainty in income taxes as required by the provisions of ASC Topic 740, "Income Taxes," which clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step is to estimate and measure the tax benefit as the largest amount that is more than 50% likely of being realized upon ultimate settlement. It is inherently difficult and subjective to estimate such amounts, as this requires us to determine the probability of various possible outcomes. We consider many factors when evaluating and estimating our tax positions and tax benefits, which may require periodic adjustments and may not accurately anticipate actual outcomes. We recognize interest and penalties as a component of our income tax expense.

The Tax Reform Act of 1986 and similar state provisions limit the use of net operating loss carryforwards in certain situations where equity transactions result in a change of ownership as defined by Internal Revenue Code Section 382. In the event we should experience such a change of ownership, utilization of our federal and state net operating loss carryforwards could be limited. We maintain a full valuation allowance against net deferred tax assets as we believe that it is more likely than not that the majority of deferred tax assets will not be realized.

Benefit from income taxes was \$0 and \$15 thousand for the three and nine months ended September 30, 2016, respectively. Benefit (expense) from income taxes was \$(0.3) million and \$0.1 million in the three and nine months ended September 30, 2015, respectively.

Recently Issued and Adopted Accounting Guidance

From time to time, new accounting pronouncements are issued by the FASB or other standards setting bodies that are adopted by us as of the specified effective date. Unless otherwise discussed, we believe that the impact of recently issued standards that are not yet effective will not have a material impact on our consolidated financial statements upon adoption.

In August 2014, the FASB issued Accounting Standards Update ("ASU") 2014-15, "Presentation of Financial Statements - Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern." ASU 2014-15 defines management's responsibility to evaluate whether there is substantial doubt about an organization's ability to continue as a going concern and provide related disclosures. ASU 2014-15 is effective for annual reporting periods ending after December 15, 2016, and interim periods within annual periods beginning after December 15, 2016. The adoption of ASU 2014-15 is not expected to have a material impact on our consolidated financial statements and related disclosures.

In July 2015, the FASB issued ASU 2015-11, "Inventory (Topic 330): Simplifying the Measurement of Inventory," which simplifies the subsequent measurement of inventory by requiring inventory to be measured at the lower of cost and net realizable value. Net realizable value is the estimated selling price of inventory in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. This ASU is effective for public business entities for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. We do not expect the adoption of ASU 2014-11 will have a material impact on our consolidated financial statements and related disclosures.

In August 2015, the FASB issued ASU 2015-14, "Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date." This ASU defers the effective date of ASU 2014-09, "Revenue from Contracts with Customers (Topic 606)" for all entities by one year. The standard outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The main principle of ASU 2014-09 is to recognize revenue when promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received for those goods or services. ASU 2014-09 provides companies with two implementation methods: (i) apply the standard retrospectively to each prior reporting period presented (full retrospective application); or (ii) apply the standard retrospectively with the cumulative effect of initially applying the standard as an adjustment to the opening balance of retained earnings of the annual reporting period that includes the date of initial application (modified retrospective application). ASU 2014-09 as amended by ASU 2015-14 is effective for annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. The FASB will permit companies to adopt the new standard early, but not before the original effective date of December 15, 2016. We are currently in the process of evaluating the impact of the pending adoption of this standard (including other amendments, such as ASU 2016-10 and ASU 2016-12, discussed below) on our consolidated financial statements and related disclosures.

In February 2016, the FASB issued ASU 2016-02, "Leases (Topic 842)," which replaces prior lease guidance (Topic 840.) The new guidance requires lessees to put most leases on their balance sheets but recognize expenses on their income statements in a manner similar to today's accounting. The guidance also eliminates today's real estate-specific provisions for all entities. For lessors, the guidance modifies the classification criteria and the accounting for sales-type and direct financing leases. Entities are required to use a modified retrospective approach for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. Entities have the option to use certain practical expedients. Full retrospective application is prohibited. This ASU is effective for public business entities for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted. We are currently evaluating the impact of adopting ASU 2016-02 on our consolidated financial statements and related disclosures.

In March 2016, the FASB issued ASU 2016-09, "Improvements to Employee Share-Based Payment Accounting," changing certain aspects of accounting for share-based payments to employees (Topic 718), as well as affecting the accounting classification within the statement of cash flows. The new guidance will require all income tax effects of awards to be recognized in the income statement when the awards vest or are settled. It will allow a policy election to account for forfeitures as they occur and will allow an employer to repurchase more of an employee's shares than it can today for tax withholding purposes without triggering liability accounting. This ASU is effective for public business entities for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. Early adoption is permitted. We are currently evaluating the impact of adopting ASU 2016-09 on our consolidated financial statements and related disclosures.

In April 2016, the FASB issued ASU 2016-10, "Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing," adding clarification, while retaining the core principles in the revenue guidance. For identifying performance obligations, the ASU clarifies when a promised good or service is separately identifiable (i.e., distinct within the context of the contract) and allow entities to disregard items that are immaterial in the context of a contract. For licensing, the ASU clarifies how an entity should evaluate the nature of its promise in granting a license of IP, which will determine whether it recognizes revenue over time ("symbolic IP") or at a point in time ("functional IP"). The effective date and transition requirements for these amendments are the same as those of the new revenue standard (ASU 2014-09, as amended by ASU 2015-14).

In May 2016, the FASB issued ASU 2016-12, "Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients," amending guidance in the new revenue standard on transition, collectability, noncash consideration and the presentation of sales taxes and other similar taxes. The amendments clarify that for a contract to be considered completed at transition, all (or substantially all) of the revenue must have been recognized under existing GAAP. The FASB also clarified the collectability assessment and expanded circumstances under which nonrefundable consideration may receive revenue recognition when collectability of the remainder is not probable. The FASB clarified that the fair value of noncash consideration should be measured at contract inception for determining the transaction price. The amendments permit an entity to make a policy election to exclude from the transaction price sales taxes and similar taxes. The effective date and transition requirements for these amendments are the same as those of the new revenue standard (ASU 2014-09, as amended by ASU 2015-14).

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments," which amends the FASB's guidance on the impairment of financial instruments. The ASU adds to GAAP an impairment model (known as the "current expected credit loss model") that is based on expected losses rather than incurred losses. ASU 2016-13 is effective for annual reporting periods ending after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. The adoption of ASU 2016-13 is not expected to have a material impact on our consolidated financial statements and related disclosures.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments," which provides the FASB's guidance on certain cash flow statements items. ASU 2016-15 is effective for fiscal reporting periods beginning after December 15, 2017, including interim periods within those fiscal years. Early adoption is permitted including adoption in an interim period. The adoption of ASU 2016-13 is not expected to have a material impact on our consolidated financial statements and related disclosures.

Note 3. Net Income (Loss) per Share

Basic net income (loss) per share is computed by dividing the net income (loss) by the weighted-average number of shares of common stock outstanding, less RSAs subject to forfeiture. Diluted net income per share is computed by dividing net income by the weighted average number of shares of common stock outstanding plus all additional common stock shares that would have been outstanding, assuming dilutive potential common stock shares had been issued for other dilutive securities. For periods of net loss, diluted and basic net loss per share were identical since potential common stock shares were excluded from the calculation, as their effect was anti-dilutive.

The following table sets forth the computation of basic and diluted net income (loss) per share during the three and nine months ended September 30, 2016 and 2015 (in thousands, except per share amounts):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Numerator:				
Net income (loss)	\$ 1,437	\$ 5,394	\$ (3,298)	\$ (5,528)
Denominator:				
Weighted average common stock shares used in computing net income (loss) per share, basic	40,940	39,767	40,504	39,340
Effect of dilutive shares	1,194	1,203	—	—
Weighted average common stock shares used in computing net income (loss) per share, diluted	42,134	40,970	40,504	39,340
Net income (loss) per share, basic	\$ 0.04	\$ 0.14	\$ (0.08)	\$ (0.14)
Net income (loss) per share, diluted	\$ 0.03	\$ 0.13	\$ (0.08)	\$ (0.14)

Anti-Dilutive Securities

The following shares were not considered in the computation of diluted net income (loss) per share because their effect was anti-dilutive (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Shares of common stock issuable pursuant to equity awards outstanding under the Equity Incentive Plan	2,149	2,320	5,371	6,121
Shares of common stock issuable upon exercise of outstanding warrants	73	75	73	75
Total shares excluded as anti-dilutive	2,222	2,395	5,444	6,196

Note 4. Collaborative Arrangements

GSK Platform Technology Transfer, Collaboration and License Agreement

In July 2014, we entered into a CodeEvolver® platform technology transfer collaboration and license agreement (the “GSK CodeEvolver® Agreement”) with GSK. Pursuant to the terms of the agreement, we granted GSK a non-exclusive license to use the CodeEvolver® protein engineering technology platform to develop novel enzymes for use in the manufacture of GSK’s pharmaceutical and health care products.

We received a \$6.0 million up-front licensing fee upon signing the GSK CodeEvolver® Agreement and subsequently a \$5.0 million non-creditable, non-refundable milestone payment upon achievement of the first milestone in 2014. In September 2015,

we achieved the second milestone of the agreement and earned milestone revenue of \$6.5 million. In April 2016, we completed the full transfer of the CodeEvolver® protein engineering platform technology and earned milestone revenue of \$7.5 million, for which payment was received in June 2016. We also have the potential to receive additional contingent payments that range from \$5.75 million to \$38.5 million per project based on GSK's successful application of the licensed technology. The contingent payments are not deemed substantive milestones due to the fact that the achievement of the event underlying the payment predominantly relates to GSK's performance of future development and commercialization activities.

We are eligible to receive royalties based on net sales, if any, of a limited set of products developed by GSK using the CodeEvolver® protein engineering technology platform.

The term of the GSK CodeEvolver® Agreement continues, unless earlier terminated, until the expiration of all payment obligations under the GSK CodeEvolver® Agreement. GSK can terminate the GSK CodeEvolver® Agreement by providing 90 days written notice to us.

Under the GSK CodeEvolver® Agreement, the significant deliverables were determined to be the license, platform technology transfer, and contingent obligation to supply GSK with enzymes manufactured by us at GSK's expense. We determined that the license did not have stand-alone value. In addition, we determined that the license and the platform technology transfer and our participation in joint steering committee activities in connection with the platform technology transfer represent a single unit of accounting. Our participation in the joint steering committee does not represent a separate unit of accounting because GSK could not negotiate for and/or acquire these services from other third parties and our participation on the joint steering committee is coterminous with the technology transfer period. Amounts to be received under the supply arrangement, if any, described above will be recognized as revenue to the extent GSK purchases enzymes from us.

The up-front license fee of \$6.0 million was being recognized ratably over the technology transfer period of three years since July 2014. As the technology transfer was completed earlier than anticipated, we recognized license fees of \$0 and \$3.0 million for the three and nine months ended September 30, 2016, respectively, compared to \$0.5 million and \$1.5 million for the three and nine months ended September 30, 2015, respectively, as biocatalyst research and development revenues. We had a deferred revenue balance from GSK related to the upfront license fee of \$0 at September 30, 2016 and \$3.0 million at December 31, 2015.

In September 2016, we recorded our first project-specific contingent fee based on GSK's successful application of our technology in an existing pharmaceutical product.

Merck Platform Technology Transfer and License Agreement

In August 2015, we entered into a CodeEvolver® platform technology transfer and license agreement (the "Merck CodeEvolver® Agreement") with Merck. The Merck CodeEvolver® Agreement allows Merck to use the CodeEvolver® protein engineering technology platform in the field of human and animal healthcare.

We received a \$5.0 million up-front license fee upon execution of the Merck CodeEvolver® Agreement, which is being recognized ratably over the estimated platform technology transfer period of two years. In September 2015, we achieved the first milestone under the Merck CodeEvolver® Agreement and earned milestone revenue of \$5.0 million. In September 2016, we completed the full transfer of the engineering platform technology and earned milestone revenue of \$8.0 million. We received the \$8.0 million milestone payment in the fourth quarter of 2016. Following the completion of the technology transfer, we may be eligible to receive payments of up to a maximum of \$15.0 million for each commercial active pharmaceutical ingredient ("API") that is manufactured by Merck using one or more novel enzymes developed by Merck using the CodeEvolver® protein engineering technology platform.

Under the terms of the Merck CodeEvolver® Agreement, we granted to Merck a non-exclusive worldwide license to use the CodeEvolver® protein engineering technology platform to research, develop and manufacture novel enzymes for use by Merck in its internal research programs ("Merck Non-Exclusive Field"). The license to Merck is exclusive for the research, development and manufacture of novel enzymes for use by Merck in the chemical synthesis of therapeutic products owned or controlled by Merck ("Merck Exclusive Field"). Merck has the right to grant sublicenses to affiliates of Merck and, in certain limited circumstances, to third parties. We also granted to Merck a license to make or have made products manufactured using the CodeEvolver® protein engineering technology platform with a right to grant sublicenses solely to affiliates of Merck, contract manufacturing organizations and contract research organizations. The manufacturing license is exclusive in the Merck Exclusive Field and non-exclusive in the Merck Non-Exclusive Field. The licenses are subject to certain limitations based on pre-existing contractual obligations that apply to the technology and intellectual property that are the subject of the license grants. The licenses do not permit the use of the CodeEvolver® protein engineering technology platform to discover any therapeutic enzyme, diagnostic product or vaccine. In addition, Merck is prohibited from using the CodeEvolver® protein engineering technology platform to develop or produce enzymes or any other compounds for or on behalf of any third parties.

except in a very limited manner when Merck divests a therapeutic product that is manufactured using an enzyme developed using the CodeEvolver® protein engineering technology platform.

Under the Merck CodeEvolver® Agreement, we transferred the CodeEvolver® protein engineering technology platform to Merck over the period from August 2015 through September 2016. As part of this technology transfer, we provided to Merck our proprietary enzymes, proprietary protein engineering protocols and methods, and proprietary software algorithms. We are providing additional enzyme evolution services to Merck at our laboratories in Redwood City through November 2016. The remaining deferred revenue relating to the upfront payment will be recognized upon completion of the additional enzyme evolution services.

The licenses to Merck are granted under patents, patent applications and know-how that we own or control as of the effective date of the Merck CodeEvolver® Agreement and that cover the CodeEvolver® protein engineering technology platform. Any improvements to the CodeEvolver® protein engineering technology platform during the technology transfer period are also included in the license grants from Codexis to Merck. Following the technology transfer period, Merck can exercise annual options that, upon payment of certain option fees, would extend Merck's license to include certain improvements to the CodeEvolver® protein engineering technology platform that arise during the three-year period that begins at the end of the technology transfer period.

Under the Merck CodeEvolver® Agreement, we will own any improvements to our protein engineering methods, processes and algorithms that arise and any enzyme technology or process technology that are developed during a technology transfer project, an evolution program or additional services. Merck will own (the "Merck-Owned Technology") (a) any enzyme technology that is developed solely by Merck under the Merck CodeEvolver® Agreement using the CodeEvolver® protein engineering technology platform (a "Project Enzyme") and (b) the methods of use of any Project Enzyme or any enzyme developed jointly by Merck and us using the CodeEvolver® protein engineering technology platform. Merck granted to us a worldwide, non-exclusive, fully paid-up, royalty-free license, with the right to grant sublicenses, to use the Merck-Owned Technology outside of the Merck Exclusive Field.

For each API that Merck manufactures using an enzyme developed with the CodeEvolver® protein engineering technology platform, we will have a right of first refusal to supply Merck with the enzyme used to manufacture the API if Merck outsources the supply of the enzyme. Our right of first refusal applies during the period that begins on the completion of a phase III clinical trial for the product containing the API and ends five years following regulatory approval for such product.

The Merck CodeEvolver® Agreement has a term that continues, unless earlier terminated, until the expiration of all payment obligations under the agreement. Merck may terminate the Merck CodeEvolver® Agreement by providing 90 days written notice to us. We can terminate the Merck CodeEvolver® Agreement by providing 30 days written notice to Merck if we determine, pursuant to our contractual audit rights under the Merck CodeEvolver® Agreement, that Merck has repeatedly failed to make required payments to us and/or materially underpaid us an amount due under the Merck CodeEvolver® Agreement. In the event the Merck CodeEvolver® Agreement is terminated earlier by Merck, or by us due to an uncured material breach by Merck, or if Merck sells or transfers to a third party any Merck business or facility that includes any of our proprietary materials, information or technology, we have the right to conduct an audit of Merck's facilities to confirm that all of our proprietary materials, information and technology have been destroyed. The Merck CodeEvolver® Agreement contains indemnification provisions under which Merck and we have agreed to indemnify each other against certain third party claims.

The up-front license fee of \$5.0 million is being recognized ratably over a two-year period. We recognized license fees of \$0.6 million and \$1.9 million for the three and nine months ended September 30, 2016, respectively, compared to \$0.4 million for the three and nine months ended September 30, 2015, as biocatalyst research and development revenues and had a deferred revenue balance from Merck related to the Merck CodeEvolver® Agreement license fees of \$2.1 million at September 30, 2016 and \$4.0 million at December 31, 2015.

Merck Sitagliptin Catalyst Supply Agreement

In February 2012, we entered into a five-year Sitagliptin Catalyst Supply Agreement ("Sitagliptin Catalyst Supply Agreement") with Merck whereby Merck may obtain commercial scale substance for use in the manufacture of Januvia®, its product based on the active ingredient sitagliptin. In December 2015, Merck exercised its option under the terms of the Sitagliptin Catalyst Supply Agreement to extend the agreement for an additional five years through February 2022. In August 2016, we and Merck amended the Sitagliptin Catalyst Supply Agreement to prospectively provide for variable pricing based on the cumulative volume of sitagliptin purchased by Merck under the Sitagliptin Catalyst Supply Agreement and to allow Merck to purchase a percentage of its requirements for sitagliptin from a specified third-party supplier. Merck has the right to terminate the Sitagliptin Catalyst Supply Agreement at any time after January 1, 2018 by giving us 24 months' advance written notice.

The Sitagliptin Catalyst Supply Agreement requires Merck to pay an annual license fee for the rights to the Sitagliptin technology each year for the term of the agreement. Amounts of annual license fees are based on contractually agreed prices and are on a declining scale. Prior to December 2015, the aggregate license fee for the initial five year period was being recognized ratably over the initial five year term of the Sitagliptin Catalyst Supply Agreement as collaborative research and development revenue. Due to the amendment entered in December 2015 as noted above, we revised our performance period in December 2015 and began recognizing the remaining unamortized portion of the license fee and the aggregate license fees for the second five year period over the revised period on a straight line basis.

We recognized license fees of \$0.3 million and \$1.0 million for the three and nine months ended September 30, 2016, respectively, and \$0.5 million and \$1.5 million for the three and nine months ended September 30, 2015, respectively, as biocatalyst research and development revenues. We had a deferred revenue balance from Merck related to license fees of \$1.7 million at September 30, 2016 and \$1.0 million at December 31, 2015.

Note 5. Cash Equivalents and Marketable Securities

Cash equivalents and marketable securities classified as available-for-sale at September 30, 2016 and at December 31, 2015 consisted of the following (in thousands):

	September 30, 2016			
	Adjusted Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Money market funds ⁽¹⁾	\$ 11,153	\$ —	\$ —	\$ 11,153
Common shares of CO ₂ Solutions ⁽²⁾	563	964	—	1,527
Total	\$ 11,716	\$ 964	\$ —	\$ 12,680

	December 31, 2015			
	Adjusted Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Money market funds ⁽¹⁾	\$ 11,120	\$ —	\$ —	\$ 11,120
Common shares of CO ₂ Solutions ⁽²⁾	563	986	—	1,549
Total	\$ 11,683	\$ 986	\$ —	\$ 12,669

(1) Money market funds are classified in cash and cash equivalents on our condensed consolidated balance sheets.

(2) Common shares of CO₂ Solutions are classified in marketable securities on our condensed consolidated balance sheets.

There were no marketable securities in an unrealized loss position at September 30, 2016 or at December 31, 2015.

Note 6. Fair Value Measurements

The following tables present the financial instruments that were measured at fair value on a recurring basis at September 30, 2016 and December 31, 2015 by level within the fair value hierarchy (in thousands):

	September 30, 2016			
	Level 1	Level 2	Level 3	Total
Money market funds	\$ 11,153	\$ —	\$ —	\$ 11,153
Common shares of CO ₂ Solutions	—	1,527	—	1,527
Total	\$ 11,153	\$ 1,527	\$ —	\$ 12,680

	December 31, 2015			
	Level 1	Level 2	Level 3	Total
Money market funds	\$ 11,120	\$ —	\$ —	\$ 11,120
Common shares of CO ₂ Solutions	—	1,549	—	1,549
Total	\$ 11,120	\$ 1,549	\$ —	\$ 12,669

We determine the fair value of Level 1 assets using quoted prices in active markets for identical assets. We estimated the fair value of our investment in 1,000,000 common shares of CO2 Solutions using the market value of common shares as determined by trading on the TSX Venture Exchange, and we classified our investment in CO2 Solutions as Level 2 assets due to the volatile and low trading volume. There were no transfers between Level 1 and Level 2 securities in the periods presented. (See also Note 5, "Cash Equivalents and Marketable Securities".)

Note 7. Balance Sheets Details

Inventories

Inventories consisted of the following (in thousands):

	September 30, 2016	December 31, 2015
Raw materials	\$ 520	\$ 262
Work-in-process	128	—
Finished goods	428	730
Inventories	<u>\$ 1,076</u>	<u>\$ 992</u>

Property and Equipment, net

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

	September 30, 2016	December 31, 2015
Laboratory equipment	\$ 20,624	\$ 20,503
Leasehold improvements	10,395	10,369
Computer equipment and software	3,284	3,271
Office equipment and furniture	1,178	1,178
Construction in progress ⁽¹⁾	1	3
Property and equipment	35,482	35,324
Less: accumulated depreciation and amortization	(33,181)	(32,215)
Property and equipment, net	<u>\$ 2,301</u>	<u>\$ 3,109</u>

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

Intangible Assets, net

Intangible assets, net consisted of the following (in thousands, except weighted average amortization period):

	September 30, 2016			December 31, 2015			Amortization Period (years)
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	
Developed and core technology	\$ 1,534	\$ (1,534)	\$ —	\$ 1,534	\$ (1,534)	\$ —	5
Maxygen intellectual property	20,244	(19,963)	281	20,244	(17,432)	2,812	6
Intangible assets, net	<u>\$ 21,778</u>	<u>\$ (21,497)</u>	<u>\$ 281</u>	<u>\$ 21,778</u>	<u>\$ (18,966)</u>	<u>\$ 2,812</u>	

The remaining estimated future amortization expense to be charged to research and development through December 31, 2016 is \$0.3 million.

Goodwill

Goodwill had a carrying value of approximately \$3.2 million at September 30, 2016 and December 31, 2015.

Note 8. Stock-Based Compensation

Equity Incentive Plans

In March 2010, our board of directors (the "Board") and stockholders approved the 2010 Equity Incentive Award Plan (the "2010 Plan"), which became effective upon the completion of our initial public offering in April 2010. The number of shares of our common stock available for issuance under the 2010 Plan is equal to 1,100,000 shares plus any shares of common stock reserved for future grant or issuance under our 2002 Stock Plan (the "2002 Plan") that remained unissued at the time of completion of the initial public offering. The 2010 Plan also provides for automatic annual increases in the number of shares reserved for future issuance. All grants will reduce the 2010 Plan reserve by one share for every share granted.

The 2010 Plan provides for the grant of incentive stock options, non-statutory stock options, RSUs, RSAs, PSUs, stock appreciation rights, and stock purchase rights to our employees, non-employee directors and consultants.

The option exercise price for incentive stock options is at least 100% of the fair value of our common stock on the date of grant and the option exercise price for nonstatutory stock options is at least 85% of the fair value of our common stock on the date of grant, as determined by the Board. If, at the time of a grant, the optionee directly or by attribution owns stock possessing more than 10% of the total combined voting power of all of our outstanding capital stock, the exercise price for these options must be at least 110% of the fair value of the underlying common stock. Stock options granted to employees generally have a maximum term of 10 years and vest over a four year period from the date of grant, of which 25% vest at the end of one year, and 75% vest monthly over the remaining three years. We may grant options with different vesting terms from time to time. Unless an employee's termination of service is due to disability or death, upon termination of service, any unexercised vested options will be forfeited at the end of three months or the expiration of the option, whichever is earlier.

We issue employees RSUs, which generally vest over either a three year period with one-third of the awards vesting on each annual anniversary or a four year period with 25% of the awards vesting on each annual anniversary. We may grant RSUs with different vesting terms from time to time.

Performance-contingent Restricted Stock Units

The compensation committee of the Board has approved grants of PSUs to employees. These awards have dual triggers of vesting based upon the successful achievement of certain corporate operating milestones in specified timelines, as well as a requirement of continued employment. When the performance goals are deemed to be probable of achievement for these types of awards, time-based vesting and, as a result, recognition of stock-based compensation expense commences.

In the first quarter of 2016, we awarded PSUs based upon the achievement of various weighted performance goals, including revenue growth, non-GAAP net income growth, new licensing collaborations, new R&D service revenue arrangements and novel therapeutic enzymes advancement ("2016 PSUs"). These 2016 PSUs vest such that one-half of the 2016 PSUs subject to the award vest approximately one year following the grant, and the remainder of the 2016 PSUs vest approximately two years following the grant, subject to our achievement of the performance goals and the recipient's continued service on each vesting date. If the performance goals are achieved at the threshold level, the number of shares issuable in respect of the 2016 PSUs would be equal to half the number of 2016 PSUs granted. If the performance goals are achieved at the target level, the number of shares issuable in respect of the 2016 PSUs would be equal to the number of 2016 PSUs granted. If the performance goals are achieved at the superior level, the number of shares issuable in respect of the 2016 PSUs would be equal to two times the number of 2016 PSUs granted. The number of shares issuable upon achievement of the performance goals at the levels between the threshold and target levels or between the target level and superior levels would be determined using linear interpolation. Achievement below the threshold level would result in no shares being issuable in respect of the 2016 PSUs. As of September 30, 2016, we estimated that the 2016 PSU performance goals would be achieved at 102.3% of the target level. Accordingly, we recognized expense to reflect the target level.

In 2015, we awarded PSUs ("2015 PSUs") based upon the achievement of various weighted performance goals, including revenue growth, non-GAAP net income growth, new licensing collaborations, and securing a drug development partnership, with other terms similar to the 2014 PSUs and 2016 PSUs. One-half of the 2015 PSUs vested in the first quarter of each of 2016 and 2017, subject to the recipient's continued service on each vesting date. In the first quarter of 2016, we determined that the 2015 PSU performance goals had been achieved at 92.8% of the target level, and recognized expenses accordingly.

In 2014, we awarded PSUs ("2014 PSUs") based upon the achievement of certain cash flow performance goals, with other terms similar to the 2015 PSUs and 2016 PSUs. One-half of the 2014 PSUs vested in the first quarter of each of 2015 and 2016, subject to the recipient's continued service on each vesting date. In the first quarter of 2015, we determined that the 2014 PSU performance goals had been achieved at 53.0% of the target level, and recognized expenses accordingly.

Stock-Based Compensation Expense

Stock-based compensation expense is included in the consolidated statements of operations as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Research and development	\$ 246	\$ 181	\$ 688	\$ 710
Selling, general and administrative	984	1,042	3,173	3,049
Total	\$ 1,230	\$ 1,223	\$ 3,861	\$ 3,759

The following table presents total stock-based compensation expense by security types included in the condensed consolidated statements of operations for the three and nine months ended September 30, 2016 and 2015 (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Stock options	\$ 249	\$ 281	\$ 820	\$ 798
RSUs and RSAs	445	566	1,580	2,020
PSUs	536	376	1,461	941
Total	\$ 1,230	\$ 1,223	\$ 3,861	\$ 3,759

As of September 30, 2016, unrecognized stock-based compensation expense, net of expected forfeitures, was \$1.9 million related to unvested employee stock options, \$2.0 million related to unvested RSUs and RSAs and \$1.3 million related to unvested PSUs.

Valuation Assumptions

The weighted-average assumptions used to estimate the fair value of employee stock options granted were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Expected term (in years) ⁽¹⁾	5.2	5.2	5.4	6.0
Volatility	63%	67%	65%	66%
Risk-free interest rate	1.18%	1.64%	1.29%	1.70%
Dividend yield	—%	—%	—%	—%
Weighted-average estimated fair value of stock options granted	\$ 2.25	\$ 2.31	\$ 2.30	\$ 2.09

(1) We had, due to insufficient historical data, used the "simplified method," as described in SEC Staff Accounting Bulletin No. 107, "Share-Based Payment", to determine the expected term of all stock options granted from the inception of our equity plans through the first half of 2015. Beginning in the third quarter of 2015, we believe we have sufficient historical data to calculate expected terms for stock options granted. (See Note 2, "Basis of Presentation and Summary of Significant Accounting Policies.")

Note 9. Capital Stock

Exercise of options

For the nine months ended September 30, 2016 and 2015, 361,145 and 128,921 shares were exercised at a weighted-average exercise price of \$2.60 and \$1.82 per share, respectively, with net cash proceeds of \$0.9 million and \$0.2 million, respectively.

Warrants

Our outstanding warrants are exercisable for common stock at any time during their respective terms. As of September 30, 2016, the following warrants remain outstanding:

Issue Date	September 30, 2016		
	Shares Subject to Warrants	Exercise Price per Share	Expiration
September 28, 2007	72,727	\$ 8.25	September 28, 2017

Note 10. Commitments and Contingencies

Operating Leases

Our headquarters are located in Redwood City, California, where we occupy approximately 107,200 square feet of office and laboratory space in four buildings within the same business park of Metropolitan Life Insurance Company ("Met-Life"). We entered into the initial lease with Met-Life for a portion of this space in 2004 and the lease has been amended multiple times since then to adjust space and amend the terms of the lease, with the latest amendment being in 2012. At September 30, 2016, the various terms for the spaces under the lease had expiration dates that range from January 2017 through January 2020. As described further below, in October 2016, we exercised an option to extend our lease of certain spaces through January 2022. In October 2015, we entered into an agreement to sublet a portion of our headquarters to a subtenant effective January 2016. This sublease expires in November 2019.

We incurred \$3.6 million of capital improvement costs related to the facilities leased from Met-Life through December 31, 2012. During 2011 and 2012, we requested and received \$3.1 million of reimbursements from the landlord from the tenant improvement and HVAC allowances for the completed construction. The reimbursements were recorded once cash was received and are amortized on a straight line basis over the term of the lease as a reduction in rent expense. The remaining lease incentive obligation was \$1.4 million at September 30, 2016, and is reflected in other liabilities on the consolidated balance sheet. Rent expense for the Redwood City properties is recognized on a straight-line basis over the term of the lease.

We are required to restore certain of the Redwood City facilities that we are renting to their original form. We are expensing the asset retirement obligation over the terms of the respective leases. We review the estimated obligation each reporting period and make adjustments if our estimates change. We recorded asset retirement obligations of \$0.4 million as of both September 30, 2016 and December 31, 2015, which are included in other liabilities on the consolidated balance sheets. Accretion expense related to our asset retirement obligations was nominal in the three and nine months ended September 30, 2016 and 2015.

Pursuant to the terms of the amended lease agreement, we exercised our right to deliver a letter of credit in lieu of a security deposit. The letters of credit are collateralized by deposit balances held by the bank in the amount of \$0.7 million as of September 30, 2016 and December 31, 2015. These deposits are recorded as restricted cash on the consolidated balance sheets.

Rent expense was \$0.9 million and \$2.6 million during the three and nine months ended September 30, 2016, respectively, partially offset by sublease income of \$0.3 million and \$0.9 million, respectively. Rent expense was \$0.9 million and \$2.6 million during the three and nine months ended September 30, 2015, respectively, partially offset by sublease income of \$0.2 million and \$0.5 million, respectively.

Future minimum payments under noncancellable operating leases are as follows at September 30, 2016 (in thousands):

Years ending December 31,	Lease payments
2016 (3 months remaining)	\$ 710
2017	2,677
2018	2,736
2019	2,818
2020	236
Total	\$ 9,177

Minimum payments have not been reduced by future minimum sublease rentals of \$2.1 million to be received under non-cancellable subleases at September 30, 2016.

A portion of our Redwood City facilities includes a lease of approximately 11,020 square feet of space located at 501 Chesapeake Drive, Redwood City, California. In September 2012, we entered into a Sixth Amendment to Lease under which we have two consecutive options to extend the term of the lease of this space for an additional period of five years per option. In October 2016, we entered into the Seventh Amendment to Lease pursuant to which we exercised the first of our options to extend the term of the lease for an additional five years, commencing on February 1, 2017 and expiring on January 31, 2022. The estimated rental expense, if recognized, would increase our costs and operating expenses in our consolidated statement of operations.

The estimated future minimum payments under this noncancellable operating lease obligation for the 501 Chesapeake Drive, Redwood City, California facilities at September 30, 2016 is as follows (in thousands):

Years ending December 31,	Lease payments
2016 (3 months remaining)	\$ —
2017	400
2018	448
2019	462
2020	476
Thereafter	531
Total	\$ 2,317

Other Commitments

In April 2016, we entered into a new manufacture and supply agreement that resulted in an additional total commitment up to \$1.8 million, with payment to be made in December 2022 or after.

In October 2016, we entered into a services agreement with a third party supplier for the development of a manufacturing process. The services agreement may result in an additional total commitment of up to \$1.4 million. We may terminate the services agreement, at our discretion, with 60 days' notice to the supplier and shall be obligated to a reduced additional total commitment equal to the contractual amount due during this 60 day period for those stages of development (i) already in progress as of the date of the notice of termination and (ii) scheduled to have commenced within 60 days after the date of the notice of termination.

Legal Proceedings

On February 19, 2016, we filed a complaint against EnzymeWorks, Inc., a California corporation, EnzymeWorks, Inc., a Chinese corporation, and Junhua "Alex" Tao (collectively, the "Defendants") in the United States District Court for the Northern District of California. On April 29, 2016, we filed a First Amended Complaint. The First Amended Complaint alleges that the Defendants have engaged in willful patent infringement, trade secret misappropriation, breach of contract, intentional interference with contractual relations, intentional interference with prospective economic relations and statutory and common law unfair competition. We have sought injunctive relief, monetary damages, treble damages, restitution, punitive damages and attorneys' fees. On May 13, 2016, the Defendants filed a Partial Motion to Dismiss the claims for breach of contract, intentional interference with contractual relations, intentional interference with prospective economic relations, statutory unfair competition, and common law unfair competition in the First Amended Complaint. We opposed the Defendant's Partial Motion

to Dismiss. On August 11, 2016, the judge issued an order that denied the Defendants' Partial Motion to Dismiss with respect to all five claims and in all relevant parts, and granted the motion with respect to certain underlying arguments. We are unable to determine when this litigation will be resolved or its ultimate outcome.

Other than our litigation against the Defendants, we are not currently a party to any material litigation or other material legal proceedings.

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.

Note 11. Related Party Transactions

Exela PharmSci, Inc.

Since September 2007, we have been party to a license agreement with Exela PharmaSci, Inc. ("Exela"). Under the license agreement, as amended, we and Exela cross-licensed certain technology relating to the manufacture of argatroban, an API, in exchange for rights to certain sublicensing fees or development payments and profit sharing.

CMEA Ventures Life Sciences 2000, L.P. and its affiliate held approximately 7.4% of our common stock until its sale of all such shares on November 10, 2014 to Presidio Partners 2014, L.P. Presidio Partners 2007, L.P. (formerly CMEA Ventures VII, L.P.) owns over 10% of Exela's outstanding capital stock. Thomas R. Baruch, one of our directors, serves on the board of directors of Exela, and is a retired general partner in Presidio Partners 2007, L.P. Mr. Baruch is also a general partner in CMEA Ventures Life Sciences 2000, L.P. Mr. Baruch has no direct or indirect pecuniary interest in the shares of our common stock owned by Presidio Partners 2014, L.P.

We recognized \$0.4 million and \$1.8 million for the three and nine months ended September 30, 2016, respectively, and \$1.1 million and \$4.1 million for the three and nine months ended September 30, 2015, respectively, shown in the consolidated statement of operations as revenue sharing arrangement. We had no receivables from Exela at September 30, 2016 and December 31, 2015.

Note 12. Significant Customer and Geographic Information

Significant Customers

Customers that each contributed 10% or more of our total revenues were as follows:

	Percentage of Total Revenues for the			
	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Customer A ⁽²⁾	76 %	39 %	43 %	34 %
Customer B	*	40 %	27 %	26 %
Customer C (related party)	*	*	*	13 %
Customer F	11 %	*	*	*

* Less than 10% in the period presented

Customers that each contributed 10% or more of our total accounts receivable had the following balances for the periods presented:

	Percentage of Accounts Receivables at	
	September 30, 2016	December 31, 2015
Customer A ⁽²⁾	80 %	12 %
Customer D	*	22 %
Customer E ⁽¹⁾	*	40 %
Customer F	13 %	*

* Revenue percentage was less than 10%; accounts receivable balance not applicable

(1) This represents a \$3.1 million settlement relating to past-due payments and settlement of future payments associated with our royalty business with a non-core customer as of December 31, 2015. We collected the full amount in February 2016.

(2) This includes the final milestone revenue of \$8.0 million earned under the Merck CodeEvolver[®] Agreement in the three and nine months ended September 2016. The \$8.0 million milestone was paid by Merck in October 2016.

Geographic Information

Geographic revenues are identified by the location of the customer and consist of the following (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Revenues:				
United States	\$ 10,373	\$ 8,755	\$ 17,226	\$ 16,516
Asia				
India	714	369	2,760	519
Singapore	792	497	2,912	497
Others	245	122	740	808
Europe				
United Kingdom	145	7,001	10,726	8,204
Others	2,601	657	4,504	3,674
Total revenues	\$ 14,870	\$ 17,401	\$ 38,868	\$ 30,218

Identifiable long-lived assets were all in the United States as follows (in thousands):

Long-lived assets:	September 30, 2016	December 31, 2015
United States	\$ 2,854	\$ 6,231

Note 13. Subsequent Events

In October 2016, we entered into the Seventh Amendment to Lease for our Redwood City facilities. In addition, we entered into a service agreement with a third party supplier for the development of a manufacturing process. (See Note 10, "Commitments and Contingencies" for details).

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, 2015 included in our Annual Report on Form 10-K for the year ended December 31, 2015, as filed with the SEC on March 8, 2016 (the "Annual Report"). 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 include, but are not limited to, expectations regarding our strategy, business plans, financial performance and developments relating to our industry. 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 set forth in Part I, Item 1A of our Annual Report, as incorporated herein and referenced 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.

Business Overview

We develop biocatalysts for the pharmaceutical and fine chemicals markets. Our proven technologies enable scale-up and implementation of biocatalytic solutions to meet customer needs for rapid, cost-effective and sustainable process development, from research to manufacturing.

Biocatalysts are enzymes that initiate and/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 CodeEvolver[®] protein engineering technology platform, which introduces genetic mutations into microorganisms in order to give rise to changes in enzymes that they produce, 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. Once potentially beneficial mutations are identified through this proprietary process, combinations of these mutations can then be tested until variant enzymes have been created that exhibit marketable performance characteristics superior to competitive products. This process allows for continuous, efficient improvements to the performance of enzymes. In the past, we implemented the CodeEvolver[®] protein engineering technology platform through paid collaborations with our customers. In July 2014, we entered into our first license agreement pursuant to which we granted a license to GSK, a global pharmaceutical company, to use the CodeEvolver[®] protein engineering technology platform for their internal development purposes. In August 2015, we entered into a second license agreement involving the CodeEvolver[®] protein engineering technology platform with Merck, a global pharmaceutical company, and we continue to pursue licensing opportunities with additional customers.

We have commercialized our technology and products in the pharmaceuticals market, which is our primary business focus. Our customers, which include several large global pharmaceutical companies, use our technology, products and services in their manufacturing processes and process development.

We also use our technology to develop biocatalysts for use in the fine chemicals market. The fine chemicals market consists of several large market verticals, including food and food ingredients, animal feed, flavors and fragrances, and agricultural chemicals.

We are also using our technology to develop an early stage, novel enzyme therapeutic product candidate for the potential treatment of phenylketonuria ("PKU") in humans. PKU is an inherited metabolic disorder in which the enzyme that converts the essential amino acid phenylalanine into tyrosine is deficient.

We are actively collaborating with new and existing customers in the pharmaceutical and other markets and we believe that we can utilize our products and services, and develop new products and services, to increase our revenue and gross margins in future periods.

Results of Operations Overview

Revenues were \$14.9 million for the third quarter of 2016, a decrease of 15% from revenues of \$17.4 million for the third quarter of 2015. Approximately \$4.1 million of the decrease in revenues was due to the variability in the timing of milestones earned from our CodeEvolver® platform licensing agreements, and \$0.6 million lower revenues from a revenue sharing arrangement. These were partially offset by an increase of \$2.2 million, or 123%, in biocatalyst product sales to \$4.1 million for the third quarter of 2016 compared to revenues of \$1.8 million in the same period in 2015, primarily due to higher customer demand.

Cost of biocatalyst product sales increased by \$1.5 million, or 112%, to \$2.8 million for the third quarter of 2016, compared to the same period in 2015, due primarily to higher biocatalyst product sales.

Product gross margins were 32% in the three months ended September 30, 2016, compared to 28% in the same period in 2015 due to an increase in sales of higher margin products to a core pharmaceutical customer.

Research and development expenses increased by \$0.5 million, or 9%, to \$5.5 million for the third quarter of 2016 compared to the third quarter of 2015, due primarily to increased costs associated with higher headcount and increased outside services.

Selling, general and administrative expense decreased by \$0.2 million, or 3%, to \$5.2 million for the third quarter of 2016 compared to the third quarter of 2015, due primarily to a decrease in rent expenses.

Net income for the third quarter of 2016 was \$1.4 million, representing basic net income of \$0.04 per share or diluted net income of \$0.03 per share. This compares to net income of \$5.4 million, or basic net income of \$0.14 per share, and diluted net income of \$0.13 per share for the third quarter of 2015. The decrease in net income for the third quarter of 2016 over the same period of the prior year is primarily related to the timing of revenue recognition of milestones in the transfer of our CodeEvolver® protein engineering technology platform.

Cash and cash equivalents decreased by \$8.4 million to \$14.9 million as of September 30, 2016 compared to \$23.3 million as of December 31, 2015. Net cash used in operating activities was \$7.0 million in the nine months ended September 30, 2016 compared to \$7.6 million in the nine months ended September 30, 2015. We believe that based on our current level of operations, 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.

GSK Platform Technology Transfer, Collaboration and License Agreement

In July 2014, we entered into a CodeEvolver® platform technology transfer and license agreement (the "GSK CodeEvolver® Agreement") with GSK. Pursuant to the terms of the agreement, we granted GSK a non-exclusive license to use the CodeEvolver® protein engineering technology platform to develop novel enzymes for use in the manufacture of GSK's pharmaceutical and health care products.

We received a \$6.0 million up-front license fee upon execution of the GSK CodeEvolver® Agreement and subsequently a \$5.0 million non-creditable, non-refundable milestone payment upon achievement of the first milestone in 2014. In September 2015, we achieved the second milestone and earned milestone revenue of \$6.5 million. In the second quarter of 2016, we completed the full transfer of the protein engineering platform technology and earned milestone revenue of \$7.5 million of which payment was received in June 2016. We also have the potential to receive additional contingent payments that range from \$5.75 million to \$38.5 million per project based on GSK's successful application of the licensed technology. The contingent payments are not deemed substantive milestones due to the fact that the achievement of the event underlying the payment predominantly relates to GSK's performance of future development and commercialization activities.

We are eligible to receive royalties based on net sales, if any, of a limited set of products developed by GSK using the CodeEvolver® protein engineering technology platform.

The up-front license fee of \$6.0 million was being recognized ratably over the technology transfer period of three years, starting July 2014. As the technology transfer was completed earlier than anticipated, we recognized license fees of \$0 and \$3.0 million for the three and nine months ended September 30, 2016 compared to \$0.5 million and \$1.5 million for the three and nine months ended September 30, 2015, respectively, as biocatalyst research and development revenues. We had a deferred revenue balance from GSK related to the upfront license fee of \$0 at September 30, 2016 and \$3.0 million at December 31, 2015.

In September 2016, we recorded our first project-specific contingent fee based on GSK's successful application of our technology in an existing pharmaceutical product.

Merck Platform Technology Transfer and License Agreement

In August 2015, we entered into a CodeEvolver® platform technology transfer and license agreement (the "Merck CodeEvolver® Agreement") with Merck, which allows Merck to use the CodeEvolver® protein engineering technology platform in the field of human and animal healthcare.

We received a \$5.0 million up-front license fee upon execution of the Merck CodeEvolver® Agreement, which is being recognized ratably over the estimated platform technology transfer period of two years. In September 2015, we achieved the first milestone under the Merck CodeEvolver® Agreement and earned a milestone payment of \$5.0 million. In September 2016, we completed the full transfer of the protein engineering platform technology and earned milestone revenue of \$8.0 million. We received the \$8.0 million milestone payment in the fourth quarter of 2016. We may be eligible to receive payments of up to a maximum of \$15.0 million for each commercial active pharmaceutical ingredient ("API") that is manufactured by Merck using one or more novel enzymes developed by Merck using the CodeEvolver® protein engineering technology platform.

Under the Merck CodeEvolver® Agreement, we transferred the CodeEvolver® protein engineering technology platform to Merck over the period from August 2015 through September 2016. As part of this technology transfer, we provided to Merck our proprietary enzymes, proprietary protein engineering protocols and methods, and proprietary software algorithms.

At the end of the technology transfer period, Merck can exercise annual options that, upon payment of certain option fees, would extend Merck's license to include certain improvements to the CodeEvolver® protein engineering technology platform that arise during the three-year period that begins at the end of the technology transfer period. We will also provide additional enzyme evolution services to Merck at our laboratories in Redwood City through November 2016.

We recognized license fees of \$0.6 million and \$1.9 million for the three and nine months ended September 30, 2016, respectively, compared to \$0.4 million for the three and nine months ended September 30, 2015 as biocatalyst research and development revenue and had a deferred revenue balance from Merck related to the Merck CodeEvolver® Agreement license fees of \$2.1 million at September 30, 2016 and \$4.0 million at December 31, 2015.

Results of Operations

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

	Three months ended September 30,		Change		Nine months ended September 30,		Change		
	2016	2015	\$	%	2016	2015	\$	%	
Revenues:									
Biocatalyst product sales	\$ 4,052	\$ 1,818	\$ 2,234	123 %	\$ 11,072	\$ 6,915	\$ 4,157	60 %	
Biocatalyst research and development	10,373	14,517	(4,144)	(29)%	25,971	19,247	6,724	35 %	
Revenue sharing arrangement	445	1,066	(621)	(58)%	1,825	4,056	(2,231)	(55)%	
Total revenues	14,870	17,401	(2,531)	(15)%	38,868	30,218	8,650	29 %	
Costs and operating expenses:									
Cost of biocatalyst product sales	2,756	1,302	1,454	112 %	7,466	4,009	3,457	86 %	
Research and development	5,467	4,994	473	9 %	16,265	15,457	808	5 %	
Selling, general and administrative	5,229	5,415	(186)	(3)%	18,451	16,289	2,162	13 %	
Total costs and operating expenses	13,452	11,711	1,741	15 %	42,182	35,755	6,427	18 %	
Income (loss) from operations	1,418	5,690	(4,272)	(75)%	(3,314)	(5,537)	2,223	40 %	
Interest income	12	4	8	200 %	40	12	28	233 %	
Other income (expenses)	7	(26)	33	127 %	(39)	(147)	108	73 %	
Income (loss) before income taxes	1,437	5,668	(4,231)	(75)%	(3,313)	(5,672)	2,359	42 %	
Provision for (benefit from) income taxes	—	274	(274)	(100)%	(15)	(144)	129	90 %	
Net income (loss)	\$ 1,437	\$ 5,394	\$ (3,957)	(73)%	\$ (3,298)	\$ (5,528)	\$ 2,230	40 %	

Our revenues are comprised of biocatalyst product sales, biocatalyst research and development revenues, and revenue from a revenue sharing arrangement.

- Biocatalyst product sales revenues consist of sales of biocatalyst enzymes, chemical intermediates, and Codex® Biocatalyst Panels and Kits.
- Biocatalyst research and development revenues include license, technology access and exclusivity fees, research services, milestone payments, royalties, and optimization and screening fees.
- Revenue sharing arrangement revenues are recognized based upon sales of licensed products by Exela.

(In Thousands)	Three months ended September 30,		Change		Nine months ended September 30,		Change	
	2016	2015	\$	%	2016	2015	\$	%
Biocatalyst product sales	\$ 4,052	\$ 1,818	\$ 2,234	123 %	\$ 11,072	\$ 6,915	\$ 4,157	60 %
Biocatalyst research and development	10,373	14,517	(4,144)	(29)%	25,971	19,247	6,724	35 %
Revenue sharing arrangement	445	1,066	(621)	(58)%	1,825	4,056	(2,231)	(55)%
Total revenues	\$ 14,870	\$ 17,401	\$ (2,531)	(15)%	\$ 38,868	\$ 30,218	\$ 8,650	29 %

Revenues typically fluctuate on a quarterly basis due to the variability in our customers' manufacturing schedules and the timing of our customers' clinical trials. In addition, we have limited internal capacity to manufacture enzymes. As a result, we are dependent upon the performance and capacity of third party manufacturers for the commercial scale manufacturing of the enzymes used in our pharmaceutical and fine chemicals business.

We accept purchase orders for deliveries covering periods from one day up to approximately one year from the date on which the order is placed. However, purchase orders can generally be revised or cancelled by the customer without penalty. Considering these industry practices and our experience, we do not believe the total of customer purchase orders outstanding (backlog) provides meaningful information that can be relied on to predict actual sales for future periods.

Total revenues decreased \$2.5 million in the three months ended September 30, 2016 compared to the same period in 2015 primarily due to a decrease in revenues recognized on achievement of milestones and a decrease in revenues from a revenue-sharing arrangement, partially offset by an increase in biocatalyst product sales. Total revenues increased \$8.7 million in the nine months ended September 30, 2016 compared to the same period in 2015 primarily due to increased research and development fees and revenues, plus growth in biocatalyst product sale revenues of \$4.2 million, partially offset by a decrease of \$2.2 million in revenues from revenue-sharing arrangement.

Biocatalyst product sales increased by \$2.2 million and \$4.2 million in the three and nine months ended September 30, 2016, respectively, compared to the same period in 2015, due to an increase in customer demand during the three and nine months periods ended September 30, 2016. This increase was related to a year-over-year increase in enzyme sales for Merck's sitagliptin manufacturing and sales to another core pharmaceutical customer.

Biocatalyst research and development revenues decreased approximately \$4.1 million in the three months ended September 30, 2016 compared to the same period in 2015. The decrease was primarily due to the timing of achievement of milestones under technology transfer agreements with certain customers. In 2015, we recognized a \$6.5 million milestone from our collaborative arrangement with GlaxoSmithKline ("GSK") under the GSK CodeEvolver® Agreement, and a \$5.0 million milestone from our collaborative arrangement with Merck Sharp & Dohme Corp., known as MSD outside the United States and Canada ("Merck") under the Merck CodeEvolver® Agreement. These were partially offset by an \$8.0 million milestone recognized under the Merck CodeEvolver® Agreement in 2016. As of September 30, 2016, we have now achieved all the substantive milestones under the technology transfer obligations of the CodeEvolver® platform technology transfer and license agreements with GSK and Merck.

Biocatalyst research and development revenues increased approximately \$6.7 million in the nine months ended September 30, 2016 compared to the same period in 2015. This was primarily due to the completion of the second and final phase in the transfer of our proprietary CodeEvolver® protein engineering platform technology to Merck under the Merck CodeEvolver® Agreement, which resulted in recognition of a \$8.0 million milestone on completion of the technology transfer, and on the achievement of the third and final milestone in the transfer of our proprietary CodeEvolver® protein engineering platform technology to GSK under the GSK CodeEvolver® Agreement which resulted in recognition of a \$7.5 million milestone payment and recognition of \$2.5 million of deferred revenues upon early completion of the technology transfer. The achievement of the final milestone under our collaboration agreement with a major biopharmaceutical company also contributed to the increase in revenues, mostly offset by lower royalties from two non-core customers in the second quarter of

the prior year. These were partially offset by a \$6.5 million milestone under the GSK CodeEvolver® Agreement and a \$5.0 million milestone under the Merck CodeEvolver® Agreement recognized in 2015.

Revenues from the revenue-sharing arrangement with Exela PharmSci, Inc. ("Exela") for the sales of argatroban injectable drug decreased \$0.6 million and \$2.2 million during the three and nine months ended September 30, 2016, respectively, compared to the same period in 2015. This is a result of the expiration of the formulation patent for argatroban in June 2014, allowing for generic competition in the subsequent quarters after expiration of the patent. We expect that revenue-sharing arrangement revenues may continue to decline in future quarters due to increased competition resulting from the expiration of the third party patent related to the production of argatroban.

Cost and Operating Expenses

(In Thousands)	Three months ended September 30,		Change		Nine months ended September 30,		Change	
	2016	2015	\$	%	2016	2015	\$	%
Cost of biocatalyst product sales	\$ 2,756	\$ 1,302	\$ 1,454	112 %	\$ 7,466	\$ 4,009	\$ 3,457	86 %
Research and development expense	5,467	4,994	473	9 %	16,265	15,457	808	5 %
Selling, general and administrative expense	5,229	5,415	(186)	(3) %	18,451	16,289	2,162	13 %
Total costs and operating expenses	\$ 13,452	\$ 11,711	\$ 1,741	15 %	\$ 42,182	\$ 35,755	\$ 6,427	18 %

Cost of Biocatalyst Product Sales and Product Gross Margin

(In Thousands)	Three months ended September 30,		Change		Nine months ended September 30,		Change	
	2016	2015	\$	%	2016	2015	\$	%
Revenues from biocatalyst product sales	\$ 4,052	\$ 1,818	\$ 2,234	123 %	\$ 11,072	\$ 6,915	\$ 4,157	60 %
Cost of biocatalyst product sales	2,756	1,302	1,454	112 %	7,466	4,009	3,457	86 %
Biocatalyst product gross profit	\$ 1,296	\$ 516	\$ 780	151 %	\$ 3,606	\$ 2,906	\$ 700	24 %
Product gross margin (%)	32%	28%			33%	42%		

Cost of biocatalyst product sales comprises both internal and third-party fixed and variable costs, including materials and supplies, labor, facilities and other overhead costs associated with our biocatalyst product sales.

Our cost of biocatalyst product sales increased by \$1.5 million, or 112%, during the three months ended September 30, 2016 and \$3.5 million, or 86%, during the nine months ended September 30, 2016, compared to the corresponding periods in 2015, due primarily to higher biocatalyst product sales. Product gross margins increased to 32% in the three months ended September 30, 2016 from 28% in the corresponding period of the prior year mainly due to an increase in sales of higher margin products to a core pharmaceutical customer. Product gross margins for the nine months ended September 30, 2016 decreased to 28% compared to 42% in the corresponding period of the prior year due to an increase in lower margin sales of enzymes to Merck for Sitagliptin manufacturing and a decrease in higher margin sales to a customer in the fine chemicals market.

Research and Development Expenses

Research and development expenses consist of costs incurred for internal projects, partner-funded collaborative research and development activities as well as license and platform technology transfer agreements. These costs primarily consist of (i) employee-related costs, which include salaries and other personnel-related expenses (including stock-based compensation), (ii) various allocable expenses, which include occupancy-related costs, supplies, depreciation of facilities and laboratory equipment and amortization of acquired technologies, and (iii) external costs, which include outside services and consulting fees. Research and development expenses are expensed when incurred.

Research and development expenses increased by \$0.5 million, or 9%, during the three months ended September 30, 2016, compared to the same period in 2015. For the nine months ended September 30, 2016, research and development expenses increased by \$0.8 million, or 5%, compared to the same period in 2015. Research and development expenses increased for both periods over the corresponding periods of the prior year primarily due to higher consulting fees related to the evaluation of potential new drug development targets, higher outside services, and increased costs associated with higher headcount.

Selling, General and Administrative Expenses

Selling, general and administrative expenses consist of employee-related costs, which include salaries and other personnel related expenses (including stock-based compensation), hiring and training costs, consulting and outside services expenses (including audit and legal counsel related costs), marketing costs, building lease costs, and depreciation and amortization expenses.

Selling, general and administrative expenses decreased by \$0.2 million, or 3%, for the three months ended September 30, 2016 compared to the same period in 2015. The decrease was primarily the result of a reduction in rent expenses reflecting the sublease of a portion of our headquarters. For the nine months ended September 30, 2016, selling, general and administrative expenses increased \$2.2 million, or 13%, compared to the corresponding periods in 2015. The increase was primarily a result of higher legal expenses and higher consulting fees relating to exploration of new business development opportunities.

Interest income and other income (expense)

(In Thousands)	Three months ended September 30,		Change		Nine months ended September 30,		Change	
	2016	2015	\$	%	2016	2015	\$	%
Interest income	\$ 12	\$ 4	\$ 8	200%	\$ 40	\$ 12	\$ 28	233%
Other income (expense)	7	(26)	33	127%	(39)	(147)	108	73%
Total other income (expense)	\$ 19	\$ (22)	\$ 41	186%	\$ 1	\$ (135)	\$ 136	101%

Interest income was not material during the three and nine months ended September 30, 2016 and 2015.

The change in other income (expenses) was primarily related to fluctuations in foreign currency.

Provision for income taxes

We recognized an income tax benefit of \$0 and \$15 thousand for the three months ended September 30, 2016 and 2015, respectively. We recognized an income tax benefit (expense) of \$(0.3) million and \$0.1 million for the nine months ended September 30, 2016 and 2015, respectively. We continue to recognize a full valuation allowance against our net deferred tax assets as we believe that it is more likely than not that the majority of our deferred tax assets will not be realized.

Liquidity and Capital Resources

Liquidity is the measurement of our ability to meet working capital needs and to fund capital expenditures. Our sources of cash include operations and stock option exercises. We actively manage our cash usage and investment of liquid cash to ensure the maintenance of sufficient funds to meet our daily needs. The majority of our cash and investments are held in U.S. banks, and our foreign subsidiaries maintain a limited amount of cash in their local banks to cover their short-term operating expenses.

The following tables summarize our cash and cash equivalents and working capital as of September 30, 2016 and December 31, 2015, as well as our statements of cash flows for the nine months ended September 30, 2016 and 2015:

(In Thousands)	September 30, 2016		December 31, 2015	
Cash and cash equivalents	\$	14,918	\$	23,273
Working capital	\$	18,399	\$	17,998

(In Thousands)	Nine months ended September 30,			
	2016		2015	
Net cash used in operating activities	\$	(7,023)	\$	(7,589)
Net cash used in investing activities		(748)		(358)
Net cash used in financing activities		(584)		(1,577)
Net decrease in cash and cash equivalents	\$	(8,355)	\$	(9,524)

We have historically experienced negative cash flows from operations as we continue to invest in key technology development projects and improvements to our CodeEvolver® protein engineering technology platform, and expand our business development and collaborations with new customers. Our cash flows from operations will continue to be affected principally by sales and gross margins from biocatalyst product sales and research and development services provided to customers, as well as our headcount costs, primarily in research and development. Our primary source of cash flows from operating activities is cash receipts from our customers for purchases of biocatalyst products and/or biocatalyst research and development services. Our largest uses of cash from operating activities are for employee-related expenditures, rent payments, inventory purchases to support our product sales and non-payroll research and development costs.

We are eligible to earn milestone and other contingent payments for the achievement of defined collaboration objectives and certain royalty payments under our collaboration agreements. Our ability to earn these milestone and contingent payments and the timing of achieving these milestones is primarily dependent upon the outcome of our collaborators' research and development activities and is uncertain at this time. In the three and nine months ended September 30, 2016 we completed the final phase in the transfer of CodeEvolver® technology to Merck under the Merck CodeEvolver® Agreement. We received payments totaling \$8.0 million in the fourth quarter of 2016 from the achievement of this milestone. Following the completion of the technology transfer to Merck, we are now eligible to receive payments of up to \$15.0 million for each commercial API that is manufactured by Merck using one or more novel enzymes developed by Merck using the CodeEvolver® technology. In addition, following the completion of the CodeEvolver® technology transfer to GSK under the GSK CodeEvolver® agreement, we have the potential to receive additional contingent payments that range from \$5.75 million to \$38.5 million per project based on GSK's successful application of the licensed technology.

We are actively collaborating with new and existing customers in the pharmaceutical and food industries. We expect that we can utilize our current products and services, and develop new products and services, to increase our revenue and gross margins in future periods.

We believe that based on our current level of operations, our existing cash and cash equivalents will provide adequate funds for ongoing operations, planned capital expenditures and working capital requirements for at least the next 12 months. However, 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 business, the spending required to develop and commercialize new and existing products, the effect of any acquisitions of other businesses, technologies or facilities that we may make or develop in the future, our spending on new market opportunities, and the potential costs for the filing, prosecution, enforcement and defense of patent claims, if necessary.

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 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 fail to generate sufficient revenue to achieve planned gross margins and to control operating costs, 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.

Cash Flows from Operating Activities

Cash used in operating activities was \$7.0 million net for the nine months ended September 30, 2016, which resulted from a net loss of \$3.3 million for the nine months ended September 30, 2016 adjusted for non-cash charges for depreciation and amortization of \$3.9 million and stock-based compensation of \$3.9 million. Additional cash uses from changes in operating assets and liabilities were \$11.4 million. Changes in operating assets and liabilities included a \$4.6 million increase in accounts receivable and a \$4.3 million decrease in deferred revenues, in each case primarily related to revenue recognition on the achievement of milestones from collaborative arrangements with Merck and GSK, a \$1.0 million decrease in accounts payable primarily reflecting the timing of payments and a \$0.9 million increase in restricted cash-current reflecting the funding of a reserve to satisfy the financial obligations of our India subsidiary.

Cash used in operating activities was \$7.6 million for the nine months ended September 30, 2015, which resulted from a net loss of \$5.5 million for the nine months ended September 30, 2015, adjusted for non-cash charges for depreciation and amortization of \$4.1 million and stock-based compensation of \$3.8 million, as well as changes in operating assets and liabilities. Such changes included a \$9.7 million increase in accounts receivable related to the achievement of milestones from collaborative arrangements with Merck and GSK and a \$3.6 million decrease in accounts payable, primarily reflecting the timing of payments. These were partially offset by an increase of \$4.0 million in deferred revenues.

Cash Flows from Investing Activities

Cash used in investing activities was \$0.8 million and \$0.3 million for the nine months ended September 30, 2016 and 2015, respectively, primarily related to the purchase of property and equipment.

Cash Flows from Financing Activities

Cash used in financing activities was \$0.6 million and \$1.6 million for the nine months ended September 30, 2016 and 2015, respectively. Cash used consisted of taxes paid related to net share settlement of equity awards partially offset by \$0.9 million and \$0.2 million proceeds provided by the exercise of employee stock options for the nine months ended September 30, 2016 and 2015, respectively.

Contractual Obligations

During the second quarter of 2016, the Company entered into a new manufacturing and supply agreement that resulted in total additional commitments up to \$1.8 million with payment to be made in December 2022 or after.

Our contractual obligations principally arise from operating leases primarily related to our leased facilities in Redwood City, California. In October 2016, we entered into a Seventh Amendment to Lease for estimated future minimum payments of approximately \$2.3 million beginning in February 2017.

In October 2016, we entered into a service agreement with a third party supplier for the development of a manufacturing process. The service agreement, which can be canceled at our discretion with 60 days' notice, may result in an additional total commitment of up to \$1.4 million beginning in October 2016.

For additional information about our contractual obligations, see Note 10 "Commitments and Contingencies" in the accompanying notes to the unaudited condensed consolidated financial statements. There have been no other material changes in our payments due under contractual obligations, compared to those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2015.

Off-Balance Sheet Arrangements

As of September 30, 2016, we did not have any off-balance sheet arrangements, as defined in Item 303(a)(4) of Regulation S-K as promulgated by the SEC.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make judgments, estimates and assumptions in the preparation of our consolidated financial statements and accompanying notes. Actual results could differ from those estimates. There have been no material changes to our critical accounting policies or estimates as discussed in our Annual Report on Form 10-K for the year ended December 31, 2015, filed with the SEC on March 8, 2016.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market Risk Management

Our cash flows and earnings are subject to fluctuations due to changes in foreign currency exchange rates, interest rates and other factors. As of September 30, 2016, there were no material changes in our market risk exposures compared to the disclosures in Item 7A of our Annual Report on Form 10-K for the year ended December 31, 2015, filed with the SEC on March 8, 2016.

Equity Price Risk

As described in Note 5, "Cash Equivalents and Marketable Securities" and Note 6, "Fair Value Measurements" to the condensed consolidated financial statements, we have an investment in common shares of CO2 Solutions, whose shares are publicly traded in Canada on the TSX Venture Exchange. As of September 30, 2016, the fair value of our investment in CO2 Solutions' common stock was \$1.5 million, including an unrealized gain of \$1.0 million.

This investment is exposed to fluctuations in both the market price of CO2 Solutions' common shares and changes in the exchange rate between the U.S. dollar and the Canadian dollar. The effect of a 10% adverse change in the market price of CO2 Solutions' common shares as of September 30, 2016 would have been an unrealized loss of approximately \$0.2 million, recognized as a component of our condensed consolidated statements of comprehensive income (loss.) The effect of a 10% adverse change in the exchange rate between the U.S. dollar and the Canadian dollar as of September 30, 2016 would have been an unrealized loss of approximately \$0.2 million, recognized as a component of our condensed consolidated statements of comprehensive income (loss).

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 principal executive officer and our principal financial and accounting officer, as appropriate, to allow timely decisions regarding required disclosure.

Our management, including our principal executive officer and our principal financial and accounting officer, evaluated the effectiveness of our disclosure controls and procedures as defined by Rules 13a-15(e) and 15d-15(e) of the Exchange Act. Based on this review, our principal executive officer and our principal financial and accounting officer concluded that these disclosure controls and procedures were effective as of September 30, 2016 at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by paragraph (d) of Exchange Act Rules 13a-15 or 15d-15 that occurred during our last fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, even if determined effective and no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives to prevent or detect misstatements. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

On February 19, 2016, we filed a complaint against EnzymeWorks, Inc., a California corporation, EnzymeWorks, Inc., a Chinese corporation, and Junhua "Alex" Tao (collectively, the "Defendants") in the United States District Court for the Northern District of California. On April 29, 2016, we filed a First Amended Complaint. The First Amended Complaint alleges that the Defendants have engaged in willful patent infringement, trade secret misappropriation, breach of contract, intentional interference with contractual relations, intentional interference with prospective economic relations and statutory and common law unfair competition. We have sought injunctive relief, monetary damages, treble damages, restitution, punitive damages and attorneys' fees. On May 13, 2016, the Defendants filed a Partial Motion to Dismiss the claims for breach of contract, intentional interference with contractual relations, intentional interference with prospective economic relations, statutory unfair competition, and common law unfair competition in the First Amended Complaint. We opposed the Defendant's Partial Motion to Dismiss. On August 11, 2016, the judge issued an order that denied the Defendants' Partial Motion to Dismiss with respect to all five claims and in all relevant parts, and granted the motion with respect to certain underlying arguments. We are unable to determine when this litigation will be resolved or its ultimate outcome.

Other than our litigation against the Defendants, we are not currently a party to any material litigation or other material legal proceedings.

ITEM 1A. RISK FACTORS

We have included in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2015, a description of certain risks and uncertainties that could affect our business, future performance or financial condition (the "Risk Factors"). During the three and nine months ended September 30, 2016 there were no material changes with respect to the Risk Factors from the disclosure provided in the Form 10-K for the year ended December 31, 2015. Investors should consider the Risk Factors, as provided therein, prior to making an investment decision with respect to our stock.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Not applicable.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Not applicable.

ITEM 6. EXHIBITS

See the Exhibit Index on the page immediately following the signature page to this Quarterly Report on Form 10-Q for a list of exhibits filed as part of this Quarterly Report, which Exhibit Index is incorporated herein by reference.

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: November 8, 2016

By: /s/ John J. Nicols

John J. Nicols
President and Chief Executive Officer
(principal executive officer)

Date: November 8, 2016

By: /s/ Gordon Sangster

Gordon Sangster
Chief Financial Officer
(principal financial and accounting officer)

EXHIBIT INDEX

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

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	Certificate of Designations of Series A Junior Participating Preferred Stock of Codexis, Inc., filed with the Secretary of State of the State of Delaware on September 4, 2012 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, filed on September 4, 2012).
3.3	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	Reference is made to Exhibits 3.1 through 3.3.
4.2	Form of the Company's Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, filed on August 9, 2012).
4.3*	Form of Warrant to purchase shares of Series D preferred stock issued in connection with the Bridge Loan Agreement dated as of May 25, 2006.
4.4*	Form of Warrant to purchase shares of Series D preferred stock issued in connection with the Loan and Security Agreement dated as of September 28, 2007.
4.5*	Warrant to purchase shares of Common Stock issued to Alexandria Equities, LLC.
4.6*	Registration Rights Agreement among the Company, Jülich Fine Chemicals GmbH and the other parties named therein, dated February 11, 2005.
10.1‡	Amendment No. 4 to Sitagliptin Supply Agreement, effective as of January 1, 2016, by and between the Company and Merck Sharp and Dohme Corp.
10.2+	Offer Letter, dated as of October 12, 2016, by and between the Company and Michael Aldridge.
10.3	Seventh Amendment to Lease, effective as of October 11, 2016, with Metropolitan Life Insurance Company.
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.
101	The following materials from the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016, formatted in Extensible Business Reporting Language (XBRL) includes: (i) Condensed Consolidated Balance Sheets at September 30, 2016 and December 31, 2015, (ii) Condensed Consolidated Statements of Operations for the Three and Nine Months Ended September 30, 2016 and 2015, (iii) Condensed Consolidated Statements of Comprehensive Income (Loss) for the Three and Nine Months Ended September 30, 2016 and 2015, (iv) Condensed Consolidated Statements of Cash Flows for the Nine Months Ended September 30, 2016 and 2015, and (v) Notes to Condensed Consolidated Financial Statements.

* Filed as exhibits to the registrant's Registration Statement on Form S-1 (File No. 333-164044), effective April 21, 2010, and incorporated herein by reference.

‡ Certain portions have been omitted pursuant to a confidential treatment request. Omitted information has been filed separately with the Securities and Exchange Commission.

+ Indicates a management contract or compensatory plan or arrangement.

AMENDMENT NO. 4 TO SITAGLIPTIN SUPPLY AGREEMENT

AMENDMENT NO. 4 TO SITAGLIPTIN CATALYST SUPPLY AGREEMENT effective as of **January 1, 2016 (the "AMENDMENT EFFECTIVE DATE")** (this "Amendment") by and between CODEXIS, INC., (the "Vendor"), a Delaware corporation, having a place of business at 200 Penobscot Drive, Redwood City, CA 94063 ("CODEXIS") and MERCK SHARP AND DOHME CORP. (the "Company"), having a place of business at One Merck Drive, Whitehouse Station, NJ 08889-0100. ("MERCK")

W I T N E S S E T H:

WHEREAS, the parties are party to that certain **SITAGLIPTIN CATALYST SUPPLY AGREEMENT** dated as of February 1, 2012, as amended as of October 1, 2013, February 25, 2015 and as of December 4, 2015 (as so amended, the "Agreement"); and

WHEREAS, the parties desire to amend the Agreement to modify the terms of the Agreement as more fully set forth below;

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto hereby agree as follows:

1. As of the AMENDMENT EFFECTIVE DATE, the Agreement is amended as follows:

1.01 Section 1.10.1 is added as follows:

““CUMULATIVE SUBSTANCE PURCHASE VOLUME” shall mean the total aggregate quantities of SUBSTANCE (in kg.) delivered to MERCK, its AFFILIATES and/or its THIRD PARTY SUPPLIERS by CODEXIS on or after [***], 20[***].”

1.02 Section 1.10.2 is added as follows:

““CUMULATIVE SUBSTANCE PURCHASE VOLUME TIER” shall mean each of the Cumulative Substance Purchase Volume Tier(s) specified in ATTACHMENT 3, SUBSTANCE PRICE/VOLUME TABLE 2.”

1.03 Section 2.1.3 shall be amended to read in its entirety as follows:

“Beginning January 1, 2018, MERCK, its AFFILIATES, and its THIRD PARTY SUPPLIER have the right to purchase up to and including [***]% of SUBSTANCE demand directly from a direct SUBSTANCE MANUFACTURER. The direct SUBSTANCE MANUFACTURER will be [***], which is also the SECONDARY SUBSTANCE MANUFACTURER for CODEXIS.

MERCK will negotiate the price for such SUBSTANCE directly with [***] and CODEXIS will not be involved in any part of the commercial agreement.

MERCK's right to purchase directly from [***] will commence upon the qualification of [***] as both CODEXIS's SECONDARY SUBSTANCE MANUFACTURER (See Section 2.1.5) and MERCK's direct SUBSTANCE MANUFACTURER, but not earlier than [***], 20[***]. Within ninety (90) days after delivery by [***] (as MERCK's, its AFFILIATES', and its THIRD PARTY SUPPLIERS' direct SUBSTANCE MANUFACTURER) to MERCK (or its AFFILIATE(S) or THIRD PARTY SUPPLIER(S)) as a SUBSTANCE MANUFACTURER, MERCK shall pay CODEXIS \$[***].

In the event that during any calendar year (N) MERCK's, its AFFILIATES', and its THIRD PARTY MANUFACTURERS purchases from direct SUBSTANCE MANUFACTURER(s) exceeds [***]% of MERCK's SUBSTANCE demand in calendar year (N), thereby resulting in a CODEXIS share of less than [***]% for calendar year (N), then MERCK shall make up such deficit of purchases from CODEXIS in the following calendar year (N+1). Such make-up volume shall be in addition to the [***]% of SUBSTANCE demand MERCK, its AFFILIATES, and its THIRD PARTY SUPPLIERS are required to purchase from CODEXIS in calendar year (N+1). Make-up volume to be purchased in calendar year (N+1) will be priced according to the CUMULATIVE SUBSTANCE PURCHASE VOLUME TIER applicable on December 31 of calendar year (N).”

1.04 Section 2.1.5 shall be amended to read in its entirety as follows:

“CODEXIS has elected to have [***] identified and qualified as CODEXIS' SECONDARY SUBSTANCE MANUFACTURER. The PARTIES agree to have [***] qualified as the SECONDARY SUBSTANCE MANUFACTURER by [***], 20[***] in order for the one-time payment of \$[***] (per Section 2.1.3) to be paid by MERCK to CODEXIS. The PARTIES agree that SUBSTANCE qualification shall be defined as: 1) the successful CODEXIS release and delivery (FCA [***] [Incoterms, 2010]) of [***] of SUBSTANCE meeting the QUALITY

STANDARDS SPECIFICATION per Section 6.1 and 6.2 of this AGREEMENT and 2) the successful completion of a MERCK Quality Audit at the [***] facility per Sections 2.1.5 and 6.5 of this AGREEMENT. MERCK shall complete the Quality Audit and provide the corresponding Quality Audit report within [***] days of the FCA [***] delivery of the [***] of SUBSTANCE. For the avoidance of doubt, [***] of SUBSTANCE shall be released and delivered (FCA [***]) no later than [***]-[***]-20[***] to enable [***] days for a Merck Quality Audit and report. Corrective Actions resulting from the Quality Audit shall not delay payment of the \$[***] fee per Section 2.1.5 of this AGREEMENT and, for the purposes of such payment fee only, the Quality Audit shall be deemed completed after [***] days of such FCA [***] delivery of the [***] of SUBSTANCE.”

1.05Section 2.2.1.1 shall be amended to read in its entirety as follows:

“Within [***] business days at the beginning of each QUARTER during the TERM, MERCK shall provide CODEXIS in writing (e-mail is acceptable) a good faith forecast reflecting MERCK’s, its AFFILIATES’, and its THIRD PARTY SUPPLIERS’ requirements, if any, for SUBSTANCE for each of the following **six (6)** QUARTERS by setting forth the quantities of SUBSTANCE to be supplied, broken down by QUARTER. All projected order dates, quantities and shipping dates set forth in the forecasts delivered pursuant to this Section 2.2.1.1 shall be binding on MERCK in respect of the requirements set forth for the **two (2) full** QUARTERS immediately following the delivery of each such forecast. Except as provided in this Section 2.2.1.1, it is understood and agreed that the forecasts shall not constitute commitments to take DELIVERY of SUBSTANCE or FIRM ORDERS unless such forecasts are specified in writing by MERCK as binding.”

1.06Section 2.2.1.2 shall be amended to read in its entirety as follows:

“At least [***] days prior to the beginning of each QUARTER during the TERM, MERCK, its AFFILIATES, and its THIRD PARTY SUPPLIERS shall place a FIRM ORDER for its requirements of SUBSTANCE for such QUARTER. MERCK, its AFFILIATES, and its THIRD PARTY SUPPLIERS may also place a FIRM ORDER at any time during the TERM of this AGREEMENT; provided that such FIRM ORDER is submitted at least [***] days prior to the earliest DELIVERY date set forth in such FIRM ORDER. Each FIRM ORDER shall specify the following:

1. Quantity of SUBSTANCE ordered;
2. The SUBSTANCE price based on Attachment 1 of Amendment 4;
3. The required DELIVERY date(s);
4. The ship-to address;
5. The specific packaging amount;
6. Shipping conditions; and
7. The current loading factor.

Any direct purchases by THIRD PARTY SUPPLIERS from CODEXIS will be governed by applicable provisions in this AGREEMENT (e.g. cancellation or delay of FIRM ORDERS, required LEAD TIME, IP protections, quality, invoicing and payment terms, warranties, limitations of liability, indemnification, etc.) MERCK shall guarantee [***]. CODEXIS shall use commercially reasonable efforts to promptly notify MERCK if any THIRD PARTY SUPPLIER is late in payment owed to CODEXIS. CODEXIS shall not accept FIRM ORDERS from any THIRD PARTY SUPPLIERS if the total outstanding balance due to CODEXIS from any THIRD PARTY SUPPLIERS exceeds \$[***].”

1.07Section 4.1.2.2 shall be amended to read in its entirety as follows:

“Subject to Section 9.1, MERCK shall pay CODEXIS a SUBSTANCE FEE for the purchase of SUBSTANCE according to the schedule in ATTACHMENT 3 (Revised Effective [***], 20[***]). The pricing set forth in ATTACHMENT 3 (Revised Effective [***], 20[***]) will apply through the remaining TERM of this AGREEMENT based on the current [***]% SUBSTANCE LOADING FACTOR. The PARTIES agree to negotiate a new pricing table should MERCK reduce the current [***]% SUBSTANCE LOADING FACTOR.

The PARTIES agree that such ATTACHMENT 3 (Revised Effective [***], 20[***]) shall apply equally to all FIRM ORDERS placed by MERCK, its AFFILIATES and its THIRD PARTY SUPPLIERS directly with CODEXIS for DELIVERY of SUBSTANCE under this AGREEMENT.”

1.08Section 12.1 shall be amended to read in its entirety as follows:

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

“This AGREEMENT shall become effective as of February 1, 2012 and shall continue in effect until February 1, 2022. This AGREEMENT may be renewed for an additional five (5) year term (beginning February 1, 2022) upon mutual written agreement executed by both PARTIES. Both PARTIES shall meet between [***], 20[***] and [***], 20[***] to discuss an extension of this AGREEMENT currently expiring on February 1, 2022.”

1.09 As of the AMENDMENT EFFECTIVE DATE, Article 12.2 of the AGREEMENT is deleted in its entirety.

1.10 Section 13.1.1 shall be amended to read in its entirety as follows:

“MERCK shall have the right to terminate this AGREEMENT at any time after January 1, 2018 in its sole discretion by giving 24 months advance written notice to CODEXIS.”

1. Miscellaneous

2.01 Effect of Amendment; Joinder. Except as expressly changed by this Amendment, the Agreement shall remain in full force and effect in accordance with its stated terms. The Agreement and the Schedules and Exhibits thereto, as amended by this Amendment and all preceding amendments, set forth the entire understanding of the parties with respect to the subject matter thereof. There are no agreements, restrictions, promises, warranties, covenants or undertakings other than those expressly set forth or referred to therein. The Agreement and the Schedules and Exhibits thereto, as amended by this Amendment and all preceding amendments, supersede all prior agreements and undertakings between the parties with respect to such subject matter.

2.02 Counterparts. This Amendment may be executed by the parties in separate counterparts, each of which when so executed and delivered is deemed an original. All such counterparts together constitute but one and the same instrument.

2.03 Definitions. All capitalized terms used but not defined in this Amendment shall have the respective definitions assigned to such terms in the Agreement.

IN WITNESS WHEREOF, the parties have caused this Amendment to be signed by their duly authorized representatives as of the date and year first written above.

Codexis Inc.

Merck Sharp & Dohme Corp.

By: /s/ Gordon Sangster

Name: Gordon Sangster

Title: Senior Vice President and CFO

Date: 29 June 2016

By: /s/ Aatush Chauhan

Name: Aatush Chauhan

Title: Director, API/Intermediates Procurement

Date: 03 August 2016

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

ATTACHMENT 3 (REVISED [*], 20[***])**

SUBSTANCE FEES

SUBSTANCE Price Table 1

CALENDAR YEAR 20[***] DELIVERIES OF SUBSTANCE	SUBSTANCE PRICE AT [***]% SUBSTANCE LOADING FACTOR (\$/kg)
All deliveries from [***], 20[***] through [***], 20[***]	\$[***]
All deliveries from and after [***], 20[***] through [***], 20[***]	\$[***]

SUBSTANCE Price/Volume Table 2

CUMULATIVE SUBSTANCE PURCHASE VOLUME TIER [CUMULATIVE SUBSTANCE PURCHASE VOLUME delivered commencing [***], 20[***] and thereafter] (kg)	SUBSTANCE PRICE AT [***]% SUBSTANCE LOADING FACTOR (\$/kg)
[***] [***]	\$[***]
[***] [***]	\$[***]
[***] [***]	\$[***]
[***] [***]	\$[***]
[***] [***]	\$[***]
[***] [***]	\$[***]

Effective [***], 20[***], in the event that [***], the parties shall negotiate in good faith a new SUPPLY PRICE [***], 20[***]. CODEXIS shall provide [***]. In all cases, throughout the Term, CODEXIS shall [***] not later than [***], 20[***], [***].

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.





Codexis, Inc.
200 Penobscot Drive
Redwood City, CA 94063
Tel: 650.421.8100
Fax: 650.421.8135
www.codexis.com

October 11, 2016

Michael Aldridge

#####

#####, ## #####

Dear Michael:

On behalf of Codexis, I am pleased to extend to you this offer of employment as Senior Vice President, Corporate & Strategic Development, reporting to the President & Chief Executive Officer. Your position is a full-time, exempt position.

Your employment is subject to proof of your legal right to work in the United States, and to your completing the United States Citizenship and Immigration Service Employment Eligibility Verification Form I-9. Your employment is also subject to successful completion of your professional references, background and drug screening, as well as the execution of your Employee Confidential Information and Inventions Assignment Agreement (Attachment B).

Compensation

If you accept this offer and you begin employment with Codexis, you will receive an initial salary of \$380,000 per year, payable semi-monthly, which will be subject to all applicable withholdings.

You will also be eligible to participate in the Codexis Executive Incentive Compensation Plan (the "Incentive Plan"). Your Incentive Plan target will be 50% of your Codexis base salary earnings. If Codexis meets all of its corporate goals for 2016, and you also perform well against your individual, to be established by Codexis' CEO, you can expect to receive an Incentive Plan payout at or near this target after our Board of Directors' (the "Board") approval of our 2016 year-end financial statements. Based on the Company's performance and your individual and group's goal performance, your actual bonus may be more or less than this target, and under certain circumstances there may be no payout. Any Incentive Plan payout you receive for 2016 will be pro-rated based on your service during 2016 as a percentage of the full year, and you must be an employee of the Company on the date the bonus is paid in order to be eligible for payment. Any payout will be subject to all applicable withholdings. Please also note that the Incentive Plan does not constitute a contract of employment or alter the "at will" status of your employment. In addition, Codexis reserves the right to modify or terminate the Incentive Plan at any time and for any reason without your consent.

Stock Option

/s/ MA /s/ JJN

Subject to approval by the Board, you will be granted an option to purchase 250,000 shares of Codexis common stock (the “Option”) at an exercise price per share equal to the closing trading price of a share of Codexis common stock on the date the option is granted. The Option will be presented to the Board for approval on or as close to your employment start date as possible. The shares subject to the Option will vest one fourth or 25% on the first anniversary of your employment start date and thereafter will vest 1/48th of the shares subject to the Option per month for the following 36 months until the option is 100% vested on the four-year anniversary of your employment start date.

Vesting of the Option is contingent upon your continued employment with Codexis through the applicable vesting date. The Option is subject to the terms of the Codexis, Inc. 2010 Equity Incentive Award Plan, and will be conditioned on your entry into an option agreement with the Company.

Change of Control Severance Agreement

In connection with the commencement of your employment with Codexis, you will have the opportunity to enter into a Change of Control Severance Agreement substantially in the form attached as Attachment A.

Employee Benefits

As a full-time employee, you will be eligible for the Codexis employee benefit plans, which currently include medical, dental, vision, long-term disability and life insurance, as well as a 401(k) plan and flexible time off that allows full-time employees to accrue 20 days of flexible time off each year of employment. For employees working greater than or equal to 20 hours and less than 40 hours per week flexible time off is prorated. Codexis reserves the right to modify or terminate any of these plans at any time and for any reason.

Other Terms and Conditions of Employment

Your employment with Codexis is at will. “Employment at will” means that you are free to resign from your employment at any time, for any reason or no reason at all, with or without cause and with or without notice. Similarly, Codexis may terminate your employment at any time for any legal reason, with or without cause and with or without notice. It also means that your job duties, title and responsibility and reporting level, work schedule, compensation and benefits, as well as the Company’s personnel policies and procedures, may be changed with prospective effect, with or without notice, at any time in the sole discretion of Codexis. By accepting this offer of employment, you agree that your employment is at will, and acknowledge that no one, other than the President and CEO of Codexis, has the authority to promise you, either orally or in writing, anything to the contrary. Any such agreement must be in writing and signed by both you and the President and CEO of Codexis to be effective.

(a) Codexis requires that, as a full-time employee, you devote your full business time, attention, skill, and efforts to the tasks and duties of your position as assigned by Codexis. If you wish to request consent to provide services (for any or no form of compensation) to any other person or business entity while employed by Codexis, you must receive the written approval of the President and CEO of Codexis in advance of agreeing to provide any such services. The Company has already consented to Mr. Aldridge’s continuing service on each board of directors of which Executive is now a member as set forth on Exhibit A attached hereto, which consent

Initial: /s/ MA /s/ JJN

shall continue until such time as the President and CEO of Codexis provides notice to Mr. Aldridge that, in its reasonable judgment, such service conflicts with the interests of Codexis. Mr. Aldridge cannot serve on the board of directors of other private or publicly traded companies without the President and CEO's prior written consent.

During the course of your employment you may create, develop or have access to confidential information belonging to Codexis or its customers or partners, including technical, research, financial, business, commercial, personnel or operational information, and/or ideas, trade secrets, know-how, procedures, strategies or plans. You agree that as a condition of your employment with Codexis, you will sign and comply with the Codexis Employee Confidential Information and Inventions Assignment Agreement, a copy of which is attached to this letter as Attachment B.

Arbitration of Disputes

You agree that, except as described below, any dispute relating to your employment or the termination of your employment with Codexis, including any claims related to any bonus or other compensation, will be finally settled by binding arbitration in accordance with procedures described in Section 12(a) of your Change of Control Severance Agreement. Claims subject to arbitration will include, but will not be limited to, claims under Title VII of the Civil Rights Act of 1964 (as amended) and other civil rights statutes of the United States, the Age Discrimination in Employment Act, the Americans with Disabilities Act, the Family and Medical Leave Act, the Employee Retirement Income Security Act of 1974, the California Fair Employment and Housing Act, the California Labor Code, and any other federal, state or local statute or regulation, and the common law of contract and tort. However, this agreement to arbitrate will not apply to claims (a) for workers' compensation, (b) for unemployment compensation or (c) injunctive relief, pending arbitration, arising out of or related to misappropriation of trade secrets or misuse or improper disclosure of confidential information, unfair competition or breach of any non-competition or non-solicitation agreement between you and Codexis.

You understand that by this agreement, you and Codexis are waiving your respective rights to trial by jury, and that judgment upon any arbitration award may be entered in any court having jurisdiction of the matter. Any controversy or claim subject to arbitration will be waived and forever barred if arbitration is not initiated within one year following the date the controversy or claim first arose, or if statutory rights are involved, within the time limit established by the applicable statute of limitations.

With regard to statutory claims, you and Codexis will have the same remedies available in arbitration as those available had the claim been filed in a court of law, including, where authorized by statute, compensatory and punitive damages, injunctive relief and attorneys' fees. Although Codexis will pay all costs of the arbitration and the arbitrator, you agree to pay all costs you would otherwise be required to pay were your claims litigated in a court of law, such as costs of your attorney, deposition transcripts and expert witness fees and expenses.

The terms described in this letter supersede and replace all prior agreements, understandings, and promises between Codexis and you concerning the terms and conditions of your employment with Codexis.

Initial: /s/ MA /s/ JJN

We hope that your association with Codexis will be mutually successful and rewarding, and we look forward to welcoming you aboard. Please indicate your acceptance of this offer by initialing each page and signing this letter below and returning the letter to Eve Lai (Codexis HR) by October 13, 2016.

Sincerely,

Codexis, Inc.

By: /s/ John Nicols
John Nicols
President & Chief Executive Officer

I understand and agree to the foregoing terms and conditions of employment with Codexis.

/s/ Michael Aldridge

October 12, 2016 / October 17, 2016
Date / Start Date

Initial: /s/ MA /s/ JJN

EXHIBIT A

CURRENT BOARD OF DIRECTOR SERVICE

University of Canterbury Foundation in America, Inc.

Sirona Therapeutics, Limited

Initial: /s/ MA /s/ JJN

ATTACHMENT A
CHANGE OF CONTROL SEVERANCE AGREEMENT

Initial: /s/ MA /s/ JJN

CODEXIS, INC.

CHANGE OF CONTROL SEVERANCE AGREEMENT

This Change of Control Severance Agreement (the “Agreement”) is made and entered into by and between Michael Aldridge (the “Executive”) and Codexis, Inc., a Delaware corporation (the “Company”), effective as of the latest date set forth by the signatures of the parties hereto below (the “Effective Date”).

RECITALS

A. It is expected that the Company from time to time will consider the possibility of an acquisition by another company or other change of control. The Board of Directors of the Company (the “Board”) recognizes that such consideration as well as the possibility of an involuntary termination or reduction in responsibility can be a distraction to Executive and can cause Executive to consider alternative employment opportunities. The Board has determined that it is in the best interests of the Company and its stockholders to assure that the Company will have the continued dedication and objectivity of Executive, notwithstanding the possibility, threat or occurrence of such an event.

B. The Board believes that it is in the best interests of the Company and its stockholders to provide Executive with an incentive to continue Executive’s employment and to motivate Executive to maximize the value of the Company upon a Change of Control (as defined below) for the benefit of its stockholders.

C. The Board believes that it is imperative to provide Executive with severance benefits upon certain terminations of Executive’s service to the Company that provide Executive with enhanced financial security and provides incentive and encouragement to Executive to remain with the Company notwithstanding the possibility of such an event.

D. Certain capitalized terms used in the Agreement are defined in Section 9 below.

The parties hereto agree as follows:

1. Term of Agreement. This Agreement shall become effective as of the Effective Date and terminate upon the date that all obligations of the parties hereto with respect to this Agreement have been satisfied.

2. At-Will Employment. The Company and Executive acknowledge that Executive’s employment is and shall continue to be “at-will,” as defined under applicable law. If Executive’s employment terminates for any reason, Executive shall not be entitled to any payments, benefits, damages, awards or compensation other than as provided by this Agreement.

3. Covered Termination Not in Connection with a Change of Control. Except as otherwise provided under Section 6, if Executive experiences a Covered Termination other than during the twelve (12) month period commencing upon a Change of Control, and if Executive, within sixty (60) days following the date of the Covered Termination, provides the Company with an

/s/ MA /s/ JJN

executed Release of Claims (as defined below) which is not revoked within the applicable revocation period, if any, then in addition to any accrued but unpaid salary, bonus, vacation and expense reimbursement payable in accordance with applicable law, the Company shall provide Executive with the following:

(a) Severance. Executive shall receive a lump sum cash payment in an amount equal to six (6) months of Executive's base salary at the rate in effect immediately prior to Executive's termination of employment (without giving effect to any reduction in base salary that gives rise to a Voluntary Termination for Good Reason), less applicable withholdings. This severance payment shall be made to Executive in substantially equal installments in accordance with the Company's normal payroll procedures with the first such installment to be made on the first payroll date following the date the Release of Claims becomes effective and irrevocable, provided, that if the Covered Termination occurs after November 1 of any year, the first such installment shall be made on the first payroll date of the subsequent year and, provided further, that, in each case, the first installment shall include any installment payments that would have been made had such installments commenced on the first payroll date after the Covered Termination.

(b) Continued Healthcare. If Executive elects to receive continued healthcare coverage pursuant to the provisions of the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA"), the Company shall directly pay, or reimburse Executive for, the premium for Executive, Executive's covered dependents and Executive's spouse or domestic partner from the date of Executive's Covered Termination through the earlier of (i) the six (6) month anniversary of the date of Executive's Covered Termination and (ii) the date Executive, Executive's covered dependents, if any, and Executive's spouse or domestic partner, if any, become eligible for healthcare coverage under another employer's plan(s), *provided, however*, that if (1) any plan pursuant to which such benefits are provided is not, or ceases prior to the expiration of the continuation coverage period to be, exempt from the application of Section 409A under Treasury Regulation Section 1.409A-1(a)(5), (2) the Company is otherwise unable to continue to cover Executive or Executive's dependents under its group health plans, or (3) the Company cannot provide the benefit without violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then, in any such case, an amount equal to each remaining Company subsidy shall thereafter be paid to Executive in substantially equal monthly installments over the remaining period the Company would otherwise directly pay or reimburse Executive. After the Company ceases to pay premiums pursuant to the preceding sentence, Executive may, if eligible, elect to continue healthcare coverage at Executive's expense in accordance with the provisions of COBRA.

4. Covered Termination Within 12 Months Following Change of Control. If Executive experiences a Covered Termination within the twelve (12) month period commencing upon a Change of Control, and if Executive, within sixty (60) days following the date of the Covered Termination, provides the Company with an executed Release of Claims (as defined below) which is

/s/ MA /s/ JJN

not revoked within the applicable revocation period, if any, then in addition to any accrued but unpaid salary, bonus, vacation and expense reimbursement payable in accordance with applicable law, the Company shall provide Executive with the following:

(a) Severance. Executive shall receive a lump sum cash payment in an amount equal to the sum of twelve (12) months of Executive's base salary at the rate in effect immediately prior to Executive's termination of employment (without giving effect to any reduction in base salary subsequent to a Change of Control that gives rise to a Voluntary Termination for Good Reason), less applicable withholdings. This severance payment shall be made to Executive within sixty (60) days following the date of the Covered Termination.

(b) Equity Awards. Each outstanding equity award, including, without limitation, stock options, restricted stock and restricted stock units, held by Executive shall automatically become vested and, if applicable, exercisable and any restrictions thereon shall immediately lapse, in each case, with respect to one hundred percent (100%) of the then unvested shares subject to such equity award. Notwithstanding the foregoing, any outstanding performance stock units held by Executive shall automatically become vested with respect to: (i) in the event of a Change of Control that occurs prior to the applicable Measurement Date, such number of shares of Company common stock corresponding to the target performance level for any applicable performance goals; or (ii) in the event of a Change of Control that occurs on or after the Measurement Date, such number of shares of Company common stock corresponding to the Company's actual achievement of any applicable performance goals.

(c) Continued Healthcare. If Executive elects to receive continued healthcare coverage pursuant to the provisions of COBRA, the Company shall directly pay, or reimburse Executive for, the premium for Executive, Executive's covered dependents and Executive's spouse or domestic partner from the date of Executive's Covered Termination through the earlier of (i) the twelve (12) month anniversary of the date of Executive's Covered Termination and (ii) the date Executive, Executive's covered dependents, if any, and Executive's spouse or domestic partner, if any, become eligible for healthcare coverage under another employer's plan(s), *provided, however*, that if (1) any plan pursuant to which such benefits are provided is not, or ceases prior to the expiration of the continuation coverage period to be, exempt from the application of Section 409A of the Code, under Treasury Regulation Section 1.409A-1(a)(5), (2) the Company is otherwise unable to continue to cover Executive or Executive's dependents under its group health plans, or (3) the Company cannot provide the benefit without violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then, in any such case, an amount equal to each remaining Company subsidy shall thereafter be paid to Executive in substantially equal monthly installments over the remaining period the Company would otherwise directly pay or reimburse Executive. After the Company ceases to pay premiums pursuant to the preceding sentence, Executive may, if eligible, elect to continue healthcare coverage at Executive's expense in accordance with the provisions of COBRA.

5. Death or Disability. If Executive terminates employment with the Company due to death or Disability and such termination constitutes a "separation from service" within the meaning of Section 409A of Code and the Department of Treasury regulations and other guidance promulgated thereunder (a "Separation from

/s/ MA /s/ JJN

Service”), then in addition to any accrued but unpaid salary, bonus, vacation and expense reimbursement payable in accordance with applicable law, the Company shall provide Executive with the following:

(a) Pro-Rata Vesting of Equity Awards. Each outstanding equity award, including, without limitation, stock options, restricted stock and restricted stock units, held by Executive shall automatically become vested and, if applicable, exercisable and any restrictions thereon shall immediately lapse, in each case, with respect to that number of shares of Company common stock that would otherwise vest on the next vesting date for such equity award, assuming Executive’s continued service through such date, pro-rated to the date of Executive’s termination due to death or Disability. For purposes of determining the number of shares subject to any outstanding performance stock units that would otherwise vest on the next vesting date pursuant to the foregoing sentence, the applicable performance goals shall be deemed achieved: (i) in the event of a Change of Control that occurs prior to the applicable Measurement Date, at the target performance level; or (ii) in the event of a Change of Control that occurs on or after the Measurement Date, based on the Company’s actual achievement.

(b) Continued Healthcare. If Executive, or any beneficiary of Executive, elects to receive continued healthcare coverage pursuant to the provisions of COBRA, the Company shall directly pay, or reimburse Executive, or such beneficiary, for, the premium for Executive, Executive’s covered dependents and Executive’s spouse or domestic partner from the date of Executive’s termination due to death or Disability through the earlier of (i) the twelve (12) month anniversary of the date of Executive’s termination of employment and (ii) the date Executive, Executive’s covered dependents, if any, and Executive’s spouse or domestic partner, if any, become eligible for healthcare coverage under another employer’s plan(s), *provided, however*, that if (1) any plan pursuant to which such benefits are provided is not, or ceases prior to the expiration of the continuation coverage period to be, exempt from the application of Section 409A of the Code, under Treasury Regulation Section 1.409A-1(a)(5), (2) the Company is otherwise unable to continue to cover Executive or Executive’s dependents under its group health plans, or (3) the Company cannot provide the benefit without violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), then, in any such case, an amount equal to each remaining Company subsidy shall thereafter be paid to Executive in substantially equal monthly installments over the remaining period the Company would otherwise directly pay or reimburse Executive. After the Company ceases to pay premiums pursuant to the preceding sentence, Executive, or any beneficiary of Executive, may, if eligible, elect to continue healthcare coverage at his or her expense in accordance with the provisions of COBRA.

6. Termination in Connection With a Change of Control. Notwithstanding anything in this Agreement to the contrary, in the event Executive experiences a Covered Termination and the Involuntary Termination without Cause underlying the Covered Termination, or the event upon which a Voluntary Termination for Good Reason underlying the Covered Termination is based, occurs at the direction of a person or entity that has entered into an agreement with the Company that contemplates a transaction that, if consummated, would constitute a Change of Control, then for all purposes hereunder, including, without limitation, Sections 4 and 7, such Covered Termination shall be deemed to have occurred within the twelve (12) month period following a Change of Control and, in lieu of the benefits provided under Section 3, Executive shall be entitled to the benefits set forth in Section 4 with such benefits to be paid, or commence being paid, upon the Covered Termination, but otherwise subject to the terms and conditions of Section 4.

/s/ MA /s/ JJN

7. Termination for Cause: Voluntary Resignation. If Executive's service with the Company is terminated by the Company for Cause or by Executive for any or no reason other than due to death, Disability or as a Covered Termination, then Executive shall only be entitled to any accrued but unpaid salary, bonus, vacation and expense reimbursement in accordance with applicable law.

8. Limitation on Payments. In the event that the severance and other benefits provided for in this Agreement or otherwise payable to Executive (i) constitute "parachute payments" within the meaning of Section 280G of the Code and (ii) but for this Section 8, would be subject to the excise tax imposed by Section 4999 of the Code, then Executive's severance benefits under this Agreement shall be payable either

(a) in full, or

(b) as to such lesser amount which would result in no portion of such severance benefits being subject to excise tax under Section 4999 of the Code, whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the excise tax imposed by Section 4999 of the Code, results in the receipt by Executive on an after-tax basis, of the greatest amount of severance benefits under this Agreement, notwithstanding that all or some portion of such severance benefits may be taxable under Section 4999 of the Code. The specific benefits that shall be reduced, if any, and the order of such reduction shall be determined by the Executive in his or her sole discretion. Unless the Company and Executive otherwise agree in writing, any determination required under this Section 8 shall be made in writing by the Company's independent public accountants (the "Accountants"), whose determination shall be conclusive and binding upon Executive and the Company for all purposes. For purposes of making the calculations required by this Section 8, the Accountants may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and Executive shall furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make a determination under this Section. The Company shall bear all costs the Accountants may reasonably incur in connection with any calculations contemplated by this Section 8.

9. Definition of Terms. The following terms referred to in this Agreement shall have the following meanings:

(a) Change of Control. "Change of Control" shall mean (i) a dissolution or liquidation of the Company; (ii) a sale of all or substantially all the assets of the Company; (iii) a merger or consolidation in which the Company is not the surviving corporation and in which beneficial ownership of securities of the Company representing at least fifty percent (50%) of the combined voting power entitled to vote in the election of directors has changed; (iv) a reverse merger in which the Company is the surviving corporation but the shares of the common stock of the Company outstanding immediately before the merger are converted by virtue of the merger into other property, whether in the form of securities, cash or otherwise, and in which beneficial ownership of securities of the Company representing at least fifty percent (50%) of the combined voting power entitled to vote in the election of directors has changed; (v) an acquisition by any person, entity or group within the meaning of Section 13(d) or 14(d) of the Securities and Exchange Act of 1934, as amended (the "Exchange Act"), or any comparable successor provisions (excluding any employee benefit plan, or related trust, sponsored or maintained

/s/ MA /s/ JJN

by the Company or subsidiary of the Company or other entity controlled by the Company) of the beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act, or comparable successor rule) of securities of the Company representing at least fifty percent (50%) of the combined voting power entitled to vote in the election of directors; or, (vi) in the event that the individuals who are members of the Incumbent Board cease for any reason to constitute at least fifty percent (50%) of the Board. Notwithstanding the foregoing, a Change of Control shall not include any transaction effected primarily for the purpose of financing the Company with cash (as determined by the Board acting in good faith and without regard to whether such transaction is effectuated by a merger, equity financing or otherwise) or the initial public offering of the Company's common stock. Further notwithstanding the foregoing, if a Change of Control would give rise to a payment or settlement event that constitutes "nonqualified deferred compensation," the transaction or event constituting the Change of Control must also constitute a "change in control event" (as defined in Treasury Regulation §1.409A-3(i)(5)) in order to give rise to the payment or settlement event, to the extent required by Section 409A.

(b) Covered Termination. "Covered Termination" shall mean an Involuntary Termination without Cause or a Voluntary Termination for Good Reason that constitutes the Executive's Separation from Service.

(c) Disability. "Disability" shall mean that Executive has been unable to perform his Company duties as the result of his incapacity due to physical or mental illness, and such inability, at least one hundred eighty (180) days after its commencement, is determined to be total and permanent by a physician selected by the Company or its insurers and acceptable to Executive or Executive's legal representative (such Agreement as to acceptability not to be unreasonably withheld). Termination resulting from Disability may only be effected after at least thirty (30) days' written notice by the Company of its intention to terminate Executive's employment. In the event that Executive resumes the performance of substantially all of his duties hereunder before the termination of his employment becomes effective, the notice of intent to terminate shall automatically be deemed to have been revoked.

(d) Incumbent Board. "Incumbent Board" shall mean the individuals who, as of the Effective Date, are members of the Board. If the election, or nomination for election by the Company's stockholders, of any new director is approved by a vote of at least fifty percent (50%) of the Incumbent Board, such new director shall be considered as a member of the Incumbent Board.

(e) Involuntary Termination without Cause. "Involuntary Termination without Cause" shall mean the termination of Executive's employment by the Company other than a termination following (i) the willful and continued failure to substantially perform the Executive's duties with the Company (other than as a result of physical or mental disability) after a written demand for substantial performance is delivered to the Executive by the Company, which demand specifically identifies the manner in which the Company believes that the Executive has not substantially performed the Executive's duties and that has not been cured within fifteen (15) days following receipt by the Executive of the written demand; (ii) commission of a felony (other than a traffic-related offense) that in the written determination of the Company is likely to cause or has caused material injury to the Company's business; (iii) dishonesty with respect to a significant matter relating to the Company's business; or (iv) material breach of any agreement by and between the Executive and the Company, which

/s/ MA /s/ JJN

material breach has not been cured within fifteen (15) days following receipt by the Executive of written notice from the Company identifying such material breach.

(f) Release of Claims. "Release of Claims" shall mean a general release of all claims against the Company and its affiliates in a form reasonably acceptable to the Company.

(g) Voluntary Termination for Good Reason. "Voluntary Termination for Good Reason" shall mean Executive's voluntarily resignation after the occurrence of any of the following without Executive's written consent; (i) a material diminution in Executive's base compensation; (ii) a material diminution in Executive's authority, duties or responsibilities; (iii) a material change of at least thirty-five (35) miles in the geographic location at which Executive must perform Executive's services; or (iv) a material breach of this Agreement by the Company. Notwithstanding the foregoing, a resignation shall not constitute a "Voluntary Termination for Good Reason" unless the condition giving rise to such resignation continues more than thirty (30) days following Executive's written notice of the condition within ninety (90) days of the first occurrence of such condition and Executive's termination occurs within one hundred eighty (180) days following the first occurrence of such condition.

(h) Measurement Date. "Measurement Date," with respect to an award of performance stock units, shall mean the date the Compensation Committee of the Board of Directors determines the final performance factor for the applicable performance period.

10. Successors.

(a) Company's Successors. Any successor to the Company (whether direct or indirect and whether by purchase, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets shall assume the obligations under this Agreement and agree expressly to perform the obligations under this Agreement in the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. For all purposes under this Agreement, the term "Company" shall include any successor to the Company's business and/or assets which executes and delivers the assumption agreement described in this Section 10(a) or which becomes bound by the terms of this Agreement by operation of law.

(b) Executive's Successors. The terms of this Agreement and all rights of Executive hereunder shall inure to the benefit of, and be enforceable by, Executive's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

11. Notices. Notices and all other communications contemplated by this Agreement shall be in writing and shall be deemed to have been duly given when personally delivered or one day following mailing via Federal Express or similar overnight courier service. In the case of Executive, mailed notices shall be addressed to Executive at Executive's home address that the Company has on file for Executive. In the case of the Company, mailed notices shall be addressed to its corporate headquarters, and all notices shall be directed to the attention of its Secretary.

/s/ MA /s/ JJN

12. Confidentiality; Non-Solicitation.

(a) Confidentiality. While Executive is employed by the Company, and thereafter while Executive receives severance benefits hereunder, Executive shall not directly or indirectly disclose or make available to any person, firm, corporation, association or other entity for any reason or purpose whatsoever, any Confidential Information (as defined below). Upon termination of Executive's employment with the Company, all Confidential Information in Executive's possession that is in written or other tangible form (together with all copies or duplicates thereof, including computer files) shall be returned to the Company and shall not be retained by Executive or furnished to any third party, in any form except as provided herein; *provided, however*, that Executive shall not be obligated to treat as confidential, or return to the Company copies of any Confidential Information that (i) was publicly known at the time of disclosure to Executive, (ii) becomes publicly known or available thereafter other than by any means in violation of this Agreement or any other duty owed to the Company by any person or entity, or (iii) is lawfully disclosed to Executive by a third party. For purposes of this Agreement, the term "Confidential Information" shall mean information disclosed to Executive or known by Executive as a consequence of or through his or her relationship with the Company, about the customers, employees, business methods, public relations methods, organization, procedures or finances, including, without limitation, information of or relating to customer lists, of the Company and its affiliates. In addition, Executive shall continue to be subject to the Confidential Information, Secrecy, and Invention Agreement entered into between Executive and the Company (the "Confidential Information Agreement").

(b) Non-Solicitation. In addition to each Executive's obligations under the Confidential Information Agreement, Executive shall not for a period of one (1) year following Executive's termination of employment for any reason, either on Executive's own account or jointly with or as a manager, agent, officer, employee, consultant, partner, joint venturer, owner or stockholder or otherwise on behalf of any other person, firm or corporation, directly or indirectly solicit or attempt to solicit away from the Company any of its officers or employees or offer employment to any person who is an officer or employee of the Company; *provided, however*, that a general advertisement to which an employee of the Company responds shall in no event be deemed to result in a breach of this Section 12(b), Executive also agrees not to harass or disparage the Company or its employees, clients, directors or agents or divert or attempt to divert any actual or potential business of the company.

(c) Survival of Provisions. The provisions of this Section 12 shall survive the termination or expiration of the applicable Executive's employment with the Company and shall be fully enforceable thereafter. If it is determined by a court of competent jurisdiction in any state that any restriction in this Section 12 is excessive in duration or scope or is unreasonable or unenforceable under the laws of that state, it is the intention of the parties that such restriction may be modified or amended by the court to render it enforceable to the maximum extent permitted by the law of that state.

13. Dispute Resolution.

(a) To ensure the timely and economical resolution of disputes that arise in connection with this Agreement, Executive and the Company agree that any and all disputes, claims, or causes of action arising from or relating to the enforcement, breach, performance or interpretation of this Agreement, Executive's employment, or the termination of Executive's employment, shall be resolved to the fullest extent permitted by

/s/ MA /s/ JJN

law by final, binding and confidential arbitration, by a single arbitrator, in San Mateo County, California, conducted by Judicial Arbitration and Mediation Services, Inc. ("JAMS") under the applicable JAMS employment rules. **By agreeing to this arbitration procedure, both Executive and the Company waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.** The arbitrator shall: (i) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (ii) issue a written arbitration decision, to include the arbitrator's essential findings and conclusions and a statement of the award. The arbitrator shall be authorized to award any or all remedies that Executive or the Company would be entitled to seek in a court of law. The Company shall pay all JAMS' arbitration fees in excess of the amount of court fees that would be required if the dispute were decided in a court of law. Nothing in this Agreement is intended to prevent either Executive or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration. Notwithstanding the foregoing, Executive and the Company each have the right to resolve any issue or dispute over intellectual property rights by Court action instead of arbitration.

14. Miscellaneous Provisions.

(a) Section 409A. Notwithstanding any provision to the contrary in this Agreement, if Executive is deemed by the Company at the time of his Separation from Service to be a "specified employee" for purposes of Section 409A(a)(2)(B)(i) of the Code, to the extent delayed commencement of any portion of the benefits to which Executive is entitled under this Agreement is required in order to avoid a prohibited distribution under Section 409A(a)(2)(B)(i) of the Code, such portion of Executive's benefits shall not be provided to Executive prior to the earlier of (i) the expiration of the six-month period measured from the date of the Executive's Covered Termination or termination of employment due to Disability or (ii) the date of Executive's death. Upon the first business day following the expiration of the applicable Code Section 409A(a)(2)(B)(i) period, all payments deferred pursuant to this Section 14(a) shall be paid in a lump sum to Executive, and any remaining payments due under the Agreement shall be paid as otherwise provided herein.

(b) Waiver. No provision of this Agreement shall be modified, waived or dis-charged unless the modification, waiver or discharge is agreed to in writing and signed by Executive and by an authorized officer of the Company (other than Executive). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party shall be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) Whole Agreement. This Agreement and the Confidential Information Agreement represent the entire understanding of the parties hereto with respect to the subject matter hereof and supersede all prior-arrangements and understandings regarding same.

(d) Choice of Law. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of California.

(e) Severability. 'flic invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision hereof, which shall remain in full force and effect.

/s/ MA /s/ JJN

(f) Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together will constitute one and the same instrument.

[Signature page follows]

/s/ MA /s/ JJN

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the day and year set forth below.

CODEXIS, INC.

By: /s/ John Nicols
Name: John Nicols
Title: President & CEO
Date:

EXECUTIVE

/s/ Michael Aldridge
Michael Aldridge
Date:

/s/ MA /s/ JJN

ATTACHMENT B

**CODEXIS EMPLOYEE CONFIDENTIAL INFORMATION AND INVENTIONS
ASSIGNMENT AGREEMENT**

Initial: /s/ MA /s/ JJN

CODEXIS, INC.

**EMPLOYEE CONFIDENTIAL INFORMATION AND
INVENTIONS ASSIGNMENT AGREEMENT**

The following confirms an agreement (the "Agreement") between Codexis, Inc., its subsidiaries, affiliates, successors or assigns (together the "Company") and me (Michael Aldridge). As a condition of my employment, and in consideration of my employment with the Company and my receipt of the compensation now and hereafter paid to me by Company, I agree to the following effective as of my first day of employment with the Company:

1. At-Will Employment. This Agreement is not an employment contract for any particular term. I have a right to resign and Company has the right to terminate my employment at will, at any time, for any or no reason, with or without cause and without notice. In addition, this Agreement does not purport to set forth all of the terms and conditions of my employment, and, as an employee of Company, I have obligations to Company which are not set forth in this Agreement. However, the terms of this Agreement govern over any inconsistent terms and can only be changed by a subsequent written agreement signed by both parties.

2. Confidential Information.

(a) **Company Information.** I agree at all times during the term of my employment and thereafter, to hold in strictest confidence, and not to use, except for the benefit of the Company, or to disclose to any person, firm or corporation (in writing, verbally, or via email or any other medium) without written advance authorization of the Board of Directors of the Company, any Confidential Information of the Company. I will not use any Confidential Information except in the performance of my authorized duties as an employee of Company. I understand that "Confidential Information" includes, without limitation, any tangible or intangible proprietary information, technical data, trade secrets or know-how, including, but not limited to, research ideas, concepts, tangible and biological materials (including, but not limited to, cell lines, plasmids, vectors and DNA) and data; product plans, products, and services; customer lists and customers (including, but not limited to, customers of the Company on whom I called or with whom I became acquainted during my term of my employment); business markets, software, development, discoveries, inventions, processes, formulas, technology, designs, drawings, engineering, hardware configuration information, marketing, business plans, corporate strategy plans, financial data; or other business information made, generated or developed by me in the course of my employment with Company, or disclosed to me by Company either directly or indirectly in any form, including, without limitation, in writing, orally, electronically, or by drawings or observation of materials, parts, equipment, or research experiments. Confidential Information also includes confidential information provided to Company by any third party, which is indicated by such third party to be confidential. I further understand that Confidential Information does not include any of the foregoing items which has become publicly known and made generally available through no wrongful act of mine.

(b) **Third Party Information.** I agree that I will not, during my employment with the Company, improperly use or disclose any proprietary information or trade secrets of any former or concurrent employer or other person or entity, and that I will not bring onto the premises of the Company any unpublished

Initial: /s/ MA /s/ JJN

document or proprietary information belonging to any such employer, person or entity unless consented to in writing and in advance by such employer, person or entity.

(c) **Third Party Information Received by the Company.** I recognize that the Company has received and in the future will likely receive from third parties their confidential or proprietary information subject to a duty on the Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. I agree to hold all such confidential or proprietary information in the strictest confidence and not to disclose it to any person, firm or corporation or to use it except as necessary in carrying out my work for the Company consistent with the Company's agreement with such third party.

(d) **Defend Trade Secrets Act. 18 U.S.C. § 1833(b) states:**

"An individual shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that— (A) is made—(i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal."

Accordingly, I have the right to disclose in confidence trade secrets to Federal, State, and local government officials, or to an attorney, for the sole purpose of reporting or investigating a suspected violation of law. I also have the right to disclose trade secrets in a document filed in a lawsuit or other proceeding, but only if the filing is made under seal and protectable from public disclosure. Nothing in this Certification is intended to conflict with 18 U.S.C. § 1833(b) or create liability for disclosures of trade secrets that are expressly allowed by 18 U.S.C. § 1833(b).

3. Inventions.

(a) **Inventions Retained and Licensed.** I have attached hereto, as Exhibit A, a list describing all inventions, original works of authorship, developments, improvements, and trade secrets (if any) which were made by me prior to my employment with the Company (collectively referred to as "Prior Inventions"), which belong to me, which relate to the Company's proposed business, products or research and development, and which are not assigned to the Company hereunder; if no such list is attached to or contained in Exhibit A, I represent that there are no such Prior Inventions. If in the course of my employment with the Company, I incorporate into a Company product, process or machine a Prior Invention owned by me or in which I have an interest, the Company is hereby granted and shall have a nonexclusive, fully sublicensable, royalty-free, irrevocable, perpetual, worldwide license to make, have made, modify, use, have used, sell, have sold and import such Prior Invention as part of or in connection with such product, process or machine.

(b) **Assignment of Inventions.** I agree that I will promptly make full written disclosure to the Company, will hold in trust for the sole right and benefit of the Company. I hereby assign to the Company, or its designee, all my right, title, and interest in and to any and all inventions, original works of authorship, developments, concepts, improvements or trade secrets, whether or not patentable or registrable under copyright or similar laws, which I may solely or jointly conceive or develop or reduce to practice, or cause to be conceived or developed or reduced to practice, during the period of time I am in the employ of the Company

Initial: /s/ MA /s/ JJN

(collectively referred to as "Inventions"), excepting only any invention (if any) which qualifies fully under the provisions of California Labor Code Section 2870 as provided in Section 3 (f) below. I further acknowledge that all original works of authorship which are made by me (solely or jointly with others) within the scope of and during the period of my employment with the Company and which are protectable by copyright are "works made for hire", as that term is defined in the United States Copyright Act.

(c) **Inventions Assigned to the United States.** I agree to assign to the United States government all my right, title, and interest in and to any and all Inventions hereunder, whenever such full title is required to be in the United States by a contract between the Company and the United States or any of its agencies.

(d) **Maintenance of Records.** I agree to keep and maintain adequate and current written records of any and all Inventions hereunder, including any made by me solely or jointly with others during the term of my employment with the Company. The records will be in the form of notes, sketches, drawings, and any other format that may be specified by the Company. The records will be available to and remain the sole property of the Company at all times.

(e) **Patent and Copyright Registrations.** I agree to assist the Company, or its designee, at the Company's expense, in every proper way to secure the Company's rights in the Inventions and any copyrights, patents, mask work rights or other intellectual property rights relating thereto in any and all countries, including the disclosure to the Company of all pertinent information and data with respect thereto, the execution of all applications, specifications, oaths, assignments and all other instruments which the Company shall deem necessary in order to apply for and obtain such rights and in order to assign and convey to the Company, its successors, assigns and nominees the sole and exclusive rights, title and interest in and to such Inventions, and any copyrights, patents, mask work rights or other intellectual property rights relating thereto. I further agree that my obligation to execute or cause to be executed, when it is in my power to do so, any such instrument or papers shall continue after the termination of this Agreement. If the Company is unable because of my mental or physical incapacity or for any other reason to secure my signature to apply for or to pursue any application for any United States or foreign patents or copyright registrations covering Inventions or original works of authorship assigned to the Company as above, then I hereby irrevocably designate and appoint the Company and its duly authorized officers and agents as my agent and attorney in fact, to act for and in my behalf and stead to execute and file any such applications and to do all other lawfully permitted acts to further the prosecution and issuance of letters patent or copyright registrations thereon with the same legal force and effect as if executed by me.

(f) **Exception to Assignments.** I understand that the provisions of this Agreement requiring assignment of Inventions to the Company do not apply to any invention which qualifies fully under the provisions of California Labor Code Section 2870 (attached hereto as **Exhibit B**). I will advise the Company promptly in writing of any invention that I believe meet the criteria in California Labor Code Section 2870 and are not disclosed on **Exhibit A**.

4. Conflicting Employment. I agree that, during the term of my employment with the Company, I will not engage in any other employment, occupation, consulting or other business activity directly related to the

Initial: /s/ MA /s/ JJN

business in which the Company is now involved or becomes involved during the term of my employment, nor will I engage in any other conduct or activities that conflict with my obligations to the Company or is not in the best interests of the Company.

5. Returning Company Property. I agree that, prior to or at the time of leaving the employ of the Company; I will deliver to the Company (and will not keep in my possession, recreate or deliver to anyone else) any and all Confidential Information in my possession, as well as all equipment, devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings, blueprints, sketches, biological and other tangible materials (including, but not limited, to cell lines, plasmids, vectors and DNA), other documents or tangible property of the Company (or property of third parties that is lawfully in the possession or control of the Company), or reproductions of any aforementioned items including any and all of the aforementioned items developed by me pursuant to my employment with the Company or otherwise property of the Company, its successors or assigns. In the event of the termination of my employment, I agree to sign and deliver the "Termination Certification" attached hereto as **Exhibit C**.

6. Notification of New Employer. In the event that I leave the employ of the Company, I hereby grant consent to notification by the Company to my new employer about my rights and obligations under this Agreement.

7. Solicitation of Employees and Customers. I acknowledge and agree that for a period of twenty-four (24) months or to the maximum extent permitted by law immediately following the termination of my relationship with the Company for any reason, whether voluntarily or involuntarily, I shall not either directly or indirectly without the prior written consent of the Company:

(a) solicit, induce, recruit or encourage any of the Company's employees to leave their employment, either for myself or for any other person or entity; or

(b) use Confidential Information of the Company to solicit the business of any customer of the Company, where I had contact with such customer during the period of my employment with the Company, and which business is competitive with any significant part of the business conducted by the Company or any subsidiary or affiliate thereof at the time of termination of my employment or as contemplated to be conducted by the Company at such time.

In connection with the foregoing, I acknowledge and agree that the identity, appropriate knowledge of personnel, research and/or product requirements, volume and frequency of orders, and price sensitivity of customers of the Company are not publicly available information and constitute valuable trade secrets of the Company.

8. Photography Consent, Waiver, And Release. Upon execution of this Agreement, I agree to sign the Photography Consent, Waiver and Release attached as **Exhibit D** hereto.

9. Conflict of Interest Guidelines. I agree to diligently adhere to the Conflict of Interest Guidelines attached as **Exhibit E** hereto.

Initial: /s/ MA /s/ JJN

10. Representations. I agree to execute any proper oath or verify any proper document required to carry but the terms of this Agreement. I represent that my performance of all the terms of this Agreement will not breach any agreement to keep in confidence proprietary information acquired by me in confidence or in trust prior to my employment by the Company. I have not entered into, and I agree I will not enter into, any oral or written agreement in conflict herewith.

11. Arbitration and Equitable Relief.

(a) **Arbitration.** Except as provided in Section 11(b) below, I agree that any dispute or controversy arising out of or relating to any interpretation, construction, performance or breach of this Agreement, shall be settled by binding arbitration conducted by a single, neutral arbitrator associated with the American Arbitration Association in San Mateo County, California, in accordance with the rules then in effect of the American Arbitration Association. The arbitrator may grant injunctions or other relief in such dispute or controversy. The decision of the arbitrator shall be final, conclusive and binding on the parties to the arbitration. Judgment may be entered on the arbitrator's decision in any court having jurisdiction. The Company shall pay the costs and expenses of the arbitration, including all administrative and arbitrator fees, and each of us shall separately pay our counsel fees. However, the arbitrator shall be empowered to make awards of costs or fees as provided by law.

(b) **Equitable Remedies.** I agree that it would be impossible or inadequate to measure and calculate the Company's damages from any breach of the covenants set forth in this Agreement. Accordingly, I agree that if I breach any provision of this Agreement, the Company will have available, in addition to any other right or remedy available, the right to obtain an injunction from a court of competent jurisdiction restraining such breach or threatened breach and to specific performance of any such provision of this Agreement.

12. Non-Disparagement. I agree that, during employment with Company and thereafter, I will not make comments, whether oral or in writing, that tend to disparage or injure the Company, its officers, directors, agents, employees, technology, businesses, products or services. Nothing in this Agreement will be construed to preclude me from complying with the terms of a validly issued subpoena.

13. General Provisions.

(a) **Governing Law; Consent to Personal Jurisdiction.** This Agreement will be governed by the laws of the State of California exclusively, as such laws apply to contracts between California residents performed entirely within California. I hereby expressly consent to the personal jurisdiction of the state and federal courts located in San Mateo County, California for any lawsuit filed there against me by the Company arising from or relating to this Agreement.

(b) **Entire Agreement.** This Agreement sets forth the entire agreement and understanding between the Company and me relating to the subject matter herein and merges all prior and contemporaneous discussions between us, including any previous confidentiality agreements that I may have entered into with the Company. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, will be effective unless in writing signed by both parties. Any subsequent change or changes in my duties, salary or compensation will not affect the validity or scope of this Agreement.

Initial: /s/ MA /s/ JJN

(c) **Severability.** If one or more of the provisions in this Agreement are deemed void by law, then the remaining provisions will continue in full force and effect.

(d) **Successors and Assigns.** This Agreement will be binding upon my heirs, executors, administrators and other legal representatives and will be for the benefit of the Company, its successors, and assigns.

(e) **Survival.** The rights and obligations of the parties to this Agreement will survive termination of my employment with Company.

(f) **Counterparts.** This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original and all of which together shall be deemed to be one and the same instrument.

[SIGNATURE PAGE FOLLOWS]

Initial: /s/ MA /s/ JJN

I HAVE READ THIS AGREEMENT CAREFULLY AND I UNDERSTAND AND ACCEPT THE OBLIGATIONS WHICH IT IMPOSES UPON ME WITHOUT RESERVATION. NO PROMISES OR REPRESENTATIONS HAVE BEEN MADE TO ME TO INDUCE ME TO SIGN THIS AGREEMENT. I SIGN THIS AGREEMENT VOLUNTARILY AND FREELY, IN DUPLICATE, WITH THE UNDERSTANDING THAT ONE COUNTERPART WILL BE RETAINED BY COMPANY AND THE OTHER COUNTERPART WILL BE RETAINED BY ME.

Date: 10-18-2016

/s/ Michael Aldridge

Signature

Michael Aldridge

Printed

CODEXIS, INC.

By: /s/ John Nicols

Title: President & CEO

Date: Oct 17/2016

Initial: /s/ MA /s/ JJJ

Exhibit A

**LIST OF PRIOR INVENTIONS
(INCLUDING ORIGINAL WORKS OF AUTHORSHIP)**

Title

Date

Identifying Number
Or Brief Description

Initial: /s/ MA /s/ JJN

EXHIBIT B

**CALIFORNIA LABOR CODE SECTION 2870
EMPLOYMENT AGREEMENTS; ASSIGNMENT OF RIGHTS**

“(a) Any provision in an employment agreement which provides that an employee shall assign, or offer to assign, any of his or her rights in an invention to his or her employer shall not apply to an invention that developed entirely on his or her own time without using the employer’s equipment, supplies, facilities, or trade secret information except for those inventions that either:

(1) Relate at the time of conception or reduction to practice of the invention to the employer’s business, or actual or demonstrably anticipated research or development of the employer.

(2) Result from any work performed by the employee for the employer.

(b) To the extent a provision in the employment agreement purports to require an employee to assign an invention otherwise excluded from being required to be assigned under subdivision (a), the provision is against the public policy of this state and is unenforceable.”

Initial: /s/ MA /s/ JJN

EXHIBIT C

CODEXIS, INC.

TERMINATION CERTIFICATION

This is to certify that I do not have in my possession, nor have I failed to return, any devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings, blueprints, sketches, materials, equipment, other documents or property, or reproductions of any aforementioned items belonging to Codexis, Inc., its subsidiaries, affiliates, successors or assigns, except where authorized in writing.

I further certify that I have complied with all the terms of the Codexis, Inc. Employee Confidential Information and Inventions Assignment Agreement signed by me, including the reporting of any inventions and original works of authorship (as defined therein), conceived or made by me (solely or jointly with others) covered by that agreement.

I further agree that, in compliance with the Employee Confidential Information and Inventions Assignment Agreement, I will preserve as confidential all trade secrets, confidential knowledge, data or other proprietary information relating to products, processes, know-how, designs, formulas, developmental or experimental work, computer programs, data bases, other original works of authorship, customer lists, business plans, financial information or other subject matter pertaining to any business of Codexis, Inc. or any of its employees, clients, consultants, or licensees.

The Federal **Defend Trade Secrets Act**. 18 U.S.C. § 1833(b) states:

“An individual shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that— (A) is made—(i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.”

Accordingly, I have the right to disclose in confidence trade secrets to Federal, State, and local government officials, or to an attorney, for the sole purpose of reporting or investigating a suspected violation of law. I also have the right to disclose trade secrets in a document filed in a lawsuit or other proceeding, but only if the filing is made under seal and protectable from public disclosure. Nothing in this Certification is intended to conflict with 18 U.S.C. § 1833(b) or create liability for disclosures of trade secrets that are expressly allowed by 18 U.S.C. § 1833(b).

Initial: /s/ MA /s/ JJN

I further agree that in compliance with the Employee Confidential Information and Inventions Assignment Agreement, for twenty-four (24) months from this date: (a) I will not use confidential information to solicit, induce, recruit or encourage any of the Company's employees to leave their employment, either for myself or for any other person or entity; and (b) I will not use confidential information to solicit the business of any customer of the Company, which business is competitive with any significant part of the business conducted by the Company or any subsidiary or affiliate thereof at the time of termination of my employment or as contemplated to be conducted by the Company at such time.

Date: __

—

(Employee's Signature)

Michael Aldridge

(Type/Print Employee's Name)

Initial: /s/ MA /s/ JJN

EXHIBIT D

CODEXIS, INC.

PHOTOGRAPHY CONSENT, WAIVER, AND RELEASE

For good and valuable consideration, I hereby consent and give permission to Codexis, Inc. ("Codexis") or its agent, to photograph, image and/or videotape me, my property, and/or myself as included with others (such photographs, images, and/or videotapes, "Photographs"). I understand that any such Photographs, and all rights associated with them, will belong solely and exclusively to Codexis and Codexis shall have the irrevocable and absolute right to copyright, duplicate, reproduce, alter, display, distribute, and/or publish them in any manner, for any purpose, and in any form including, but not limited to, print, electronic, video, and/or Internet without notifying me.

I voluntarily waive any and all rights I may now or hereafter have with respect to any such Photographs, including any compensation, ownership, copyright, and privacy rights and any right to inspect or approve such Photographs and/or copy, print or other materials that may be used in connection with them, whether now or in the future, whether that use is known or unknown to me, I hereby waive any right to inspect or approve of any finished Photographs whether printed or electronic, that may be used now or in the future, whether that use is known or unknown to me, and I forever waive any right to royalties or other compensation arising from or related to the use of the Photographs. I hereby release and discharge, and agree to hold harmless, Codexis, its officers, agents and employees, and all persons acting under its permission or authority, from any claims, losses, damages or liability arising from or related to such Photographs and/or their use under any circumstances.

This consent, waiver, and release will be binding upon the heirs, executors, administrators and other legal representatives of myself, and will be for the benefit of Codexis, its successors and assigns.

I HAVE READ AND FULLY UNDERSTAND THE CONTENTS OF THIS CONSENT, WAIVER, AND RELEASE FORM, AND I SIGN IT FREELY AND VOLUNTARILY.

/s/ Michael Aldridge

Name: Michael Aldridge

Date: 10-18-2016

Initial: /s/ MA /s/ JJN

EXHIBIT E

CONFLICT OF INTEREST GUIDELINES

It is the policy of Codexis, Inc., to conduct its affairs in strict compliance with this letter and spirit of the law and to adhere to the highest principles of business ethics. Accordingly, all officers, employees and independent contractors must avoid activities that are in conflict, or give the appearance of being in conflict, with these principles and with the interests of the company. The following are potentially compromising situations that must be avoided. Any exceptions must be reported to the Chief Executive Officer and written approval for continuation must be obtained.

1. Revealing confidential information to outsiders or misusing confidential information. Unauthorized divulging of information is a violation of this policy whether or not for personal gain and whether or not harm to the company is intended. (The Employee Confidential Information and Inventions Assignment Agreement elaborates on this principle and is a binding agreement.)
2. Accepting or offering substantial gifts, excessive entertainment, favors or payments which may be deemed to constitute undue influence or otherwise be improper or embarrassing to Codexis, Inc.
3. Participating in civic or professional organizations that might involve divulging confidential information of the company.
4. Initiating or approving personnel actions affecting reward or punishment of employees or applicants where there is a family relationship or is or appears to be a personal or social involvement.
5. Initiating or approving any form of harassment of employees based upon their age, sex, race, ethnicity, national origin, or on any other protected basis.
6. Investing or holding outside directorship in suppliers, customers, or competing companies, including financial speculations, where such investment or directorship might influence in any manner a decision or course of action of the company.
7. Borrowing from or lending to employees, customers or suppliers.
8. Acquiring any business opportunity of interest to Codexis, Inc.
9. Improperly using or disclosing to the company any proprietary information or trade secrets of any former or concurrent employer or other person or entity with whom obligations of confidentiality exist.
10. Unlawfully discussing prices, costs, customers, sales or markets with competing companies or their employees.
11. Making any unlawful agreement with distributors with respect to prices.

Initial: /s/ MA /s/ JJN

12. Improperly using or authorizing the use of any inventions that are the subject of patent claims of any other person or entity.
13. Engaging in any conduct that is not in Codexis, Inc.'s best interest.

Each officer, employee and independent contractor must take every necessary action to ensure compliance with these guidelines and to bring problem areas to the attention of higher management for review. Violations of this conflict of interest policy may result in discharge without warning.

Initial: /s/ MA /s/ JJN

SEVENTH AMENDMENT TO LEASE

This Seventh Amendment to Lease (“**Amendment**”) is entered into, and dated for reference purposes, as of October 11, 2016 (the “**Execution Date**”) by and between METROPOLITAN LIFE INSURANCE COMPANY, a New York corporation (“**Landlord**”), and CODEXIS, INC., a Delaware corporation (“**Tenant**”), with reference to the following facts (“**Recitals**”):

A. Landlord and Tenant are the parties to that certain lease which is comprised of the following (collectively, the “**Existing Lease**”): that certain Lease, dated October ___ [sic], 2003, entered into by and between Tenant, as tenant and Landlord, as landlord (“**Original Lease**”); as amended by that certain First Amendment to Lease dated as of June 1, 2004, that certain Second Amendment to Lease (the “**Second Amendment**”) dated as of March 9, 2007, that certain Third Amendment to Lease dated as of March 31, 2008, that certain Fourth Amendment to Lease dated as of September 17, 2010, that certain Fifth Amendment to Lease dated March 16, 2011 and that certain Sixth Amendment to Lease dated September 27, 2012 (the “**Sixth Amendment**”), for certain premises (the “**Premises**”) containing approximately **107,159** rentable square feet, comprised of the following: (i) approximately 11,158 rentable square feet commonly known as 501 Chesapeake Drive, Redwood City, California (the “**501 Chesapeake Space**”), (ii) approximately 10,597 rentable square feet commonly known as 200 Penobscot Drive, Redwood City, California (the “**200 Penobscot Space**”), (iii) approximately 17,627 rentable square feet commonly known as 220 Penobscot Drive, Redwood City, California (the “**220 Penobscot Space**”), (iv) approximately 37,856 rentable square feet commonly known as 400 Penobscot Drive, Redwood City, California (the “**400 Penobscot Space**”), and (v) approximately 29,921 rentable square feet commonly known as 101 Saginaw Drive, Redwood City, California (the “**101 Saginaw Space**”), in the Project (commonly known as Seaport Centre in Redwood City, California), all as more particularly described in the Existing Lease.

B. Landlord and Tenant desire to provide for (i) the extension of the Term solely as to the 501 Chesapeake Space; and (ii) 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. 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. 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; provided, however, that the term “Lease” as used herein and, from and after the Execution Date, in the Existing Lease shall refer to the Existing Lease as modified by this Amendment.

SECTION 2. REMEASUREMENT. Landlord and Tenant acknowledge and agree that Landlord has remeasured the project on which the Building is located (the “**Project**”), the Building and the 501 Chesapeake Space, and that, according to such remeasurement: (a) the rentable square footage of the Project is 537,362 rentable square feet and accordingly, effective as of the Execution Date, all references to the “Rentable Area of the Project” in the Lease are hereby amended to refer to “537,362 rentable square feet”; (b) the rentable square footage of Building 3 is 37,718 rentable square feet and accordingly, effective as of the Execution Date, all references to the “Rentable Area of Building 3” in the Lease are hereby amended to refer to “37,718 rentable square feet”; (c) the

rentable square footage of the Phase I is 301,703 rentable square feet and accordingly, effective as of the Execution Date, all references to the “Rentable Area of Phase I” in the Lease are hereby amended to refer to “301,703 rentable square feet”; and (d) the rentable square footage of the 501 Chesapeake Space is 11,020 rentable square feet and accordingly, effective as of the 501 Chesapeake Third Extension Commencement Date (as defined below), and continuing throughout the 501 Chesapeake Third Extended Term (as defined below), all references to the “Rentable Area of the Premises” in the Lease are hereby amended to refer to “11,020 rentable square feet”.

SECTION 3. EXTENSION OF TERM FOR THE 501 CHESAPEAKE SPACE. Landlord and Tenant acknowledge and agree that, notwithstanding any provision of the Existing Lease to the contrary, the current Term, solely with respect to the 501 Chesapeake Space, pursuant to the Existing Lease will expire on January 31, 2017, and that the Term of the Lease solely for the 501 Chesapeake Space is hereby extended for the period of sixty (60) months (the “**501 Chesapeake Third Extended Term**”) commencing on February 1, 2017 (the “**501 Chesapeake Third Extension Commencement Date**”) and expiring January 31, 2022 (hereafter, the “**Third Extended 501 Chesapeake 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 the first option to extend the current Term for the 501 Chesapeake Space pursuant to Section 7(b) of the Sixth Amendment, whether or not in accordance with any other provisions, if any, of the Existing Lease regarding renewal or extension of the 501 Chesapeake Space.

SECTION 4. MONTHLY BASE RENT FOR 501 CHESAPEAKE THIRD EXTENDED TERM. Notwithstanding any provision of the Existing Lease to the contrary, commencing on the 501 Chesapeake Third Extension Commencement Date and continuing through the Third Extended 501 Chesapeake Expiration Date, the amount of Monthly Base Rent payable by Tenant for the 501 Chesapeake Space shall be as follows:

Period from/to	Monthly Base Rent
February 1, 2017 – January 31, 2018	\$36,366.00
February 1, 2018 – January 31, 2019	\$37,456.98
February 1, 2019 – January 31, 2020	\$38,580.69
February 1, 2020 – January 31, 2021	\$39,738.11
February 1, 2021 – January 31, 2022	\$40,930.25

SECTION 5. TENANT’S SHARE. Notwithstanding any provision of the Existing Lease to the contrary, during the 501 Chesapeake Third Extended Term, Tenant’s Building 3 Share, Tenant’s Phase I Share, and Tenant’s Project Share are as follows:

- Tenant’s Building 3 Share: 29.22%
- Tenant’s Phase I Share: 3.65%
- Tenant’s Project Share: 2.05%

SECTION 6. "AS IS" CONDITION. Notwithstanding any provision of the Existing Lease to the contrary, Tenant is in possession of the 501 Chesapeake Space and accepts the same in its "AS IS" condition existing on the Execution Date, 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 same; 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 in any portion of the Premises.

SECTION 7. EXISTING TENANT ADDITIONS. Tenant shall not be required to remove any Tenant Additions existing in the 501 Chesapeake Space as of the Execution Date.

SECTION 8. OPTION TO EXTEND. Tenant has exercised its first option to extend the Term of the Lease with respect to the 501 Chesapeake Space and has one option to extend the Term with respect to the 501 Chesapeake Space remaining pursuant to Section 7(b) of the Sixth Amendment.

SECTION 9. NEGOTIATION RIGHT. Landlord and Tenant acknowledge and agree that the Negotiation Right with respect to 525 Chesapeake Drive has terminated.

SECTION 10. CHANGE OF ADDRESS. Landlord's Address set forth in the Basic Lease Provisions of the Original Lease, as amended by Section 14 of the Second Amendment, is hereby deleted in its entirety and replaced with the following:

"Metropolitan Life Insurance Company
c/o Seaport Centre Manager
701 Chesapeake Drive
Redwood City, CA 94063

with copies to the following:

Metropolitan Life Insurance Company
425 Market Street, Suite 1050
San Francisco, CA 94105
Attention: Director, EIM

and

Metropolitan Life Insurance Company
425 Market Street, Suite 1050
San Francisco, CA 94105
Attention: Associate General Counsel"

SECTION 11. LIMITATION OF LANDLORD'S LIABILITY. Notwithstanding any provision of the Existing Lease to the contrary (including, without limitation, Section 26.08 of the Original Lease), Tenant agrees, on its behalf and on behalf of its successors and assigns, that any liability or obligation of Landlord in connection with this Lease shall only be enforced against Landlord's equity interests in the Project up to a maximum of Five Million Dollars (\$5,000,000.00) and in no event against any other assets of the Landlord, or Landlord's officers

or directors or partners, and that any liability of Landlord with respect to the Lease shall be so limited and Tenant shall not be entitled to any judgment in excess of such amount.

SECTION 12. TIME OF ESSENCE. Without limiting the generality of any other provision of the Existing Lease, time is of the essence to each and every term and condition of this Amendment.

SECTION 13. BROKERS. Notwithstanding any other provision of the Existing Lease to the contrary, Tenant represents that in connection with this Amendment it is represented by Kidder Mathews (“**Tenant’s Broker**”) and, except for Tenant’s Broker and 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 Newmark Cornish & Carey (“**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. Tenant is not obligated to pay or fund any amount to Landlord’s Broker and Tenant’s Broker, and Landlord hereby agrees to pay such commission, if any, to which Landlord’s Broker or Tenant’s Broker is entitled in connection with the subject matter of this Amendment pursuant to Landlord’s separate written agreement with Landlord’s Broker and/or Tenant’s Broker, as applicable. The provisions of this Section shall survive the expiration or earlier termination of the Lease.

SECTION 14. 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 Original Lease shall apply.

SECTION 15. 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 16. 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 17. 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 18. RATIFICATION. Tenant represents to Landlord that: (a) the Existing Lease is in full force and effect and has not been modified except as provided by this Amendment; (b) as of the Execution Date, 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 (except for any subleases that have been consented to by Landlord in writing).

SECTION 19. AUTHORITY. 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 Tenant’s authority.

SECTION 20. DISCLOSURE REGARDING CERTIFIED ACCESS SPECIALIST. Pursuant to California Civil Code Section 1938, Landlord hereby notifies Tenant that as of the date of this Amendment, the Premises has not undergone inspection by a “Certified Access Specialist” to determine whether the Premises meet all applicable construction-related accessibility standards under California Civil Code Section 55.53.

SECTION 21. ENERGY UTILITY USAGE. If Tenant is billed directly by a public utility with respect to Tenant’s energy usage at the Premises, then, upon request, Tenant shall provide monthly energy utility usage for the Premises to Landlord for the period of time requested by Landlord (in electronic or paper format) or, at Landlord’s option, provide any written authorization or other documentation required for Landlord to request information regarding Tenant’s energy usage with respect to the Premises directly from the applicable utility company.

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, and the signature of any party to any counterpart shall be deemed a signature to, and may be appended to, any other counterpart. Each duplicate and counterpart shall be equally admissible in evidence, and each original shall fully bind each party who has executed it.

[Signature Page Follows]

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/ John J. Nicols

Print Name: John J. Nicols

Title: President and CEO

LANDLORD:

METROPOLITAN LIFE INSURANCE COMPANY,
a New York corporation

By: /s/ Leland Low

Print Name: Leland Low

Title: Director

CERTIFICATION

I, John J. Nicols, 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: November 8, 2016

/s/ John J. Nicols

John J. Nicols
President and Chief Executive Officer
(principal executive officer)

CERTIFICATION

I, Gordon Sangster, 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: November 8, 2016

/s/ Gordon Sangster

Gordon Sangster
Senior Vice President and Chief Financial Officer
(principal financial and accounting officer)

**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 September 30, 2016, as filed with the Securities and Exchange Commission (the "Report"), John J. Nicols, President and Chief Executive Officer of the Company and Gordon Sangster, 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: November 8, 2016

/s/ John J. Nicols

John J. Nicols
President and Chief Executive Officer
(principal executive officer)

/s/ Gordon Sangster

Gordon Sangster
Senior Vice President and Chief Financial Officer
(principal financial and accounting officer)