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, 2014

OR

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

For the transition period from to

Commission file number: 001-34705

Codexis, Inc.

(Exact name of registrant as specified in its charter)

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

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

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

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

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

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

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

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

As of October 31, 2014, there were 39,549,301 shares of the registrant's Common Stock, par value $0.0001 per share, outstanding.

Codexis, Inc.

Quarterly Report on Form 10-Q

For The Three Months Ended September 30, 2014

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

	September 30, 2014	December 31, 2013
Assets		
Current assets:		
Cash and cash equivalents	$ 21,522	$ 22,130
Short-term investments	—	3,005
Accounts receivable, net of allowances of $513 at September 30, 2014 and $460 at December 31, 2013	3,088	5,413
Inventories, net	1,943	1,487
Prepaid expenses and other current assets	1,652	1,567
Assets held for sale	—	2,179
Total current assets	28,205	35,781
Restricted cash	711	711
Marketable securities	1,031	795
Property and equipment, net	4,374	8,446
Intangible assets, net	7,029	9,560
Goodwill	3,241	3,241
Other non-current assets	201	306
Total assets	$ 44,792	$ 58,840
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 2,542	$ 3,961
Accrued compensation	2,376	3,625
Other accrued liabilities	2,050	1,612
Deferred revenue	4,036	2,001
Total current liabilities	11,004	11,199
Deferred revenue, net of current portion	4,368	1,114
Other long-term liabilities	4,213	5,044
Total liabilities	19,585	17,357
Commitments and contingencies (note 11)		
Stockholders' equity:		
Preferred stock, $0.0001 par value; 5,000 shares authorized, none issued and outstanding	—	—
Common stock, $0.0001 par value; 100,000 shares authorized at September 30, 2014 and December 31, 2013; 39,510 and 38,351 shares issued and outstanding at September 30, 2014 and December 31, 2013, respectively	4	4
Additional paid-in capital	301,365	298,370
Accumulated other comprehensive income (loss)	113	(32)
Accumulated deficit	(276,275)	(256,859)
Total stockholders' equity	25,207	41,483
Total liabilities and stockholders' equity	$ 44,792	$ 58,840

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,	
	2014	2013	2014	2013
Revenue:				
Biocatalyst product sales	$ 2,562	$ 1,076	$ 8,323	$ 15,161
Biocatalyst research and development	3,364	2,028	7,176	4,936
Revenue sharing arrangement	1,546	839	5,617	2,300
Total revenue	7,472	3,943	21,116	22,397
Costs and operating expenses:				
Cost of biocatalyst product sales	1,532	494	6,179	9,790
Research and development	5,038	6,831	17,708	22,776
Selling, general and administrative	5,157	5,832	16,791	21,126
Total costs and operating expenses	11,727	13,157	40,678	53,692
Loss from operations	(4,255)	(9,214)	(19,562)	(31,295)
Interest income	3	9	15	53
Other expenses	(57)	(22)	(183)	(288)
Loss before income taxes	(4,309)	(9,227)	(19,730)	(31,530)
Provision for (benefit from) income taxes	253	35	(314)	(41)
Net loss	$ (4,562)	$ (9,262)	$ (19,416)	$ (31,489)
Net loss per share, basic and diluted	$ (0.12)	$ (0.24)	$ (0.51)	$ (0.83)
Weighted average common shares used in computing net loss per share, basic and diluted	38,450	38,102	38,063	38,002

See accompanying notes to the unaudited condensed consolidated financial statements

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2014	2013	2014	2013
Net loss	$ (4,562)	$ (9,262)	$ (19,416)	$ (31,489)
Other comprehensive income (loss):				
Unrealized gain (loss) on marketable securities, net of tax expense of $160 for the three months and tax benefit of $89 for the nine months ended September 30, 2014, and $17 for the three months and $172 for the nine months ended September 30, 2013.	(261)	32	145	275
Other comprehensive income (loss)	(261)	32	145	275
Total comprehensive loss	$ (4,823)	$ (9,230)	$ (19,271)	$ (31,214)

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,	
	2014	**2013**
Operating activities:		
Net loss	$ (19,416)	$ (31,489)
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	2,679	5,307
Impairment of property and equipment	1,841	—
Change in fair value of assets held for sale	886	—
(Gain) loss on disposal of property and equipment	(115)	62
Gain on sale of Hungarian subsidiary	(760)	—
Stock-based compensation	3,630	3,361
Amortization of premium (accretion of discount) on marketable securities	2	(63)
Bad debt expense	53	328
Changes in operating assets and liabilities:		
Accounts receivable	2,316	833
Inventories, net	(456)	(614)
Prepaid expenses and other current assets	(734)	4
Other assets	(74)	(37)
Accounts payable	(1,418)	(2,164)
Accrued compensation	(1,100)	(155)
Other accrued liabilities	194	1,080
Deferred revenue	5,288	1,923
Net cash used in operating activities	(4,653)	(19,093)
Investing activities:		
Purchase of property and equipment	(267)	(447)
Proceeds from maturities of marketable securities	3,000	13,410
Proceeds from sale of Hungarian subsidiary, net of selling costs	1,500	—
Proceeds from the sale of assets held for sale	281	—
Proceeds from sale of property and equipment	166	150
Decrease in restricted cash	—	600
Net cash provided by investing activities	4,680	13,713
Financing activities:		
Proceeds from exercises of options to purchase common stock	180	288
Taxes paid related to net share settlement of equity awards	(815)	—
Net cash provided by (used in) financing activities	(635)	288
Net decrease in cash and cash equivalents	(608)	(5,092)
Cash and cash equivalents at the beginning of the period	22,130	32,003
Cash and cash equivalents at the end of the period	$ 21,522	$ 26,911

See accompanying notes to the unaudited condensed consolidated financial statements

Note 1. Description of Business

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

Codexis, Inc. was incorporated in the State of Delaware in January 2002. 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 or microbes 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 technology platform is able to overcome many of these limitations, allowing us to evolve and optimize biocatalysts to perform specific and desired chemical reactions at commercial scale.

We have commercialized our technology and products in the pharmaceuticals market, which is our primary business focus. Our pharmaceutical customers, which include several of the largest global pharmaceutical companies, use our technology, products and services in their manufacturing processes and process development, including in the production of some of the world's best-selling and fastest growing drugs.

We have recently begun to use our technology to develop biocatalysts for use in the fine chemicals market. The fine chemicals market is similar to our pharmaceutical business and consists of several large market verticals, including: food, animal feed, polymers, flavors, fragrances, and agricultural chemicals.

We create our products by applying our CodeEvolver® directed evolution technology platform, which introduces genetic mutations into microorganisms, giving rise to changes in the enzymes that they produce. Once we identify potentially beneficial mutations, we test combinations of these mutations until we have created variant enzymes that exhibit marketable performance characteristics superior to competitive products. This process allows us to make continuous, efficient improvements to the performance of our enzymes. We are also pursuing opportunities to provide licenses to certain pharmaceutical customers to use our CodeEvolver® platform for their internal development purposes.

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, 2013. The condensed consolidated balance sheet at December 31, 2013 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 its financial position as of September 30, 2014 and results of its operations and comprehensive loss for the three months and nine months ended September 30, 2014 and 2013, and cash flows for the nine months ended September 30, 2014 and 2013. 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 the amounts of Codexis, Inc. and its wholly-owned subsidiaries in the United States, Brazil, Hungary (through the sale date of March 13, 2014), India, Mauritius, the Netherlands, and Singapore (dissolved in October 2014). 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, assets held for sale, 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. The Company's chief operating decision maker is Codexis' 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. The Company has 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, the Company has a single reporting segment.

Revenue Recognition

We recognize revenue from the sale of our biocatalyst products, biocatalyst research and development agreements and profit sharing arrangements. 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.

Revenue from Multiple Element Arrangements

We account for multiple element arrangements, such as license and platform technology transfer agreements 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. We allocate revenue to each non-contingent element based on the relative selling price of each element. When applying the relative selling price method, we determine the selling price for each deliverable using vendor-specific objective evidence (“VSOE”) of selling price, if it exists, or third-party evidence (“TPE”) of selling price, if it exists. If neither VSOE nor TPE of selling price exist for a deliverable, we use the best estimated selling price for that deliverable. Revenue allocated to each element is then recognized based on when the basic four revenue recognition criteria are met for each element.

Where a portion of non-refundable up-front fees or other payments received are allocated to continuing performance obligations under the terms of a collaborative arrangement, they are recorded as deferred revenue and recognized as revenue or as an accrued liability and recognized as a reduction of research and development expenses ratably over the term of our estimated performance period under the agreement. We determine the estimated performance periods, and they 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.

Milestones

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.

Biocatalyst Product Sales

Biocatalyst product sales consist of sales of biocatalyst intermediates, active pharmaceutical ingredients 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, contingent payments upon achievement of contractual criteria, and royalty fees based on the licensee's product sales or cost savings achieved by Codexis' 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 revenue 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 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 revenue from nonrefundable, 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 recognized over the estimated period of continuing performance obligation.

We recognize revenue from other payments received which are contingent solely upon the passage of time or the result of a customer's performance when earned in accordance with the contract terms and when such payments can be reasonably estimated and collectability of such payments is reasonably assured.

We recognize revenue 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 revenue, estimates are made using notification of the sale of licensed products from the licensees.

Revenue Sharing Arrangement

We recognize revenue from a revenue sharing arrangement based upon sales of licensed products by our revenue share partner Exela PharmSci, Inc. ("Exela") (see Note 10, "Related Party Transactions"). We recognize revenue 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.

Allowances

Allowances against receivable balances primarily relate to product returns and prompt pay sales discounts, and are recorded in the same period that the related revenue is recognized, resulting in a reduction in biocatalyst product sales revenue and the reporting of accounts receivable net of allowances.

We estimate an allowance for doubtful accounts through specific identification of potentially uncollectible accounts receivable based on an analysis of our accounts receivable aging. Uncollectible accounts receivable are written off against the allowance for doubtful accounts when all efforts to collect them have been exhausted. Recoveries are recognized when they are received. Actual collection losses may differ from our estimates and could be material to our consolidated financial position, results of operations, and cash flows.

Cost of Biocatalyst Product Sales

Cost of biocatalyst product sales comprises both internal and third party fixed and variable costs including amortization of purchased technology, materials and supplies, labor, facilities and other overhead costs associated with our 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. Research and development expenses related to FTE services under the research and development agreements approximate the research funding over the term of the respective agreements and are included in research and development expense.

Research and Development Expenses

Research and development expenses consist of costs incurred for internal projects as well as partner-funded collaborative research and development activities. These costs include our direct and research-related overhead expenses, which include salaries and other personnel-related expenses (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 Codexis' equity incentive plans. The Black-Scholes-Merton option valuation model requires the use of assumptions, including the expected term of the award and the expected stock price volatility. We used the "simplified" method as described in Staff Accounting Bulletin No. 107, "Share-Based Payment," for the expected option term because Codexis' historical option exercise data is limited due to its initial public offering in 2010. We used Codexis' 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 option. The expected dividend assumption was based on Codexis' 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 Codexis' 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 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 account for stock awards issued to non-employees based on their estimated fair value determined using the Black-Scholes-Merton option-pricing model. Compensation expense for the stock awards granted to non-employees is recognized based on the fair value of awards as they vest, during the period the related services are rendered.

We have not recognized, and do not expect to recognize in the near future, any income tax benefit 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 Codexis' net operating loss carryforwards.

Foreign Currency Translation

The assets and liabilities of foreign subsidiaries, where the local currency is the functional currency, are translated from their respective functional currencies into United States dollars at the exchange rates in effect at the balance sheet date, with resulting foreign currency translation adjustments recorded in the consolidated statement of comprehensive loss. Revenue and expense amounts are translated at average rates during the period.

Where the United States dollar is the functional currency, 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 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 ofthree months or less at the date of purchase to be cash equivalents. Cash and cash equivalents consist of cash on deposit with banks and money market funds. The majority of 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 $21.5 million at September 30, 2014, and was comprised of cash of $6.9 million and money market funds of $14.6 million.

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, reserves are recorded for the difference between the cost and the estimated market value. These reserves are determined based on significant estimates. In addition, inventories include employee stock-based compensation expenses.

Investment Securities

We invest in debt and equity securities and we classify those investments as available-for-sale. These securities are carried at estimated fair value (see Note 5, "Investment Securities," below) with unrealized gains and losses included in accumulated other comprehensive loss in stockholders' equity. Available-for-sale equity securities and available-for sale debt securities with remaining maturities of greater than one year 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 the 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 Codexis' financial instruments, including cash equivalents, marketable investments, accounts receivable, accounts payable and 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: Quoted prices (unadjusted) in active markets that are accessible at the measurement date for assets or liabilities.

- Level 2: Directly or indirectly observable inputs as of the reporting date through correlation with market data, including quoted prices for similar assets and liabilities in active markets and quoted prices in markets that are not active. Level 2 also includes assets and liabilities that are valued using models or other pricing methodologies that do not require significant judgment since the input assumptions used in the models, such as interest rates and volatility factors, are corroborated by readily observable data from actively quoted markets for substantially the full term of the financial instrument.

- Level 3: Unobservable inputs that are supported by little or no market activity and reflect the use of significant management judgment. These values are generally determined using pricing models for which the assumptions utilize management's estimates of market participant assumptions.

For Level 2 financial instruments, our investment adviser provides monthly account statements documenting the value of corporate bonds and U.S. Treasury obligations based on prices received from an independent third-party valuation service provider. This third party evaluates the types of securities in our investment portfolio and calculates a fair value using a multi-dimensional pricing model that includes a variety of inputs, including quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, interest rates and yield curves observable at commonly quoted intervals, volatilities, prepayment speeds, loss severities, credit risks and default rates that are observable at commonly quoted intervals. As we are ultimately responsible for the determination of the fair value of these instruments, we perform quarterly analyses using prices obtained from another independent provider of financial instrument valuations, to validate that the prices we have used are reasonable estimates of fair value.

Concentrations of Credit Risk

Our financial instruments that are potentially subject to concentration of credit risk primarily consist of: cash equivalents, short-term investments, accounts receivable, marketable securities, and restricted cash. We invest cash that is not required for immediate operating needs principally in money market funds and corporate securities through banks and other financial institutions in the United States, as well as in foreign countries.

Long-Lived and Intangible Assets

Our intangible assets are finite-lived and consist of customer relationships, developed core technology, trade names, 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 Codexis acquired the assets and, for those assets having finite useful lives, are amortized using the straight-line method over their estimated useful lives. Our long-lived assets include property and equipment, and other non-current assets.

We determined that Codexis has 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 Codexis' identifiable cash flow generating capacity. Consequently, we do not believe that identification of independent cash flows associated with Codexis 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 Codexis' condensed consolidated balance sheet as ofSeptember 30, 2014. There has been no significant change in the utilization or estimated life of the Core IP since we acquired the technology patent portfolio from Maxygen.

The carrying value of Codexis' 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 Codexis' 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 Codexis' 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. Codexis' 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 2013, we determined that Codexis' continued annual operating losses and a decline in market price of Codexis' common stock, reduced anticipated future cash flows related to potential CodeXyme® cellulase enzyme and CodeXol® detergent alcohols transactions and reduced future revenue growth to reflect Codexis' most recent outlook were indicators of impairment. As a result, we undertook an impairment analysis in the fourth quarter of 2013.

The results of our fourth quarter 2013 impairment analysis indicated that the undiscounted cash flows for the Asset Group were greater than the carrying value of the Asset Group by approximately 37%. Based on the results obtained, we determined there was no impairment of Codexis' intangible assets as of December 31, 2013. During thenine months ended September 30, 2014, we made no changes to the underlying forecasts nor did we identify any additional indicators of potential impairment of intangible assets or other new information that would have a material impact on the forecast or the impairment analysis prepared as of December 31, 2013.

Goodwill

We determined that Codexis has onlyone operating segment and reporting unit under the criteria in ASC 280, "Segment Reporting." Accordingly, our review of goodwill impairment indicators is performed at the Codexis level. We review goodwill impairment annually in the fourth quarter of each of Codexis' fiscal years 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 Codexis' 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 Codexis' market capitalization as an indicator of fair value. We believe that since its 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 Codexis' reporting unit as a whole to exceed its market capitalization. However, we believe that the fair value measurement need not be based solely on the quoted market price of an individual share of Codexis' 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 Codexis' projected future cash flows expected to be generated from its 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 Codexis' market capitalization be less than the total stockholder's equity as of our annual test date or as of any interim impairment testing date, we would also consider market comparables, recent trends in Codexis' stock price over a reasonable period and, if appropriate, use an income approach to determine whether the fair value of its 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 2013. We concluded that the fair value of the reporting unit exceeded the carrying value and no impairment existed. Based on the results obtained, we determined there was no impairment of Codexis' goodwill as of December 31, 2013. During thenine months ended September 30, 2014, we made no changes to the underlying forecasts nor did we identify any additional indicators of potential impairment of intangible assets or other new information that would have a material impact on the forecast or the impairment analysis prepared as of December 31, 2013.

Restricted Cash

Restricted cash consisted of amounts invested in savings accounts primarily for purposes of securing a standby letter of credit as collateral for Codexis' Redwood City, California facility lease agreement.

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 Codexis' 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 Codexis' 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. With the sale of the Hungarian subsidiary in the quarter ended March 31, 2014, the related net operating losses and other tax attributes are no longer available to Codexis. The related deferred tax assets had a full valuation allowance and, as a result, their removal did not have a material impact to the financial statements.

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 Codexis' tax positions and tax benefits, which may require periodic adjustments and may not accurately anticipate actual outcomes.

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 Codexis should experience such a change of ownership utilization of Codexis' federal and state net operating loss carryforwards could be limited.

Provision for income taxes was $0.3 million for the three months ended September 30, 2014 and benefit from income taxes totaled $0.3 million for the nine months ended September 30, 2014. The total tax benefit for the nine months ended September 30, 2014 primarily consisted of income tax benefit attributable to foreign operations (release of previous tax provision related to a liquidated entity) offset by the tax effect on the unrecognized gain from our investment in CO_2 Solutions, as well as the recognition of previously unrecognized tax benefits. 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.

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 May 2014, the FASB issued Accounting Standards Update ("ASU") 2014-09, "Revenue from Contracts with Customers". This 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). This guidance is effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period, and early application is not permitted. We are currently in the process of evaluating the impact of the pending adoption of ASU 2014-09 on Codexis' consolidated financial statements.

In August 2014, the FASB issued ASU No. 2014-15, "Presentation of Financial Statements—Going Concern (Sub Topic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern". This ASU provides guidance to

an entity's management with principles and definitions that are intended to reduce diversity in the timing and content of disclosures that are commonly provided by entities today in the financial statement footnotes. This ASU is effective for annual periods ending after December 15, 2016, and interim periods within annual periods beginning after December 15, 2016. Early application is permitted for annual or interim reporting periods for which the financial statements have not previously been issued. We are currently evaluating the impact of this ASU on our consolidated financial statements and footnote disclosures.

Note 3. Net Loss per Share

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

Anti-Dilutive Securities

In periods of net loss, the weighted average number of shares outstanding, prior to the application of the treasury stock method, are excluded from the computation of diluted net loss per common share because including such shares would have an anti-dilutive effect. The following shares were not included in the computation of diluted net loss per share (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2014	2013	2014	2013
Options to purchase common stock	3,674	4,805	3,674	4,805
Restricted stock units/awards	1,950	1,665	1,950	1,665
Performance-contingent restricted stock units	774	—	774	—
Warrants to purchase common stock	75	75	75	75
Total shares excluded as anti-dilutive	6,473	6,545	6,473	6,545

Note 4. Collaborative Arrangements

GSK Platform Technology Transfer, Collaboration and License Agreement

In July 2014, Codexis entered into a platform technology license agreement (the "License Agreement") with GlaxoSmithKline ("GSK"). Under the terms of the License Agreement, Codexis granted GSK a license to use its proprietary CodeEvolver® protein engineering platform technology.

We received a $6.0 million up-front licensing fee and we are eligible to receive contingent payments up to$19.0 million, of which $11.5 million are considered milestone payments, over the next three years subject to satisfactory completion of technology transfer milestones. We also have the potential to receive numerous 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.

For up to three years following the end of the three-year period during which we will transfer our CodeEvolver® Platform Technology to GSK, GSK can exercise an option, upon payment of certain option fees, that would extend GSK's license to include certain improvements to the CodeEvolver® Platform Technology that arise during such period. In addition, we are eligible to receive royalties based on net sales, if any, of a limited set of products developed by GSK using Codexis' CodeEvolver® protein engineering platform technology.

The term of the License Agreement continues, unless earlier terminated, until the expiration of all payment obligations under the License Agreement. At any time following the completion of the first technology transfer stage, GSK can terminate the License Agreement by providing 90 days written notice to us. If GSK exercises this termination right during the three-year technology transfer period, GSK will make a one-time termination payment to us.

Under the License 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 and the platform technology transfer (together the "License") represent a unit of accounting. We determined that our

participation in the joint steering committee in connection with the platform technology transfer 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.

The up-front License fee of $6.0 million is being recognized over the technology transfer period of three years. Amounts to be received under the development supply agreement described above will be recognized as revenue to the extent GSK purchases enzymes from us.

As of September 30, 2014, we have a deferred revenue balance of $5.5 million from GSK related to the up-front License fee. We recognized license fees of $0.5 million for the three and nine months ended September 30, 2014, as biocatalyst research and development revenue.

Merck Research and Development Collaboration

On February 1, 2012, Codexis entered into a five-year Sitagliptin Catalyst Supply Agreement ("Sitagliptin Catalyst Supply Agreement") whereby Merck Sharp and Dohme Corp. ("Merck") may obtain commercial scale substance for use in the manufacture of one of its products, Januvia®. Merck may extend the term of the Sitagliptin Catalyst Supply Agreement for an additional five years at its sole discretion.

The Sitagliptin Catalyst Supply Agreement calls for Merck to pay an annual license fee for the rights to the Sitagliptin technology each year for the term of the Sitagliptin Catalyst Supply Agreement. The license fee is being recognized as collaborative research and development revenue ratably over the five year term of the Sitagliptin Catalyst Supply Agreement. As of September 30, 2014, we have a deferred revenue balance of $1.6 million from Merck related to the license fee. We recognized license fees of $0.5 million for three months ended September 30, 2014 and 2013, and $1.5 million for the nine months ended September 30, 2014, and $1.3 million for the nine months ended September 30, 2013, as biocatalyst research and development revenue. In addition, pursuant to the Sitagliptin Catalyst Supply Agreement, Merck may purchase supply from us for a fee based on contractually stated prices.

Arch Manufacturing Collaboration

From 2006 through November 2012, Arch of Mumbai, India manufactured substantially all of Codexis' commercialized intermediates and active pharmaceutical ingredients ("APIs") for sale to generic and innovative pharmaceutical manufacturers. Prior to November 2012, Arch produced atorva-family APIs and intermediates for us and it sold these directly to end customers primarily in India. In November 2012, Codexis entered into a new commercial arrangement with Arch (the "New Arch Enzyme Supply Agreement") whereby we agreed to supply Arch with enzymes for use in the manufacture of atorva family products and Arch agreed to market these products directly to end customers. We recognized product sales revenue for the sale of enzyme inventory to Arch and its affiliates pursuant to the New Arch Enzyme Supply Agreement of $0.2 million for the three months and $0.3 million for the nine months ended September 30, 2014, and nil for the three months and $2.1 million for the nine months ended September 30, 2013, as biocatalyst product sales revenue. During 2013, we recorded an allowance for bad debt of approximately $387,000 due to a write-off of an accounts receivable from Arch.

Note 5. Investment Securities

At September 30, 2014, investment securities classified as available-for-sale equity securities and money market funds consisted of the following (in thousands):

	September 30, 2014				
	Adjusted Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value	Average Contractual Maturities
					(in days)
Money market funds (1)	$ 14,600	$ —	$ —	$ 14,600	n/a
Common shares of CO_2 Solutions (2)	563	468	—	1,031	n/a
Total	$ 15,163	$ 468	$ —	$ 15,631	

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

(2) Common shares of CO_2 Solutions are classified in marketable securities on Codexis' condensed consolidated balance sheets.

At December 31, 2013, investment securities classified as available-for-sale equity securities and money market funds consisted of the following (in thousands):

	December 31, 2013				
	Adjusted Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value	Average Contractual Maturities
					(in days)
Money market funds (1)	$ 16,089	$ —	$ —	$ 16,089	n/a
Corporate bonds	1,002	3	—	1,005	140
U.S. Treasury obligations	2,000	—	—	2,000	59
Common shares of CO_2 Solutions (2)	563	232	—	795	n/a
Total	$ 19,654	$ 235	$ —	$ 19,889	

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

(2) Common shares of CO_2 Solutions are classified in marketable securities on Codexis' condensed consolidated balance sheets.

Note 6. Fair Value Measurements

Fair Value of Financial Instruments

The following table presents the financial instruments that were measured at fair value on a recurring basis at September 30, 2014 by level within the fair value hierarchy (in thousands):

	September 30, 2014			
	Level 1	Level 2	Level 3	Total
Money market funds	$ 14,600	$ —	$ —	$ 14,600
Common shares of CO_2 Solutions	—	1,031	—	1,031
Total	$ 14,600	$ 1,031	$ —	$ 15,631

The following table presents the financial instruments that were measured at fair value on a recurring basis at December 31, 2013 by level within the fair value hierarchy (in thousands):

	December 31, 2013			
	Level 1	Level 2	Level 3	Total
Money market funds	$ 16,089	$ —	$ —	$ 16,089
Corporate bonds	—	1,005	—	1,005
U.S. Treasury obligations	—	2,000	—	2,000
Common shares of CO2 Solutions	—	795	—	795
Total	$ 16,089	$ 3,800	$ —	$ 19,889

Fair Value of Assets Held for Sale

As of December 31, 2013, Codexis had assets held for sale related to lab equipment located in the United States. The fair value of these assets was determined based on Level 3 inputs, primarily sales data for similar assets. For further discussion, see Note 8, "Assets Held for Sale."

There were no assets held for sale at September 30, 2014, and as such there was no fair value to measure on a non-recurring basis at September 30, 2014.

The fair value of assets held for sale atDecember 31, 2013, measured on a nonrecurring basis, is as follows (in thousands):

	December 31, 2013			
	Level 1	Level 2	Level 3	Total
Assets held for sale	$ —	$ —	$ 2,179	$ 2,179

Note 7. Balance Sheets Details

Inventories, net

Inventories, net consisted of the following (in thousands):

	September 30, 2014	December 31, 2013
Raw materials	$ 575	$ 763
Work-in-process	17	31
Finished goods	1,351	693
Inventories, net	$ 1,943	$ 1,487

Property and Equipment, net

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

	September 30, 2014		December 31, 2013
Laboratory equipment	$ 23,069		$ 23,949
Leasehold improvements	9,517		9,493
Computer equipment	3,257		3,196
Office furniture and equipment	1,227		1,228
	37,070		37,866
Less: accumulated depreciation and amortization	(30,880)		(29,461)
	6,190		8,405
Construction in progress	25		41
Property and equipment	6,215		8,446
Less: Impairment of laboratory equipment	(1,841)	(1)	—
Property and equipment, net	$ 4,374		$ 8,446

(1) Plans to utilize certain CodeXol® assets changed in the second quarter of 2014 such that assets with a carrying value of $1.8 million were no longer recoverable. Accordingly, we recorded an impairment charge of $1.8 million, reducing the carrying value to zero (their estimated fair value, net of costs). The impairment charge was recorded within research and development expense for the nine months ended September 30, 2014.

Intangible Assets, net

Intangible assets consisted of the following (in thousands):

	September 30, 2014			December 31, 2013			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted-Average Amortization Period
							(years)
Maxygen intellectual property	$ 20,244	$ (13,215)	$ 7,029	$ 20,244	$ (10,684)	$ 9,560	6

The estimated future amortization expense to be charged to research and development expenses through the year ending December 31, 2016 is as follows (in thousands):

Year ending December 31:	Total
2014 (remaining 3 months)	$ 843
2015	3,374
2016	2,812
	$ 7,029

Goodwill

There were no changes in the carrying value of goodwill of $3,241,000 for the three months and nine months ended September 30, 2014 and 2013.

Note 8. Assets Held for Sale

In the fourth quarter of 2013, we announced that we would begin winding down Codexis' CodeXyme® cellulase enzyme program. As a result of the termination of this research program and corresponding reductions in headcount, we concluded that certain excess research and development equipment, including assets at Codexis' Hungarian subsidiary, were no longer held for use, and these assets were determined to meet the criteria to be classified as held for sale at December 31, 2013. In conjunction with classifying certain assets as held for sale, in 2013, we performed a detailed review of Codexis' excess research and development equipment with the assistance of a third party and determined that the estimated net sales price, less selling costs, was below the carrying value. A charge of $1,571,000 was recorded in the fourth quarter of 2013 to research and development expenses to reduce the value of held for sale assets to their estimated fair market value net of selling expenses. We reclassified the adjusted carrying value to Assets Held for Sale as of December 31, 2013.

In March 2014, we sold our Hungarian subsidiary including all of the equipment at this facility classified as assets held for sale for proceeds of $1.5 million and recognized a gain of $760,000.

During the second quarter of 2014, we changed our plan to sell certain U.S. research and development equipment. Such equipment, which had a carrying value of approximately $333,000, was put back in operational use and classified as held for use. Some of the unutilized equipment reclassified as held for use was exchanged for more suitable research equipment. In addition to the exchange of equipment, we recognized a loss of approximately $188,000. We also decided to expedite the disposition of held for sale assets by selling such assets through auction. As a result of the above changes to our plan to use the excess research and development equipment, we determined that further impairment charges should be recorded in the second quarter of 2014. Total impairment charges related to excess research and development equipment totaled $568,000 for the three months ended June 30, 2014. We disposed of the remaining held for sale equipment in the third quarter of 2014, which resulted in an additional impairment charge of $130,000.

Total assets reclassified as assets held for sale at September 30, 2014, were (in thousands):

Assets Held for Sale	Adjusted Carrying Value
Research & development equipment classified as held for sale at December 31, 2013	$ 2,179
Hungarian assets sold for the three months ended March 31, 2014	(779)
U.S. assets sold for the three months ended March 31, 2014	(6)
Research & development equipment classified as held for sale at March 31, 2014	$ 1,394
Research & development equipment reclassified as held for use	(333)
U.S. assets sold for the three months ended June 30, 2014	(13)
Loss on exchange of assets	(188)
Change in estimated fair value of research equipment during three months ended June 30, 2014	(568)
Research & development equipment classified as held for sale at June 30, 2014	$ 292
U.S. assets sold for the three months ended September 30, 2014	(162)
Change in estimated fair value of research equipment during three months ended September 30, 2014	$ (130)
Research & development equipment classified as held for sale at September 30, 2014	—

Note 9. Sale of Hungarian Subsidiary

On March 13, 2014, we entered into an agreement with Intrexon Corporation to sell 100% of Codexis' equity interests in its Hungarian subsidiary, Codexis Laboratories Hungary Kft, as well as all assets of such subsidiary that were previously classified as held for sale. On March 15, 2014, the sale transaction closed and we received cash proceeds of $1,500,000 from the sale and recorded a net gain of $760,000 which was included in research and development expenses in connection with the sale. As part of the purchase, the buyer obtained all the Hungarian assets held for sale and assumed all employment and facility lease related contract obligations. There were no transaction related costs incurred other than legal fees, which were recorded in selling, general and administrative expenses.

Note 10. Related Party Transactions

Exela PharmSci, Inc.

We signed a commercialization agreement with Exela in 2007, whereby Exela agreed to pay to us a contractual percentage share of Exela's net profit from the sales of licensed products.

CMEA Ventures, which owns approximately 7.4% of Codexis' common stock, owns over 10% of Exela's outstanding capital stock. Thomas R. Baruch, one of Codexis' directors, also serves on the board of directors of Exela and, as a limited partner in the CMEA Ventures funds that hold such shares of Exela, has an indirect pecuniary interest in the shares of Exela held by CMEA Ventures.

We recognized revenue from the revenue sharing arrangement of $1.5 million for the three months and $5.6 million for the nine months ended September 30, 2014, and $0.8 million for the three months and $2.3 million for the nine months ended September 30, 2013. We had no receivables from Exela at September 30, 2014.

Alexander A. Karsner

Alexander A. Karsner was a member of Codexis' board of directors until the expiration of his term at the close of our annual shareholder meeting on June 11, 2014. In addition, Mr. Karsner provided consulting services to Codexis through June 30, 2014. Amounts paid to Mr. Karsner for consulting services was nil for the three months and $60,000 for the nine months ended September 30, 2014, and $30,000 for the three months and $90,000 for the nine months ended September 30, 2013.

Note 11. Commitments and Contingencies

Operating Leases

Codexis' headquarters are located in Redwood City, California where it leases approximately 107,000 square feet of office and laboratory space in four buildings within the same business park from Metropolitan Life Insurance Company ("MetLife"). Codexis entered into the initial lease with MetLife for a portion of this space in 2004 and the lease has been amended numerous times since then to add and subtract space and to amend the terms of the lease, with the latest amendment being in 2012. The various terms for the spaces under the lease have expiration dates that range from January 2017 through January 2020.

As of December 31, 2012, Codexis incurred $3.6 million of capital improvement costs related to the facilities leased from MetLife and received $3.1 million of reimbursements from the landlord out of the tenant improvement and HVAC allowances for the completed construction. The reimbursements are being amortized on a straight line basis over the term of the lease as a reduction in rent expense. As of September 30, 2014, the lease incentive obligation remaining was classified with other long-term liabilities on the condensed consolidated balance sheet for $1.8 million.

As part of a restructuring plan that Codexis undertook in the third quarter of 2012, Codexis began the process of vacating the 101 Saginaw Drive, Redwood City, California space and marketed the space for sublease. In March 2014, Codexis entered into a three-year sublease agreement with a subtenant, which terminates in April 2017, with the option to extend for two consecutive one-year terms thereafter. Sublease income is being recorded as a reduction of Codexis' rent expense and was $0.1 million for the three months and $0.2 million for the nine months ended September 30, 2014.

Codexis' lease obligations for the facility in Hungary were transferred to the buyer of Codexis' Hungarian subsidiary in March 2014.

Rent expense is recognized on a straight-line basis over the term of the lease. In accordance with the terms of the amended lease agreement, we exercised Codexis' right to deliver letters of credit in lieu of a security deposit. The letters of credit in the amount of $0.7 million as of September 30, 2014 were collateralized by deposit balances held by Codexis' bank. These deposits are recorded as restricted cash on the condensed consolidated balance sheets.

As of September 30, 2014, we had estimated asset retirement obligations of approximately $0.1 million from operating leases, requiring Codexis to restore the facilities that Codexis is renting to their original form. Codexis is expensing the asset retirement obligation over the terms of the respective leases. We review the estimated obligation each period and make adjustments for any changes in estimates.

Future minimum payments under non-cancellable operating leases at September 30, 2014 are as follows (in thousands):

	Lease payments
Three months ending December 31,	
2014	$ 669
Years ending December 31,	
2015	2,743
2016	2,827
2017	2,677
2018	2,736
2019 and beyond	3,054
Total	$ 14,706

Litigation

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

On July 30, 2013, Dyadic International, Inc. ("Dyadic") delivered notice to Codexis alleging that it is in breach under the Dyadic license agreement and stating that Dyadic intended to terminate the Dyadic license agreement in 60 days if the alleged breach was not cured to Dyadic's satisfaction. This notice was subsequently withdrawn by Dyadic in February 2014 in light of Codexis' decision to wind down its CodeXyme® cellulase enzyme program. Although we do not believe that the use of the licensed technology in its CodeXyme® cellulase enzyme program constituted a breach of the Dyadic license agreement, we can

make no assurances that Dyadic will not make such allegations again in the future, or regarding our ability to resolve any possible future disputes with Dyadic on commercially reasonable terms or our ability to dispute with success, through legal action or otherwise, any possible future allegations by Dyadic that such use may have breached the Dyadic license agreement.

Other Contingencies

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

Indemnifications

Codexis is required to recognize a liability for the fair value of any obligations Codexis assumes upon the issuance of a guarantee. Codexis has certain agreements with licensors, licensees and collaborators that contain indemnification provisions. In such provisions, Codexis typically agrees 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 12. Stock-Based Compensation

Stock Plans

In 2002, Codexis adopted the 2002 Stock Plan (the “2002 Plan”), pursuant to which its board of directors issued incentive stock options, non-statutory stock options and stock purchase rights to its employees, officers, directors and consultants. In March 2010, Codexis' board of directors and stockholders approved the 2010 Equity Incentive Award Plan (the “2010 Plan”), which became effective upon the completion of its initial public offering ("IPO") in April 2010. The 2010 Plan is similar to the 2002 Plan but allows for issuance of additional awards, such as a RSU, PSU, RSA, deferred stock award and stock appreciation rights. A total of 1,100,000 shares of common stock were initially reserved for future issuance under the 2010 Plan and any shares of common stock reserved for future grant or issuance under Codexis' 2002 Plan that remained unissued at the time of completion of the IPO became available for future grant or issuance under the 2010 Plan. In addition, the shares reserved for issuance pursuant to the exercise of any outstanding awards under the 2002 Plan that expire unexercised will also become available for future issuance under the 2010 Plan. The 2010 Plan also provides for automatic annual increases in the number of shares reserved for future issuance. As of September 30, 2014, total shares remaining available for issuance were approximately5.6 million.

Performance-contingent Restricted Stock Units

Codexis awarded 835,000 PSUs in the nine months ended September 30, 2014, and523,048 PSUs in the nine months ended September 30, 2013, under the 2010 Plan, based upon the achievement of certain cash flow performance goals for each respective year. These PSUs vest such that one-half of the PSUs subject to the award vest one year following the grant, and the remainder of the PSUs vest two years following the grant, subject to Codexis achieving the performance goals and the recipient’s continued service to Codexis on each vesting date. If the performance goal is achieved at the threshold level, the number of shares issuable in respect of the PSUs would be equal to half the number of PSUs granted. If the performance goal is achieved at the target level, the number of shares issuable in respect of the PSUs would be equal to the number of PSUs granted. If the performance goal is achieved at the superior level, the number of shares issuable in respect of the PSUs would be equal to two times the number PSUs granted. The number of shares issuable upon achievement of the performance goal at the levels between the threshold and target levels or target level and superior levels is determined using linear interpolation. Achievement below the threshold level results in no shares being issuable in respect of the PSUs.

During the third quarter of 2014, we concluded that it was not probable that the performance objective would be achieved at the target level of 100%. As a result, we revised our estimate of achieving the performance goal to a linear point between the threshold level and the target level. Accordingly, during the third quarter of 2014, we reduced stock-based compensation expense to reflect this lower level of estimated achievement compared to the first half of 2014.

During 2013, we revised our estimate of forecasted performance criteria and concluded that the performance target would not likely be achieved for the PSUs that were granted in 2013. The 358,308 outstanding PSUs that were granted in 2013 were canceled in February 2014 when we determined that we had not attained the threshold performance target for the 2013 awards.

Stock-Based Compensation Expense

The following table presents total stock-based compensation expense by functional areas included in the condensed consolidated statements of operations for the three months and nine months ended September 30, 2014 and 2013 (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2014	2013	2014	2013
Research and development (1)	$ 227	$ 97	$ 734	$ 989
Selling, general and administrative	828	529	2,896	2,372
Total	$ 1,055	$ 626	$ 3,630	$ 3,361

(1) Stock-based compensation expense associated with cost of biocatalyst product sales is included in research and development. Amounts were immaterial for all periods presented.

The following table presents total stock-based compensation expense by security types included in the condensed consolidated statements of operations for the three months and nine months ended September 30, 2014 and 2013 (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2014	2013	2014	2013
Stock options	$ 247	$ 397	$ 843	$ 1,538
RSUs and RSAs	722	527	2,383	1,823
PSUs	86	(298)	404	—
Total	$ 1,055	$ 626	$ 3,630	$ 3,361

As of September 30, 2014, unrecognized stock-based compensation expense, net of expected forfeitures, was $1.7 million related to unvested employee stock options, $3.1 million related to unvested RSUs and RSAs and $0.7 million related to unvested PSUs.

Valuation Assumptions

The ranges of 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,	
	2014	2013	2014	2013
Expected term (in years)	6.0	6.0	6.0	6.0
Volatility	0.676 - 0.679	0.640	0.639 - 0.679	0.640 - 0.652
Risk-free interest rate	1.90% - 2.13%	1.81%	1.90% - 2.13%	1.07% - 1.81%
Dividend yield	—%	—%	—%	—%
Weighted-average estimated fair value of stock options granted	$ 1.21	$ 1.17	$ 1.16	$ 1.34

Note 13. Capital Stock

Exercise of options

For the nine months ended September 30, 2014, 136,796 shares were exercised at a weighted-average exercise price of $1.34 per share, for total cash proceeds of less than $0.2 million.

Warrants

Codexis' outstanding warrants are exercisable for common stock at any time during their respective terms. As of September 30, 2014, the following warrants remain outstanding:

Issue Date	Shares Subject to warrants	Exercise Price per Share	Expiration
July 17, 2007	2,834	$ 12.45	February 9, 2016
September 28, 2007	72,727	$ 8.25	September 28, 2017

Note 14. Significant Customer and Geographic Information

Our significant customers each contributed 10% or more of our net revenue as follows:

	Three months ended September 30,		Nine months ended September 30,	
	2014	2013	2014	2013
Customer A	21%	21%	27%	10%
Customer B	27%	34%	26%	47%
Customer C	*	—%	13%	*
Customer D	16%	*	*	*
Customer E	10%	*	*	*
Customer F	*	—%	*	10%

** Less than 10%*

The balances of accounts receivable, net for these customers as a percent of total accounts receivable, net were Customer B of32%, Customer C of 1% and Customer D of 10% at September 30, 2014 and Customer C of 51% at December 31, 2013.

We currently sell primarily to pharmaceutical companies throughout the world by the extension of trade credit terms based on an assessment of each customers' financial condition. Trade credit terms are generally offered without collateral and may include a discount for prompt payment for specific customers. To manage our credit exposure, we perform ongoing evaluations of our customers' financial conditions. We provided for an increase in allowance for doubtful accounts of $53,000 in the three months and nine months ended September 30, 2014 and $328,000 in the three months and nine months ended September 30, 2013.

Net revenue, by geographic region was as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2014	2013	2014	2013
Revenue:				
United States	$ 4,747	$ 2,738	$ 12,518	$ 7,039
Asia				
India	225	213	636	2,721
Singapore	466	—	466	6,721
Others	192	209	872	751
Europe				
Ireland	—	—	2,744	1,219
Others	1,842	757	3,864	3,921
Other	—	26	16	25
Total Revenue	$ 7,472	$ 3,943	$ 21,116	$ 22,397

Identifiable long-lived assets by geographic region were as follows (in thousands):

	September 30, 2014	December 31, 2013
Long-lived assets		
United States	$ 11,403	$ 16,189
Europe (1)	—	2,123
Total long-lived assets	$ 11,403	$ 18,312

(1) Primarily Hungary

Note 15. Restructuring

Q4 2013 Restructuring Plan

During the fourth quarter of 2013, Codexis' board of directors approved and committed to a restructuring plan (the "Q4 2013 Restructuring Plan") to reduce its cost structure resulting from Codexis' decision to begin winding down its CodeXyme® cellulase enzymes program, which included a total of15 employee terminations in the United States. For the year ended December 31, 2013, costs of $809,000 for employee severance and other termination benefits have been recognized, consisting of $573,000 in research and development expenses and $236,000 in selling, general and administrative expenses. For the three months ended March 31, 2014, Codexis made severance payments of $238,000 and there was no remaining liability at March 31, 2014. Associated with the Q4 2013 Restructuring Plan, Codexis announced it was selling certain research and development assets that had become excess to future requirements (see Note 8, "Assets Held for Sale"). We do not anticipate recording any further costs under this restructuring plan.

All obligations under the restructuring plans were satisfied in the first quarter of 2014. The following table summarizes the activity in the restructuring accrual for the three months ended March 31, 2014 (in thousands):

	Q4 2013 Restructuring Plan
Balance at December 31, 2013	$ 277
Cash payments for the first quarter of 2014	(238)
Adjustments to previously accrued charges	(39)
Balance at March 31, 2014, June 30, 2014 and September 30, 2014	$ —

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, 2013 included in our Annual Report on Form 10-K filed with the SEC on March 13, 2014. This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). These statements are often identified by the use of words such as may, will, expect, believe, anticipate, intend, could, should, estimate, or continue, and similar expressions or variations. Such forward-looking statements are subject to risks, uncertainties and other factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those set forth in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2013 filed with the SEC on March 13, 2014, 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 or microbes 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 technology platform is able to overcome many of

these limitations, allowing us to evolve and optimize biocatalysts to perform specific and desired chemical reactions at commercial scale.

We have commercialized our technology and products in the pharmaceuticals market, which is our primary business focus. Our pharmaceutical customers, which include several of the largest global pharmaceutical companies, use our technology, products and services in their manufacturing processes and process development, including in the production of some of the world's best-selling and fastest growing drugs.

We have recently begun to use our technology to develop biocatalysts for use in the fine chemicals market. The fine chemicals market is similar to our pharmaceutical business and consists of several large market verticals, including: food, animal feed, polymers, flavors, fragrances, and agricultural chemicals.

We create our products by applying our CodeEvolver® directed evolution technology platform, which introduces genetic mutations into microorganisms, giving rise to changes in the enzymes that they produce. Once we identify potentially beneficial mutations, we test combinations of these mutations until we have created variant enzymes that exhibit marketable performance characteristics superior to competitive products. This process allows us to make continuous, efficient improvements to the performance of our enzymes. We are also pursuing opportunities to provide licenses to certain pharmaceutical customers to use our CodeEvolver® platform for their internal development purposes.

Results of Operations Overview

Revenues were $7.5 million in the third quarter of 2014, a 90% increase from $3.9 million in the third quarter of 2013. Biocatalyst product sales revenues, which consist primarily of sales of biocatalyst intermediates, APIs and Codex® Biocatalyst Panels and Kits, were $2.6 million in the third quarter of 2014, an increase of 138% compared with $1.1 million for the third quarter of 2013. The increase was primarily due to an increase in sales of enzymes for food-related products.

Biocatalyst research and development revenues, which include license, technology access and exclusivity fees, research services FTE , contingent payments, royalties, and optimization and screening fees, totaled $3.4 million in the third quarter of 2014, an increase of 66%, compared with $2.0 million for the third quarter of 2013. The increase was primarily due to an increase in services provided to pharmaceutical customers.

Revenue sharing arrangement sales were $1.5 million in the third quarter of 2014, an increase of 84%, compared with $0.8 million for the third quarter of 2013, which increase relates to the license to Exela PharmSci, Inc. ("Exela") for the anticoagulant drug argatroban.

Research and development expenses were $5.0 million in the third quarter of 2014, a decrease of 26% from $6.8 million for the third quarter of 2013. The decrease was primarily due to lower depreciation expense resulting from the disposal and impairment of certain equipment previously used in discontinued research and development activities, as well as lower employee-related expenses associated with the company-wide restructurings implemented in late 2013.

Selling, general and administrative expenses were $5.2 million in the third quarter of 2014, a decrease of 12% compared to $5.8 million in the third quarter of 2013. The decrease was primarily due to reductions in headcount and other discretionary expense reductions implemented as part of those same company-wide restructurings begun in late 2013.

Net loss for the third quarter of 2014 was $4.6 million or a loss of $0.12 per share based on 38.5 million weighted average common shares outstanding in the third quarter of 2014. This compares favorably to a net loss of $9.3 million, or a loss of $0.24 per share, for the third quarter of 2013. The reduced loss is primarily related to higher revenue as well as reduced research spending as a result of exiting the CodeXyme® cellulase enzyme program in the fourth quarter of 2013.

The combined balance of cash and cash equivalents, short-term investments and marketable securities decreased to $22.6 million as of September 30, 2014 compared to $25.9 million as of December 31, 2013. Net cash used in operating activities decreased to $4.7 million in the nine months ended September 30, 2014, as compared to $19.1 million during the nine months ended September 30, 2013. 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. 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.

GlaxoSmithKline platform technology license agreement

In July 2014, we entered into a platform technology license agreement (the "License Agreement") with GlaxoSmithKline ("GSK"). Under the terms of the License Agreement, we granted GSK a non-exclusive, worldwide license to use our CodeEvolver® Platform Technology to develop novel enzymes for (a) the manufacture and commercialization of compounds, molecules and products for the treatment of any human disease or medically treatable human condition, (b) the prophylaxis, diagnosis, or treatment of any human disease or medically treatable human condition, and (c) the research and development of compounds, molecules and products for the treatment of any human disease or medically treatable human condition. This license to GSK is exclusive for the use of the CodeEvolver® Platform Technology to develop novel enzymes for the synthesis of small-molecule compounds owned or controlled by GSK.

We received a $6.0 million up-front licensing fee and we are eligible to receive contingent payments up to $19.0 million, of which $11.5 million are considered milestone payments, over the next three years subject to satisfactory completion of technology transfer milestones. We also have the potential to receive numerous 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 do not expect to begin receiving these additional contingent payments, if any, during the first three years of the License Agreement. We will also be eligible to receive royalties based on net sales, if any, of a limited set of products developed by GSK using our CodeEvolver® protein engineering platform technology. In addition, for up to three years following the end of the three-year period during which we will transfer our CodeEvolver® Platform Technology to GSK, GSK can exercise an option, upon payment of certain option fees, that would extend GSK’s license to include certain improvements to the CodeEvolver® Platform Technology that arise during such period.

In total, we expect to receive $5.0 million in cash during the remainder of 2014 as a result of the License Agreement.

The term of the License Agreement continues, unless earlier terminated, until the expiration of all payment obligations under the License Agreement. At any time following the completion of the first technology transfer stage, GSK can terminate the License Agreement by providing 90 days written notice to us. If GSK exercises this termination right during the three-year technology transfer period, GSK will make a one-time termination payment to us.

Sale of Hungarian Subsidiary

On March 13, 2014, we entered into an agreement with Intrexon Corporation to sell 100% of our equity interests in our Hungarian subsidiary, Codexis Laboratories Hungary Kft. On March 15, 2014, the sale transaction closed and we received gross proceeds of $1.5 million from the sale and recorded a net gain of $0.8 million which was included in research and development expenses in connection with the sale. As part of the purchase, the buyer assumed all employment and facility lease related contract obligations. There were 32 employees at the time of the sale. There were no transaction related costs incurred other than legal fees, which were recorded in selling, general and administrative expenses. As a result of the sale of our Hungarian subsidiary, we estimate that we will reduce our operating expenses, not including depreciation, by approximately $3.0 million per year. Prior to the sale of our Hungarian subsidiary, we transferred certain of the subsidiary's equipment to another European subsidiary of Codexis and incurred a VAT liability of approximately $0.4 million. We paid this VAT amount in July 2014 and expect to recover the VAT payment within the next 12 months.

CodeXyme® Cellulase Enzyme and CodeXol® Detergent Alcohols Businesses

During 2013 we maintained a reduced level of spending in biofuels research while seeking to obtain funding or sell the rights for this business. In the fourth quarter of 2013, we announced that we would begin winding down our CodeXyme® cellulase enzyme program and stop further development of our CodeXol® detergent alcohols program. As a result, we committed to the Q4 2013 Restructuring Plan to reduce our cost structure to align with our projected future revenue from our pharmaceutical business. The Q4 2013 Restructuring Plan included a reduction of employees in the United States and Hungary and the sale of excess assets which will reduce future research and development costs and related expenditures. We recorded restructuring charges of $0.8 million in the year ended December 31, 2013, which included a total of 15 employee terminations in the United States. We also recorded $1.6 million in asset impairment charges related to excess equipment reclassified as held for sale as of December 31, 2013.

Plans to utilize certain CodeXol® assets changed in the second quarter of 2014 such that assets with a carrying value of $1.8 million were no longer recoverable. Accordingly, we recorded an impairment charge of $1.8 million, reducing the carrying value to zero, which is our estimated fair value of the assets, net of costs. The impairment charge was recorded within research and development expense for the nine months ended September 30, 2014.

Arch Commercial Arrangement

Since 2006, Arch Pharma Labs of Mumbai, India has manufactured substantially all of our commercialized intermediates and APIs for sale to generic and innovator pharmaceutical manufacturers. Prior to November 2012, Arch produced statin-family APIs and intermediates for us and we sold these directly to end customers primarily in India. In November 2012, we entered into a new commercial arrangement with Arch (the "New Arch Enzyme Supply Agreement") whereby we agreed to supply Arch with enzymes for use in the manufacture of certain of Arch's products and Arch agreed to market these products directly to end customers. We recognized product sales revenue for the sale of enzyme inventory to Arch and its affiliates pursuant to the New Arch Enzyme Supply Agreement of $0.2 million for the three months and $0.3 million for the nine months ended September 30, 2014, and nil for the three months and $2.1 million for the nine months ended September 30, 2013, as biocatalyst product sales revenue. We do not anticipate significant Arch revenue in future periods.

Results of Operations

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

	Three months ended September 30,		% of Total Revenue		Nine months ended September 30,		% of Total Revenue	
	2014	2013	2014	2013	2014	2013	2014	2013
Revenue:								
Biocatalyst product sales	$ 2,562	$ 1,076	34 %	27 %	$ 8,323	$ 15,161	39 %	68 %
Biocatalyst research and development	3,364	2,028	45 %	52 %	7,176	4,936	34 %	22 %
Revenue sharing arrangement	1,546	839	21 %	21 %	5,617	2,300	27 %	10 %
Total revenue	7,472	3,943	100 %	100 %	21,116	22,397	100 %	100 %
Costs and operating expenses:								
Cost of biocatalyst product sales	1,532	494	21 %	13 %	6,179	9,790	29 %	44 %
Research and development	5,038	6,831	67 %	173 %	17,708	22,776	84 %	102 %
Selling, general and administrative	5,157	5,832	69 %	148 %	16,791	21,126	80 %	94 %
Total costs and operating expenses	11,727	13,157	157 %	334 %	40,678	53,692	193 %	240 %
Loss from operations	(4,255)	(9,214)	(57)%	(234)%	(19,562)	(31,295)	(93)%	(140)%
Interest income	3	9	— %	— %	15	53	— %	— %
Other expenses	(57)	(22)	(1)%	— %	(183)	(288)	— %	(1)%
Loss before income taxes	(4,309)	(9,227)	(58)%	(234)%	(19,730)	(31,530)	(93)%	(141)%
Provision for (benefit from) income taxes	253	35	3 %	1 %	(314)	(41)	(1)%	— %
Net loss	$ (4,562)	$ (9,262)	(61)%	(235)%	$ (19,416)	$ (31,489)	(92)%	(141)%

Revenue

Our revenue is comprised of biocatalyst product sales, biocatalyst research and development arrangements and a revenue sharing arrangement.

- Biocatalyst product sales revenue consists of sales of biocatalysts intermediates, APIs and Codex® Biocatalyst Panels and Kits.
- Biocatalyst research and development revenue includes: license, technology access and exclusivity fees, research services FTE, contingent payments, royalties, and optimization and screening fees.
- Revenue sharing arrangement revenue is recognized based upon sales of licensed products by Exela.

(In Thousands)	Three months ended September 30, 2014	2013	Change $	Change %	Nine months ended September 30, 2014	2013	Change $	Change %
Biocatalyst product sales	$ 2,562	$ 1,076	$ 1,486	138%	$ 8,323	$ 15,161	$ (6,838)	(45)%
Biocatalyst research and development	3,364	2,028	1,336	66%	7,176	4,936	2,240	45 %
Revenue sharing arrangement	1,546	839	707	84%	5,617	2,300	3,317	144 %
Total revenue	$ 7,472	$ 3,943	$ 3,529	90%	$ 21,116	$ 22,397	$ (1,281)	(6)%

The timing of orders and delivery of products fluctuates from quarter-to-quarter, and may not be comparable on a sequential or year over year basis. In addition, we have limited internal capacity to manufacture enzymes and 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.

Total revenue increased $3.5 million for the three months ended September 30, 2014, as compared to the same period in 2013, due to an increase in revenue across all revenue streams. Total revenue decreased $1.3 million for the nine months ended September 30, 2014, as compared to the same period in 2013. This decrease was due primarily to lower biocatalyst product sales, partially offset by increases in revenue sharing arrangement and research and development revenue.

Biocatalyst product sales revenue increased $1.5 million for the three months ended September 30, 2014, as compared to the same period in 2013. The increase was primarily due to an increase in sales of enzymes for food-related products. Biocatalyst product sales decreased $6.8 million for the nine months ended September 30, 2014, as compared to the same period in 2013. The decrease was primarily due to the expected loss of our biocatalyst and intermediate sales to customers in the hepatitis C drug marketplace, which was previously disclosed in our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2104.

Biocatalyst research and development revenue increased $1.3 million for the three months and $2.2 million for the nine months ended September 30, 2014, as compared to the same periods in 2013. The increases were primarily due to an increase in services provided to pharmaceutical customers.

Revenue sharing arrangement revenue increased $0.7 million for the three months and $3.3 million for the nine months ended September 30, 2014, as compared to the same periods in 2013, which increases relate to the license to Exela for the anticoagulant drug argatroban. Revenue sharing arrangement revenue may decline in future quarters due to increased competition that may result from the expiration of a third party patent related to the production of argatroban.

Cost and Operating Expenses

(In Thousands)	Three months ended September 30, 2014	2013	Change $	Change %	Nine months ended September 30, 2014	2013	Change $	Change %
Cost of biocatalyst product sales	$ 1,532	$ 494	$ 1,038	210 %	$ 6,179	$ 9,790	$ (3,611)	(37)%
Research and development	5,038	6,831	(1,793)	(26)%	17,708	22,776	(5,068)	(22)%
Selling, general and administrative	5,157	5,832	(675)	(12)%	16,791	21,126	(4,335)	(21)%
Total operating expenses	$ 11,727	$ 13,157	$ (1,430)	(11)%	$ 40,678	$ 53,692	$ (13,014)	(24)%

Cost of Biocatalyst Product Sales

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

Our cost of biocatalyst product sales increased $1.0 million for the three months ended September 30, 2014, as compared to the same period in 2013. The increase was primarily due to two large shipments of low cost product in the third quarter of 2013. Our cost of biocatalyst product sales decreased $3.6 million for the nine months ended September 30, 2014, as compared to the same period in 2013. The decrease was primarily due to the decrease of contract manufacturing costs related to reduced hepatitis C product sales, as well as costs associated with the sale of inventory to Arch in the first quarter of 2013.

Research and Development Expenses

Research and development expenses consist of costs incurred for internal projects as well as partner-funded collaborative research and development activities. These costs 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, as well as (iii) external costs. Research and development expenses, including costs to acquire technologies that are utilized in research and development and that have no alternative future use, are expensed when incurred. We budget total research and development expenses on an internal department level basis, because we do not have project or program level reporting capabilities.

Research and development expenses decreased $1.8 million for the three months ended September 30, 2014, as compared to the same period in 2013. The decrease was primarily due to lower depreciation expense resulting from the disposal and impairment of certain equipment previously used in discontinued research and development activities, as well as lower employee-related expenses associated with the company-wide restructuring implemented in late 2013. Research and development expenses decreased $5.1 million for the nine months ended September 30, 2014, as compared to the same period in 2013. The results for the nine months ended September 30, 2014 include non-cash impairment charges of $2.7 million, primarily related to write down of assets associated with our CodeXol® program. Excluding non-recurring charges, research and development expenses decreased $7.8 million for the nine months ended September 30, 2014, as compared to the same period in 2013. The decrease was primarily due to lower employee-related expenses associated with the company-wide restructuring implemented in late 2013, as well as lower depreciation expense resulting from the disposal and impairment of certain equipment previously used in discontinued research and development activities. Research and development expenses included stock-based compensation expense of $0.2 million for the three months and $0.7 million for the nine months ended September 30, 2014, as compared to $0.1 million for the three months and $1.0 million for the nine months ended September 30, 2013.

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 $0.7 million for the three months and $4.3 million for the nine months ended September 30, 2014, as compared to the same periods in 2013. These decreases were primarily due to reductions in headcount and other discretionary expense reductions implemented as part of those same company-wide restructurings begun in late 2013. Selling, general and administrative expenses included stock-based compensation expense of $0.8 million for the three months and $2.9 million for the nine months ended September 30, 2014, as compared to $0.5 million for the three months and $2.4 million for the nine months ended September 30, 2013.

Interest income and other expenses

	Three months ended September 30,		Change		Nine months ended September 30,		Change	
(In Thousands)	**2014**	**2013**	**$**	**%**	**2014**	**2013**	**$**	**%**
Interest income	$ 3	$ 9	$ (6)	(67)%	$ 15	$ 53	$ (38)	(72)%
Other expenses	(57)	(22)	(35)	159 %	(183)	(288)	105	(36)%
Total other income (expense)	$ (54)	$ (13)	$ (41)	315 %	$ (168)	$ (235)	$ 67	(29)%

Interest income decreased $6,000 for the three months and $38,000 for the nine months ended September 30, 2014, as compared to the same periods in 2013. The decreases were primarily due to lower investment balances.

Other expenses decreased $35,000 for the three months and $105,000 for the nine months ended September 30, 2014, as compared to the same periods in 2013. These changes were primarily related to fluctuations in foreign currency.

Benefit from income taxes

We recognized an income expense of $0.3 million for the three months ended September 30, 2014, as compared to less than $0.1 million in the same period of 2013. We recognized a tax benefit of $0.3 million for the nine months ended September 30, 2014, as compared to less than $0.1 million in the same period of 2013. The increase is primarily due to the release of reserves related to uncertain tax positions from previous years. The total tax benefit for the nine months ended September 30, 2014 primarily consists of income tax benefit attributable to foreign operations offset by the tax effect on the unrecognized gain

from our investment in CO2 Solutions, as well as the recognition of previously unrecognized tax benefits. 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.

For the nine months ended September 30, 2014, we recognized approximately $0.4 million of previously unrecognized tax benefits related to our operations in Singapore. There were no other material changes to our reserves for unrecognized tax benefits for the nine months ended September 30, 2014, and we do not anticipate any further material changes to our reserves for unrecognized tax benefits during 2014.

Liquidity and Capital Resources

Liquidity is the measurement of our ability to meet potential cash requirements, fund the planned expansion of our operations and acquire businesses. 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 combined balance of cash and cash equivalents, short-term investments and marketable securities totaled $22.6 million as of September 30, 2014, as compared to $25.9 million as of December 31, 2013.

(In Thousands)	September 30, 2014	December 31, 2013
Cash and cash equivalents	$ 21,522	$ 22,130
Short-term investments	$ —	$ 3,005
Accounts receivable, net	$ 3,088	$ 5,413
Accounts payable, accrued compensation and accrued liabilities	$ 6,968	$ 9,198
Working capital	$ 17,201	$ 24,582
Marketable securities	$ 1,031	$ 795

	Nine months ended September 30,	
(In Thousands)	2014	2013
Net cash used in operating activities	$ (4,653)	$ (19,093)
Net cash provided by investing activities	4,680	13,713
Net cash (used in) provided by financing activities	(635)	288
Net decrease in cash and cash equivalents	$ (608)	$ (5,092)

We have historically experienced negative cash flows from operations as we continue to invest in key technology development projects, improvements to our biocatalysis technology platform, and expand our business development and collaboration with new pharmaceutical customers. Our cash flows from operations will continue to be affected principally by sales and gross margins from biocatalyst product sales to pharmaceutical 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 actively collaborating with new and existing pharmaceutical customers and we believe 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, 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. 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 pharmaceutical 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, including bio-based chemicals, 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 $4.7 million for the nine months ended September 30, 2014, which resulted from a net loss of $19.4 million for the nine months ended September 30, 2014, adjusted for non-cash depreciation and amortization of $5.2 million, stock-based compensation of $3.6 million and impairment and changes in fair values for assets held for use charges totaling $2.7 million, partially offset by $6.0 million received in up-front fees under a collaborative arrangement and a gain on the sale of the Hungarian subsidiary of $0.8 million.

Cash used in operating activities was $19.1 million during the nine months ended September 30, 2013, which resulted from a net loss of $31.5 million for the nine months ended September 30, 2013, adjusted for non-cash depreciation and amortization of $7.8 million, stock-based compensation of $3.4 million, and changes in working capital components of approximately $0.9 million.

Cash Flows from Investing Activities

Cash provided by investing activities was $4.7 million for the nine months ended September 30, 2014, which mainly resulted from the maturities of our investment securities of $3.0 million and proceeds from the sale of our Hungarian subsidiary of $1.5 million.

Cash provided by investing activities was $13.7 million during the nine months ended September 30, 2013, which mainly resulted from the proceeds from our marketable securities of $13.4 million and the decrease of our restricted cash of $0.6 million due to the reduction of the available credit under Codexis' working capital line, offset by capital expenditures of $0.4 million.

Cash Flows from Financing Activities

Cash used in financing activities was $0.6 million for the nine months ended September 30, 2014, which was the result of the payment of taxes related to the net share settlement of equity awards, partially offset by the proceeds from exercises of employee stock options.

Cash provided by financing activities was $0.3 million during the nine months ended September 30, 2013, which was the result of proceeds from exercises of employee stock options.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements as of September 30, 2014.

Contractual Obligations

Our contractual obligations principally arise from operating leases primarily related to our leased facilities in Redwood City, California. There have been no significant 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, 2013.

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. We believe there have been no significant changes in our critical accounting policies as discussed in our Annual Report on Form 10-K for the year ended December 31, 2013.

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. There were no significant changes in our market risk exposures for the three months or nine months ended September 30, 2014. This is discussed in further detail in our Annual Report on Form 10-K filed with the SEC on March 13, 2014.

Equity Price Risk

As described in Note 5, "Investment Securities" and Note 6, "Fair Value Measurements" to the condensed consolidated financial statements, we have an investment in common shares of CO_2 Solutions, whose shares are publicly traded in Canada on the TSX Venture Exchange. As of September 30, 2014, the fair value of our investment in CO_2 Solutions' common stock was $1.0 million and our carrying cost for the investment was $0.6 million.

This investment is exposed to fluctuations in both the market price of CO_2 Solutions' common shares and changes in the exchange rates between the U.S. dollar and the Canadian dollar. As of September 30, 2014 the fair value of our investment in CO_2 Solutions' common stock was $1.0 million. The effect of a 10% adverse change in the market price of CO_2 Solution's common shares as of September 30, 2014 would have been an unrealized loss of approximately $0.1 million, recognized as a component of our condensed consolidated statement of comprehensive income. The effect of a 10% adverse change in the exchange rates between the U.S. dollar and the Canadian dollar as of September 30, 2014 would have been an unrealized loss of approximately $0.1 million, recognized as a component of our condensed consolidated statements of comprehensive income.

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 required by Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended. 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, 2014 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

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, 2013, a description of certain risks and uncertainties that could affect our business, future performance or financial condition (the "Risk Factors"). Except as set forth below, there are no material changes from the disclosure provided in the Form 10-K for the year ended December 31, 2013 with respect to the Risk Factors. Investors should consider the Risk Factors, as updated below, prior to making an investment decision with respect to our stock.

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

Our current product revenues are derived from a limited number of pharmaceutical products. We expect a limited number of pharmaceutical products to continue to account for a significant portion of our pharmaceutical product revenues for the foreseeable future. This product concentration increases the risk of quarterly fluctuations in our revenues and operating results. The loss or reduction of business of one or a combination of our significant pharmaceutical products could materially adversely affect our revenues, financial condition and results of operations. For instance, product revenues for the year ended December 31, 2013 was $20.4 million, a decrease from $35.9 million in product revenues for the year ended December 31, 2012, and $49.0 million in product revenues for the year ended December 31, 2011, primarily due to lower revenues for generic statin-family products. These products were approximately $2.7 million in product revenues for the year ended December 31, 2013, as compared to $20.9 million and $30.0 million, for the years ended December 31, 2012 and 2011, respectively. In addition, our revenue sharing arrangement revenue, which is based on sales of the anticoagulant drug argatroban by our revenue sharing partner Exela PharmSci, Inc., may decline in future quarters due to increased competition that may result from the expiration of a third party patent related to the production of argatroban.

We are dependent on contract manufacturers for commercial scale production of substantially all of our enzymes.

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 rely on one contract manufacturer, Lactosan, for our pharmaceutical business to manufacture substantially all of the commercial enzymes used in our pharmaceutical and fine chemicals businesses. These businesses, therefore, face risks of difficulties with, and interruptions in, performance by Lactosan, the occurrence of which could adversely impact the availability, launch and/or sales of our enzymes in the future. We have experienced in the past, and we have recently begun to experience, manufacturing delays at Lactosan due to a viral contamination. Continued manufacturing delays at Lactosan could negatively affect our business, reputation, results of operations and financial condition. The failure of any contract manufacturers that we may use to supply manufactured enzymes on a timely basis or at all, or to manufacture our enzymes in compliance with our specifications or applicable quality requirements or in volumes sufficient to meet demand would adversely affect our ability to sell pharmaceutical and fine and complex chemicals products, could harm our relationships with our collaborators or customers and could negatively affect our revenues and operating results. We may be forced to secure alternative sources of supply, which may be unavailable on commercially acceptable terms, cause delays in our ability to deliver products to our customers, increase our costs and decrease our profit margins.

We do not have any supply agreements in place with any enzyme contract manufacturers, other than Lactosan. In the absence of a supply agreement, a contract manufacturer will be under no obligation to manufacture our enzymes and could elect to discontinue their manufacture at any time. If we require additional manufacturing capacity and are unable to obtain it in sufficient quantity, we may not be able to increase our pharmaceutical and fine and complex chemicals sales, or we may be required to make substantial capital investments to build that capacity or to contract with other manufacturers on terms that may be less favorable than the terms we currently have with our suppliers. If we choose to build our own additional manufacturing facility, it could take two years or longer before our facility is able to produce commercial volumes of our enzymes. Any resources we expend on acquiring or building internal manufacturing capabilities could be at the expense of other potentially more profitable opportunities. In addition, if we contract with other manufacturers, we may experience delays

of several months in qualifying them, which could harm our relationships with our collaborators or customers and could negatively affect our revenues or operating results.

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

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

- we do not achieve our research and development objectives under our collaboration agreements in a timely manner or at all;
- we develop products and processes or enter into additional collaborations that conflict with the business objectives of our other collaborators;
- our collaborators and/or our contract manufacturers do not receive the required regulatory and other approvals necessary for the commercialization of the applicable product;
- we disagree with our collaborators as to rights to intellectual property that are developed during the collaboration, or their research programs or commercialization activities;
- we are unable to manage multiple simultaneous collaborations;
- our collaborators or licensees are unable or unwilling to implement or use the technology or products that we provide or license to them;
- our collaborators become competitors of ours or enter into agreements with our competitors;
- our collaborators become unable or less willing to expend their resources on research and development or commercialization efforts due to general market conditions, their financial condition or other circumstances beyond our control; or
- our collaborators experience business difficulties, which could eliminate or impair their ability to effectively perform under our agreements.

Additionally, despite the termination of the research term of our three-way research collaboration with Shell and Iogen, many elements of our collaborative research and license agreement with Shell and Iogen will continue. For example, the collaborative research and license agreement provides for certain rights, licenses and obligations of each party with respect to intellectual property and program materials that will continue after the research activities have ended. Disagreements or conflicts between and among the parties could develop even though the research program has ended. These disagreements or conflicts could result in expensive arbitration or litigation, which may not be resolved in our favor.

Finally, our business could be negatively affected if any of our collaborators or suppliers undergo a change of control or were to otherwise assign the rights or obligations under any of our agreements.

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

(a) Unregistered Sales of Equity Securities

Not applicable.

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

On April 27, 2010, we closed our IPO of our common stock pursuant to a registration statement on Form S-1 (File No. 333-164044), which was declared effective by the SEC on April 21, 2010. There has been no material change in the planned use of proceeds from our IPO as described in our final prospectus filed with the SEC on April 22, 2010 pursuant to Rule 424(b). As of September 30, 2014, we have used approximately $45 million of the net offering proceeds for purchase and installation of machinery and equipment, continued investments in research and development, payment of restructuring costs, payment of taxes related to net share settlement of equity awards and working capital.

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 6, 2014

By: /s/ John Nicols

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

Date: November 6, 2014

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	Form of the Registrant'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).
10.1†	Platform Technology Transfer, Collaboration and License Agreement by and between the Company and GlaxoSmithKline Intellectual Property Limited, effective as of July 10, 2014.
10.2+	Offer Letter Agreement by and between the Company and Gordon Sangster effective as of July 11, 2014.
10.3+	Separation Agreement between David O'Toole and the Company effective as of July 9, 2014.
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, 2014, formatted in Extensible Business Reporting Language (XBRL) includes: (i) Condensed Consolidated Balance Sheets at September 30, 2014 and December 31, 2013, (ii) Condensed Consolidated Statements of Income for the Three and Nine Months Ended September 30, 2014 and 2013, (iii) Condensed Consolidated Statements of Comprehensive Loss for the Three and Nine Months Ended September 30, 2014 and 2013, (iv) Condensed Consolidated Statements of Cash Flows for the Three and Nine Months Ended September 30, 2014 and 2013, and iv) Notes to Condensed Consolidated Financial Statements.

+ Indicates a management contract or compensatory plan or arrangement.

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

CONFIDENTIAL

[***] 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.

PLATFORM TECHNOLOGY TRANSFER, COLLABORATION AND LICENSE AGREEMENT

BY AND BETWEEN

CODEXIS, INC.

AND

GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED

EFFECTIVE AS OF

10 July 2014

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Exhibits

PLATFORM TECHNOLOGY TRANSFER, COLLABORATION AND LICENSE AGREEMENT

THIS PLATFORM TECHNOLOGY TRANSFER, COLLABORATION AND LICENSE AGREEMENT (together with any exhibits attached hereto, this "**Agreement**") is made and entered into as of 10 July 2014 (the "**Effective Date**"), by and between Codexis, Inc., a Delaware corporation, having a place of business at 200 Penobscot Drive, Redwood City, California 94063, United States of America, ("**Codexis**") and **GlaxoSmithKline Intellectual Property Development Limited**, an English company headquartered at 980 Great West Road, Brentford, Middlesex, TW8 9GS, United Kingdom ("**GSK**"). Codexis and GSK are sometimes referred to herein individually as a "**Party**" and collectively as the "**Parties**."

RECITALS

WHEREAS, GSK possesses expertise in bioprocess development and scale up, including commercial scale manufacture, as well as certain expertise in biocatalyst development;

WHEREAS, Codexis possesses expertise in the engineering and optimization of biocatalysts for use in pharmaceutical compound synthesis and manufacture;

WHEREAS, GSK seeks to collaborate with Codexis on certain biocatalysis projects in order to develop biocatalytic approaches to synthesize compounds of interest to GSK and to practice the Platform Technology under the licenses granted by Codexis and in connection with a technology transfer from Codexis; and

WHEREAS, Codexis desires to grant to GSK such license and perform such technology transfer, on the terms and conditions set forth herein.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing premises and the mutual promises, covenants and conditions contained in this Agreement, the Parties agree as follows:

1. DEFINITIONS.The terms in this Agreement with initial letters capitalized, whether used in the singular or the plural, shall have the meaning set forth below.

1.1 "Affiliate" means any Person that directly or indirectly is controlled by, controls or is under common control with a Party to this Agreement. For the purposes of this definition, the term "control" (including, with correlative meanings, the terms "controlled by" and "under common control with") as used with respect to a Person means (a) in the case of a corporate entity, direct or indirect ownership of voting securities entitled to cast more than fifty percent (50%) of the votes in the election of directors, (b) in the case of a non-corporate entity, direct or indirect ownership of more than fifty percent (50%) of the equity interests with the power to direct the management and policies of such entity, or (c) any other arrangement

whereby a Person controls or has the right to control the board of directors or equivalent governing body or management of a corporation or other entity; *provided* that, if local Applicable Law restricts foreign ownership, control shall be established by direct or indirect ownership of the maximum ownership percentage that may, under such local Applicable Law, be owned by foreign interests.

1.2 "Alliance Manager" has the meaning assigned to such term in Section 2.1.2.

1.3 "Applicable Law" means all applicable laws, statutes, rules, regulations, ordinances and other pronouncements having the effect of law of any federal, national, multinational, state, provincial, county, city or other political subdivision, government or Regulatory Authority.

1.4 "Arising Codexis Enzyme Technology" means: (a) the amino acid sequence and structure of any Project Enzyme developed under a Project during the TT Term (and, if GSK exercises the Option, during the Improvements TT Term) and (b) structure-activity data that describes the structure-activity relationship and other characteristics of any Project Enzyme(s) noted in (a), and in each of (a) and (b), which data and information are Controlled by Codexis during the TT Term (and, if GSK exercises the Option, during the Improvements TT Term).

1.5 "Arising Codexis Enzyme Technology IP" means Intellectual Property which has arisen directly from the Arising Codexis Enzyme Technology.

1.6 "Arising Codexis Process Technology" means methods of using Project Enzymes in compound synthesis, developed under a Project during the TT Term (and, if GSK exercises the Option, during the Improvements TT Term) and which methods are Controlled by Codexis during the TT Term (and, if GSK exercises the Option, during the Improvements TT Term); *provided* that *Arising Codexis Process Technology* shall exclude technology that is generally applicable to chemical process development and to the synthesis and scale up of small molecule compounds and that does not specifically require the use or performance of such Project Enzyme.

1.7 "Arising Codexis Process Technology IP" means Intellectual Property which has arisen directly from the Arising Codexis Process Technology.

1.8 "Arising GSK Enzyme Technology" means: (a) the amino acid sequence and structure of any Project Enzyme researched under a Project during the TT Term and (b) structure-activity data that describes the structure-activity relationship and other characteristics of any Project Enzyme(s) noted in (a) and, in each of (a) and (b), which data and information are Controlled by GSK during the TT Term.

1.9 "Arising GSK Enzyme Technology IP" means Intellectual Property which has arisen directly from the Arising GSK Enzyme Technology.

1.10 "Arising GSK Process Technology" means methods of using Project Enzymes developed under a Project during the TT Term; *provided* that *Arising GSK Process Technology* shall exclude technology that is generally applicable to chemical process development and to the synthesis and scale up of small molecule compounds and that does not specifically require the use or performance of such Project Enzyme, which methods are Controlled by GSK during the TT Term.

1.11 "Arising GSK Process Technology IP" means Intellectual Property which has arisen directly from the Arising GSK Process Technology.

1.12 "Background IP" means any and all Intellectual Property which is Controlled by a Party and (a) exists as of the Effective Date and/or (b) arises independently of the other Party during the Term.

1.13 "Business Day" means a day other than Saturday, Sunday or any day on which commercial banks located in New York, New York are authorized or obligated by Applicable Law to close.

1.14 "Calendar Quarter" means the period beginning on the Effective Date and ending on the last day of the calendar quarter in which the Effective Date falls and, thereafter, each successive period of three (3) consecutive calendar months ending on March 31, June 30, September 30 or December 31.

1.15 "Calendar Year" means the period beginning on the Effective Date and ending on December 31st of the calendar year in which the Effective Date falls, and thereafter, each successive period of twelve (12) consecutive calendar months commencing on January 1 and ending on December 31.

1.16 "Change of Control" means, with respect to a Party, any one of the following events: (a) any entity or two or more entities acting in concert shall have acquired beneficial ownership, directly or indirectly, of more than fifty percent (50%) of the total voting power of the stock then outstanding of the Party normally entitled to vote in elections of directors; (b) the Party consolidates with or merges into another entity, or any entity consolidates with or merges into the Party, in either event pursuant to a transaction in which more than fifty percent (50%) of the total voting power of the stock outstanding of the surviving entity normally entitled to vote in elections of directors is not held by the parties holding at least fifty percent (50%) of such total voting power of the Party preceding such consolidation or merger; or (c) the Party conveys, transfers or leases all or substantially all of its assets to a another entity that is not an Affiliate of the Party (such entity or entities in each of (a), (b) and (c), the "**Acquiring Entity**").

1.17 "Clinical Proof of Concept" means the initial demonstration of clinical efficacy of an Enzyme Product in a patient population demonstrated through the conduct of a Phase 1b Clinical Trial or a Phase 2a Clinical Trial.

1.18 "Codexis Core Patents" means the Patents set forth on Exhibit 1.18.

1.19 "Codexis Core Technology" means those (i) tools, processes and methods Controlled by Codexis; and (ii) generally applicable tools, processes and methods which Codexis has the ability to transfer to or license to GSK, in each of (i) and (ii) above: (a) used to identify, select, optimise, isolate, modify, engineer, research, develop, make, have made and/or import enzymes, Covered Enzymes and Enzymes, through the recombination and/or rearrangement and/or mutation of genetic material for the creation of genetic diversity, using any methods, including but not limited to Codexis Software, in silico, in vitro, and/or in vivo technologies, (b) screening techniques, methodologies and/or processes of using the resulting genes and/or proteins to identify and assess their potential utility, (c) gene expression methods applicable in high throughput screening, (d) techniques for cultivation of microorganisms, (e) techniques for producing, harvesting, and/or purifying proteins, and (f) Codexis Software, in each of (a) – (f) above, as described in Exhibit 1.19.

1.20 "Codexis Core Technology Improvements" means any improvement or advance to the Codexis Core Technology practiced by Codexis or any Affiliate of Codexis which are licensed to GSK under Section 3.2, that is generated by either Party, or both Parties, or on behalf of either Party or both Parties, or by Codexis with a Third Party, during the TT Term and is Controlled by Codexis, excluding any improvement or advance to the Codexis Core Technology which arises from GSK's Background IP.

1.21 "Codexis Core Technology Improvements IP" means any and all Intellectual Property which is generated by or on behalf of either Party or any Affiliate of the Parties or jointly between the Parties or any Affiliate of the Parties which Covers the Codexis Core Technology Improvements.

1.22 "Codexis Documentation" means any documentation disclosed by Codexis to GSK pursuant to Article 2 (including with respect to Codexis Core Technology Improvements or the Platform Technology), including all Codexis Methods, the Technology Transfer Plan, and documentation related to the Codexis Software and the documentation described in the Technology Transfer Plan and any and all copies thereof, in whole or in part.

1.23 "Codexis Enzymes" means any Covered Enzyme which is Controlled by Codexis and transferred to GSK pursuant to the Technology Transfer Plan. For clarity, *Codexis Enzymes* does not include GSK Initial Enzymes and GSK Selected Enzymes.

1.24 "Codexis Enzyme Patents" means the Patents set forth on Exhibit 1.24.

1.25 "Codexis Exclusive Field" means, the use, research or development (whether in vitro or in vivo), or commercialization of any Enzyme or Enzyme fusion protein (except where the use of any Enzyme or Enzyme fusion protein which is used by GSK solely: (i) as a research reagent or a research tool, or (ii) to synthesize any GSK Compound), that: (a) effects a chemical transformation in humans, (b) facilitates, assists or enables the action, dispersion, absorption or bioavailability of a molecule, biologic agent, drug product, therapeutic agent, or other compound (other than such Enzyme or Enzyme fusion protein) in humans, or (c) transports a molecule, biologic agent, drug product, therapeutic agent, or any other compound (other than such Enzyme or Enzyme fusion protein) in humans, in each of cases (a) through (c) for any purpose, including without limitation the use of Enzymes for medicinal or therapeutic purposes, such as the treatment of lysosomal storage diseases, removal of toxic metabolites and by-products resulting from defects in metabolism, metabolite depletion therapy (e.g., for the treatment of cancer), permeabilization of tissue for improved uptake of a molecule, biologic agent, drug product, therapeutic agent, or any other compound into cells (e.g., hyaluronidase type application, [***], etc.), as well as combinations of the above; *provided* that the *Codexis Exclusive Field* [***].

1.26 "Codexis Initial Enzyme(s)" means any Codexis Enzyme or any Enzyme derived from a Codexis Enzyme or a Codexis Library which is designated as an Initial Enzyme pursuant to a Project.

1.27 "Codexis Initial Enzyme IP" means any and all Intellectual Property which Codexis Controls during the Term and which Covers any Codexis Initial Enzymes.

1.28 "Codexis Library" means any collection, set or sub-set of expression vectors containing genes Controlled by Codexis that encode for Covered Enzymes, Enzymes or enzymes, transferred to GSK under the Technology Transfer Plan, for the propagation of additional enzyme stock.

1.29 "Codexis Materials" means those materials disclosed or transferred to GSK by Codexis for the practice of the Platform Technology, including (a) the Codexis Libraries and Codexis Enzymes, and (b) the Codexis Core Technology Improvements to which GSK is entitled pursuant to Section 2.2.9.

1.30 "Codexis Mayflower Patents" means the Patents set forth on Exhibit 1.30.

1.31 "Codexis Methods" means (a) as of the Effective Date, the methods and protocols listed in Appendix IV of the Technology Transfer Plan, and (b) after the Effective Date, the methods and protocols disclosed by Codexis and drafted by Codexis, documenting all

[***] 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.

material methods relating to the Codexis Core Technology in sufficient detail to enable a scientist with reasonable skills and experience in the field of protein engineering or protein biochemistry to practice the Platform Technology. The *Codexis Methods* shall include the most current and complete procedures used by Codexis as of the date on which they are disclosed to GSK with respect to the procedures described therein.

1.32 "Codexis Senior Management" means, as of the Effective Date, [***].

1.33 "Codexis Software" means [***], and all other software disclosed under the Technology Transfer Plan, as amended from time to time, together with all software Controlled by Codexis and disclosed by Codexis under this Agreement, including all versions and improvements practiced by Codexis during the TT Term.

1.34 "Codexis Team" has the meaning assigned to it in Section 2.2.5(b).

1.35 "Collaborative Project" means any collaborative enzyme evolution project in the GSK Exclusive Field agreed by the JSC as such prior to the commencement of such collaborative enzyme evolution project, using the Platform Technology where both Codexis and GSK perform the research plan to identify a GSK Selected Enzyme.

1.36 "Commercially Reasonable Efforts" means, with respect to a Party's obligations under this Agreement, efforts consistent with the efforts and resources normally used by a similarly situated pharmaceutical, biotechnology or technology company in the exercise of its reasonable business discretion relating to the development or commercialization of a product with similar product characteristics that is of similar market potential at a similar stage of development or commercialization, taking into account issues of efficacy, safety, patent and regulatory exclusivity, product profile, anticipated or approved labeling, present and future market potential, competitive market conditions, the proprietary position of the compound or product, the regulatory structure involved, and other technical, legal, scientific, medical or commercial factors, and the profitability of the product, including in light of pricing and reimbursement issues.

1.37 "Completion of Wave 1" means achievement of all the "Wave 1 Milestone Success Criteria" as defined under the Technology Transfer Plan.

1.38 Completion of Wave 2" means achievement of all the "Wave 2 Milestone Success Criteria" as defined under the Technology Transfer Plan.

1.39 Completion of Wave 3" means achievement of all the "Wave 3 Milestone Success Criteria" as defined under the Technology Transfer Plan.

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1.40 "Confidential Information" means all trade secrets, processes, formulae, Know-How, improvements, inventions, chemical or biological materials, chemical structures, techniques, marketing plans, strategies, customer lists, suppliers, or other information that has been created, discovered, or developed by a Party, or has otherwise become known to a Party, or to which rights have been assigned or licensed to a Party, as well as any other information and materials that are deemed confidential or proprietary to or by a Party (including all information and materials of a Party's customers and any other Third Party and their consultants), in each case that are disclosed by such Party to the other Party, regardless of whether any of the foregoing are marked "confidential" or "proprietary" or communicated to the other Party by the disclosing Party in oral, written, graphic or electronic form.

1.41 "Controlled" or "Controls" means, when used in reference to an item or to Intellectual Property rights, the legal authority or right of a Party (or any of its Affiliates) (whether by ownership, assignment or by license, other than pursuant to this Agreement) to grant the right to use such item or a license or sublicense of such Intellectual Property rights to the other Party, or to otherwise disclose proprietary or trade secret information to such other Party, without violating any Applicable Law, breaching the terms of any agreement with any Third Party, or misappropriating the proprietary or trade secret information or other Know-How of a Third Party.

1.42 "Cover" or "Covers" means a particular item or method claimed in any Intellectual Property that, but for a license under or ownership right in such Intellectual Property, the use, making, having made, offering for sale, sale, importation, or other exploitation of such item would infringe or misappropriate such Intellectual Property (assuming, in the case of pending Patent applications, that such pending Patent applications were issued Patents).

1.43 "Covered Enzyme" means any immature or mature peptide or protein, including derivatives, with enzymatic or biocatalytic activity Covered by the Licensed IP pursuant to this Agreement.

1.44 "Dollar" or "$" means the lawful currency of the United States.

1.45 "Embargo Period" means the period beginning on the Effective Date and continuing until and ending on the five (5) year anniversary of the Effective Date.

1.46 "Enzyme" means any immature or mature peptide or protein, including derivatives, with enzymatic or biocatalytic activity derived from the use of the Platform Technology pursuant to this Agreement.

1.47 "Enzyme Product" means any of: (a) Licensed Enzyme Therapeutic Product, (b) Licensed Diagnostic Product, (c) Licensed Accessory Product, (d) Licensed Prophylactic Product, or (e) Licensed Other Therapeutic Product.

1.48 "FDA" means the U.S. Food and Drug Administration, or any successor agency thereto.

1.49 "Field" means (a) the manufacture and commercialization of compounds, molecules and products (including, but not limited to, Licensed Products) for the treatment of any human disease or medically treatable human condition; (b) the prophylaxis, diagnosis, or treatment of any human disease or medically treatable human condition; and (c) the research and development of compounds, molecules and products (including, but not limited to, Licensed Products) for the treatment of any human disease or medically treatable human condition.

1.50 "Final Round of Enzyme Evolution" means that final one (1) Round of Enzyme Evolution in the series of successive Rounds of Enzyme Evolution in which the GSK Selected Enzyme was identified.

1.51 "First Commercial Sale" means the first sale of a Licensed Product in a given country or other regulatory jurisdiction in the Territory by or on behalf of GSK, its Affiliates or sublicensees to a Third Party, after receipt of Regulatory Approval (including pricing approval, to the extent required for sale of Licensed Products in a given country or regulatory jurisdiction, and the completion of any necessary labeling negotiations that may be required after Regulatory Approval and such pricing approval) for Licensed Products in such country or regulatory jurisdiction. *First Commercial Sale* shall specifically exclude sales or transfers for clinical study purposes or compassionate use, named-patient, indigent patient or similar uses, if such uses do not result in monetary compensation to GSK above the cost of goods.

1.52 "First Production Run" means the use of a Licensed Collaborative Project GSK Selected Enzyme or a Licensed GSK Sole Project GSK Selected Enzyme in the synthesis of a GSK Compound (a) for use in clinical trials or (b) for commercial sales.

1.53 "FTE" means the equivalent of the work performed after the Effective Date of one (1) Codexis scientist or one (1) GSK scientist, full time for one (1) year. In no event will one (1) person count for more than one (1) FTE in any Calendar Year.

1.54 "Fully Burdened Cost" means [***]. For the avoidance of doubt, the calculation of "Fully Burdened Cost" shall exclude for all purposes the cost of any and all materials supplied by GSK. [***].

1.55 "Generic Version" means, with respect to a Pharmaceutical Product, a product meeting all of the following criteria: (a) such product contains the same active pharmaceutical ingredient(s) in the same dosage form and the same formulation as is contained in such Pharmaceutical Product, and (b) such product is A/B Rated with respect to such Pharmaceutical Product. For the purposes of this definition, **"A/B Rated"** means, inside the United States, "therapeutically equivalent" as evaluated by the FDA, applying the definition of "therapeutically equivalent" set forth in the preface to the then-current edition of the FDA publication "Approved Drug Products With Therapeutic Equivalence Evaluations" and, outside the United States, such equivalent determination by the applicable Regulatory Authorities as is necessary to permit pharmacists or other individuals authorized to dispense pharmaceuticals under Applicable Law to substitute one product for another product in the absence of specific instruction from a physician or other authorized prescriber under Applicable Law.

1.56 "Good Clinical Practices" or "GCP" means the then-current international ethical and scientific quality standards for designing, conducting, recording and reporting trials that involve the participation of human subjects. In the United States, GCP shall be based on Good Clinical Practices established through FDA guidance (including ICH E6) and, outside the United States, GCP shall be based on ICH E6.

1.57 "Good Laboratory Practices" or "GLP" means the then-current Good Laboratory Practice (or similar standards) for the performance of laboratory activities for pharmaceutical products as are required by applicable Regulatory Authorities or Applicable Law. In the United States, Good Laboratory Practices are established through FDA regulations (including 21 C.F.R. Part 58), FDA guidance, FDA current review and inspection standards and current industry standards.

1.58 "Good Manufacturing Practices" or "GMP" means the then-current Good Manufacturing Practices for the manufacture of products as are required by applicable Regulatory Authorities or Applicable Law. In the United States, GMP shall be as defined under the rules and regulations of the FDA, as the same may be amended from time to time.

1.59 "GSK Compound" means any compound which is Controlled by GSK or its Affiliates [***], in any form including, but not limited to the final active pharmaceutical ingredient (i.e., an API) form (but excluding, for clarity, any Enzyme).

1.60 "GSK Exclusive Field" means the development and/or use of any Enzyme for the synthesis of any GSK Compound, within the Field.

1.61 "GSK Existing Pharmaceutical Product" means any GSK product containing a GSK Compound which has obtained Regulatory Approval and where the first such GSK product sold in a Major Market Country did not include the use of a GSK Selected Enzyme within the route of synthesis of the GSK Compound included within the product.

[***] 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.

1.62 "GSK Initial Enzyme(s)" means any enzyme (which for clarity is not an "*Enzyme*") that is provided by GSK and which is designated as an Initial Enzyme pursuant to a Project excluding, for clarity, Enzymes derived from a Codexis Enzyme or a Codexis Library.

1.63 "GSK Project Library" means any collection, set or sub-set of Enzymes and/or expression vectors containing genes that encode for Enzymes derived from a Project.

1.64 "GSK Selected Enzyme" means an Enzyme derived from an Initial Enzyme and has been selected by GSK from a Project for use pursuant to this Agreement to synthesize any GSK Compound.

1.65 "GSK Sole Project" means any Enzyme evolution project that was initiated using a GSK Initial Enzyme or a Codexis Initial Enzyme, conducted in the GSK Exclusive Field by GSK or any Affiliate of GSK, whether or not in collaboration with any Third Party permitted under this Agreement, using the Platform Technology which may involve limited Codexis' participation (which, for clarity, would not constitute such level of participation that the JSC would otherwise deem such participation as constituting a Collaborative Project).

1.66 "GSK Team" shall have the meaning assigned to it in Section 2.2.5(a).

1.67 "IFRS" means the International Financial Reporting Standards.

1.68 "Improvements TT Term" means the period beginning on the expiration of the TT Term and continuing until and ending on the earlier of (a) the Improvements TT Term Expiration Date, (b) the date on which GSK fails to timely pay an Annual Option Fee in accordance with Section 7.2 or (c) the early termination of this Agreement by Codexis in accordance with Sections 11.2 or 11.4.

1.69 "Improvements TT Term Expiration Date" means, if GSK exercises the Option under Section 3.5.2 and timely pays the First Annual Option Fee and each Annual Option Fee set forth in Section 7.2, the three (3) year anniversary of the TT Term Expiration Date or a later date if the Improvements TT Term is extended in accordance with Section 3.5.4.

1.70 "Initial Enzyme" means any GSK Initial Enzyme or Codexis Initial Enzyme contributed to a Project which is selected to undergo Initial Enzyme Optimisation.

1.71 "Initial Enzyme Optimisation" means the process of optimising Initial Enzymes for desired characteristics directly using the Platform Technology in any Project.

1.72 "Initial Technology Transfer Inventory" means all of the items set out in Appendix I of the Technology Transfer Plan.

1.73 "Initial Training" has the meaning assigned to such term in Section 2.2.6.

1.74 "In-License Agreements" means the agreements set forth in Exhibit 1.74 in the versions sent by Codexis to GSK in an e-mail(s) dated July 7, 2014.

1.75 "In-Licensed IP" means the In-Licensed Patents and any In-Licensed Know-How.

1.76 "In-Licensed Know-How" means all Know-How of Third Parties Controlled by Codexis as of the Effective Date and licensed to Codexis pursuant to the In-License Agreements, in each case that Covers the Codexis Documentation, the Codexis Materials, the Codexis Software or the practice of the Platform Technology.

1.77 "In-Licensed Patents" means all Patents of Third Parties Controlled by Codexis as of the Effective Date and licensed or sub-licensed to Codexis pursuant to the In-License Agreements, in each case, that Cover the Codexis Documentation, the Codexis Materials, the Codexis Software or the practice of the Platform Technology, set forth on Exhibit 1.77.

1.78 "Intellectual Property" means Patents, Know-How, copyrights and software, including all applications for registration for the foregoing and all other similar proprietary rights as may exist anywhere in the world.

1.79 "Invention" means any discovery, invention, contribution, method, finding, or improvement, whether or not patentable, and all related Know-How.

1.80 "Invoice" means any invoice submitted to GSK by Codexis under this Agreement, produced in accordance with GSK's processing requirements, as set forth in Exhibit 1.80.

1.81 "Know-How" means non-public materials and technical information, including techniques, methods, processes, technology, recipes, designs, equipment configurations and uses, biological samples, compounds and cell lines, and biological, chemical, pharmacological, toxicological, clinical, assay and related trade secrets, and manufacturing data, preclinical and clinical data, the specifications of ingredients, the manufacturing processes, formulation, specifications, sourcing information, quality control and testing procedures, and related know-how and trade secrets.

1.82 "Licensed Additional Codexis IP" means Licensed Additional Codexis Know-How and Licensed Additional Codexis Patents.

1.83 "Licensed Accessory Product" means [***].

1.84 "Licensed Additional Codexis Know-How" means any and all Know-How which (a) Codexis or any Codexis Affiliate comes to Control during the TT Term (and, if GSK exercises the Option, during the Improvements TT Term) and (b) which Covers (i) the Platform Technology, (ii) Arising Codexis Enzyme Technology, (iii) Arising Codexis Process Technology, (iv) any Codexis Core Technology Improvements, (v) the Codexis Documentation and (vi) Codexis Materials.

1.85 "Licensed Additional Codexis Patents" means any and all Patents which (a) Codexis or any Affiliate comes to Control during the TT Term (and, if GSK exercises the Option, during the Improvements TT Term) and (b) which Covers (i) the Platform Technology, (ii) Arising Codexis Enzyme Technology, (iii) Arising Codexis Process Technology, or (iv) any Codexis Core Technology Improvements.

1.86 "Licensed Collaborative Project GSK Selected Enzyme" means any GSK Selected Enzyme arising from a Collaborative Project.

1.87 "Licensed Diagnostic Product" means [***].

1.88 "Licensed Enzyme Therapeutic Product" means [***].

1.89 "Licensed GSK Sole Project GSK Selected Enzyme" means any GSK Selected Enzyme arising from a GSK Sole Project.

1.90 "Licensed IP" means (a) the Licensed Patents, (b) the In-Licensed Patents, (c) the Licensed Know-How, (d) the In-Licensed Know-How, (e) the Licensed Additional Codexis Know-How, and (f) the Licensed Additional Codexis Patents.

1.91 "Licensed Know-How" means any Know-How Controlled by Codexis as of the Effective Date which is disclosed or provided to GSK hereunder in accordance with Section 2.2.3, including the Codexis Documentation, Codexis Materials and Codexis Software but only to the extent existing as of the Effective Date.

1.92 "Licensed Other Therapeutic Product" means [***].

1.93 "Licensed Patents" means (a) the Codexis Core Patents and (b) the Codexis Enzyme Patents.

1.94 "Licensed Product" means an Enzyme Product and/or a Pharmaceutical Product.

1.95 "Licensed Prophylactic Product" means [***].

1.96 "Losses" means any claim, threatened claim, suit, proceeding, liability, loss, damage, expense (including reasonable legal expenses, costs of litigation, and attorneys' fees) or judgment, whether for money or equitable relief, of any kind.

1.97 "Major Market Country" means [***].

1.98 "Net Sales" means gross invoiced sales of the Licensed Product to Third Parties, in each quarter less the following deductions from such gross amounts which are actually incurred, allowed, paid, accrued or specifically allocated to the extent that such amounts are deducted from gross invoiced sales amounts as reported in financial statements in accordance with the International Financial Reporting Standards ("IFRS"), applied on a consistent basis:

1.98.1 credits or allowances actually granted for damaged Licensed Product, returns or rejections of Licensed Product, price adjustments, and billing errors;

1.98.2 governmental and other rebates (or equivalents thereof) to national, state/provincial, local and other governments, their agencies and purchasers, and reimbursers, or to trade customers;

1.98.3 normal and customary trade, cash and quantity discounts, allowances, and credits actually allowed or paid;

1.98.4 commissions allowed or paid to Third Party distributors, brokers or agents other than sales personnel, sales representatives and sales agents;

1.98.5 transportation costs, including insurance, for outbound freight related to delivery of Licensed Product to the extent included in the gross amount invoiced;

1.98.6 sales taxes, value added taxes, and other taxes directly linked to the sales of Licensed Product to the extent included in the gross amount invoiced; and

1.98.7 any other items actually deducted from gross invoiced sales amounts as reported in financial statements in accordance with the IFRS, applied on a consistent basis.

[***] 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.

For purposes of this definition, the Licensed Product shall be considered "sold" and "deductions" allowed when recorded as invoiced in financial statements prepared in accordance with IFRS.

1.99 "On-Site Training" has the meaning assigned to such term in Section 2.2.7.

1.100 "Patent(s)" means (a) patents and patent applications anywhere in the world, (b) all divisionals, continuations, continuations in-part thereof or any other patent application claiming priority, or entitled to claim priority, directly or indirectly to (i) any such patents or patent applications, or (ii) any patent or patent application from which such patents or patent applications claim, or is entitled to claim, direct or indirect priority, and (c) all patents issuing on any of the foregoing anywhere in the world, together with all registrations, reissues, re-examinations, patents of addition, renewals, substitutions, validations, and re-validations, supplemental protection certificates or extensions of any of the foregoing anywhere in the world, and (d) all provisional and any other priority patent applications filed worldwide.

1.101 "Person" means any individual, firm, corporation, partnership, limited liability company, trust, business trust, joint venture, governmental authority, association or other entity.

1.102 "Pharmaceutical Product" means any product containing a GSK Compound that includes a GSK Selected Enzyme within its route of synthesis, and which has been formulated into such product.

1.103 "Phase 1b Clinical Trial" means a pilot human clinical trial usually conducted in patients diagnosed with the disease, or condition for which the study drug is intended, who demonstrate some biomarker, surrogate, or possible clinical outcome.

1.104 "Phase 2a Clinical Trial" means a human clinical trial, the principal purpose of which is a determination of efficacy and safety, in the target population, at the intended clinical dose or doses, to confirm the optimal manner of use.

1.105 "Platform Technology" means (a) the Codexis Core Technology, (b) the Codexis Enzymes and (c) the Codexis Libraries which are provided to GSK by Codexis under this Agreement in such a state and condition and in the detail which are necessary to enable a scientist with reasonable skills and experience in the field of protein engineering or protein biochemistry to use, identify, select, optimise, isolate, modify, engineer, research, develop, make, have made and/or import any Enzyme, in each of (a), (b) and (c), that (i) is described in, and embodies the subject matter of, the Codexis Documentation, and (ii) uses the Codexis Materials and the Codexis Software.

1.106 "Project" means any GSK Sole Project or Collaborative Project.

1.107 "Project Enzyme" means any Enzyme derived from an Initial Enzyme arising from a Round of Enzyme Evolution.

1.108 "Prosecution" means the preparation, drafting, filing, prosecution (including any interferences, reissue proceedings, reexaminations, inter partes reviews, post-grant reviews, oppositions and Patent office appeals) and maintenance of Patents in the Territory. When used as a verb, "Prosecute" means to engage in Prosecution.

1.109 "Regulatory Approval(s)" means, with respect to any Licensed Product in any jurisdiction, all approvals from any Regulatory Authority necessary for the commercial manufacture, marketing and sale of any product containing such Licensed Product in such jurisdiction in accordance with Applicable Law, including without limitation, receipt of pricing and reimbursement approvals, where required.

1.110 "Regulatory Authority" means any national or supranational governmental authority, including without limitation the FDA, that has responsibility in countries in the Territory over the development and/or commercialization of any Licensed Product, as applicable.

1.111 "Regulatory Filings" means any and all regulatory applications, filings, approvals and associated correspondence required to develop any Licensed Product in each country or jurisdiction in the Territory.

1.112 "Restricted Enzyme" means any immature or mature peptide or protein with enzymatic or biocatalytic activity, or any vector that encodes for any such peptide or protein, listed in Exhibit 1.112, which list as of the Effective Date will be provided in accordance with Section 3.7.1. During the Term, Exhibit 1.112 may be revised in accordance with Section 3.7.1.

1.113 "Round(s) of Enzyme Evolution" means round of Initial Enzyme Optimisation conducted during a Project resulting in Project Enzymes comprising a GSK Project Library.

1.114 "Royalty Term" means, on a country-by-country and Enzyme Product-by-Enzyme Product basis, the period commencing as of the date of First Commercial Sale of such Enzyme Product in such country and ending upon [***]: (a) [***] years after the date of First Commercial Sale of such Enzyme Product in such country, and (b) the date of expiration of the last to expire Valid Claim of the last to expire Patent that claims the composition of matter or method of use of the Enzyme Product that would be infringed by the manufacture, use or sale of such Enzyme Product in such country, but for the licenses granted to GSK under this Agreement.

1.115 "Scientific Lead" shall have the meaning assigned to it in Section 2.1.1.

1.116 "Technology Transfer" means (a) the transfer of the Codexis Documentation, Codexis Software and Codexis Materials and (b) the training with respect to the Platform Technology, in each case to be conducted in accordance with the Technology Transfer Plan and Article 2.

1.117 "Technology Transfer Plan" means that plan for the Technology Transfer as mutually agreed between the Parties and set forth in Exhibit 1.117 as of the Effective Date and as may be amended by the Parties during the TT Term in accordance with Section 2.2.4, itemising each Party's responsibilities and obligations, the activities to be performed by each Party, and a timeline for performance of such activities, in connection with the Technology Transfer from Codexis to GSK to fully implement the Platform Technology within GSK.

1.118 "Territory" means worldwide.

1.119 "Third Party" means any Person other than GSK and Affiliates of GSK, and Codexis and Affiliates of Codexis.

1.120 "TT Term" means the period beginning on the Effective Date and ending on the earlier of (a) the date on which Codexis receives notification from GSK, in accordance with Section 7.3, of Completion of Wave 3, (b) the third (3rd) anniversary of the Effective Date, or (c) the date GSK initiates the first GSK Sole Project that is not a Technology Transfer Project and for which GSK will provide prompt notification to Codexis of such initiation date.

1.121 "TT Term Expiration Date" means the earlier of (a) the date on which Codexis receives notification from GSK, in accordance with Section 7.3, of Completion of Wave 3, (b) the third (3rd) anniversary of the Effective Date, or (c) the date GSK initiates the first GSK Sole Project that is not a Technology Transfer Project and for which GSK will provide prompt notification to Codexis of such initiation date.

1.122 "Upfront Payment" shall have the meaning assigned to it in Section 7.1.

1.123 "United States" or "U.S." means the United States of America and all its territories and possessions.

1.124 "Valid Claim" means either (a) a claim of an issued and unexpired Patent which has not been held permanently revoked, unenforceable or invalid by a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal and that is not admitted to be invalid or unenforceable through reissue, disclaimer or otherwise (i.e., only to the extent the subject matter is disclaimed or is sought to be deleted or amended through reissue), or (b) a claim of a pending Patent application that has not been abandoned, finally rejected or expired without the possibility of appeal or refiling.

1.125 "Wave" means each phase of the Technology Transfer noted as *Wave 1*, *Wave 2* and *Wave 3* of the Technology Transfer Plan in force as of the Effective Date, and from time-to-time during the TT Term.

1.126 Additional Definitions. Each of the following terms has the meaning set forth in the corresponding section of this Agreement indicated below:

Definition:	**Section:**
AAA	12.3
A/B Rated	1.55
Acquiring Entity	1.16
Agreement	Preamble
Annual Option Fee	7.2
Bankruptcy Code	11.3
Breaching Party	11.2
Challenging Party	11.4
Codexis	Preamble
Codexis Indemnitees	10.1
Codexis Patents	6.5.2
Covered Patent Claim	3.1.3
Cure Period	11.2
Disclosing Party	9.1
Dispute	12.1
Effective Date	Preamble
Exclusive Option	3.5.1
First Annual Option Fee	7.2
Force Majeure	13.4
GSK	Preamble
GSK Indemnitees	10.2
GSK Patents	6.5.3
Indemnification Claim	10.3
Indemnitee	10.3
Indemnitor	10.3
Infringement Action	6.6.1
Joint Steering Committee or JSC	5.1.1
Lactosan	3.4.6
Material	2.5
Material Transfer Record Form	2.5
Non-Breaching Party	11.2
Non-Exclusive Option	3.5.1
Non-Solicitation Period	13.1
Option	3.5.1

Definition:	**Section:**
Option Period	3.5.2
Parties	Preamble
Party	Preamble
Patent Challenge	11.4
Patent Claim	3.1.3
Patent Committee	5.2.1
Patent Committee Embargo License Period	3.1.4(a)
Potentially Restricted Enzyme	3.7.1
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2. TECHNOLOGY TRANSFER AND PROJECTS

2.1 Management of Technology Transfer; Projects; Alliance.

2.1.1 Scientific Lead. Each Party shall designate in writing within fifteen (15) days after the Effective Date, a "**Scientific Lead**" with all necessary scientific skill and expertise to fulfil such role in accordance with this Article 2, to be the primary contact for such Party responsible for managing day-to-day communications between the Parties with respect to the technical aspects of the Technology Transfer and other scientific and technical activities set forth in this Agreement, including responsibility for scheduling teleconferences and coordinating meetings and technical support as required hereunder. Each Party may respectively appoint a substitute Scientific Lead to represent it under this Section 2.1.1.

2.1.2 Alliance Manager. Each Party shall designate in writing within fifteen (15) days after the Effective Date, an "**Alliance Manager**" with all necessary business skill and expertise as necessary to be the primary contact for such Party as regards all business development and/or contract-related communications between the Parties for all matters in connection with this Agreement, outside of the purview of the technical matters for which the Scientific Leads are responsible. The Alliance Managers shall be responsible for initially

addressing any finance, legal and business issues that may arise. Each Party may respectively appoint a substitute Alliance Manager to represent it under this Section 2.1.2.

2.1.3 Limitations. The Scientific Leads and the Alliance Managers shall not have the authority to amend, modify or waive compliance with this Agreement, through meeting minutes, e-mails or otherwise.

2.2 Technology Transfer.

2.2.1 Codexis Methods. Except for the protocols listed under the heading "Protocols to be Generated in the Context of Training during Technology Transfer" in Appendix IV of the Technology Transfer Plan, Codexis shall provide the Codexis Methods within thirty (30) days after the Effective Date.

2.2.2 Codexis Technology Transfer. Codexis shall transfer to GSK the Initial Technology Transfer Inventory and: (a) the Codexis Materials, (b) the Codexis Documentation, and (c) the Codexis Software, each in accordance with the Technology Transfer Plan. The Parties shall perform the Technology Transfer during the TT Term pursuant to the timelines under the Technology Transfer Plan.

2.2.3 Technology Transfer Plan. Upon the Effective Date the Parties shall commence the Technology Transfer in sequential order of Waves as described in, and in accordance with, the Technology Transfer Plan. Each Party shall perform the activities assigned to such Party under the Technology Transfer Plan at the sites identified in Section 2.2.6 and 2.2.7 and shall perform all such activities in compliance with Applicable Law. Notwithstanding anything to the contrary, subject to any updates to the Technology Transfer Plan pursuant to Section 2.2.4, Codexis shall not be obligated to transfer to GSK any information and/or materials not described in the Technology Transfer Plan.

2.2.4 Updates to Technology Transfer Plan. In the event that errors and/or omissions in the Technology Transfer Plan are discovered by GSK and/or Codexis during the TT Term and the Parties mutually agree to update the Technology Transfer Plan pursuant to any reasonable scientific rationale agreed between the Parties to enable GSK to practice the Platform Technology, the Parties shall then update the Technology Transfer Plan accordingly.

2.2.5 Technology Transfer Teams. In order to effect Section 2.2:

(a) GSK shall identify a Technology Transfer team of personnel and in such numbers as it may so determine (the "**GSK Team"**) to participate in each Wave of the Technology Transfer. GSK shall change any member(s) of the GSK Team in its sole discretion at any time. The GSK Team shall have all reasonable skills and experience in the field of protein engineering to perform the Technology Transfer.

(b) Codexis shall identify a Technology Transfer team to lead the GSK Team in each Wave of the Technology Transfer, including the Initial Training and the On-Site Training [***] (the "**Codexis Team**") as detailed in the Technical Transfer Plan. Codexis, in its sole discretion, may change any member(s) of the Codexis Team at any time. Each member of the Codexis Team shall have all necessary scientific experience and expertise to perform the Technology Transfer.

2.2.6 Initial Training at Codexis' Facility. After the Effective Date, the GSK Team will participate in Wave 2 of Technology Transfer at Codexis' facility in Redwood City, California, which training shall be completed as outlined in the Technology Transfer Plan (the "**Initial Training**"). GSK shall bear its own costs and expenses of participating in such Initial Training.

2.2.7 On-Site Training at GSK's Upper Merion West Campus Facility. On an agreed-upon date, promptly following Completion of Wave 1 the Codexis Team and the GSK Team will participate in Wave 2 Technology Transfer activities at a GSK facility in Upper Merion West Campus facility (or any other GSK facility nominated by GSK in the greater Philadelphia region). Codexis shall bear its own costs and expenses of providing such training (the "**On-Site Training**"). The On-Site Training shall be conducted by the Codexis Team in accordance with the Technology Transfer Plan. The On-Site Training shall include training on all items identified in the Technology Transfer Plan as required at the On-Site Training.

2.2.8 Acceptance by GSK of the Initial Technology Transfer Inventory; Completion of Technology Transfer. The Initial Technology Transfer Inventory to be transferred in accordance with the Technology Transfer Plan shall be deemed to have been accepted by GSK [***] (the "**Initial Technology Transfer Inventory Acceptance Criteria**"). In the event that any item in the Initial Technology Transfer Inventory fails to meet the Initial Technology Transfer Inventory Acceptance Criteria, GSK shall notify Codexis in writing [***]. In the event that any item of the Initial Technology Transfer Inventory fails to meet the Initial Technology Transfer Inventory Acceptance Criteria and GSK so notifies Codexis of such, Codexis shall promptly provide replacements for any item of the Initial Technology Transfer Inventory which shall meet the Initial Technology Transfer Inventory Acceptance Criteria. The Technology Transfer will have been completed when each item of the Initial Technology Transfer Inventory and each step in the Technology Transfer Plan has been successfully completed[***].

2.2.9 Codexis Core Technology Improvements, Arising Codexis Enzyme Technology and Arising Codexis Process Technology During the TT Term.

(a) Initial Disclosure. Within [***] days after the end of the Calendar Quarters ending June 30 and December 31:

(i) during the TT Term and, if GSK exercises the Option, during the Improvements TT Term, Codexis' Alliance Manager shall disclose to GSK's Alliance Manager [***] Codexis Core Technology Improvements by or on behalf of Codexis, or any Affiliate of Codexis and [***] corresponding Licensed Additional Codexis IP during the applicable half year period, if any; and

(ii) during the TT Term, Codexis' Alliance Manager shall disclose to GSK's Alliance Manager [***] Arising Codexis Enzyme Technology and/or Arising Codexis Process Technology by or on behalf of Codexis, or any Affiliate of Codexis and [***] corresponding Licensed Additional Codexis IP during the applicable half year period, if any.

(b) Subsequent Disclosure. If the GSK Alliance Manager requests further information regarding Codexis Core Technology Improvements, Arising Codexis Enzyme Technology and/or Arising Codexis Process Technology by or on behalf of Codexis, or any Affiliate of Codexis, and [***] corresponding Licensed Additional IP during the TT Term and, if GSK exercises the Option, during the Improvements TT Term, and corresponding Licensed Additional Codexis IP disclosed to GSK in accordance with Section 2.2.9(a), GSK shall, within [***] days after receipt of the initial disclosure of Codexis Core Technology Improvements by Codexis pursuant to Section 2.2.9(a) request the disclosure of such further information Controlled by Codexis, and with respect to Section 2.2.9(a), in sufficient detail as reasonably necessary for GSK to make a decision as to whether to exercise its rights pursuant to Section 3.5.2 to obtain a license to such Codexis Core Technology Improvements and corresponding Licensed Additional Codexis IP. All information, documents and other materials disclosed by Codexis to GSK pursuant to this Section 2.2.9 shall constitute the Confidential Information of Codexis.

(c) Disclosure of Codexis Core Technology Improvements During the TT Term and, if GSK exercises the Option, during the Improvements TT Term. During the TT Term and, if GSK exercises the Option, during the Improvements TT Term, GSK shall have [***] days after the disclosure of such further information relating to the Codexis Core Technology Improvements and corresponding Licensed Additional Codexis IP pursuant to Section 2.2.9(b) to request in writing that Codexis disclose such Codexis Core Technology Improvement(s) and [***] corresponding Licensed Additional Codexis IP to GSK. If GSK makes such request during such period, Codexis shall disclose such Codexis Core Technology and Licensed Additional Codexis IP to GSK as promptly as possible, and in any event no later than within [***] days and such Codexis Core Technology and Licensed Additional Codexis IP shall be deemed licensed to GSK under Section 3.2.1.

(d) Role of Scientific Lead. For one (1) Calendar Year following the end of the TT Term, and during the Improvements TT Term, if GSK exercises the Option, Codexis shall make its Scientific Lead reasonably available to provide telephonic or web-based advisory technical support and assistance to GSK in GSK's practice of the Platform Technology pursuant to the licenses granted pursuant to Section 3.5.3.

2.2.10 Arising GSK Enzyme Technology and Arising GSK Process Technology During the TT Term.

(a) Initial Disclosure. Within [***] days after the end of the Calendar Quarters ending June 30 and December 31, during the TT Term, GSK shall disclose to Codexis' Alliance Manager [***] Arising GSK Enzyme Technology and Arising GSK Process Technology, if any.

(b) Subsequent Disclosure. If the Codexis Alliance Manager requests further information regarding Arising GSK Enzyme Technology and/or Arising GSK Process Technology, Codexis shall, within [***] days after receipt of the initial disclosure of such Arising GSK Enzyme Technology and/or such Arising GSK Process Technology by GSK pursuant to Section 2.2.10(a) request the disclosure of such further information Controlled by GSK.

2.3 Technology Transfer Projects. During the TT Term, the Parties shall conduct at least four (4) Projects as set forth in the Technology Transfer Plan (each, a "**Technology Transfer Project**") pursuant to the terms of written project plans (each, a "**Technology Transfer Project Plan**") agreed upon and approved by the JSC at appropriate times during the TT Term in light of the schedule set forth in the Technology Transfer Plan. The Parties acknowledge and agree that Technology Transfer Projects [***] (as described in the Technology Transfer Plan) shall be [***], and Technology Transfer Projects [***] (as described in the Technology Transfer Plan) shall be [***]. Subject to Article 7, each Party shall be solely responsible for all costs and expenses arising from activities performed by such Party pursuant to the Technology Transfer Project Plans ("**Technology Transfer Project Activities**"). Each such Technology Transfer Project shall be deemed completed upon satisfaction of the criteria for such project as set forth in the Technology Transfer Plan.

2.4 New Projects. Upon reasonable request by GSK during the TT Term, the JSC shall meet to discuss in good faith one or more additional Collaborative Projects to be conducted by the Parties under this Agreement. If the JSC agrees that any such Collaborative Project shall be performed by the Parties, the Parties shall prepare in good faith a written research plan for such Collaborative Project and submit such written research plan to the JSC for approval. If the JSC approves such Collaborative Project, the written research plan will automatically be made a part of this Agreement.

2.5 Transfers of Materials. In the event that the Parties mutually agree that a transfer of any biopharmaceutical, biological, chemical or other material ("**Material(s)**") from GSK or Codexis (the "**Transferor**") to Codexis or GSK (as applicable) (the "**Transferee**") is necessary or desirable to facilitate the Parties' collaborative activities pursuant to this Agreement, except where Codexis Materials are transferred by Codexis to GSK pursuant to the Technology Transfer Plan (which in all cases shall be itemised and recorded in writing, such written records to be sent to GSK for confirmation of receipt of all such items), the Parties shall document such transfer using the material transfer record form set out in Exhibit 2.5 (the "**Material Transfer Record Form**") and the Transferor shall effect such transfer in accordance with the following provisions:

2.5.1 the Transferor shall complete and submit to the Transferee for counter-signature, the Material Transfer Record Form prior to the transfer of the Material.

2.5.2 both Parties warrant that they have the full right and authority to transfer the Materials to the Transferee for use within the contemplated research program.

2.5.3 the Material and related information provided by Transferor will remain the property of Transferor or remain under the control of Transferor and will be kept securely by Transferee and will not be provided by Transferee, without the prior written consent of Transferor, to any Third Party.

2.5.4 the Transferee shall only use the Material for the purpose of the performing the applicable work as laid out under any applicable Project or in connection with the Platform Technology, in each case in accordance with Applicable Law.

2.5.5 the Transferee acknowledges that the Material is experimental in nature and provided "AS IS."

2.5.6 the Transferee shall use the Material at its own risk and in accordance with Applicable Law and any safety instructions provided by the Transferor.

2.5.7 all right title and interest in Materials transferred in accordance with this Section 2.5 shall remain vested in the Transferor and the Transferee shall gain no right, title or interest of any sort, other than as may be granted to the Transferee pursuant to the rights and licenses in this Agreement, in such Material.

2.6 Project Reporting. At each JSC meeting or as otherwise agreed between the Parties (but in no event less than once per Calendar Quarter), each Party will provide the JSC with presentations regarding the Technology Transfer Project Activities performed by it, including a summary of results relating to each Technology Transfer Project.

2.7 Post- Project Enzyme Supply.

2.7.1 Request, Audit and Supply Terms. Subject to the limitations in Section 2.7.2, GSK, during the Term, may request that Codexis supply to GSK any Enzyme for use in any Project. Prior to obtaining supply of any Enzyme from Codexis, GSK shall have the right to perform a quality and technical audit of Codexis' manufacturing facility to determine such facility's suitability for manufacture of the Enzyme and compliance with Applicable Law, including without limitation, whether such facility (a) holds necessary permits and licenses; and (b) maintains such Good Laboratory Practices and/or Good Manufacturing Practices, in each case as may be applicable to the Enzyme to be obtained from Codexis. If GSK elects to proceed with obtaining supply from Codexis after satisfactory completion of the audit, the Parties shall negotiate in good faith to agree to mutually acceptable commercial supply and quality terms, defining the roles and responsibilities related to Codexis' manufacture and delivery of the Enzyme to GSK. [***].

2.7.2 Limitations. GSK may only request the use of [***], and Codexis will have no obligation under Section 2.7.1 to supply Enzyme to GSK [***].

2.8 Regulatory Responsibilities and Costs. As between the Parties, GSK shall prepare, file, maintain and own all Regulatory Filings and related submissions with respect to all Licensed Products and shall bear the cost of such preparation, filing, maintenance and ownership. GSK shall be responsible for all safety reporting obligations globally with respect to all Licensed Products and shall maintain the global safety database for all Licensed Products. GSK shall be solely responsible for communicating with the FDA and/or any other Regulatory Authority in any country or jurisdiction regarding all Licensed Products.

2.9 Commercialization Responsibilities and Costs. GSK shall be solely responsible for all commercialization activities relating to Licensed Products, at GSK's sole cost and expense, and shall have sole decision-making authority with respect to the foregoing. GSK shall conduct all commercialization activities under this Agreement in compliance with all Applicable Law. For clarity, nothing in this Agreement shall require GSK to develop or commercialize any minimum number of Licensed Products or limit the number of Licensed Products that GSK may develop or commercialize.

2.10 Availability for Collaborative Projects; Additional Codexis Libraries. During the TT Term, [***]

[***]; *provided* that the JSC agrees that the performance of such Project Activities by such members of the Codexis Team will not impact negatively the Technology Transfer or any Technology Transfer Project.

2.11 Party Employees. Notwithstanding anything to the contrary under this Agreement, under no circumstance would any employee, contractor, contingent worker or consultant of a Party be considered an employee, contractor, contingent worker or consultant of the other Party. The Party who sends any employee, contractor, contingent worker or consultant to work at the other Party's premises shall assume all liability for such employees, contractors, contingent workers or consultants working at the other Party's premises and shall procure that its employees, contractors, contingent workers or consultants comply with all security, health and safety and other policies applicable to occupiers of the hosting Party's premises.

3. LICENSES

3.1 Licenses to Codexis.

3.1.1 GSK Background IP License. Subject to the terms and conditions of this Agreement, GSK hereby grants to Codexis a worldwide, non-exclusive, non-transferable (except as provided in Section 13.5), fully paid-up, royalty-free right and license, with the right to grant sublicenses solely to Affiliates, under GSK's Background IP in the GSK Exclusive Field solely as necessary for Codexis to perform its obligations during the Technology Transfer and under each Project as set forth in the written research plan applicable to such Project.

3.1.2 Arising GSK Enzyme Technology IP and Arising GSK Process Technology IP. Subject to the terms and conditions of this Agreement, GSK hereby grants to Codexis a worldwide, non-exclusive, non-transferable (except as provided in Section 13.5), fully paid-up, royalty-free right and license, with the right to grant sublicenses through multiple tiers, under the Arising GSK Enzyme Technology IP and the Arising GSK Process Technology IP (in each case, if any) for any use outside of the GSK Exclusive Field; *provided* that the foregoing license [***] which shall include any GSK Selected Enzyme.

3.1.3 Embargo License. If it is determined pursuant to Section 3.1.4**(a)** that GSK, during the Embargo Period, used Platform Technology in any way with respect to any Enzyme or Enzyme fusion protein within the Codexis Exclusive Field that is claimed in any Patent (whether or not filed during the Embargo Period) that is Controlled by GSK, licensed to GSK by a Third Party or licensed by GSK to a Third Party and that such Patent claims the composition, manufacture or use of any product or product candidate in the Codexis Exclusive Field that is Controlled by Codexis or, if applicable, an exclusive licensee or

assignee of Codexis with respect to such product or product candidate ("**Patent Claim**"), then GSK hereby grants to Codexis or, if applicable, each such exclusive licensee or assignee a worldwide, non-exclusive, non-transferable (except as provided in Section 13.5, fully paid-up, royalty-free right and license, with the right to grant sublicenses only to Affiliates, and collaborators, partners, suppliers or vendors, under each Patent Controlled by GSK that includes a Patent Claim, to develop, make, use, sell, offer for sale, market, import and export such product or product candidate in the Codexis Exclusive Field.

3.1.4 Patent Claims.

(a) The determination of the existence of a Patent Claim, as described in Section 3.1.3, shall be made by the Patent Committee pursuant to Section 5.2.1, *provided, however,* that if the Patent Committee is unable to resolve such matter within thirty (30) days (the "**Patent Committee Embargo License Period**"), then notwithstanding Section 5.2.3 and Article 12, the determination will be made pursuant to Section 3.1.4(b).

(b) Independent Patent Counsel. If the Patent Committee cannot make a determination under Section 3.1.4(b), the determination of the existence of a Patent Claim, notwithstanding Article 12, will be made by independent patent counsel in accordance with the following procedure:

(i) Selection of Independent Patent Counsel. The Parties' representatives on the Patent Committee, within fifteen (15) days after the end of the Patent Committee Embargo License Period, shall mutually agree on, and the Patent Committee shall select, one person to serve as an independent patent counsel.

(ii) Process. The Parties may submit evidence and written arguments as deemed necessary by the independent patent counsel; *provided, however*, that any evidence and arguments shall be submitted within fifteen (15) days or any longer period of time mutually agreed between the Parties after the selection of the independent patent counsel.

(iii) Costs and Expenses. Each Party will share equally the cost and expenses of the independent patent counsel selected in 3.1.4(b)(i). Each Party shall bear its own costs and expenses and attorneys' fees in connection with any such determination; *provided, however,* that the prevailing Party in any such determination shall be entitled to recover from the other Party the reasonable attorneys' fees, costs and expenses incurred by such prevailing Party in connection with such determination.

(iv) Binding Decision. The decision of the independent patent counsel shall be the sole, exclusive and binding decision regarding the determination of the existence of a Patent Claim. The independent patent counsel shall prepare and deliver to the Parties a written, reasoned opinion conferring its decision.

(c) After the grant of a second license under Section 3.1.3, GSK will be deemed in material breach of this Agreement, and Codexis shall have a right to terminate this Agreement pursuant to Section 11.2, such termination to be effective immediately upon notice to GSK, notwithstanding the sixty (60) day cure period set forth in such Section 11.2.

3.2 Licenses to GSK.

3.2.1 Platform Technology Licenses. Subject to the terms and conditions of this Agreement (including the restrictions under Section 3.4), Codexis hereby on behalf of itself and its Affiliates, grants to GSK, during the Term, a nontransferable (except as provided in Section 13.5), right and license, with the right to grant sublicenses to Affiliates and Third Parties, in accordance with, and to the extent permitted under, Section 3.3, under the Licensed IP in the Territory, with respect to enzymes, including any enzyme owned or otherwise controlled by GSK under this Agreement or otherwise, to use the Platform Technology (or any aspect of the Platform Technology), which right and license shall be:

(a) exclusive in the GSK Exclusive Field; and

(b) non-exclusive otherwise in the Field;

in each of Sections 3.2.1(a) and 3.2.1(b), solely to research, develop, use, optimize, modify, isolate, engineer, identify, select, make, have made, import and/or export Enzymes, other than any Restricted Enzyme.

3.2.2 Manufacturing Licenses. Subject to the terms and conditions of this Agreement (including the restrictions under Section 3.4), Codexis hereby on behalf of itself and its Affiliates grants to GSK, during the Term, a non-transferable (except as provided in Section 13.5) right and license, with the right to grant sublicenses solely to Affiliates, contract manufacturing organizations (CMOs), contract research organizations (CROs), or other contract service organizations in accordance with and to the extent permitted under Section 3.3 under the Licensed IP in the Territory, solely to make or have made, for the purpose of sale or to have sold:

(a) Pharmaceutical Products, which shall be exclusive in the GSK Exclusive Field and otherwise non-exclusive in the Field; and

(b) Enzyme Products, which shall be a non-exclusive license in the Field.

3.2.3 Loss of Pharmaceutical Product Exclusivity. The exclusive licenses granted by Codexis to GSK in the GSK Exclusive Field pursuant to Sections 3.2.1, 3.2.2 and 3.5.3 shall become non-exclusive, on a Pharmaceutical Product-by-Pharmaceutical

Product and country-by-country basis, on the first date that both a first and a second Generic Version of such Pharmaceutical Product is commercially available in such country.

3.3 Sublicensing. To the extent that either Party is permitted to grant sublicenses under the licenses granted to it under this Agreement, either Party shall have the right to grant such sublicenses through multiple tiers of sublicensees; *provided* that:

3.3.1 no sublicense may be granted to any Third Party under Section 3.2.1 [***]. For clarity, nothing in this Section 3.3 shall permit the grant by GSK of any sublicense to any Codexis Enzyme or any Codexis Core Technology (except the specific Codexis Methods listed on Exhibit 3.3.1);

3.3.2 in relation to the rights under Section 3.3.1, any sublicense agreement between GSK and a Third Party sublicensee relating to the performance of GSK's obligations or exercise of GSK's rights under this Agreement shall include material transfer terms, and non-use and non-disclosure confidentiality terms, that are no less stringent than terms consistent with GSK's ordinary practice involving GSK proprietary materials and information of a similar nature;

3.3.3 any such sublicense is consistent with and subject to the terms of this Agreement and shall terminate automatically upon termination of the corresponding license hereunder;

3.3.4 each Party, within thirty (30) days after the effective date of any sublicense, shall provide written notice to the other Party of the grant, the date, and the identity of the Third Party of any sublicense to a Third Party;

3.3.5 each Party shall not be relieved of its obligations pursuant to this Agreement as a result of such sublicense; and

3.3.6 any sublicense granted by GSK shall (a) prohibit the sublicensee from using the Platform Technology for any purpose other than as specified in Section 3.2.1 and Section 3.2.2 and (b) require the sublicensee to destroy all Platform Technology, and all Confidential Information of Codexis, in possession of such sublicensee after completion of the sublicensee's obligations under such sublicense.

3.4 Limitations on Licenses.

3.4.1 In-Licensed Patents. With respect to any aspect of the In-Licensed Patents for which Codexis has less than fully exclusive, worldwide rights (e.g., co-exclusive, non-exclusive, limited territorial or otherwise restricted rights), the licenses provided

[***] 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.

in Sections 3.2.1, 3.2.2 and 3.5.3 shall be limited to the scope of those rights that Codexis Controls.

3.4.2 Codexis Mayflower Patents. Notwithstanding anything set forth in this Article 3, GSK shall have no right under the Codexis Mayflower Patents with respect to:

(a) the making, having made, using and selling of reagents, instruments and services for the diagnostics and research supply markets, only as follows: (a) clinical and diagnostic tests, including those conducted to identify genetic disease predisposition, genetic or other disease conditions, and infectious or pathogenic agents, as well as those conducted for other medical, agricultural or veterinary purposes; (b) tests for analytical/bioanalytical purposes, including those conducted for biomedical, chemical, or medical research or treatment purposes, for environmental purposes, and for forensic purposes, including paternity, maternity or identity tests; and (c) sequencing and sequence analysis of nucleic acids or other biological polymers for any purposes; but excluding (i) the use of a reagent, other than a nucleic acid array, that specifically binds to selected cells, organs or tissue, and that is sold for medical use in procedures to image selected cells, organs or tissue, which procedure is carried out inside the body of an animal or human, and that requires FDA approval, and (ii) the sale of products and performance of services requiring a license under the In-Licensed Patents, to identify compounds that bind to receptors for use as pharmaceuticals;

(b) any (i) amino acid (including any natural, synthetic, modified or other amino acid analogue) chain that is a human or humanized protein, or any variant, homology, derivative, mutant or fragment thereof, and (ii) any molecule described in subsection (i) that is conjugated or otherwise coupled to any other molecule, in each of cases (i) and (ii) expressly including (iii)(A) any amino acid (including any natural, synthetic, modified or other amino acid analogue) chain that is a cytotoxic T lymphocyte associated antigen 4 or any variant, homolog, derivative, mutant or fragment thereof, and (B) any molecule described in subsection (iii)(A) that is conjugated or otherwise coupled to any other molecule, and (iv)(A) any amino acid (including any natural, synthetic, modified or other amino acid analogue) chain that is a human or animal protein or any variant, homolog, derivative, mutant or fragment of the foregoing, and (B) any molecule described in subsection (iv)(A) that is conjugated or otherwise coupled to any other molecule, and any pharmaceutical products that contain any of the foregoing as an ingredient;

(c) any formulation containing one or more antigens (or a nucleic acid sequence encoding an Antigen) in the form of (a) an infectious agent (e.g., bacteria, viruses, parasite, protozoa) whether live, attenuated or dead, (b) protein(s), (c) nucleic acid(s), (d) cells, spores and vectors (i.e., viruses or virus-like particles, liposomes, beads or other substrates for Antigen presentation), (e) fragments of any of the foregoing, or (f) a combination of any of the preceding, which formulation is administered or is intended to be administered to induce an Antigen-Specific Response in the human or animal recipient to at least one such

antigen for the prevention of the onset of, or treatment of, a disease state, symptom or condition in humans or animals caused by an infectious agent; where "Antigen" means a molecule (e.g., protein, nucleic acid, polypeptide, peptide, carbohydrate, glycoprotein, glycolipid or any combination of the foregoing) that is produced naturally by, or is derived in whole or in part from, an infectious agent (e.g., bacteria, viruses, parasite, protozoa) that produces an Antigen-Specific Response to such molecule in a human or animal recipient (but excluding any molecule that is derived from, in whole or in part, any human gene or protein); and "Antigen-Specific Response" means an immune state resulting from the modulation of activity (i.e., an increase, decrease or qualitatively different activity) or one or more lymphoid cells (e.g., B cells, NK cells, T cells or professional antigen-presenting cells, such as monocytes, macrophages, Langerhans cells, dendritic cells) following the administration of a stimulus, where such immune state is induced in a human or animal recipient to an Antigen that is specifically directed to the subject Antigen;

(d) the development, production and/or sale of any and all polypeptides more than twelve (12) amino acids in length, and the development of organisms and vectors (including without limitation plant vectors and plant hosts) for the expression of such polypeptides, in the areas of (a) processes for textile or garment production, (b) processes for the production of leather, (c) cleaning processes or cleaning products, (d) starch processing, (e) food production processes, (f) animal feed processing, (g) personal care processes, excluding pharmaceutical products and oral, topical and intravaginal medications, (g) the processing of wood, paper, pulp and derived lignin and cellulose, (i) oil drilling, (j) dyestuffs and dyeing processes, (k) electronics industry waste water treatment, (l) detoxification of pesticides, chemical weapons and biological weapons, (m) utilization of industrial waste or co-products to generate energy, compost or industrial raw materials including fermentable substrates for e.g. citric acid production from agricultural waste, (n) polymer production, modification or processing of polymers (tetramers of higher) from monomers (including polymers made by addition of dimers or trimers for reactions proceeding to completion in the same reactor), and the enzymatic modification of chemically synthesized polymers, (o) waste water treatment, sewage sludge treatment or cleanup of contaminated soil, (p) synthesis of fuels including bio-diesel and hydrogen, and (q) bioremediation of water, soil and municipal waste, including without limitation biological waste, sewage and sludge (including without limitation biological waste treatment and cleaning of sewer and drain pipes).

(e) any and all human or humanized granulocyte-colony stimulating factor (G-CSF) protein, or any and all variants, derivatives, mutants or fragments thereof, and any and all pharmaceutical products that contain any of the foregoing.

3.4.3 Government Rights. GSK acknowledges that certain of the inventions claimed in the Codexis Core Technology and/or the Codexis Enzymes and the Intellectual Property rights therein have been made with funds provided by the U.S. government, and that with respect thereto the U.S. government retains a non-exclusive license as set forth in 35 U.S.C. § 202. In addition, GSK acknowledges that this Agreement is subject

to all of the terms and conditions of 35 U.S.C. § 200 et seq., which sets forth additional obligations with regard to inventions made with U.S. government funds and products based thereon, including a preference for manufacture in the U.S. pursuant to 35 U.S.C. § 204.

3.4.4 Prohibited GSK Activities. During the Embargo Period, GSK shall not, and shall cause its Affiliates and permitted sublicensees not to, alone or with a Third Party, on behalf of GSK, its Affiliates or any Third Party, conduct any activities (including, without limitation, any research, drug discovery, development or commercialization activities) in the Codexis Exclusive Field using any Platform Technology; *provided* that the foregoing restriction shall not apply to the use by GSK of any Platform Technology in connection with the use of an Enzyme or Enzyme fusion protein that is contained within a Licensed Accessory Product in combination with a GSK Compound; and it shall not constitute a breach of this Section 3.4 if GSK generates and/or uses Enzymes solely as research reagents or research tools within the Field.

3.4.5 No Use for Third Parties. GSK shall not use, and shall cause its Affiliates and permitted sublicensees not to use, the Platform Technology to engineer, synthesize, manufacture or otherwise develop or produce any Enzymes, molecules, biologic agents, drug products, therapeutic agents or any other compounds for or on behalf of any Third Party and to that Third Party's order or direction. [***]. If GSK or any Affiliate exclusively licenses, assigns, divests or otherwise transfers to a Third Party all of GSK's or such Affiliate's rights relating specifically to a GSK Compound(s) and/or a Licensed Product(s), and GSK or such Affiliate, at the time of such transfer, uses an Enzyme developed using the Platform Technology to manufacture such GSK Compound(s) and/or a Licensed Product(s), then (A) GSK or its Affiliates may synthesize, manufacture and supply such Enzyme (and no other Enzyme) for and to such Third Party solely to manufacture such GSK Compound(s) and/or a Licensed Product(s), and (B) GSK may grant to such Third Party a limited sublicense under the Platform Technology solely to the extent necessary for such Third Party to make and use such Enzyme (and no other Enzyme) solely in connection with the development, making, use, sale, offer for sale, import and export of such GSK Compound(s) and/or a Licensed Product(s) and products incorporating such GSK Compound(s) and/or a Licensed Product(s), but not to make or use such Enzyme (and no other Enzyme) in connection with any other compounds or products. Notwithstanding anything to the contrary herein, GSK shall remain responsible for any payments due to Codexis under Article 7 on account of such Enzyme or such GSK Compounds and/or Licensed Products. For clarity, no payments, other than payments due under Article 7, shall be due to Codexis.

[***] 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.

3.4.6 Enzyme Supplier. [***] would supply to GSK or its Affiliates any Enzymes developed using rights licensed by Codexis to GSK under the terms of this Agreement, [***].

3.4.7 Certain Kits and Panels. In the event that GSK or an Affiliate of GSK desires to have a kit or panel containing any Codexis Materials developed for use by GSK or an Affiliate of GSK which was transferred to GSK pursuant to the Technology Transfer, and such kit or panel is not otherwise available, either through development by GSK or an Affiliate of GSK or commercially through Codexis or a Third Party, GSK, subject to the conditions set forth in Section 3.3, [***] request that Codexis develop such kit or panel, [***] exclusively for use by GSK and Affiliates of GSK. Codexis shall have no obligation to develop such GSK requested kit or panel but, if Codexis agrees to develop such a kit or panel, [***] subject to other reasonable terms and conditions agreed upon by the Parties for such work by Codexis. [***].

3.5 Codexis Core Technology Improvements Option.

3.5.1 Option Grant. Subject to the terms and conditions of this Agreement, Codexis hereby grants to GSK an option, exercisable at GSK's sole discretion in accordance with Section 3.5.2, to acquire the rights described in Section 3.5.3, which option shall be exclusive as to the GSK Exclusive Field (the "**Exclusive Option**") and non-exclusive otherwise in the Field (the "**Non-Exclusive Option**", together with the Exclusive Option, the "**Option**").

3.5.2 Option Exercise. At any time during the period beginning on the earlier of the second (2nd) anniversary of the Effective Date and the TT Term Expiration Date, and ending on the date that is three (3) months after the TT Term Expiration Date (an

"**Option Period**"), GSK may exercise the Option by (a) providing written notice thereof to Codexis and (b) paying the First Annual Option Fee. If GSK does not exercise the Option prior to the expiration of the Option Period, the Option shall automatically expire and be of no further force or effect.

3.5.3 Grant of Rights. Subject to the terms and conditions of this Agreement, effective upon GSK's exercise of the Option in accordance with Section 3.5.2, Codexis hereby on behalf of itself and its Affiliates grants to GSK a worldwide, non-transferrable (except as permitted under Section 13.5), non-sublicensable (except in accordance with Section 3.2.1 and Section 3.2.2) license, which license shall be exclusive in the GSK Exclusive Field and non-exclusive otherwise in the Field, under all of Codexis' rights to Codexis Core Technology Improvements practiced by Codexis during the Improvements TT Term. Codexis shall provide any technology transfer or scientific or technical resources reasonably requested by GSK, and reasonably necessary for GSK, to practice such Codexis Core Technology Improvements, at GSK's reasonable expense. During the Improvements TT Term, Codexis' Alliance Manager will periodically disclose to GSK's Alliance Manager information regarding new, updated or improved Enzyme kits or panels (as defined in this Section 3.5.3 below) [***]. For purposes of this Section 3.5.3, the term "new, updated or improved Enzyme kits or panels" means a collection of multiple, genetically-diverse Enzymes, Controlled by Codexis, that are first made commercially available to the general public by Codexis through Codexis' catalog or website. All information, documents and other materials provided by Codexis to GSK pursuant to this Section 3.5.3 shall constitute Confidential Information of Codexis.

3.5.4 Extension of the Improvements TT Term. Upon mutual written agreement of the Parties, and payment by GSK to Codexis of an amount to be mutually agreed in good faith by the Parties, within the sixty (60) day period prior to the then-current Improvements TT Term Expiration Date, the Improvements TT Term Expiration Date may be extended by one (1) year. The Parties may extend the Improvements TT Term Expiration Date any number of times in accordance with this Section 3.5.4.

3.6 Third Party Licences. [***].

3.7 Restricted Enzymes.

3.7.1 During the Term, in its ordinary course of business, Codexis will conduct research and development activities for Third Parties under the Licensed IP using the Platform Technology and, in connection with such research and development activities, will generate Potentially Restricted Enzymes that, in certain cases, on a Potentially Restricted Enzyme-by- Potentially Restricted Enzyme basis,(a) will be owned by such Third Parties or exclusively licensed by Codexis to such Third Parties and (b) will not be Controlled by Codexis. For purposes of this Section 3.7.1, the term "**Potentially Restricted Enzyme**" means any peptide or protein, including derivatives, with enzymatic or biocatalytic activity, or any vector that encodes for any such peptide or protein, derived from the use of the Platform Technology by Codexis after the Effective Date that, in either case, may not be Controlled by Codexis. In the event that any Potentially Restricted Enzyme generated by Codexis is owned by a Third Party or exclusively licensed by Codexis to a Third Party, Codexis, subject to confidentiality obligations owed by Codexis to such Third Party, will inform the Patent Committee of such Potentially Restricted Enzyme at its next regularly scheduled meeting and, if applicable, any particular field(s) and/or use(s) restrictions with respect to such Potentially Restricted Enzyme. The Patent Committee will review information provided by Codexis with respect to any such Potentially Restricted Enzyme and, if applicable, any particular field(s) and/or use(s) restrictions with respect to such Potentially Restricted Enzymes and, in accordance with Section 5.2.3, determine whether the list of Restricted Enzymes set forth on Exhibit 1.112 shall be revised to include such Potentially Restricted Enzyme and, if applicable, any particular field(s) and/or use(s) restrictions with respect to such Potentially Restricted Enzyme. Codexis will provide GSK with the initial list of Restricted Enzymes on Exhibit 1.112 within [***] days after the Effective Date.

3.7.2 In the event that GSK wishes to exercise its rights under Section 3.2 to any Restricted Enzyme for any specific field(s) and/or use(s), it shall notify Codexis in writing of such request. Codexis shall then have [***] days in which to confirm to GSK in writing whether Codexis Controls such Restricted Enzyme for such specific field(s) and/or use(s) requested by GSK. In the event that Codexis does Control such Restricted Enzyme for such specific field(s) and/or use(s) then effective upon the date of such written confirmation from Codexis, such Restricted Enzyme shall be an Enzyme for such specific field(s) or use(s) for the purpose of Section 3.2.

3.8 Responsibility for Freedom to Operate Analyses. GSK acknowledges and agrees that it is within GSK's discretion to conduct freedom to operate analyses with respect to the use of any enzyme, other than a Codexis Enzyme, to generate an Enzyme and, in addition, any Enzyme generated in accordance with the terms of the license granted by Codexis to GSK and, whether or not GSK elects to conduct a freedom to operate analysis, GSK will be solely responsible for any such enzyme (other than a Codexis Enzyme) and any such Enzyme.

3.9 Public Domain Information and Material. Codexis acknowledges and agrees that GSK shall be free to utilize, without restriction, any information or material that is (a) within the Platform Technology and (b) wholly within the public domain.

3.10 No Implied Licenses. No license or other right is or shall be created or granted hereunder by implication, estoppel or otherwise. All licenses and rights are or shall be granted only as expressly provided in this Agreement. All rights not expressly granted by a Party under this Agreement are reserved by such Party and may be used by such Party for any purpose. For clarity, there shall be no implied license or implied other right in favor of Codexis to any Enzyme, and there shall be no implied license or implied other right in favor of GSK to any Patent(s) of Codexis or any Know-How of Codexis.

4. PROJECTS

4.1 Collaborative Projects. Beginning on the Effective Date and continuing during the TT Term and if mutually agreed for such period following the TT Term, GSK and Codexis (or Affiliates of GSK and Codexis) shall work on Collaborative Projects pursuant to the terms of written project plans to be mutually agreed by the Parties. Upon mutual agreement by the Parties, or agreement of the JSC as applicable, if the JSC is then in existence, upon agreement by the Parties of the written research plan for any Collaborative Project, such research plan shall be attached to and made part of this Agreement. Each such written research plan shall describe each Party's responsibilities and obligations, and the activities to be performed by each Party, in connection with the applicable Collaborative Project and the frequency and content of any reports to be provided by one Party to the other Party. Any amendment to a written research plan in respect of a Collaborative Project must be in writing and signed by both GSK and Codexis or approved by the JSC if the JSC is then in existence. In the event that GSK subsequently decide to resume a terminated Collaborative Project, whether resumed and progressed independently or in further collaboration with Codexis, such project shall continue to be deemed a Collaborative Project for the purposes of Codexis' eligibility to earn such associated milestone payments in Section 7.4.

4.2 Project Summaries. During the Term, within thirty (30) days after the end of the Calendar Year ending December 31 or such other date within such Calendar Year as mutually agreed between the Parties, GSK shall disclose to Codexis a summary of [***]. Such summary shall be provided to Codexis in sufficient detail to provide to Codexis reasonable information into GSK activities with respect to GSK's use of the Platform Technology for the purpose of enabling Codexis to anticipate GSK's progression toward achievement of milestone events as set forth in Article 7 and to monitor GSK's compliance with this Agreement. Each such summary shall include [***]

[***]; *provided* that, in the event [***], the information provided by GSK in any such summary report from such time onwards [***].

[***] 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.

4.3 Project Activities. Each Party shall perform the research activities assigned to such Party under each written research plan in respect of a Collaborative Project and shall perform all such research activities in compliance with all Applicable Law. Subject to Article 7, each Party shall be solely responsible for all costs and expenses of research activities performed by such Party, unless otherwise specified in the applicable written research plan; *provided* that, if the Parties agree to perform a Collaborative Project after the expiration of the TT Term, the Parties shall negotiate in good faith and mutually agree upon reasonable compensation from GSK to Codexis for the research activities performed by Codexis in connection with such Collaborative Project.

4.4 Subcontracting.

4.4.1 Generally. Subject to the limitations set forth in Section 4.4.2, GSK may perform any of its obligations or exercise any of its rights under this Agreement through one or more Third Party contractors, contract manufacturing organizations (CMOs), contract research organizations (CROs) or other contract service organizations [***]. Codexis may perform any of its obligations under [***] (as described in the Technology Transfer Plan) and [***] (as described in the Technology Transfer Plan) through one or more Third Party contractors, contract service organizations and academic or government collaborators; *provided* that the activities corresponding to such obligations were performed through subcontractors in the ordinary course of Codexis' business as of the Effective Date including, for illustrative purposes, protein analysis, gene and oligonucleotide synthesis and analysis, polynucleotide and polypeptide sequencing, microbiological testing, protein immobilization, and crystallization.

4.4.2 Limitations.

(a) GSK may not subcontract any activities to a Third Party that would permit such a Third Party to receive and/or use the Platform Technology;

(b) Any agreement between GSK and a Third Party contractor relating to the performance of GSK's obligations or exercise of GSK's rights under this Agreement shall include material transfer terms, and non-use and non-disclosure confidentiality

[***] 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.

terms, that are no less stringent than terms consistent with GSK's ordinary practice involving GSK proprietary materials and information of a similar nature; and

(c) GSK may not subcontract activities to any contract service organization unless Codexis consents to the choice of the contract service organization, such consent not to be unreasonably withheld, conditioned, or delayed.

4.5 Records. Each Party shall, and shall require its Affiliates and subcontractors to, maintain complete and accurate records of all research activities under a Project conducted pursuant to a written research plan and Technology Transfer Project Activities and all results, information and data generated in performing such research activities and Technology Transfer Project Activities. Such records shall be complete and accurate and shall fully and properly reflect all work done and results achieved in sufficient detail and in a manner appropriate for accounting, Patent and regulatory purposes.

5. GOVERNANCE

5.1 Joint Steering Committee.

5.1.1 Establishment. Within thirty (30) days after the Effective Date, the Parties shall establish a joint steering committee (the "Joint Steering Committee" or "JSC") to have overall responsibility for managing and directing the Projects and to oversee and make certain decisions regarding the Projects, as set forth in this Section 5.1. The JSC shall also provide a forum for sharing advice, progress and results relating to the activities conducted by the Parties under the Projects and shall attempt to facilitate the resolution of any disputes between the Parties, as described in Section 5.1.4. At each meeting of the JSC, each Party shall brief the JSC regarding the content, execution and results achieved by such Party under each Project, as described in Section 2.6. Each Party, through its representatives on the JSC, shall be permitted to provide advice and commentary with respect to the Projects. The JSC shall have the following specific responsibilities:

(a) oversee, review and provide advice regarding the overall progress of the Projects;

(b) coordinate by way of each Party's Scientific Leads, the research activities under a written research plan relating to a Project agreed by the Parties and coordinate sharing of results and data arising therefrom;

(c) appoint and oversee subcommittees as it deems appropriate for carrying out activities under this Agreement, including for oversight of any specific aspects of any Projects or other matters;

(d) review each written research plan and, if appropriate, propose modifications thereto to the Parties;

(e) review the Technology Transfer Plan and, if appropriate, propose modifications thereto to the Parties;

(f) perform any other activities or functions as the Parties may mutually agree in writing; and

(g) determine the initiation and termination of Collaborative Projects.

5.1.2 Membership; Meetings. The JSC shall be composed of two (2) employees from each of GSK and Codexis and shall meet, in person, by teleconference, or by video-teleconference, at least one (1) time per Calendar Quarter, or more or less often as the Parties shall determine; *provided* that nothing under this Agreement shall prevent the Parties from meeting in person, by teleconference, or by video-teleconference more frequently as may be mutually agreed by the JSC representatives, in connection with the Technology Transfer. In-person meetings shall alternate between Codexis and GSK locations within the United States whenever possible unless otherwise agreed by the Parties. The first such meeting shall be within forty-five (45) days after the Effective Date. Any member of the JSC may designate a substitute, who shall be an employee of the applicable Party, to attend with prior written notice to the other Party. Ad hoc guests who are subject to written confidentiality obligations at least as stringent as the provisions in Article 9 may be invited to JSC meetings. Each Party may replace its JSC members with other of its employees, at any time, upon written notice to the other Party.

5.1.3 Project Teams. The JSC may establish one (1) or more sub-committees (each, a "Project Team") that includes each Party's Scientific Leads. Such Project Team shall have day-to-day oversight of individual Collaborative Projects and/or the Technology Transfer, shall provide primary scientific and technical expertise with respect to such activities and shall regularly and proactively provide updates to the JSC and escalate issues for discussion and resolution, as appropriate. Any dispute of technical feasibility of any Project that cannot be resolved through good faith negotiation between the members of such Project Team shall be referred for resolution to the JSC.

5.1.4 Decision-Making; Limitations on JSC. Except as provided under Section 5.1.6, decisions of the JSC shall be made by consensus, including issues concerning technical feasibility and the deployment of Codexis resources, with each Party having collectively one (1) vote in all decisions. The JSC shall have only such powers as are specifically delegated to it in this Agreement, and such powers shall be subject to the terms and conditions set forth herein. Without limiting the generality of the foregoing, the JSC shall have no power to amend this Agreement or the Technology Transfer Plan. The Parties shall be alternately responsible for preparing and circulating minutes, for approval by the non-preparing Party, within fourteen (14) days after each meeting including but not limited to a list of topics of discussion at the meeting and a list of any actions, decisions or determinations approved and a list of any issues and actions to be resolved. If the JSC is unable to reach a consensus decision

on a matter that is within its decision-making authority within thirty (30) days after it has met and attempted to reach such decision, then either Party may refer such matter for resolution by the executive officers designated by the Parties for attempted resolution pursuant to Section 12.1. In the event that the executive officers are unable to resolve such matter within the time period specified in Section 12.1, then in the case of any decision relating to the conduct of a Collaborative Project, such Collaborative Project shall immediately terminate. Any matter not expressly provided for hereunder and any matter relating to any GSK Background IP, GSK Compound, Licensed Product, Platform Technology, Licensed IP, or Codexis Background IP shall remain outside of the scope of the JSC.

5.1.5 Duration of JSC. The JSC shall be automatically disbanded upon the expiration of the TT Term or the earlier expiration or termination of this Agreement; *provided* that the Parties may, by mutual written agreement, extend the term of the JSC for additional one (1) year periods after the expiration of the TT Term, with a separate mutual written agreement required for each such one (1) year extension.

5.1.6 Matters Reserved for GSK. Notwithstanding anything contained in this Section 5.1, GSK shall determine in its sole discretion, decisions in connection with the following matters:

(a) Collaborative Project selection and termination;

(b) GSK Sole Projects;

(c) Selection and use of any GSK Selected Enzyme; and

(d) [***].

5.2 Patent Committee.

5.2.1 Establishment. Within sixty (60) days after the Effective Date, the Parties shall establish a Patent committee (the "Patent Committee") to discuss, oversee and coordinate the Prosecution (or abandonment) of Patents, enforcement of Patents, and defense against claims of infringement of Third Party patents relating to Intellectual Property licensed under Article 3, Sections 2.2.9 and 2.2.10**,** including for example Codexis Core Technology Improvements IP, Arising Codexis Enzyme Technology IP, Arising Codexis Process Technology IP, Arising GSK Enzyme Technology IP and Arising GSK Process Technology IP, and any related Intellectual Property matters regarding any Inventions made during the Term, including for example, the Licensed Additional Codexis IP; and to provide recommendations to the Parties regarding the Prosecution of such Patents and related Intellectual Property matters. Within thirty (30) days after the end of each half year, each Party shall provide the Patent Committee with a report listing all Patents relating to such Parties' utilization of the Platform Technology filed by that Party during that half year.

[***] 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.

5.2.2 Membership; Meetings. The Patent Committee shall be composed of one (1) employee from each of GSK and Codexis knowledgeable in U.S. patent law and the technology areas that are the subject of this Agreement. The Patent Committee shall meet, in person, by teleconference, or by video-teleconference, at least one (1) time per Calendar Quarter, or more or less often as the Parties shall determine. In-person meetings shall alternate between Codexis and GSK locations within the United States whenever possible unless otherwise agreed by the Parties. The first such meeting shall be within ninety (90) days after the Effective Date. Any member of the Patent Committee may designate a substitute, who shall be an employee of the applicable Party, to attend with prior written notice to the other Party. Ad hoc guests who are subject to written confidentiality obligations at least as stringent as the provisions in Article 9 may be invited to Patent Committee meetings. Each Party may replace its Patent Committee members with other of its employees with the qualifications set forth in this Section 5.2.2, at any time, upon written notice to the other Party.

5.2.3 Decision-Making; Limitations on Patent Committee. Decisions of the Patent Committee shall be made by consensus, with each Party having collectively one (1) vote in all decisions. The Patent Committee shall have only such powers as are specifically delegated to it in this Agreement, and such powers shall be subject to the terms and conditions set forth herein. Without limiting the generality of the foregoing, the Patent Committee shall have no power to amend this Agreement, the Technology Transfer Plan or any written research plan. If the Patent Committee is unable to reach a consensus decision on a matter that is within its decision-making authority within thirty (30) days after it has met and attempted to reach such decision, then either Party may refer such matter for resolution by the executive officers designated by the Parties for attempted resolution pursuant to Section 12.1. In the event that the executive officers of each Party are unable to resolve such matter within the time period specified in Section 12.1, then Codexis shall have final decision-making authority with respect to any dispute relating specifically to Restricted Enzymes and Codexis Patents and GSK shall have final decision-making authority with respect to any dispute relating specifically to GSK Patents. The Patent Committee shall provide status updates to the JSC once per Calendar Quarter as long as the JSC is in existence and, thereafter, to the Parties.

5.2.4 Duration of Patent Committee. The Patent Committee shall endure beyond the expiration of the TT Term and shall automatically renew on a year-to-year basis. Notwithstanding the aforementioned, the Patent Committee may be disbanded at any time upon mutual written agreement of the Parties.

6. INTELLECTUAL PROPERTY

6.1 Background Rights. Each Party shall retain all right, title and interest to its Background IP, and, except as expressly set forth in this Agreement, no right or license to such Patents, Know-How and other Intellectual Property rights is granted by either Party to the other Party.

6.2 Ownership of Inventions.

6.2.1 Generally. Inventorship of Inventions shall be determined by application of U.S. patent laws. Subject to Sections 6.2.2, 6.2.3 and 6.2.4, all patentable Inventions invented solely by or on behalf of either Party or jointly by or on behalf of both Parties under this Agreement, including without limitation in the performance of any responsibilities under a written research plan relating to a Project, and all Intellectual Property rights therein, shall be owned in accordance with inventorship.

6.2.2 Codexis Core Technology Improvements IP. Codexis shall own any and all Codexis Core Technology Improvements and Codexis Core Technology Improvements IP arising during the TT Term and, if GSK exercises the Option, during the Improvements TT Term. GSK hereby assigns to Codexis all of GSK's right, title and interest in and to the Codexis Core Technology Improvements IP.

6.2.3 Arising Enzyme Technology IP. GSK shall own any and all Arising GSK Enzyme Technology, Arising GSK Enzyme Technology IP, Arising Codexis Enzyme Technology and Arising Codexis Enzyme Technology IP arising during the TT Term and, if GSK exercises the Option, during the Improvements TT Term. Codexis hereby assigns to GSK all of Codexis' right, title and interest in and to the Arising Codexis Enzyme Technology Improvements IP.

6.2.4 Arising Process Technology IP. GSK shall own any and all Arising GSK Process Technology, Arising GSK Process Technology IP, Arising Codexis Process Technology and Arising Codexis Process Technology IP arising during the TT Term and, if GSK exercises the Option, during the Improvements TT Term. Codexis hereby assigns to GSK all of Codexis' right, title and interest in and to the Arising Codexis Process Technology IP.

6.2.5 Ownership of Enzymes. GSK shall exclusively own all Enzymes derived from GSK's use of the Platform Technology pursuant to this Agreement.

6.3 Further Assurances. Each Party and its Affiliates shall sign and deliver to the other Party all writings and do all such things as may be necessary or appropriate to vest in such other Party all right, title and interest in and to all Codexis Core Technology Improvements IP, Arising Enzyme Technology IP and Arising Process Technology IP in accordance with Section 6.2.

6.4 Employees and Agents. Each Party shall ensure that all employees, agents, consultants, contractors and subcontractors (as permitted under Section 4.4) performing activities under or contemplated by this Agreement, have assigned or are obligated to assign their interest in any Invention invented in the course of such activities to the Party for which such employee, agent, consultant, contractor or subcontractor is providing its services.

6.5 Prosecution of Patents.

6.5.1 In General. The Patent Committee shall have oversight regarding the Prosecution of Patents disclosing and/or claiming Inventions directly related to Codexis Core Technology Improvements, Arising GSK Enzyme Technology, Arising GSK Process Technology, Arising Codexis Enzyme Technology and Arising Codexis Process Technology and shall provide recommendations to the Parties to maximize the value of such Patents. To the extent necessary, the Parties agree to cooperate in good faith to coordinate the Prosecution of such Patents, including submissions of Patent applications worldwide (e.g., to coordinate the filing of Patent applications to ensure that the Parties file related applications on the same day). The Parties shall agree in good faith on a strategy with respect to Prosecution of any Patents disclosing and/or claiming any jointly-owned Inventions.

6.5.2 Codexis Prosecution. As between the Parties, Codexis shall have the sole right, but not the obligation, to Prosecute all Patents disclosing and/or claiming all Codexis Core Technology, Codexis Core Technology Improvements, Codexis Enzymes and Codexis Libraries (the "**Codexis Patents**"), in Codexis' sole discretion and at Codexis' sole cost and expense.

6.5.3 GSK Prosecution. As between the Parties, GSK shall have the sole right, but not the obligation, to Prosecute all Patents disclosing and/or claiming all Arising GSK Enzyme Technology, Arising GSK Process Technology, Arising Codexis Enzyme Technology, and Arising Codexis Process Technology (collectively, the " **GSK Patents**"), in GSK's sole discretion and at GSK's sole cost and expense.

6.5.4 Back-Up Rights. If GSK decides not to Prosecute, or not to continue Prosecuting, any GSK Patent, GSK shall provide Codexis with written notice of such decision at least forty-five (45) days prior to the date upon which the subject matter of such GSK Patent shall lapse or become abandoned. The basis for such decision shall be discussed by the Patent Committee pursuant to Section 5.2 and Codexis shall thereupon have the right (but not the obligation) to assume responsibility for Prosecution of such GSK Patent at Codexis' expense, and with counsel of Codexis' choosing, except (a) any GSK Patent covering any Licensed Product; and (b) any GSK Patent relating to any GSK Compound, any GSK Existing Pharmaceutical Product, any GSK Initial Enzyme, and/or any GSK Selected Enzyme. Effective upon the date Codexis assumes responsibility for Prosecution of such GSK Patent, and the costs and expenses relating thereto, GSK hereby assigns any and all interest held by GSK in, to and under such GSK Patent to Codexis.

6.5.5 CREATE Act. Each Party acknowledges and agrees that this Agreement is a "joint research agreement" as contemplated by 35 U.S.C. § 102(c), and that all inventions arising under any Collaborative Projects hereunder are intended to have the benefit of the rights and protections conferred by the Cooperative Research and Enhancement Act of 2004 (CREATE Act). Each Party agrees to disclose the names of both Parties in each Patent application for all inventions arising under all Collaborative Projects in accordance with the requirements of 35 U.S.C. § 102(c)(3).

6.6 Enforcement of Patents.

6.6.1 Notice. If either Party becomes aware of any suspected infringement of any GSK Patent or Codexis Patent, or any GSK Patent or Codexis Patent is challenged in any action or proceeding (any of the foregoing, an "**Infringement Action**"), such Party shall notify the other Party's representative on the Patent Committee, and following such notification, the Parties shall confer.

6.6.2 Enforcement. As between the Parties, GSK will have the first right, but not the obligation, to bring any Infringement Action with respect to any GSK Patent at its sole cost and expense, and Codexis shall have the sole right, but not the obligation, to bring any Infringement Action with respect to any Codexis Patent at its sole cost and expense.

6.6.3 Procedure for Enforcement.

(a) The non-enforcing Party pursuant to Section 6.6.2 shall reasonably assist the enforcing Party (at the enforcing Party's expense) in any Infringement Action if so requested, such assistance to be coordinated through the Parties' Patent Committee members, and the non-enforcing Party shall lend its name and be joined as a party plaintiff to such action if reasonably requested by such enforcing Party or required by Applicable Law. The non-enforcing Party shall have the right to participate and be represented in any such action by its own counsel at its own expense. The non-enforcing Party shall cooperate, at the enforcing Party's cost and expense, with the enforcing Party in investigating or terminating any suspected infringement, whether through legal action, negotiation or otherwise, including by producing all reasonably pertinent records, papers, information, samples, specimens and similar items, and directing its employees to testify and grant interviews, upon the request of the enforcing Party. The enforcing Party will keep the non-enforcing Party reasonably informed of the status of the action through the enforcing Party's Patent Committee members.

(b) A settlement, consent judgment or other voluntary final disposition of a suit under this Section 6.6.3 may be entered into by the enforcing Party without the consent of the non-enforcing Party; *provided* that any such settlement, consent judgment or other disposition of any action or proceeding by an enforcing Party under this Article 6 shall not, without the consent of the non-enforcing Party (not to be unreasonably withheld), (a) impose any liability or obligation on the non-enforcing Party, (b) include the grant of any license, covenant or other rights to any Third Party that would conflict with or reduce the scope of the subject matter included under the licenses granted to the non-enforcing Party under this Agreement, (c) conflict with or reduce the scope of the subject matter claimed in any Patent owned by the non-enforcing Party, or (d) adversely affect the interest of the non-enforcing Party in any material respect.

6.6.4 Damages. In the event that a Party exercises the rights conferred in this Section 6.6, and such Party recovers any damages or other sums in such action or in

settlement thereof, such damages or other sums recovered shall first be applied to all out-of-pocket costs and expenses incurred by the Parties in connection therewith, including attorneys' fees. If such recovery is insufficient to cover all such costs and expenses of both Parties, it shall be shared in proportion to the total of such costs and expenses incurred by each Party. If, after such reimbursement of the Parties' cost and expenses, any funds shall remain from such damages or other sums recovered, such remaining funds shall be retained by the prosecuting Party.

6.7 Defense Against Claims of Infringement of Third Party Patents.

6.7.1 Claims of Infringement Relating to Enzyme Products. If a Third Party asserts, or either Party becomes aware of a Third Party's intention to assert, that a Patent owned or otherwise controlled by the Third Party is infringed by the manufacture, use, sale, offer for sale, import or export of an Enzyme Product in the Territory, the Party first obtaining knowledge of such a claim shall immediately provide the other Party written notice of such claim along with the related facts in reasonable detail. In such event, unless the Parties otherwise agree, as between the Parties GSK shall have the first right, but not the obligation, at its expense, to control the defense of such claim with respect to such Enzyme Product. Each Party shall cooperate with the defending Party, at the defending Party's reasonable request and expense, such cooperation to be coordinated through the Parties' Patent Committee members, and the defending Party shall have the right to be represented separately by counsel of its own choice, but at its own expense. The defending Party shall also control settlement of such claim; *provided, however,* that no settlement shall be entered into without the prior consent of the other Party if such settlement would adversely affect the rights and benefits of, or impose or adversely affect any obligations on, the other Party, such consent not to be unreasonably withheld.

6.7.2 Claims of Infringement Relating to Licensed Rights. If a Third Party asserts, or either Party becomes aware of a Third Party's intention to assert, that a Patent owned or otherwise controlled by the Third Party is infringed by the exercise by GSK or its Affiliates of any rights licensed to GSK hereunder (other than by the manufacture, use, sale, offer for sale, import or export of an Enzyme Product in the Territory), the Party first obtaining knowledge of such a claim shall immediately provide the other Party notice of such claim along with the related facts in reasonable detail. In such event, as between the Parties Codexis shall have the sole right, but not the obligation, at its expense, to control the defense of such claim. GSK shall cooperate with Codexis, at Codexis' reasonable request and expense, such cooperation to be coordinated through GSK's Patent Committee members, and GSK shall have the right to be represented separately by counsel of its own choice, but at its own expense. Codexis shall also control settlement of such claim; *provided, however,* that no settlement shall be entered into without the prior consent of GSK if such settlement would adversely affect the rights and benefits of, or impose or adversely affect any obligations on, GSK, such consent not to be unreasonably withheld.

7. FINANCIAL TERMS

7.1 Upfront Payment. In consideration, along with Section 7.3, of the Technology Transfer under this Agreement within [***] Business Days after receiving an Invoice from Codexis, after the Effective Date, GSK shall pay to Codexis a non-creditable, non-refundable upfront payment of six million Dollars ($6,000,000) (the "**Upfront Payment**").

7.2 Annual Option Fee. In consideration of the licenses granted by Codexis to GSK under Section 3.5.3, upon GSK's exercise of the Option, as set forth in Section 3.5.2, GSK shall pay, after GSK receipt of an Invoice from Codexis, to Codexis a non-creditable, non-refundable payment of one million Dollars ($1,000,000) (the "**First Annual Option Fee**"). On each of the first (1st) and second (2nd) anniversaries of the TT Term Expiration Date, GSK shall pay to Codexis, after GSK receipt of an Invoice from Codexis, an additional non-creditable, non-refundable payment of one million Dollars ($1,000,000) (each such payment and the First Annual Option Fee, an "**Annual Option Fee**"); *provided* that GSK's failure to timely pay any Annual Option Fee during the Improvements TT Term shall not constitute a breach of this Agreement, but instead shall cause the Improvements TT Term to immediately terminate without opportunity to cure.

7.3 Technology Transfer Milestones. In consideration for the Technology Transfer, GSK shall pay to Codexis, after GSK receipt of an Invoice from Codexis, each of the milestone payments set forth in this Section 7.3 upon achievement of the applicable milestone event. Such milestone payments shall be non-creditable and non-refundable.

Technology Transfer Milestone Event	Milestone Payment
Completion of Wave 1 including delivery of all deliverables therefor specified in the Technology Transfer Plan.	$5,000,000
Completion of Wave 2, including delivery of all deliverables therefor specified in the Technology Transfer Plan.	$6,500,000
The earlier to occur of the event described in (a) Section 1.120(a) or (b) Section 1.120(c).	$7,500,000

7.4 Collaborative Project Milestones. GSK shall pay to Codexis, after GSK receipt of an Invoice from Codexis, each of the milestone payments set forth in this Section 7.4 upon achievement of the applicable milestone event with respect to a Licensed Collaborative Project GSK Selected Enzyme (or the associated Pharmaceutical Product, as applicable). Each milestone achieved with respect to an associated Pharmaceutical Product shall be paid on a Pharmaceutical Product-by-Pharmaceutical Product basis. Each milestone payment will be made for each Licensed Collaborative Project GSK Selected Enzyme (or the associated Pharmaceutical

Product as applicable) that achieves the applicable milestone event, regardless of the number of Collaborative Projects that achieve each such milestone event. For clarity, each milestone payment will be made only once with respect to each Licensed Collaborative Project GSK Selected Enzyme (or the associated Pharmaceutical Product, as applicable). Such milestone payments shall be non-creditable and non-refundable. Notwithstanding the foregoing, no milestone payments shall be owed by GSK to Codexis under this Section 7.4 with respect to any GSK Sole Project or any Enzyme Product.

Collaborative Project Milestone Event	**Milestone Payment**
Initiation of [***] of the Licensed Collaborative Project GSK Selected Enzyme used in the synthesis of a GSK Compound for [***].	$[***]
Initiation of [***] of the Licensed Collaborative Project GSK Selected Enzyme used in the synthesis of a GSK Compound for [***] of a Pharmaceutical Product.	$[***]
[***] of a Pharmaceutical Product in [***].	$[***]
First time annual Net Sales of a Pharmaceutical Product in the Territory achieve [***] Dollars ($[***])	$[***]
First time annual Net Sales of a Pharmaceutical Product in the Territory achieve [***] Dollars ($[***])	$[***]
First time annual Net Sales of a Pharmaceutical Product in the Territory achieve [***] Dollars ($[***])	$[***]

7.5 GSK Sole Project Milestones. GSK shall pay to Codexis after GSK receipt of an Invoice from Codexis, each of the milestone payments set forth in this Section 7.5 upon achievement of the applicable milestone event with respect to a Licensed GSK Sole Project GSK Selected Enzyme (or the associated Pharmaceutical Product, as applicable). Each milestone achieved with respect to an associated Pharmaceutical Product shall be paid on a Pharmaceutical Product-by-Pharmaceutical Product basis. Each milestone payment will be made for each GSK Sole Project GSK Selected Enzyme (or the associated Pharmaceutical Product, as

applicable), that achieves the applicable milestone event; *provided* that each milestone payment shall be made no more than two (2) times, on the first two (2) achievements of the applicable milestone event, regardless of the number of GSK Sole Projects that achieve such milestone event. For clarity, each milestone payment will be made only once with respect to each GSK Sole Project GSK Selected Enzyme (or the associated Pharmaceutical Product, as applicable). Such milestone payments shall be non-creditable and non-refundable. Notwithstanding anything to the contrary, no milestone payments shall be owed by GSK to Codexis under this Section 7.5 with respect to any GSK Collaborative Project or Enzyme Product.

GSK Sole Project Milestone Event	**Milestone Payment**
Initiation of [***] of the Licensed GSK Sole Project GSK Selected Enzyme for use in synthesis of a GSK Compound for [***] of a Pharmaceutical Product.	$[***]
[***] of a Pharmaceutical Product in [***].	$[***]
First time annual Net Sales of Pharmaceutical Product in the Territory achieve [***] Dollars ($[***])	$[***]
First time annual Net Sales of Pharmaceutical Product in the Territory achieve [***] Dollars ($[***])	$[***]
First time annual Net Sales of Pharmaceutical Product in the Territory achieve [***] Dollars ($[***])	$[***]

7.6 GSK Existing Pharmaceutical Product Milestones. GSK shall pay to Codexis after GSK receipt of an Invoice from Codexis, each of the milestone payments set forth in this Section 7.6 upon achievement of the applicable milestone event with respect to a GSK Existing Pharmaceutical Product (or the Licensed (GSK Sole or Collaborative, as the case may be) Project GSK Selected Enzyme used in the synthesis of such GSK Existing Pharmaceutical Product, as applicable). Each milestone achieved with respect to an associated Pharmaceutical Product shall be paid on a Pharmaceutical Product-by-Pharmaceutical Product basis. For a GSK Existing Pharmaceutical Product that is the subject of a GSK Sole Project, each milestone payment will be made for each GSK Existing Pharmaceutical Product (or Licensed GSK Sole Project GSK Selected Enzyme used in the synthesis of such GSK Existing Pharmaceutical

Product, as applicable) that achieves the applicable milestone event; *provided* that with respect to all GSK Sole Projects described in BOTH Sections 7.5 and 7.6, each milestone payment shall be made no more than three (3) times, on the first three (3) achievements of the applicable milestone event, regardless of the number of GSK Sole Projects. By way of example, if milestones were paid twice for any milestone event per Section 7.5, there would remain one additional opportunity for the equivalent milestone event to be earned by Codexis in Section 7.6. For a GSK Existing Pharmaceutical Product that is the subject of a Collaborative Project, each milestone payment will be made for each GSK Existing Pharmaceutical Product (or Licensed Collaborative Project GSK Selected Enzyme used in the synthesis of such GSK Existing Pharmaceutical Product, as applicable) with respect to Collaborative Projects that achieves the applicable milestone event, regardless of the number of GSK Existing Pharmaceutical Products (or Licensed GSK Collaborative Project GSK Selected Enzyme used in the synthesis of such GSK Existing Pharmaceutical Product, as applicable) with respect to Collaborative Projects that achieve each such milestone event. For clarity, each milestone payment will be made only once with respect to each GSK Existing Pharmaceutical Product (or Licensed Collaborative Project GSK Selected Enzyme used in the synthesis of such GSK Existing Pharmaceutical Product, as applicable). Such milestone payments shall be non-creditable and non-refundable.

GSK Existing Pharmaceutical Product Milestone Event	**Milestone Payment for Collaborative Project**	**Milestone Payment for GSK Sole Project**
Initiation of a Project following selection of an Initial Enzyme for Initial Enzyme Optimization.	$[***]	$[***]
Initiation of [***] of the GSK Selected Enzyme used in the synthesis of a GSK Existing Pharmaceutical Product for [***] of a Pharmaceutical Product.	$[***]	$[***]
[***] of a GSK Existing Pharmaceutical Product synthesized using a GSK Selected Enzyme in [***].	$[***]	$[***]
First time annual Net Sales of a GSK Existing Pharmaceutical Product synthesized using a GSK Selected Enzyme in the Territory achieve [***] Dollars ($[***])	$[***]	$[***]

[***] 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.

7.7 Enzyme Product Milestones. GSK shall pay to Codexis, after GSK receipt of an Invoice from Codexis, each of the milestone payments set forth in this Section 7.7 upon achievement of the applicable milestone event with respect to an Enzyme Product. Each milestone payment will be made on an Enzyme Product-by-Enzyme Product basis; *provided* that with respect to each of Enzyme Products listed in Column 2 and Column 3s, each milestone payment shall be made no more than two (2) times with respect Enzyme Products listed in Column 2 and no more than two (2) times with respect to Enzyme Products listed in Column 3, on the first two (2) achievements of the applicable milestone event with respect to Enzyme Products listed in Column 2 and the first two (2) achievements of the applicable milestone event with respect to Enzyme Products listed in Column 3, regardless of the number of Enzyme Products listed in Column 2 and Column 3 that achieve such milestone event. Each milestone payment will be made for each Licensed Enzyme Therapeutic Product listed in Column 1 that achieves the applicable milestone event, regardless of the number of Licensed Enzyme Therapeutic Products that achieve each such milestone event. For clarity, each milestone payment will be made only once with respect to each Enzyme Product. Such milestone payments shall be non-creditable and non-refundable.

Enzyme Product Milestone Event	**Column 1** **Milestone Payment for Licensed Enzyme Therapeutic Products**	**Column 2** **Milestone Payment for Licensed Prophylactic Products, Licensed Other Therapeutic Products and Licensed Accessory Products**	**Column 3** **Milestone Payment for Licensed Diagnostic Products**
Demonstration of [***] for an Enzyme Product.	$[***]	$[***]	$[***]
[***] of an Enzyme Product in [***].	$[***]	$[***]	$[***]

First time annual Net Sales of an Enzyme Product in the Territory achieve [***] Dollars ($[***])	$[***]	$[***]	$[***]
First time annual Net Sales of an Enzyme Product in the Territory achieve [***] Dollars ($[***])	$[***]	$[***]	$[***]
First time annual Net Sales of an Enzyme Product in the Territory achieve [***] Dollars ($[***])	$[***]	$[***]	$[***]
First time annual Net Sales of an Enzyme Product in the Territory achieve [***] Dollars ($[***])	$[***]	$[***]	$[***]

7.8 Manner of Milestone Payments and Other Payments. GSK shall notify Codexis in writing of the achievement of any milestone event under Sections 7.3 - 7.7 as applicable, within [***] days after its achievement. Each such milestone event together with the First Annual Option Fee and any Annual Option Fee and all other payments agreed under this Agreement shall be made within [***] days after receipt of an Invoice from Codexis.

7.9 Royalties. GSK, on an Enzyme Product-by-Enzyme Product and country-by-country basis, shall pay to Codexis royalties based upon the total quarterly Net Sales in the Territory, during a Calendar Quarter in which such Enzyme Product is sold, during the Royalty Term, at a rate equal to [***] percent ([***]%) of Net Sales of Licensed Enzyme Therapeutic Products in Column 1, [***] percent ([***]%) of Net Sales of Enzyme Products listed in Column 2 of the table in Section 7.7 and [***] percent ([***]%) of Net Sales of Enzyme Products listed in Column 3 (collectively, "**Royalties**"). With respect to Enzyme Products listed in Column 2 and Column 3 of the table in Section 7.7, Royalties will be due only with respect to the first two (2) Enzyme Products listed in Column 2 and the first two (2) Enzyme Products listed in Column 3 of the table in Section 7.7 to achieve First Commercial Sale, regardless of the number of Enzyme Products listed in Column 2 and Column 3 of the table in Section 7.7 that are commercialized by or on behalf of GSK. Royalties will be due with respect to all Licensed Enzyme Therapeutic Products in Column 1 of the table in Section 7.7 that achieve First Commercial Sale, regardless

of the number of Licensed Enzyme Therapeutic Products that are commercialized by or on behalf of GSK.

7.10 Royalty Payment Reports. After the First Commercial Sale of an Enzyme Product that is subject to the payment of Royalties in accordance with Section 7.9, and for the Royalty Term for such Product, GSK shall furnish to Codexis a written report, within [***] days after the end of each Calendar Quarter (or portion thereof if this Agreement terminates during a Calendar Quarter), showing the amount of Royalties due for such Calendar Quarter (or portion thereof) pursuant to Section 7.9. Royalty payments for each Calendar Quarter shall be due at the same time as such written report for the Calendar Quarter. With each quarterly payment, GSK shall deliver to Codexis a full and accurate accounting to include at least the following information:

(a) the Net Sales on an Enzyme Product-by-Enzyme Product and country-by-country basis in the reporting currency in which sales were made and in Dollars after the application of the exchange rate during the reporting period as reported in Section 7.10(c);

(b) the Royalties payable in Dollars which shall have accrued hereunder in respect of such Net Sales and the basis for calculating such Royalties;

(c) the exchange rates used in converting into Dollars, from the currencies in which sales were made;

(d) dispositions of Enzyme Products other than pursuant to sale for cash for which a royalty is due; and

(e) withholding taxes, if any, required by Applicable Law to be deducted in respect of such Royalties.

7.11 Applicability of Milestones and Royalties. All milestone payments and Royalties set forth in Sections 7.3 through 7.9, inclusive, shall be made during the Term and, after expiration or termination of this Agreement, with respect to all applicable Pharmaceutical Products or Enzyme Products, regardless of whether the applicable Project was initiated during or after the TT Term, or before or after the effective date of expiration or termination of this Agreement; *provided* that the applicable Project is initiated or, in the case of an Enzyme Product, any Enzyme is generated using the Platform Technology, in either case, prior to the [***] of (a) the date of expiration of the last-to-expire Patent within the Codexis Core Technology licensed to GSK under this Agreement and (b) the date that is [***] years after the Effective Date.

7.12 Manner of Payment. All payments to be made by GSK to Codexis hereunder shall be made in Dollars by wire transfer of immediately available funds to such U.S. bank account as shall be designated by Codexis; *provided, however,* that any notice by Codexis

of a change in such account shall not be effective until [***] days after receipt thereof by GSK. Late payments shall bear interest at the rate provided in Section 7.16.

7.13 Records Retention. Commencing with the First Commercial Sale of a Product, GSK shall keep, and shall cause each of its Affiliates and permitted sublicensees to keep, full and accurate books of accounting in accordance with IFRS, containing all particulars that may be necessary for the purpose of calculating all Royalties payable to Codexis under this Article 7, for a period of [***] years after the Calendar Year in which such sales occurred, in sufficient detail to permit Codexis to confirm the accuracy of Royalties paid hereunder. Such books of accounting, including those of GSK's Affiliates and Sublicensees, shall be kept at the GSK site where such records are stored in the normal course of GSK's business.

7.14 Audit Rights.

7.14.1 Technical Audit Right. If Codexis has a reasonable basis for believing that a product sold by or on behalf of GSK for which GSK has not paid any milestone payments or Royalties under Sections 7.4 through 7.9, inclusive, constitutes a Licensed Product for which such milestone payments and/or Royalties may be payable, Codexis may notify GSK of its belief in writing. GSK shall allow a designee chosen by Codexis and reasonably acceptable to GSK to review such reasonable documentation and other reasonable materials of GSK as is necessary for such designee to determine whether such product constitutes a Licensed Product. Results of such investigation shall be made available to both GSK and Codexis; *provided* that such designee shall disclose to Codexis only its determination of whether the product constitutes a Licensed Product and shall disclose no other information revealed in such investigation to Codexis. Any materials examined by such designee shall be deemed GSK's Confidential Information, which may not be disclosed by such designee to any Third Party. GSK may require such designee to enter into an appropriate written agreement obligating it to be bound by obligations of confidentiality and restrictions on use of such Confidential Information that are no less restrictive than the obligations set forth in Article 9. If, as a result of any such investigation, such designee determines that such product constitutes a Licensed Product, then GSK shall (a) make all payments required to be made to Codexis under Sections 7.4 through 7.9, inclusive, with respect to such Licensed Product for achievement of milestones and/or Net Sales that occurred prior to the date the Parties receive such results, within [***] days after such date, and shall be responsible for any such payments with respect to such Licensed Product thereafter, (b) pay interest on all late payments in accordance with Section 7.16 and (c) pay Codexis' reasonable out-of-pocket costs of the investigation.

7.14.2 Financial Audit Right. During the Term and for a period of [***] years thereafter, GSK shall permit an independent, certified public accountant appointed by Codexis, and reasonably acceptable to GSK, during normal business hours and upon [***] days prior written notice, but in no case more than [***] per Calendar Year, to examine (but not copy) such records as may be necessary for the sole purpose of verifying the calculation and reporting of Net Sales and milestone payments and the correctness of any

payment made under this Agreement for any period within the preceding [***] years. The report of the independent public accountant shall be shared with GSK prior to distribution to Codexis such that GSK can provide the independent, certified public accountant with justifying remarks for inclusion in the report prior to sharing the conclusions of such report with Codexis. Results of any such examination shall be made available to both GSK and Codexis. The independent, certified public accountant shall disclose to Codexis only the amounts that the independent auditor believes to be due and payable hereunder to Codexis and details concerning any discrepancy from the amount paid and the amount due, and shall disclose no other information revealed in such audit. Any and all records examined by such independent accountant shall be deemed GSK's Confidential Information, which may not be disclosed by said independent, certified public accountant to any Third Party. GSK may require such independent accountant to enter into an appropriate written agreement obligating it to be bound by obligations of confidentiality and restrictions on use of such Confidential Information that are no less restrictive than the obligations set forth in Article 9. If, as a result of any inspection of the books and records of GSK, it is shown that payments under this Agreement were less than the amount that should have been paid, then GSK shall make all payments required to be made to Codexis to eliminate any discrepancy revealed by such inspection within [***] days. Codexis shall pay for such audits, except that in the event that the audited amounts were underpaid by GSK by more than [***] of the undisputed amounts that should have been paid during the period in question as per the audit, GSK shall pay Codexis' out-of-pocket costs of the audit and pay interest on all late payments in accordance with Section 7.16. In the event that the audited amounts were overpaid by GSK, GSK shall withhold such overpayment from future Royalties or milestone payments.

7.14.3 In the event that GSK is determined, as a consequence of an audit conducted by Codexis pursuant to either Section 7.14.1 or Section 7.14.2, as applicable, to have:

(a) not paid to Codexis any milestone payments or Royalties with respect to a Licensed Product for which milestone payments and/or Royalties are payable; or

(b) underpaid any amounts by more than [***] of the undisputed amounts that should have been paid to Codexis; and

(c) whether in the case of (a) or (b), for each occurrence after the first occurrence that GSK is determined, as a consequence of a separate, independent audit conducted by Codexis pursuant to either Section 7.14.1 or Section 7.14.2, as applicable, to have:

(i) not paid any milestone payments or Royalties with respect to a Licensed Product for which milestone payments and/or Royalties are payable; or

(ii) underpaid any amounts by more than [***] of the undisputed amounts that should have been paid to Codexis;

GSK shall pay to Codexis, in accordance with Section 7.8: (A) the outstanding amount due to Codexis as determined under this Section 7.14.3; (B) the amount calculated to be [***] percent ([***]%) of the amount noted in (A) above; and (C) the interest of due in respect of the amount noted in (A) above pursuant to Section 7.16.

7.15 Taxes.

7.15.1 No Deductions or Withholding. GSK will make all payments to Codexis under this Agreement without deduction or withholding for taxes, except to the extent that any such deduction or withholding is required by Applicable Law in effect at the time of payment.

7.15.2 Withholding Required by Applicable Law. Any tax required to be withheld on amounts payable under this Agreement shall be paid promptly by GSK on behalf of Codexis to the appropriate governmental authority, and GSK will furnish Codexis with proof of payment of such tax. Any such tax required to be withheld will be borne by Codexis.

7.15.3 Cooperation. GSK and Codexis will cooperate with respect to all documentation required by any taxing authority or reasonably requested by GSK to secure a reduction in the rate of applicable withholding taxes. Within thirty (30) days after the execution of this Agreement, Codexis will deliver to GSK an accurate and complete Internal Revenue Service Form W-9.

7.15.4 Reimbursement. If GSK had a duty to withhold taxes in connection with any payment it made to Codexis under this Agreement but GSK failed to withhold, and such taxes were assessed against and paid by GSK, then Codexis will reimburse GSK for such taxes actually paid by GSK. If GSK makes a claim under this Section 7.15.4, it will comply with the obligations imposed by Section 7.15.2 as if GSK had withheld taxes from a payment to Codexis.

7.16 Interest Due. Without limiting any other rights or remedies available to either Party, GSK shall pay to Codexis interest on any payments that are not paid on or before the date such payments are due under this Agreement at a rate equal to the lesser of (a) [***] as reported by Citibank, New York, New York, on the date such payment was due to be paid or (b) the maximum applicable legal rate on such date, in either (a) or (b), calculated on the total number of days payment was delinquent.

8. REPRESENTATIONS, WARRANTIES, AND COVENANTS; DISCLAIMERS; LIMITATION OF LIABILITY

8.1 Mutual Representations and Warranties. Each Party represents and warrants to the other Party as of the Effective Date, that:

8.1.1 such Party is duly organized, validly existing, and in good standing under the Applicable Law of the jurisdiction of its incorporation and has full corporate power and authority to enter into this Agreement and to carry out the provisions hereof;

8.1.2 execution of this Agreement and the performance by such Party of its obligations hereunder have been duly authorized;

8.1.3 this Agreement has been duly executed and delivered on behalf of such Party, and constitutes a legal, valid, binding obligation of such Party, enforceable against it in accordance with the terms hereof;

8.1.4 the performance of this Agreement by such Party does not create a breach or default under any other agreement to which it is a party, which breach or default would adversely affect the other Party;

8.1.5 the execution, delivery, and performance of this Agreement by such Party does not conflict with any agreement, instrument, or understanding, oral or written, to which it is a party or by which it is bound, nor violate any Applicable Law of any court, governmental body or administrative or other agency having jurisdiction over such Party;

8.1.6 no government authorization, consent, approval, license, exemption, filing or registration with any court or governmental department, commission, board, bureau, agency or instrumentality, domestic or foreign, under any Applicable Law currently in effect, is or will be necessary for, or in connection with, the transaction contemplated by this Agreement or any other agreement or instrument executed in connection herewith, or for the performance by such Party of its obligations under this Agreement and such other agreements, except as may be required to obtain applicable Regulatory Approvals or Regulatory Filings related to the development of any Licensed Product; and

8.1.7 such Party has not employed and, to its knowledge, has not used a contractor or consultant that has employed, any individual or entity (a) debarred by the FDA (or subject to a similar sanction of any other applicable Regulatory Authority), (b) who is the subject of an FDA debarment investigation or proceeding (or similar proceeding of any other applicable Regulatory Authority), or (c) has been charged with or convicted under Applicable Law of the United States for conduct relating to the development or approval, or otherwise relating to the regulation of any product under the Generic Drug Enforcement Act of 1992, in each case, in the conduct of its activities prior to the Effective Date.

8.2 Additional Representations and Warranties of Codexis. Codexis, on behalf of itself and its Affiliates, hereby represents and warrants to GSK that, except as

otherwise disclosed in writing by Codexis to GSK and accepted in writing by GSK, as of the Effective Date:

8.2.1 [***];

8.2.2 Codexis is the sole and exclusive owner of the Licensed Patents (other than In-Licensed Patents) and the Licensed Know-How (other than In-Licensed Know-How) and has the full authority to grant the full and unencumbered scope of rights and licenses (other than as set forth in Section 3.4.2) granted to GSK under this Agreement;

8.2.3 to the knowledge of the Codexis Senior Management, no licenses under any Third Party Intellectual Property rights are necessary for Codexis to grant to GSK the licenses hereunder (other than licenses to commercially available software such as, by way of example only, [***] or [***]);

8.2.4 the Licensed Patents are all of the Patents Controlled by Codexis that are (i) necessary to practice the Platform Technology; and (ii) which Cover the practice of the Platform Technology;

8.2.5 the Licensed Know-How accounts for all of the Codexis Know-How that is (i) necessary to practice the Platform Technology; and (ii) which Cover the practice of the Platform Technology;

8.2.6 neither Codexis nor any of its Affiliates has granted any right, license or interest to any Third Party relating to or under the Licensed IP or to the Platform Technology that would conflict or would otherwise be inconsistent with any of the rights, licenses or interests granted to GSK under this Agreement;

8.2.7 the Licensed Know-How (other than In-Licensed Know How) were generated either by employees or contractors of Codexis, and in each case the terms of employment or engagement of such employees or contractors vested in Codexis all right, title and interest in and to any Know-How generated by them or has obtained or has the legal right to obtain assignments of all such Licensed Know-How;

8.2.8 to the knowledge of Codexis Senior Management, no Third Party has rights in the Licensed Patents, the Licensed Know-How or the Platform Technology that would adversely affect GSK's rights under this Agreement;

8.2.9 [***];

8.2.10 [***];

8.2.11 [***];

8.2.12 to the knowledge of Codexis Senior Management, neither Codexis nor any of its Affiliates:

(a) is a party to any legal action relating to the Licensed IP; and

(b) [***];

8.2.13 in respect of each of the In-License Agreements, to the knowledge of Codexis Senior Management:

(a) each of the In-License Agreements is in full force and effect and neither Codexis nor its Affiliates have materially breached or received any written or oral notice of any breach or any written or oral notice of the intent to terminate under any of the In-License Agreements;

(b) each sublicense granted to GSK has been granted to GSK pursuant to the terms of each respective In-License Agreement; and

(c) each of the In-License Agreements disclosed to GSK is true, accurate and not misleading as to the terms thereof that have not been redacted;

8.2.14 the license limitations in Section 3.4.2 with respect to the Codexis Mayflower Patents are exhaustive, complete, accurate and not misleading; and

8.2.15 [***].

8.3 Mutual Covenants. Each Party hereby covenants to the other Party that:

8.3.1 all employees of such Party or its Affiliates, and all agents, consultants, contractors and subcontractors (as provided in Section 4.4) of such Party or its Affiliates performing any research activities under a research plan under a Project shall be under the obligation to assign all right, title and interest in and to their inventions and discoveries, whether or not patentable, if any, to such Party as the sole owner thereof;

8.3.2 such Party shall perform its obligations and activities in compliance with Applicable Law and industry standards, including, without limitation, GLP, GCP and GMP, in each case as applicable under Applicable Law of the country and the state and local government wherein such activities are conducted, and with respect to the care, handling and use in research and development activities hereunder of any non-human animals by or on behalf of such Party, shall at all times comply (and shall ensure compliance by any of its subcontractors) with Applicable Law, and also with the standards in the pharmaceutical industry for the development and manufacture of pharmaceutical products, and (b) with individuals who are appropriately trained and qualified;

8.3.3 neither Party shall employ (or, to its knowledge, use any contractor or consultant that employs) any individual or entity (a) debarred by the FDA (or subject to a similar sanction of any other applicable Regulatory Authority), (b) who is the subject of an FDA debarment investigation or proceeding (or similar proceeding of any other applicable Regulatory Authority), or (c) has been charged with or convicted under any Applicable Law of the United States for conduct relating to the development, approval or otherwise relating to the regulation of any product under the Generic Drug Enforcement Act of 1992, in each case, in the conduct of its activities under this Agreement; and

8.3.4 neither Party shall, during the Term, grant any right or license to any Third Party relating to any of the Intellectual Property rights it Controls that would conflict or interfere with any of the rights or licenses granted to the other Party hereunder.

8.4 Additional Covenants of GSK. GSK hereby covenants to Codexis that:

8.4.1 GSK acknowledges and agrees that the use of any enzyme, other than a Codexis Enzyme, to generate an Enzyme and, in addition, any Enzyme generated in accordance with the terms of the license granted by Codexis to GSK may be Covered by a Patent(s) owned or otherwise controlled by a Third Party;

8.4.2 all GSK employees and contractors that will have access to Codexis Confidential Information and/or Platform Technology shall be subject to a confidentiality obligations with GSK subjecting the employee or contractor to GSK's maintenance, non-disclosure, and non-use obligations under Article 9;

8.4.3 the financial information contained in any GSK report delivered pursuant to Article 7 will be generated using the same financial reporting system, using the same

data, and in the same manner that GSK uses to generate financial information for GSK's public reporting obligations; and

8.4.4 GSK shall pay Codexis' costs relating to the prosecution of the [***] Patents in accordance with Section 7.8 up to a maximum amount of [***] dollars ($[***]) per Calendar Year.

8.5 Additional Covenant of Codexis. Codexis hereby covenants to GSK that:

8.5.1 with respect to each In-License Agreement, Codexis shall maintain and keep such In-License Agreement in full force and effect under each In-License Agreement's respective terms for the term of the In-Licensed IP licensed pursuant to such In-License Agreement;

8.5.2 Codexis shall not amend any such In-License Agreement in a manner that adversely affects GSK's rights under Section 3.2 and/or imposes any additional obligations upon GSK not disclosed to GSK under the In-License Agreements; and

8.5.3 except in respect of Section 8.4.4, Codexis, pursuant to the terms of the In-License Agreements, shall be responsible for any and all annual maintenance fees due to all Third Party licensors during the Term required to maintain each In-License Agreement; *provided, however*, that (i) GSK shall be responsible for any and all milestones and royalties due to such Third Party licensors during the Term as a consequence of GSK's activities under the terms of this Agreement and (ii) nothing contained herein shall require Codexis to be responsible for Losses arising from the breach of such In-License Agreements by GSK as a sublicensee.

8.5.4 In the event of the termination of any of the In-License Agreements set forth on Exhibit 8.5.4, Codexis shall, at GSK's sole discretion, either:

(a) [***]; or

(b) [***].

Notwithstanding anything to the contrary, Codexis shall have no obligation under this Section 8.5.4 in the event of (i) expiration of any of the In-License Agreements set forth on Exhibit 8.5.4 in accordance with the terms of such In-License Agreement or (ii) a decision by the relevant

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Third Party licensor to abandon the Patents licensed under any of the In-License Agreements set forth on Exhibit 8.5.4 and dedicate the subject matter of such abandoned Patents to the public domain.

8.6 DISCLAIMERS.

8.6.1 CODEXIS DISCLAIMER. EXCEPT AS EXPRESSLY SET FORTH IN SECTIONS 8.1 THROUGH 8.5, CODEXIS MAKES NO REPRESENTATIONS, WARRANTIES OR COVENANTS OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ANY CODEXIS CONFIDENTIAL INFORMATION, CODEXIS PATENTS, CODEXIS CORE TECHNOLOGY, CODEXIS CORE TECHNOLOGY IMPROVEMENTS, ARISING CODEXIS ENZYME TECHNOLOGY OR ARISING CODEXIS PROCESS TECHNOLOGY OR ANY LICENSE GRANTED BY CODEXIS HEREUNDER, OR WITH RESPECT TO THE PRODUCTS. EXCEPT AS EXPRESSLY SET FORTH IN SECTIONS 8.1 THROUGH 8.5, NOTHING IN THIS AGREEMENT SHALL BE CONSTRUED AS A REPRESENTATION OR WARRANTY THAT ANY PATENT OR OTHER PROPRIETARY RIGHTS INCLUDED IN THE CODEXIS PATENTS ARE VALID OR ENFORCEABLE OR THAT USE OF THE CODEXIS PATENTS, CODEXIS CORE TECHNOLOGY, CODEXIS CORE TECHNOLOGY IMPROVEMENTS, ARISING CODEXIS ENZYME TECHNOLOGY AND ARISING CODEXIS PROCESS TECHNOLOGY CONTEMPLATED HEREUNDER [***].

8.6.2 GSK DISCLAIMER. EXCEPT AS EXPRESSLY SET FORTH IN SECTIONS 8.1 AND 8.4, GSK MAKES NO REPRESENTATIONS, WARRANTIES OR COVENANTS OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ANY GSK CONFIDENTIAL INFORMATION OR ANY LICENSE GRANTED BY GSK HEREUNDER. EXCEPT AS EXPRESSLY SET FORTH IN SECTIONS 8.1 AND 8.5, NOTHING IN THIS AGREEMENT SHALL BE CONSTRUED AS A REPRESENTATION OR WARRANTY THAT ANY PATENT OR OTHER PROPRIETARY RIGHTS INCLUDED IN THE GSK BACKGROUND IP, ARISING GSK ENZYME TECHNOLOGY OR ARISING GSK PROCESS TECHNOLOGY ARE VALID OR ENFORCEABLE OR THAT THE USE OF THE GSK BACKGROUND IP, ARISING GSK ENZYME TECHNOLOGY OR ARISING GSK PROCESS TECHNOLOGY CONTEMPLATED HEREUNDER [***].

8.7 LIMITATION OF LIABILITY. EXCEPT FOR A BREACH OF [***], OR CLAIMS OF A THIRD PARTY THAT ARE SUBJECT TO

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INDEMNIFICATION UNDER ARTICLE 10, NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY WITH RESPECT TO ANY SUBJECT MATTER OF THIS AGREEMENT, WHETHER UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY, FOR ANY INCIDENTAL, INDIRECT, SPECIAL, EXEMPLARY, PUNITIVE, MULTIPLE OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST PROFITS, LOSS OF USE, DAMAGE TO GOODWILL OR LOSS OF BUSINESS.

9. CONFIDENTIALITY

9.1 Nondisclosure. Each Party agrees that, during the Term and for a period of ten (10) years thereafter, a Party (the "**Receiving Party**") receiving Confidential Information from the other Party (the "**Disclosing Party**") (or that has received any such Confidential Information from the other Party prior to the Effective Date) shall (a) maintain in confidence such Confidential Information using not less than the efforts such Receiving Party uses to maintain in confidence its own proprietary information of similar kind and value, but in no event less than reasonable efforts, (b) not disclose such Confidential Information to any Third Party without the prior written consent of the Disclosing Party, except for disclosures expressly permitted pursuant to Section 9.3, and (c) not use such Confidential Information for any purpose, except as permitted by this Agreement (it being understood that this clause (c) shall not create or imply any rights or licenses not expressly granted under this Agreement).

9.2 Exceptions. The obligations in Section 9.1 shall not apply with respect to any portion of the Confidential Information received from the Disclosing Party that the Receiving Party can show by competent written proof:

9.2.1 was publicly disclosed by the Disclosing Party, either before or after disclosure to the Receiving Party hereunder;

9.2.2 was known to the Receiving Party or any of its Affiliates, without any obligation to keep it confidential or any restriction on its use, prior to disclosure by the Disclosing Party, as evidenced by contemporaneous written records;

9.2.3 was subsequently disclosed to the Receiving Party or any of its Affiliates by a Third Party lawfully in possession thereof and without any obligation to keep it confidential or any restriction on its use;

9.2.4 was published by a Third Party or otherwise becomes publicly available or enters the public domain, either before or after it is disclosed to the Receiving Party; or

9.2.5 was developed independently by or for the Receiving Party or its Affiliates, as evidenced by written records, without reference to or reliance upon the Disclosing Party's Confidential Information.

9.3 Authorized Disclosure. The Receiving Party may disclose Confidential Information belonging to the Disclosing Party, and Confidential Information deemed to belong to both Parties under the terms of this Agreement, to the extent (and only to the extent) such disclosure is reasonably necessary in the following instances:

9.3.1 Prosecuting Patents;

9.3.2 Regulatory Filings;

9.3.3 Prosecuting or defending litigation, including responding to a subpoena in a Third Party litigation;

9.3.4 subject to Section 9.5, complying with Applicable Law (including the rules and regulations of the Securities and Exchange Commission or any national securities exchange) and with judicial process, if in the reasonable opinion of the Receiving Party's counsel, such disclosure is necessary for such compliance; and

9.3.5 disclosure, solely on a "need to know basis," to Affiliates, potential and future collaborators (including sublicensees), potential or actual acquirers, merger partners, or assignees permitted under Section 13.5, potential or actual research and development collaborators, permitted subcontractors, investment bankers, investors, lenders or other potential financial partners, and their and each of the Parties' respective directors, employees, consultants, contractors and agents, each of whom prior to disclosure must be bound by written obligations of confidentiality and non-use no less restrictive than the obligations set forth in this Article 9; *provided, however,* that, in each of the above situations, the Receiving Party shall remain responsible for any failure by any Person who receives Confidential Information pursuant to this Section 9.3.5 to treat such Confidential Information as required under this Article 9.

If and whenever any Confidential Information is disclosed in accordance with this Section 9.3, such disclosure shall not cause any such information to cease to be Confidential Information, except to the extent that such disclosure results in a public disclosure of such information (other than by breach of this Agreement). Where reasonably possible and subject to Section 9.5 and other than pursuant to Section 9.3.5, the Receiving Party shall notify the Disclosing Party of the Receiving Party's intent to make such disclosure pursuant to this Section 9.3 sufficiently prior to making such disclosure so as to allow the Disclosing Party adequate time to take whatever action it may deem appropriate to protect the confidentiality of the information, and the Receiving Party will provide reasonable assistance to the Disclosing Party with respect thereto; *provided* that, in any event, the Receiving Party will use reasonable measures to ensure confidential treatment of such information.

9.4 Terms of this Agreement. The Parties acknowledge that this Agreement and all of the respective terms of this Agreement shall be treated as Confidential Information of both Parties.

9.5 Securities Filings. In the event either Party proposes to file with the Securities and Exchange Commission or the securities regulators of any state or other jurisdiction a registration statement or any other disclosure document which describes or refers to the terms and conditions of this Agreement under the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, or any other securities Applicable Law, the Party shall notify the other Party of such intention and shall provide such other Party with a copy of relevant portions of the proposed filing prior to such filing (and any revisions to such portions of the proposed filing a reasonable time prior to the filing thereof), including any exhibits thereto relating to the terms and conditions of this Agreement, and shall use reasonable efforts to obtain confidential treatment of the terms and conditions of this Agreement that such other Party reasonably requests be kept confidential, and shall only disclose Confidential Information that it is advised by counsel is legally required to be disclosed. No such notice shall be required under this Section 9.5 if the description of or reference to this Agreement contained in the proposed filing has been included in any previous filing made by the either Party hereunder or otherwise approved by the other Party.

9.6 Publicity.

9.6.1 Upon execution of this Agreement, Codexis shall issue the press release mutually agreed upon by the Parties and set forth in Exhibit 9.6. [***]. Notwithstanding the foregoing, any disclosure that is required by Applicable Law (including the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended), or the rules of a securities exchange or the Securities and Exchange Commission or the securities regulations of any state or other jurisdiction, may be made by Codexis or GSK; *provided* that any such required disclosure will not contain any Confidential Information of, respectively, GSK or Codexis and, if disclosure of such information is required by Applicable Law or such rules or regulations, the Parties will comply with Sections 9.3.4 and 9.5, as applicable, and will use reasonable efforts to minimize such disclosure and obtain confidential treatment for any such information that is disclosed to a governmental agency. Notwithstanding the foregoing, Codexis may publicly disclose any information that has previously been disclosed in accordance with this Section 9.6 without any requirement to receive GSK's approval thereof or to provide GSK with an opportunity to review such disclosure.

9.6.2 Codexis agrees to provide to GSK a copy of any public announcement regarding this Agreement or the subject matter thereof within a reasonable period of time under the circumstances prior to its scheduled release, which period of time shall not be less than fifteen (15) Business Days where practicable, for GSK's review. Except as otherwise required by Applicable Law, Codexis shall remove any Confidential Information of GSK that GSK deems to be inappropriate for disclosure. Codexis agrees not to use the name or trademark

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of GSK, its Affiliates, or its employees, without the prior written consent of GSK, except that Codexis may disclose that GSK is a licensee of Codexis hereunder.

9.6.3 GSK may make public announcements and publications regarding any Pharmaceutical Product in its sole discretion, and such announcement or publication shall not be subject to this Section 9.6. In addition, GSK may publish scientific papers and make scientific presentations; *provided, however,* that such publications and presentations do not include the Confidential Information of Codexis.

10. INDEMNITY AND INSURANCE

10.1 GSK Indemnity. GSK shall indemnify, defend, and hold harmless Codexis and its Affiliates, and their respective officers, directors, employees, agents, licensors, and their respective successors, heirs and assigns, and representatives (the "**Codexis Indemnitees**"), from and against any and all Losses from Third Party claims to the extent arising out of or relating to, directly or indirectly: (a) the negligence, recklessness or wrongful intentional acts or omissions of GSK, its Affiliates, and sublicensees and its or their respective directors, officers, employees and agents, in connection with GSK's performance of its obligations or exercise of its rights under this Agreement, including without limitation under any Project; (b) any breach by GSK of any representation, warranty or covenant set forth in this Agreement; (c) research, development, synthesis, transfer, handling, storage, sale, use, optimization, modification, isolation, engineering, identification, selection, making, having made, importation, exportation or other disposition of any Licensed Product by or on behalf of GSK or any of its Affiliates, sublicensees, agents and contractors (other than Codexis) , including for each of clauses (a), (b), and (c) above, claims and threatened claims based on (i) product liability, bodily injury, risk of bodily injury, death or property damage or (ii) the failure to comply with Applicable Law; except (A) in any such case for Losses from Third Party claims to the extent reasonably attributable to any Codexis Indemnitee having committed an act or acts of negligence, recklessness or willful misconduct, (B) any breach by Codexis of any representation, warranty or covenant; or (C) for which Codexis is required to indemnify GSK pursuant to Section 10.2.

10.2 Codexis Indemnity. Codexis shall indemnify, defend and hold harmless GSK and its Affiliates, and their respective officers, directors, employees, agents, licensors, and their respective successors, heirs and assigns, and representatives (the "**GSK Indemnitees**"), from and against any and all Losses from Third Party claims, to the extent arising out of or relating to, directly or indirectly: (a) the negligence, recklessness or wrongful intentional acts or omissions of Codexis, its Affiliates, and sublicensees (excluding GSK) and its or their respective directors, officers, employees and agents, in connection with Codexis' performance of its obligations or exercise of its rights under this Agreement, including without limitation under any Project; and (b) any breach by Codexis of any representation, warranty or covenant set forth in this Agreement; including for each of clauses (a) and (b), claims and threatened claims based on (i) product liability, bodily injury, risk of bodily injury, death or property damage or (ii) the

failure to comply with Applicable Law; except (A) in any such case for Losses from Third Party claims to the extent reasonably attributable to any GSK Indemnitee having committed an act or acts of negligence, recklessness or willful misconduct, (B) any breach by GSK of any representation, warranty or covenant; or (C) for which GSK is required to indemnify Codexis pursuant to Section 10.1.

10.3 Indemnification Procedure. A claim to which indemnification applies under Section 10.1 or Section 10.2 shall be referred to herein as an "**Indemnification Claim**." If any Person or Persons (collectively, the "**Indemnitee**") intends to claim indemnification under this Article 10, the Indemnitee shall notify the other Party (the "**Indemnitor**") in writing promptly upon becoming aware of any claim that may be an Indemnification Claim (it being understood and agreed, however, that the failure by an Indemnitee to give such notice shall not relieve the Indemnitor of its indemnification obligation under this Agreement, except and only to the extent that the Indemnitor is actually prejudiced as a result of such failure to give notice). The Indemnitor shall have the right to assume and control the defense of the Indemnification Claim at its own expense with counsel selected by the Indemnitor and reasonably acceptable to the Indemnitee; *provided, however,* that an Indemnitee shall have the right to retain its own counsel, with the fees and expenses to be paid by the Indemnitor, if representation of such Indemnitee by the counsel retained by the Indemnitor would be inappropriate due to actual or potential conflicting interests between such Indemnitee and the Indemnitor; *provided* that the Indemnitor shall not be obligated to pay the fees of more than one counsel retained by all Indemnitees. If the Indemnitor does not assume the defense of the Indemnification Claim as described in this Section 10.3 above, the Indemnitee may defend the Indemnification Claim, but shall have no obligation to do so. The Indemnitee shall not settle or compromise the Indemnification Claim without the prior written consent of the Indemnitor, and the Indemnitor shall not settle or compromise the Indemnification Claim in any manner which would have an adverse effect on the Indemnitee's interests (including any rights under this Agreement, or the scope or enforceability of any Patent within the Codexis Patent Rights or of the Codexis Know-How), without the prior written consent of the Indemnitee, which consent, in each case, shall not be unreasonably withheld or delayed. The Indemnitee shall reasonably cooperate with the Indemnitor at the Indemnitor's reasonable expense and shall make available to the Indemnitor all pertinent information under the control of the Indemnitee, which information shall be subject to Article 9.

10.4 Insurance. Each Party shall maintain at all times during the Term commercial general liability insurance and product liability insurance in respect of any Third Party claim, the subject of Section 10.1 and Section 10.2, from a recognized, creditworthy insurance company, with coverage limits of at least [***] Dollars ($[***]) per Third Party claim. With respect to GSK, such product liability insurance shall include coverage for any Third Party claim subject to Section 10.1 in respect of any Licensed Product undergoing clinical trials. The minimum level of insurance set forth herein shall not be construed to create a limit on either Party's liability hereunder. Within ten (10) days following reasonable written request from either Party, the other Party shall furnish to such Party a certificate of insurance

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evidencing such coverage. In the case of a material modification or cancellation of such coverage, the covered Party shall notify the other Party as soon as reasonably practicable and provide such other Party with a new certificate of insurance evidencing that the covered Party's coverage meets the requirements of this Section 10.4. Notwithstanding the aforementioned, each Party may elect to self-insure or re-insure all or parts of the limits described above and, in such event, this Section 10.4 shall apply to such self-insurance or re-insurance arrangements *mutatis mutandis*.

11. TERM AND TERMINATION.

11.1 Term; Expiration. This Agreement shall become effective on the Effective Date and, unless earlier terminated pursuant to this Article 11, or by mutual agreement of the Parties, shall remain in effect until the expiration on a country-by-country basis of all payment obligations under this Agreement. The period from the Effective Date until the date of expiration of this Agreement, or termination of this Agreement pursuant to this Article 11, shall be the "**Term**".

11.2 Termination for Material Breach. Either Party (the "**Non-Breaching Party**") may, without prejudice to any other remedies available to it at law or in equity, terminate this Agreement, in its entirety, in the Non-Breaching Party's sole discretion in the event the other Party (the "**Breaching Party**") has materially breached this Agreement, and such material breach has continued for sixty (60) days (the "**Cure Period**") after written notice thereof is provided to the Breaching Party by the Non-Breaching Party, such notice describing the alleged material breach in sufficient detail to put the Breaching Party on notice. If at the end of the Cure Period, the Breaching Party can demonstrate that it is actively seeking to remedy such material breach, then at the Breaching Party's request and with the consent of the Non-Breaching Party (not to be unreasonably withheld), the Non-Breaching Party shall grant an additional forty-five (45) days for the Breaching Party to remedy such breach.

11.3 Insolvency or Bankruptcy. To the extent permitted under Applicable Law, either Party may terminate this Agreement, (a) if, at any time, the other Party files in any court or agency pursuant to any statute or regulation of any state or country, a petition in bankruptcy or insolvency or for reorganization or for an arrangement or for the appointment of a receiver or trustee of the Party or of substantially all of its assets, or (b) if the other Party is served with an involuntary petition against it, filed in any insolvency proceeding, and such petition shall not be dismissed within ninety (90) days after the filing thereof, or (c) if the other Party shall propose or be a party to any dissolution or liquidation, or (d) if the other Party shall make an assignment of substantially all of its assets for the benefit of creditors. Each Party agrees to give the other Party prompt notice of the foregoing events giving rise to termination under this Section 11.3. All rights and licenses granted under or pursuant to any section of this Agreement are and shall otherwise be deemed to be for purposes of Section 365(n) of Title 11, United States Code (the "**Bankruptcy Code**") licenses of rights to "intellectual property" as defined in Section 101(35A) of the Bankruptcy Code. The Parties shall retain and may fully

exercise all of their respective rights and elections under the Bankruptcy Code. All materials required to be delivered by the non-bankrupt Party under this Agreement (including all manufacturing information) shall be considered to be "embodiments" of such intellectual property for purposes of Section 365(n) of the Bankruptcy Code. Upon the bankruptcy of any Party, the non-bankrupt Party shall further be entitled to a complete duplicate of, or complete access to, any intellectual property licensed to the non-bankrupt Party, and such, if not already in its possession, shall be promptly delivered to the non-bankrupt Party, unless the bankrupt Party elects to continue, and continues, to perform all of its obligations under this Agreement. All written agreements entered into in connection with the Parties' performance under this Agreement from time to time shall be considered agreements "supplementary" to this Agreement for purposes of Section 365(n) of the Bankruptcy Code.

11.4 Termination for Challenge of any Codexis Patent. If GSK or any of its Affiliates (the "**Challenging Party**") challenges the validity, scope or enforceability of or otherwise opposes any Codexis Patent in any country (each, a "**Patent Challenge**"), Codexis has the right to give notice to the Challenging Party that this Agreement will terminate in its entirety forty-five (45) days after such notice, and, unless the Challenging Party withdraws or causes to be withdrawn such Patent Challenge within such forty-five (45) day period, this Agreement will so terminate.

11.5 Consequences of Expiration or Termination.

11.5.1 In General. Expiration or termination of this Agreement for any reason shall not (a) release either Party from any obligation that has accrued prior to the effective date of such expiration or termination; (b) preclude either Party from claiming any other damages, compensation, or relief that it may be entitled to upon such expiration or termination; or (c) terminate any right to obtain performance of any obligation provided for in this Agreement that shall survive expiration or termination. Upon any expiration or termination of this Agreement, each Party shall return to the other Party and cease using all Confidential Information of such other Party; *provided* that the legal department of each Party may retain one (1) copy of such Confidential Information. Upon expiration (but not earlier termination) of this Agreement, the licenses granted to GSK pursuant to Sections 3.5.2 (if GSK exercised the Option) and 3.2.2 shall become perpetual and non-exclusive in the Field; *provided* that GSK shall remain responsible for any payments due to Codexis after the effective date of such expiration in accordance with Section 7.11. In the event of termination of this Agreement in accordance with this Article 11, [***] GSK shall have no rights to practice the Platform Technology.

11.5.2 Partial Termination of Licenses. All licenses granted to GSK under this Agreement shall terminate on a country-by-country basis to the extent that they relate to a country in the Territory that GSK has selected for termination in accordance with Section 11.7. Upon termination of this Agreement by GSK with respect to a country in the Territory (a

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"**Terminated Country**"), Codexis' rights and GSK's obligations under Section 11.5.3 shall apply as to the Terminated Country. In addition, the certification signed by [***], or a successor, provided to Codexis pursuant to Section 11.5.3 shall certify that all use of Platform Technology by GSK, its Affiliates or sublicensees, either alone or with a Third party, in the Terminated Country(ies) has ceased as of the date of such certification. For the avoidance of doubt, partial termination of this Agreement with respect to any Terminated Country(ies) does not relieve GSK of obligations under Article 7 that arise from GSK's exercise of rights or obligations under this Agreement within such Terminated Country(ies) existing as of the effective date of such partial termination. For clarity, in the event that GSK, on a country-by-country basis, terminates this Agreement with respect to all countries in the Territory, this Agreement will be deemed to be terminated in its entirety.

11.5.3 Codexis Audit Right on GSK Breach or Termination. In the event of termination of this Agreement by Codexis as a result of GSK's material breach under Section 11.2, or by GSK pursuant to Section 11.7, GSK shall provide to Codexis, within ninety (90) days after the effective date of such termination, a certification signed by [***] certifying that all Codexis proprietary materials, information, and technology in custody or control of GSK or sublicensee of GSK has been destroyed. In addition, Codexis shall have a right to conduct an audit to determine that all Codexis materials, information, and/or technology have been destroyed and that such destruction is complete (the "**Termination Audit Right**"). Under the Termination Audit Right, GSK shall allow a designee chosen by Codexis and reasonably acceptable to GSK to review documentation, materials, and facilities of GSK as reasonably necessary for such designee to determine whether all Codexis materials, information, and/or technology has been destroyed. Results of such investigation shall be made available to both GSK and Codexis; *provided* that such designee shall disclose to Codexis only its determination of whether all Codexis materials, information, and/or technology has been destroyed. GSK may require such designee to enter into an appropriate written agreement obligating it to be bound by obligations of confidentiality and restrictions on use of such Confidential Information that are comparable to the obligations set forth in Article 9. The Termination Audit Right shall continue until the earlier of (a) ten (10) years after the effective date of termination of this Agreement by Codexis as a result of GSK's material breach under Section 11.2, or by GSK pursuant to Section 11.7 or (b) until a designee determines, pursuant to the Codexis' exercise of the Termination Audit Right, that all Codexis materials, information, and/or technology has been destroyed. All reasonable expenses arising from the first audit shall be at Codexis' expense, and all subsequent audits, if any, shall be at GSK's expense.

11.6 GSK Continuing Rights. Upon termination of this Agreement by GSK pursuant to Section 11.2 and 11.3, GSK shall continue to have the rights to research, develop, use, optimize, modify, isolate, engineer, identify, select, make, have made, import and/or export Enzymes and their derivatives under the licenses granted to GSK pursuant to Section 3.2, which

shall remain in effect to the fullest extent possible subject only to the payment by GSK of the applicable amounts set out in Article 7.

11.7 GSK Termination at Will. At any time following Completion of Wave 1, GSK may terminate this Agreement in its entirety, or on a country-by-country basis, upon providing ninety (90) days' written notice to Codexis at any time and for any reason or for no reason at all. In such event, GSK shall pay to Codexis all reasonable non-cancellable and non-terminable costs incurred by Codexis upon such event of termination. If GSK terminates this Agreement in its entirety pursuant to this Section 11.7 during the TT Term, GSK shall pay to Codexis the applicable termination payment set forth in this Section 11.7.

Termination at Will During TT Term	Termination At Will Payment
During Technology Transfer Project 1, as defined in the Technology Transfer Plan	$[***]
During Technology Transfer Project 2, as defined in the Technology Transfer Plan	$[***]
During Technology Transfer Project 3, as defined in the Technology Transfer Plan	$[***]
During Technology Transfer Project 4, as defined in the Technology Transfer Plan	$[***]

11.8 Additional Consequence of Certain Terminations. If Codexis terminates this Agreement pursuant to Section 11.2, or if GSK terminates this Agreement in its entirety, then, in addition to the consequences set forth in Sections 11.5 - 11.7, [***].

11.9 Survival. Notwithstanding anything to the contrary in this Agreement, the following provisions shall survive, as well as any other provision which by its terms or by the context thereof, is intended to survive expiration or termination of this Agreement: Articles 1 (Definitions), 6 (Intellectual Property), 7 (Financial Terms) (in accordance with Section 7.11), 9 (Confidentiality) (for the period of time set forth in Section 9.1), 12 (Dispute Resolution), and 13 (Miscellaneous), and Sections 3.1.2, 3.1.3, 3.4.1 and 3.4.2 (for the remaining term of the relevant Patents), 3.7.2, 8.6, 8.7, 10.1, 10.2, 10.3, 11.5, 11.8 and 11.9. Except as otherwise expressly

provided, all other rights, licenses and obligations shall terminate upon expiration or termination of this Agreement.

12. DISPUTE RESOLUTION.

12.1 Resolution by Executive Officers. The Parties agree that the procedures set forth in this Article 12 shall be the exclusive mechanism for resolving any dispute, controversy, or claim (each, a "**Dispute**") between the Parties that may arise from time to time pursuant to this Agreement relating to any Party's rights and/or obligations. Except as otherwise provided in this Agreement, in the event of any Dispute between the Parties in connection with this Agreement, the construction hereof, or the rights, duties or liabilities of either Party hereunder, the Parties shall first attempt in good faith to resolve such Dispute by negotiation and consultation between themselves. In the event that such Dispute is not resolved on an informal basis within ten (10) Business Days, either Party may, by written notice to the other Party, refer the Dispute to the executive officers designated by the Parties for attempted resolution. Such officers, or their designees, shall attempt in good faith to promptly resolve such Dispute within thirty (30) Business Days thereafter. In the event that any matter is not resolved under the foregoing provisions, each Party may, at its sole discretion, seek resolution of such matter in accordance with Section 12.2.

12.2 Mediation. If a Dispute arises out of or relating to this Agreement, or the breach thereof, and if said Dispute is not resolved through negotiation by the Parties under Section 12.1, the Parties agree that they shall try in good faith to resolve the Dispute by referring it for confidential mediation under the CPR Mediation Procedure in effect at the start of mediation. Unless otherwise agreed, the Parties shall select a mediator from the CPR Panels of Distinguished Neutrals. If the Parties cannot agree, they will defer to the CPR to select a mediator. The cost of the mediator shall be borne equally by the Parties. The place of mediation shall be New York, New York, United States of America. Any Dispute not resolved within forty-five (45) days (or within such other time period as may be agreed to by the Parties in writing) after appointment of the mediator shall be finally resolved by arbitration pursuant to Section 12.3.

12.3 Arbitration. Subject to Section 12.4, any Dispute referred for arbitration shall be finally resolved by binding arbitration before a panel of three (3) arbitrators in accordance with the rules of the American Arbitration Association (**"AAA"**) in effect at the time the proceeding is initiated. If the issues in Dispute involve scientific, technical or commercial matters, then any arbitrator chosen under this Agreement shall have educational training and industry experience sufficient to demonstrate a reasonable level of relevant scientific, technical and commercial knowledge relevant to the subject matter of the Dispute. All proceedings and communications as part of the arbitration shall be in English. Following selection of the third arbitrator, the arbitrators shall use all reasonable efforts to complete the arbitration proceedings and render an award within six (6) months after the last arbitrator is appointed. In any such arbitration, the following additional procedures shall apply:

12.3.1 Rules. The arbitration shall be conducted pursuant to the then-current AAA rules in effect for disputes between U.S. parties on the date of commencement of the arbitration; *provided, however*, that discovery in any arbitration shall be conducted in accordance with the AAA Commercial Arbitration Rules in effect immediately prior to October 1, 2013, for large complex commercial disputes between U.S. based entities.

12.3.2 Panel. Within thirty (30) days after a Party demands arbitration, each Party shall select one (1) arbitrator and the third chosen by the two (2) Party-chosen arbitrators. If either, or both, of GSK or Codexis fails to choose an arbitrator within thirty (30) days after receiving notice of commencement of arbitration or if the two arbitrators fail to choose a third arbitrator within thirty (30) days after their appointment, then either or both Parties shall immediately request that the AAA select the remaining number of arbitrators to be selected, which arbitrator(s) shall have an appropriate background, experience and expertise in the subject matter at issue in the Dispute. The place of arbitration shall be San Francisco, California, United States of America. The seat of arbitration shall be the State of New York, United States of America (for clarity, the Parties intend this to mean that the procedural rules of the State of New York, United States of America, will apply to any arbitration).

12.3.3 Injunctive Relief; Costs and Expenses. Either Party may apply to the arbitrators for interim injunctive relief until the arbitration decision is rendered or the Dispute is otherwise resolved. Either Party may, without waiving any right or remedy under this Agreement, seek from any court having jurisdiction any injunctive or provisional relief necessary to protect the rights or property of that Party pending resolution of the Dispute pursuant to this Article 12. The arbitrators shall have no authority to award punitive or any other type of damages not measured by a Party's compensatory damages. Each Party will share equally the cost and expenses of the panel selected in Section 12.3.2 and any administrative fees unless in each case the arbitrators agree otherwise, which they are hereby empowered, authorized and instructed to do if they determine that to be fair and appropriate. Each Party shall bear its own costs and expenses and attorneys' fees in connection with any such arbitration; *provided, however,* that the prevailing Party in any such arbitration shall be entitled to recover from the other Party the reasonable attorneys' fees, costs and expenses incurred by such prevailing Party in connection with such arbitration.

12.3.4 Confidentiality. Except to the extent necessary to confirm an award or decision or as may be required by Applicable Law, or the requirement of any exchange on which a Party's shares are traded, neither Party nor any arbitrator may disclose the existence or results of any arbitration without the prior written consent of both Parties. In no event shall any arbitration be initiated after the date when commencement of a legal or equitable proceeding based on the Dispute would be barred by the applicable Delaware statute of limitations.

12.3.5 Breach of the Agreement. In the event of a Dispute involving the alleged breach of this Agreement (including, without limitation, whether a Party has satisfied its diligence obligations hereunder), (a) neither Party may terminate this Agreement under

Article 11 until resolution of the Dispute pursuant to this Article 12 and (b) if the arbitrators render a decision that a breach of this Agreement has occurred, the arbitrators shall have no authority to modify the right of the non-breaching Party to terminate this Agreement in accordance with Section 11.2.

12.3.6 Performance. Any disputed performance or suspended performance pending the resolution of a Dispute that the arbitrators determine to be required to be performed by a Party shall be completed within a reasonable time period following the final decision of the arbitrators.

12.3.7 Binding Decision. The decision of the arbitrators shall be the sole, exclusive and binding remedy between the Parties regarding the determination of all Disputes presented. The arbitrators shall prepare and deliver to the Parties a written, reasoned opinion conferring their decision. Judgment on the award so rendered may be entered in any court having competent jurisdiction thereof. Any monetary payment to be made by a Party pursuant to a decision of the arbitrators shall be made in Dollars, free of any tax or other deduction.

12.4 Confidentiality and Patent Disputes. Notwithstanding anything in this Agreement to the contrary, any and all issues regarding (a) breach or threatened breach of a Party's confidentiality obligations under this Agreement or (b) the ownership, scope, construction, validity and enforceability of any Patent shall be determined in a court of competent jurisdiction under the local Patent laws of the jurisdictions having issued the Patent in question.

13. MISCELLANEOUS.

13.1 Non-Solicitation. During the period beginning on the Effective Date and ending on the date that is [***], (the "**Non-Solicitation Period**"), GSK and its Affiliates shall not, directly or indirectly, solicit, hire, employ or attempt to solicit, hire or employ any person acting in a scientific role who is or was an employee or contractor of Codexis or any Codexis Affiliate during the Non-Solicitation Period, or in any other way directly or indirectly seek to solicit, induce, bring about, influence, promote, facilitate, or encourage any such individual to work for GSK or any party other than GSK; *provided* that the foregoing shall not restrict GSK or its Affiliates from advertising employment opportunities in any manner that does not directly target Codexis or its Affiliates or from hiring or employing any person who responds to such generalized public advertisements.

13.2 Severability. If one or more of the provisions of this Agreement is held to be invalid or unenforceable, the provision shall be considered severed from this Agreement and shall not serve to invalidate any remaining provisions hereof. The Parties shall make a good faith effort to replace any invalid or unenforceable provision with a valid and enforceable one

[***] 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.

such that the objectives contemplated by the Parties when entering this Agreement may be realized.

13.3 Notices. Any notice required or permitted to be given by this Agreement shall be in writing and shall be (a) delivered by hand or by overnight courier with tracking capabilities, (b) mailed postage prepaid by first class, registered or certified mail, or (c) delivered by facsimile or e-mail followed by delivery via either of the methods set forth in (a) or (b), in each case, addressed as set forth below unless changed by notice so given:

If to GSK:

GlaxoSmithKline

709 Swedeland Road
P.O. Box 1539, Mail Code UW2318
King of Prussia, PA 19406-0939
United States

Attention: [***]
Email: [***]

With a copy to:

GlaxoSmithKline
2301 Renaissance Boulevard
Mailcode RN0220
King of Prussia, PA 19406-2772
United States

Attention: [***]
Email: [***]

If to Codexis:

Codexis, Inc.
200 Penobscot Drive
Redwood City, CA 94063
Attention: Chief Executive Officer
Telephone: [***]
Fax: [***]
Email: [***]

[***] 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.

With a copy to:

Codexis, Inc.
200 Penobscot Drive
Redwood City, CA 94063
Attention: General Counsel
Telephone: [***]
Fax: [***]
Email: [***]

Any such notice shall be deemed given on the date received. A Party may add, delete or change the Person or address to which notices should be sent at any time upon written notice delivered to the Party's notices in accordance with this Section 13.3.

13.4 Force Majeure. Except for the payment of money, neither Party shall be liable for delay or failure in the performance of any of its obligations hereunder if such delay or failure is due to causes beyond its reasonable control, including acts of God, fires, earthquakes, acts of war, terrorism, or civil unrest ("**Force Majeure**"); *provided, however,* that the affected Party promptly notifies the other Party; *provided further* that the affected Party shall use its Commercially Reasonable Efforts to avoid or remove such causes of non-performance and to mitigate the effect of such occurrence, and shall continue performance with the utmost dispatch whenever such causes are removed. When such circumstances arise, the Parties shall negotiate in good faith any modifications of the terms of this Agreement that may be necessary or appropriate in order to arrive at an equitable solution.

13.5 Assignment. Neither Party may, without the consent of the other Party, assign or transfer any of its rights and obligations hereunder; *provided* that no such consent is required for an assignment or transfer to an Affiliate of such Party or to a successor in interest to such Party by reason of merger or consolidation or sale of all or substantially all of the business of such Party relating to the subject matter of this Agreement, whether by merger, sale of stock, sale of assets or otherwise. This Agreement shall inure to the benefit of and be binding on the Parties' successors and assigns. Any assignment or transfer in violation of the foregoing shall be null and void.

13.6 Change of Control [***]. [***]

[***] 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.

[***].

13.7 GSK Divestments. If GSK sells, leases, loans, provides or otherwise transfers to any Third Party any asset, facility, business unit or personnel that practice or otherwise use any Codexis Core Technology, Codexis Core Technology Improvements or Enzyme Technology, GSK shall provide a certification to Codexis and Codexis shall have an audit right as set forth in Section 11.5.3.

13.8 Waivers and Modifications. The failure of any Party to insist on the performance of any obligation hereunder shall not be deemed to be a waiver of such obligation. Waiver of any breach of any provision hereof shall not be deemed to be a waiver of any other breach of such provision or any other provision on such occasion or any succeeding occasion. No waiver, modification, release or amendment of any obligation under or provision of this Agreement shall be valid or effective unless in writing and signed by both Parties.

13.9 Choice of Law. This Agreement shall be governed by, enforced and construed in accordance with the laws of the State of Delaware, United States of America, excluding: (a) any conflicts of law principles that would result in the application of the laws of any state other than the State of Delaware; (b) the United Nations Convention on Contracts for the International Sales of Goods; (c) the 1974 Convention on the Limitation Period in the International Sale of Goods (the "**1974 Convention**"); and (d) the Protocol amending the 1974 Convention, done at Vienna April 11, 1980; *provided, however,* that with respect to matters involving the enforcement, validity or scope of Intellectual Property rights, the laws of the applicable country shall apply.

13.10 Relationship of the Parties. Each Party is an independent contractor under this Agreement. Nothing contained herein is intended or is to be construed so as to constitute Codexis and GSK as partners, agents or joint venturers. Neither Party shall have any express or implied right or authority to assume or create any obligations on behalf of or in the name of the other Party or to bind the other Party to any contract, agreement or undertaking with any Third Party.

13.11 Entire Agreement. This Agreement, together with the attached exhibits and schedules, constitutes the entire agreement between the Parties as to the subject matter of this Agreement, and supersedes and merges all prior and contemporaneous negotiations, representations, agreements and understandings regarding the same.

13.12 Counterparts. This Agreement may be executed in counterparts with the same effect as if both Parties had signed the same document. All such counterparts shall be deemed an original, shall be construed together and shall constitute one and the same instrument.

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Signatures to this Agreement transmitted by facsimile, by email in "portable document format" (".pdf"), or by any other electronic means intended to preserve the original graphic and pictorial appearance of this Agreement shall have the same effect as physical delivery of the paper document bearing original signature. Notwithstanding the aforementioned, the Parties shall as soon as reasonably practicable exchange original signed counterparts to this Agreement.

13.13 Interpretation.

13.13.1 Drafting Party. Each of the Parties acknowledges and agrees that this Agreement has been diligently reviewed by and negotiated by and between them, that in such negotiations each of them has been represented by competent counsel and that the final agreement contained herein, including the language whereby it has been expressed, represents the joint efforts of the Parties and their counsel. Accordingly, in interpreting this Agreement or any provision hereof, no presumption shall apply against any Party as being responsible for the wording or drafting of this Agreement or any such provision, and ambiguities, if any, in this Agreement shall not be construed against any Party, irrespective of which Party may be deemed to have authored the ambiguous provision.

13.13.2 Singular and Plural; Gender. The definitions of the terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The word "will" shall be construed to have the same meaning and effect as the word "shall." The word "any" means "any and all" unless otherwise clearly indicated by context. The word "including" will be construed as "including without limitation." The word "or" is disjunctive but not necessarily exclusive.

13.13.3 References. Unless the context requires otherwise, (a) any definition of or reference to any agreement, instrument or other document herein shall be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein or therein), (b) any reference to Applicable Law herein shall be construed as referring to such Applicable Law as from time to time enacted, repealed or amended, (c) any reference herein to any Person shall be construed to include the Person's successors and assigns, and (d) all references herein to Articles, Sections or Exhibits, unless otherwise specifically provided, shall be construed to refer to Articles, Sections and Exhibits of this Agreement.

13.13.4 Headings and Captions. Headings and captions are for convenience only and are not be used in the interpretation of this Agreement.

13.14 Anti-Bribery and Corruption.

13.14.1 Codexis acknowledges that it has read GSK's 'Prevention of Corruption – Third Party Guidelines' attached at Exhibit 13.14 and agrees to perform its obligations under the Agreement in accordance with the principles set out therein.

13.14.2 Codexis shall comply fully at all time with all applicable laws and regulations, including but not limited to applicable anti-corruption laws, of the territory in which Codexis conducts business with GSK.

13.14.3 GSK shall be entitled to terminate this Agreement immediately on written notice to Codexis, if Codexis fails to perform its obligations in accordance with this Section 13.14. [***].

13.15 Ethical Standards and Human Rights. Codexis represents and warrants, to the best of its knowledge, that in connection with this Agreement, it respects the human rights of its staff and does not employ child labor, forced labor, unsafe working conditions, discrimination on the basis of race, religion, disability or gender, or cruel or abusive disciplinary practices in the workplace; and that it pays each employee at least the minimum wage, provides each employee with all legally mandated benefits, and complies with the laws on working hours and employment rights in the countries in which it operates. Codexis shall encourage compliance with these standards by any supplier of goods or services that it uses in performing its obligations under this Agreement.

13.16 Good Data Management. During the Technology Transfer or under any Collaborative Project conducted pursuant to this Agreement, each Party shall, and shall cause any Third Party acting for and on behalf of such Party to, carry out its obligations under the Agreement, and collect and record any data generated therefrom, in accordance with the following good data management practices:

13.16.1 Data are being generated using sound scientific techniques and processes;

13.16.2 Data are being accurately recorded in accordance with good scientific practices;

13.16.3 Data are being analyzed appropriately without bias in accordance with good scientific practices;

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13.16.4 Data and results are being stored securely and can be retrieved, and

13.16.5 Data trails exist to demonstrate and/or reconstruct key decisions.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused this Platform Technology Transfer, Collaboration and License Agreement to be executed by their respective duly authorized officers as of the Effective Date.

Codexis, Inc.		**GlaxoSmithKline Intellectual Property Development Limited**	
By:	/s/ John J. Nicols	By:	/s/ Paul Williamson
Name:	John J. Nicols	Name:	Paul Williamson For and on behalf of Edinburgh Pharmaceutical Industries Limited
Title:	President & CEO	Title:	Corporate Director

Exhibit 1.18

Codexis Core Patents

CODEXIS CORE PATENTS							
Country	**Application Title**	**Application Status**	**Application Number**	**Filing Date**	**Publication Number**	**Patent Number**	**Issue Date**
US	COMBINED AUTOMATED PARALLEL SYNTHESIS OF POLYNUCLEOTIDE VARIANTS	Granted	12/562988	09/18/2009	2010/0093560	8,383,346	02/26/2013
CN	METHOD OF SYNTHESIZING POLYNUCLEOTIDE VARIANTS	Granted	200980122093.2	12/13/2010	102066561	200980122093.2	09/25/2013
CA	METHOD OF SYNTHESIZING POLYNUCLEOTIDE VARIANTS	Published	2,726,850	12/02/2010	2726850		
EP	METHOD OF SYNTHESIZING POLYNUCLEOTIDE VARIANTS	Published	9763625.2	11/29/2010	2285958		
IN	METHOD OF SYNTHESIZING POLYNUCLEOTIDE VARIANTS	Published	8090/CHEN/2010	12/13/2010	8090/CHENP/2010		
SG	METHOD OF SYNTHESIZING POLYNUCLEOTIDE VARIANTS	Granted	201009215-3	12/13/2010		167342	05/31/2013

CA	COMBINED AUTOMATED PARALLEL SYNTHESIS OF POLYNUCLEOTIDE VARIANTS	Published	2763017	11/21/2011	2763017		
CN	COMBINED AUTOMATED PARALLEL SYNTHESIS OF POLYNUCLEOTIDE VARIANTS	Published	200980159766.1	12/08/2011	102803489		
EP	COMBINED AUTOMATED PARALLEL SYNTHESIS OF POLYNUCLEOTIDE VARIANTS	Published	9845944.9	12/05/2011	2451951		
IN	COMBINED AUTOMATED PARALLEL SYNTHESIS OF POLYNUCLEOTIDE VARIANTS	Published	9101/CHENP/2011	12/07/2011	9101/CHENP/2011		
US	COMBINED AUTOMATED PARALLEL SYNTHESIS OF POLYNUCLEOTIDE VARIANTS	Published	13/756778	02/01/2013	2013/0143767		
US	METHOD OF SELECTING AN OPTIMIZED, DIVERSE POPULATION OF VARIANTS	Granted	12/867429	08/12/2010	2011/0029468	8,504,498	08/06/2013

EP	METHOD OF SELECTING AN OPTIMIZED, DIVERSE POPULATION OF VARIANTS	Published	9710859.1	02/12/2009	2250595		
EP	METHOD OF GENERATING AN OPTIMIZED, DIVERSE POPULATION OF VARIANTS	Published	9710490.5	02/12/2009	2250594		
US	METHOD OF GENERATING AN OPTIMIZED, DIVERSE POPULATION OF VARIANTS	Granted	12/867433	10/21/2010	2011/0034342	8,768,871	07/01/2014
[***]	[***]	[***]	[***]	[***]			
EP	REDUCED CODON MUTAGENESIS	Published	10817881.5	03/30/2012	2478137		
US	PROTEIN VARIANT GENERATION BY REGION SHUFFLING	Published	13/577651	08/07/2012	2014/0005057		
EP	PROTEIN VARIANT GENERATION BY REGION SHUFFLING	Published	12803889.0	12/12/2013	2726651		
WO	GENE SHUFFLING METHODS	Published	PCT/US2013/030526	03/12/2013	WO2013138339		

[***] 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.

[***]	[***]	[***]	[***]	[***]			
[***]	[***]	[***]	[***]	[***]			
[***]	[***]	[***]	[***]	[***]			
[***]	[***]	[***]	[***]	[***]			
[***]	[***]	[***]	[***]	[***]			
[***]	[***]	[***]	[***]	[***]			

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Exhibit 1.19

Codexis Core Technology

The enzyme optimization process starts by identifying genes that code for enzymes known to have the general type of catalytic reactivity for a desired chemical reaction. Typically, we identify gene sequences in published databases and then synthesize candidate genes having those sequences. Using a variety of biotechnology tools, we diversify these genes by introducing mutations, giving rise to changes in the enzymes for which they encode. The methods for diversifying these genes, and types of diversity being tested, often vary over the course of an enzyme optimization program. For finding initial diversity, methods typically include random mutagenesis and site-directed (included structure-guided) mutagenesis. We also test mutational variations that distinguish related enzymes among different organisms. Once we have identified potentially beneficial mutations, we test combinations of these mutations in libraries made using our proprietary gene recombination methodologies, gene shuffling and multiplexed gene SOEing, or Splicing by Overlap Extension.

With our proprietary gene shuffling methodology, we generate libraries of genes that have random combinations of the mutations we are testing. The pool of genes is used to transform host cells, which entails introducing the various genes, one by one, into host cells. These cells are then segregated and grown into colonies. Cells from individual colonies are cultured in high throughput to produce the enzyme encoded by the shuffled gene in those cells. The enzymes are then screened in high throughput using test conditions relevant to the desired process. The screening results identify individual shuffled genes that produce improved enzymes having combinations of beneficial mutations and weed out enzymes having detrimental ones. Using different test conditions and/or different analytical methods, we can identify variant enzymes that exhibit various improved performance characteristics, such as stability, activity and selectivity, under conditions relevant to the desired chemical process.

In the next step in our optimization process, we use our proprietary software tool, ProSAR™, to analyze protein sequence-activity relationships. ProSAR™ aids in identifying specific gene and enzyme mutations that are beneficial, neutral or detrimental with respect to the desired performance characteristics. Earlier directed evolution methods did not separately evaluate individual mutations in libraries of variants which carry multiple mutations, where beneficial and detrimental performance characteristics may be mixed in an individual gene or enzyme. Capitalizing on the advent of inexpensive gene sequencing, we are able to determine which particular mutations are present in the genes and proteins we have screened. Our ProSAR™ bioinformatics software relates the screening results to the mutations and ranks the individual mutations with regard to their degree of benefit or detriment, relative to whichever process

parameter(s) the screening tested. Using that information, we can bias the pool of mutational diversity in the next iteration to further the accumulation of beneficial diversity and cancel out detrimental diversity in the individual genes in the resulting shuffled library. The ProSAR™ results also help us develop ideas about new diversity to test. ProSAR™, combined with efficient gene synthesis and high quality library generation methods, has led to a significant increase in the efficiency and speed of enzyme improvement and optimization.

In another step of our optimization process, we take the best variants we have identified and prepare enough of each to test in the desired chemical process at laboratory scale, for in-process confirmation. This optimization routine is done iteratively, typically adding new diversity to the pool in each iteration. The gene that codes for the best performing enzyme in one iteration is used as the starting gene for the next iteration of shuffling and screening. As the enzymes improve over these iterations, the screening conditions are made increasingly more stringent. In this way, enzymes are rapidly optimized until all in-process performance requirements have been achieved and the economic objectives for the desired process have been met.

Multiplexed gene SOEing is our proprietary methodology for rapidly generating gene variants. Using multiplexed gene SOEing, we rapidly generate collections of individual gene variants that have predetermined, as opposed to random, combinations of mutations we are testing. It is based on a biotechnology technique, which we refer to as SOEing, generally used to make a hybrid, or spliced, gene from fragments of two genes and/or to introduce a specific mutation into a splice between fragments of one gene. We have automated the process to make robotically, in parallel, one hundred to several hundred variants, each with a predetermined combination of the mutations we are testing. The variants are introduced into host cells, and the encoded enzyme is produced and screened in high throughput, as described above.

Using multiplexed gene SOEing, we can test many mutations and combinations thereof in parallel, and because the mutation incorporation is controlled and predetermined before screening, as opposed to random incorporation and selection after screening, the resulting data set can be more optimal for ProSAR™ analysis.

We believe using multiplexed gene SOEing to survey many mutations quickly, followed by ProSAR™-driven shuffling of beneficial mutations, is a particularly effective approach, providing rapid gains in enzyme performance

Exhibit 1.24

Codexis Enzyme Patents

CODEXIS ENZYME PATENTS							
Country	**Application Title**	**Application Status**	**Application Number**	**Filing Date**	**Publication Number**	**Patent Number**	**Issue Date**
US	TRANSAMINASE POLYPEPTIDES	Granted	12/684864	01/08/2010	2010/0209981	8,470,564	06/25/2013
EP	TRANSAMINASE POLYPEPTIDES	Published	10729606.3	01/08/2010	2385983		
SG	TRANSAMINASE POLYPEPTIDES	Published	201104947-5	07/06/2011	172891		
IN	TRANSAMINASE POLYPEPTIDES	Published	5648/CHENP/2011	08/04/2011	5648/CHENP/2011		
IL	TRANSAMINASE POLYPEPTIDES	Pending	213950	07/06/2011			
CN	TRANSAMINASE POLYPEPTIDES	Published	201080010926.9	01/08/2010	102341494		
US	TRANSAMINASE POLYPEPTIDES	Published	13/920,902	06/18/2013	2013/0266994		
US	TRANSAMINASE BIOCATALYSTS	Granted	12/714397	02/26/2010	2010/0285541	8,293,507	10/23/2012
CN	TRANSAMINASE BIOCATALYSTS	Published	201080017312.3	10/19/2011	102405281		
EP	TRANSAMINASE BIOCATALYSTS	Granted	10746948.8	09/26/2011	2401366	2401366	12/18/2013
IN	TRANSAMINASE BIOCATALYSTS	Published	6857/CHENP/2011	09/22/2011	6857/CHENP/2011		

SG	TRANSAMINASE BIOCATALYSTS	Granted	201106064-7	02/26/2010	173815	173815	11/15/2013
JP	TRANSAMINASE BIOCATALYSTS	Published	2011-552209	08/23/2011	2012-519004		
US	TRANSAMINASE BIOCATALYSTS	Published	13/604,323	09/05/2012	2012/0329108		
DE	TRANSAMINASE BIOCATALYSTS	Granted	10746948.8	09/26/2011	2401366	202010012539.4	12/18/2013
FR	TRANSAMINASE BIOCATALYSTS	Granted	10746948.8	09/26/2011	2401366	2401366	12/18/2013
ES	TRANSAMINASE BIOCATALYSTS	Granted	10746948.8	09/26/2011	2401366	2401366	12/18/2013
CH	TRANSAMINASE BIOCATALYSTS	Granted	10746948.8	09/26/2011	2401366	2401366	12/18/2013
GB	TRANSAMINASE BIOCATALYSTS	Granted	10746948.8	09/26/2011	2401366	2401366	12/18/2013
IE	TRANSAMINASE BIOCATALYSTS	Granted	10746948.8	09/26/2011	2401366	2401366	12/18/2013
IT	TRANSAMINASE BIOCATALYSTS	Granted	10746948.8	09/26/2011	2401366	2401366	12/18/2013
NL	TRANSAMINASE BIOCATALYSTS	Granted	10746948.8	09/26/2011	2401366	2401366	12/18/2013
CN	KETOREDUCTASE-MEDIATED STEREOSELECTIVE ROUTE TO ALPHA CHLOROALCOHOLS	Published	201080027481.5	12/20/2011	102482648		
EP	KETOREDUCTASE-MEDIATED STEREOSELECTIVE ROUTE TO ALPHA CHLOROALCOHOLS	Published	10797576.5	12/22/2011	2446025		

IN	KETOREDUCTASE-MEDIATED STEREOSELECTIVE ROUTE TO ALPHA CHLOROALCOHOLS	Pending	9363/CHENP/2011	12/21/2011			
SG	KETOREDUCTASE-MEDIATED STEREOSELECTIVE ROUTE TO ALPHA CHLOROALCOHOLS	Allowed	201109538-7	12/21/2011	177331		
US	KETOREDUCTASE-MEDIATED STEREOSELECTIVE ROUTE TO ALPHA CHLOROALCOHOLS	Allowed	13/378618	12/15/2011	2012/0190086		
EP	KETOREDUCTASE POLYPEPTIDES FOR THE PREPARATION OF PHENYLEPHRINE	Published	10810597.4	03/15/2012	2467473		
IN	KETOREDUCTASE POLYPEPTIDES FOR THE PREPARATION OF PHENYLEPHRINE	Published		03/15/2012	2372/CHENP/2012		
US	KETOREDUCTASE POLYPEPTIDES FOR THE PREPARATION OF PHENYLEPHRINE	Published	13/390677	02/15/2012	2012/0149073		
SG	KETOREDUCTASE POLYPEPTIDES FOR THE PREPARATION OF PHENYLEPHRINE	Published	201201086-4	02/16/2012	178456		
CN	TRANSAMINASE REACTIONS	Published	201080027740.4	12/21/2011	102597226		
EP	TRANSAMINASE REACTIONS	Published	10797544.3	12/22/2011	2446026		
IN	TRANSAMINASE REACTIONS	Published	9683/CHENP/2011	12/22/2011	9683/CHENP/2011		

SG	TRANSAMINASE REACTIONS	Published	201109536-1	12/21/2011	177329		
US	TRANSAMINASE REACTIONS	Published	13/378963	04/09/2012	2012/0190085		
IL	TRANSAMINASE REACTIONS	Pending	216099	11/02/2011			
US	BIOCATALYTIC PROCESSES FOR THE PREPARATION OF SUBSTANTIALLY STEREOMERICALLY PURE FUSED BICYCLIC PROLINE COMPOUNDS	Granted	12/490190	06/23/2009	2010/0063300	8,178,333	05/15/2012
CN	BIOCATALYTIC PROCESSES FOR THE PREPARATION OF SUBSTANTIALLY STEREOMERICALLY PURE FUSED BICYCLIC PROLINE COMPOUNDS	Allowed	200980133157.9	06/24/2008	102131813		
SG	BIOCATALYTIC PROCESSES FOR THE PREPARATION OF SUBSTANTIALLY STEREOMERICALLY PURE FUSED BICYCLIC PROLINE COMPOUNDS	Granted	201009300-3	06/23/2009		167392	08/15/2013
EP	BIOCATALYTIC PROCESSES FOR THE PREPARATION OF SUBSTANTIALLY STEREOMERICALLY PURE FUSED BICYCLIC PROLINE COMPOUNDS	Granted	9798485.0	06/23/2009	2307419	2307419	11/06/2013

IN	BIOCATALYTIC PROCESSES FOR THE PREPARATION OF SUBSTANTIALLY STEREOMERICALLY PURE FUSED BICYCLIC PROLINE COMPOUNDS	Published	397/CHENP/2011	01/19/2011	397/CHENP/2011		
US	STEREOMERICALLY PURE FUSED BICYLIC PROLINE COMPOUNDS USEFUL FOR PREPARING HEPATITIS C PROTEASE INHIBITORS	Allowed	13/294930	11/11/2011	2012/0130087		
US	BIOCATALYTIC PROCESSES FOR THE PREPARATION OF STEREOMERICALLY PURE FUSED BICYCLIC PROLINE COMPOUNDS	Granted	13/436506	03/30/2012	2012/0244581	8,574,876	11/05/2013
FR	BIOCATALYTIC PROCESSES FOR THE PREPARATION OF SUBSTANTIALLY STEREOMERICALLY PURE FUSED BICYCLIC PROLINE COMPOUNDS	Granted	9798485.0	06/23/2009	2307419	2307419	11/06/2013
DE	BIOCATALYTIC PROCESSES FOR THE PREPARATION OF SUBSTANTIALLY STEREOMERICALLY PURE FUSED BICYCLIC PROLINE COMPOUNDS	Granted	9798485.0	06/23/2009	2307419	602009019988.9	11/06/2013

IE	BIOCATALYTIC PROCESSES FOR THE PREPARATION OF SUBSTANTIALLY STEREOMERICALLY PURE FUSED BICYCLIC PROLINE COMPOUNDS	Granted	9798485.0	06/23/2009	2307419	2307419	11/06/2013
IT	BIOCATALYTIC PROCESSES FOR THE PREPARATION OF SUBSTANTIALLY STEREOMERICALLY PURE FUSED BICYCLIC PROLINE COMPOUNDS	Granted	9798485.0	06/23/2009	2307419	2307419	11/06/2013
NL	BIOCATALYTIC PROCESSES FOR THE PREPARATION OF SUBSTANTIALLY STEREOMERICALLY PURE FUSED BICYCLIC PROLINE COMPOUNDS	Granted	9798485.0	06/23/2009	2307419	2307419	11/06/2013
ES	BIOCATALYTIC PROCESSES FOR THE PREPARATION OF SUBSTANTIALLY STEREOMERICALLY PURE FUSED BICYCLIC PROLINE COMPOUNDS	Granted	9798485.0	06/23/2009	2307419	2307419	11/06/2013
CH	BIOCATALYTIC PROCESSES FOR THE PREPARATION OF SUBSTANTIALLY STEREOMERICALLY PURE FUSED BICYCLIC PROLINE COMPOUNDS	Granted	9798485.0	06/23/2009	2307419	2307419	11/06/2013

GB	BIOCATALYTIC PROCESSES FOR THE PREPARATION OF SUBSTANTIALLY STEREOMERICALLY PURE FUSED BICYCLIC PROLINE COMPOUNDS	Granted	9798485.0	06/23/2009	2307419	2307419	11/06/2013
US	KETOREDUCTASE POLYPEPTIDES AND USES THEREOF	Granted	12/545761	08/21/2009	2010/0055751	8,288,131	10/16/2012
US	POLYNUCLEOTIEDES ENCODING ENGINEERED KETOREDUCTASE POLYPEPTIDES	Granted	13/610723	09/11/2012	2013/0005018	8,455,230	06/04/2013
US	KETOREDUCTASE POLYPEPTIDES FOR THE PRODUCTION OF A 3-ARYL-3-HYDROXYPROPANAMINE FROM A 3-ARYL-3-KETOPROPANAMINE	Granted	12/549154	08/27/2009	2010/0151534	8,426,178	04/23/2013
EP	KETOREDUCTASE POLYPEPTIDES FOR THE PRODUCTION OF A 3-ARYL-3-HYDROXYPROPANAMINE FROM A 3-ARYL-3-KETOPROPANAMINE	Published	9810573.7	08/27/2009	2329013		
IN	KETOREDUCTASE POLYPEPTIDES FOR THE PRODUCTION OF A 3-ARYL-3-HYDROXYPROPANAMINE FROM A 3-ARYL-3-KETOPROPANAMINE	Published	2014/CHENP/2011	03/22/2011	2014/CHENP/2011		

US	KETOREDUCTASE POLYPEPTIDES FOR THE PRODUCTION OF A 3-ARYL-3-HYDROXYPROPANAMINE FROM A 3-ARYL-3-KETOPROPANAMINE	Granted	13/796985	03/12/2013	2013/0177962	8,673,607	03/18/2014
US	KETOREDUCTASE POLYPEPTIDES FOR THE STEREOSELECTIVE PRODUCTION OF (4S)-3-[(5S)-5(4-FLUOROPHENYL)-5-HYDROXYPENTANOLYL]-4PHENYL1,3-OXAZOLIDIN-2-ONE	Granted	12/545034	08/20/2009	2010/0062499	8,273,554	09/25/2012
CN	KETOREDUCTASE POLYPEPTIDES FOR THE STEREOSELECTIVE PRODUCTION OF (4S)-3-[(5S)-5(4-FLUOROPHENYL)-5-HYDROXYPENTANOYL]-4PHENYL-1,3-OXAZOLIDIN-2-ONE	Published	200980141486.8	04/19/2011	102186972		
SG	KETOREDUCTASE POLYPEPTIDES FOR THE STEREOSELECTIVE PRODUCTION OF (4S)-3-[(5S)-5(4-FLUOROPHENYL)-5-HYDROXYPENTANOYL]-4PHENYL-1,3-OXAZOLIDIN-2-ONE	Pending	201101090-7	02/16/2011			

EP	KETOREDUCTASE POLYPEPTIDES FOR THE STEREOSELECTIVE PRODUCTION OF (4S)-3-[(5S)-5(4-FLUOROPHENYL)-5-HYDROXYPENTANOYL]-4PHENYL-1,3-OXAZOLIDIN-2-ONE	Published	9810477.1	03/29/2011	2329014		
IN	KETOREDUCTASE POLYPEPTIDES FOR THE STEREOSELECTIVE PRODUCTION OF (4S)-3-[(5S)-5(4-FLUOROPHENYL)-5-HYDROXYPENTANOYL]-4PHENYL-1,3-OXAZOLIDIN-2-ONE	Published	2000/CHENP/2011	03/22/2011	2000/CHENP/2011		
US	POLYNUCLEOTIDES ENCODING RECOMBINANT KETOREDUCTASE POLYPEPTIDES	Granted	13/590882	08/21/2012	2012/0322136A1	8,415,126	04/09/2013
US	KETOREDUCTASE POLYPEPTIDES FOR THE STEREOSELECTIVE PRODUCTION OF (4S)-3-[(5S)-5(4-FLUOROPHENYL)-5-HYDROXYPENTANOLYL]-4PHENYL1,3-OXAZOLIDIN-2-ONE	Published	13/764596	02/11/2013	2013/0210098		
US	ENONE REDUCTASES	Granted	12/646907	12/23/2009	2010/0190218	8,329,438	12/11/2012
EP	ENONE REDUCTASES	Published	9835878.1	12/23/2009	2382308		
IN	ENONE REDUCTASES	Published	4505/CHENP/2011	12/23/2009	4505/CHENP/2011		

SG	ENONE REDUCTASES	Published	201104630-7	12/23/2009	172783		
US	ENONE REDUCTASES	Published	13/658582	10/23/2012	2013/0115663		
US	RECOMBINANT HALOHYDRIN DEHALOGENASE POLYPEPTIDES	Granted	12/642586	12/18/2009	2010/0173372	8,187,856	05/29/2012
IN	RECOMBINANT HALOHYDRIN DEHALOGENASE POLYPEPTIDES	Published	5068/CHENP/2011	12/18/2009	5068/CHENP/2011		
US	RECOMBINANT HALOHYDRIN DEHALOGENASE POLYPEPTIDES	Granted	13/452328	04/20/2012	2012/0220002	8,580,555	11/12/2013
US	PENICILLIN G ACYLASES	Granted	12/615139	11/09/2009	2010/0143968	8,247,192	08/21/2012
US	PENICILLIN G ACYLASES	Granted	13/542835	07/06/2012	2012/0270282	8,569,013	10/29/2013
US	NITRILASE BIOCATALYSTS	Granted	13/381155	12/28/2011	2012/0142063	8,614,081	12/24/2013
US	KETOREDUCTASE POLYPEPTIDES FOR THE PRODUCTION OF 3-ARYL-3-HYDROXYPROPANAMINE FROM A 3-ARYL-3-KETOPROPANAMINE	Granted	12/549293	08/27/2009	2010/0173369	8,288,141	10/16/2012
US	POLYNUCLEOTIDES ENCODING ENGINEERED KETOREDUCTASE POLYPEPTIDES	Published	13/610166	09/11/2012	2013/0005017		

CN	SYNTHESIS OF PRAZOLE COMPOUNDS	Published	201080054980.3	06/04/2012	102884178		
EP	SYNTHESIS OF PRAZOLE COMPOUNDS	Published	10836590.9	07/05/2012	2510089		
IN	SYNTHESIS OF PRAZOLE COMPOUNDS	Published	5934/CHENP/2012	07/05/2012	5934/CHENP/2012		
SG	SYNTHESIS OF PRAZOLE COMPOUNDS	Published	201204152-1	06/06/2012	181535		
US	SYNTHESIS OF PRAZOLE COMPOUNDS	Published	13/514750	06/08/2012	2013/0017580		
EP	BIOCATALYSTS FOR EZETIMIBE SYNTHESIS	Published	11778262.3	12/03/2012	2566497		
IN	BIOCATALYSTS FOR EZETIMIBE SYNTHESIS	Published	10077/CHENP/2012	11/30/2012	10077/CHENP/2012		
US	BIOCATALYSTS FOR EZETIMIBE SYNTHESIS	Published	13/695856	11/02/2012	2013/0052699		
US	PROCESSES USING AMINO ACID DEHYDROGENASES AND KETOREDUCTASE-BASED COFACTOR REGENERATING SYSTEM	Published	13/577772	10/16/2012	2013/0029385		

IN	PROCESSES USING AMINO ACID DEHYDROGENASES AND KETOREDUCTASE-BASED COFACTOR REGENERATING SYSTEM	Published	7740/CHENP/2012	09/07/2012	7740/CHENP/2012		
SG	STRUCTURE-ACTIVITY RELATIONSHIPS	Published	201200817-3	02/12/2001	178753		
US	STRUCTURE-ACTIVITY RELATIONSHIPS	Published	13/757554	02/01/2013	2013/0165341		
US	STRUCTURE-ACTIVITY RELATIONSHIPS	Published	13/764252	02/11/2013	2013/0157900		
CN	KETOREDUCTASES AND USES THEREOF	Granted	200880004582.3	02/08/2008	CN 101627116A	ZL2008 8 0004582.3	07/10/2013
SG	KETOREDUCTASES AND USES THEREOF	Granted	200904674-9	02/08/2008		154045	03/30/2012
KR	KETOREDUCTASES AND USES THEREOF	Pending	10-2009-7016084	02/08/2008			
US	KETOREDUCTASES AND USES THEREOF	Granted	12/028,780	02/08/2008	2008/0318295	7,820,421	10/26/2010
EP	KETOREDUCTASES AND USES THEREOF	Granted	8725329.0	02/08/2008	2115130	2115130	08/03/2011
IL	KETOREDUCTASES AND USES THEREOF	Pending	199399	02/08/2008			
JP	KETOREDUCTASES AND USES THEREOF	Published	2009-549110	02/08/2008	2010-517574		
US	KETOREDUCTASES AND USES THEREOF	Granted	12/881734	09/14/2010	2011/0165670	8,071,347	12/06/2011

CH	KETOREDUCTASES AND USES THEREOF	Granted	8725329.0	02/08/2008	2115130	2115130	08/03/2011
DE	KETOREDUCTASES AND USES THEREOF	Granted	8725329.0	02/08/2008	2115130	2115130	08/03/2011
FR	KETOREDUCTASES AND USES THEREOF	Granted	8725329.0	02/08/2008	2115130	2115130	08/03/2011
GB	KETOREDUCTASES AND USES THEREOF	Granted	8725329.0	02/08/2008	2115130	2115130	08/03/2011
IE	KETOREDUCTASES AND USES THEREOF	Granted	8725329.0	02/08/2008	2115130	2115130	08/03/2011
NL	KETOREDUCTASES AND USES THEREOF	Granted	8725329.0	02/08/2008	2115130	2115130	08/03/2011
US	KETOREDUCTASES AND USES THEREOF	Granted	13/290773	11/07/2011	2012/0178142	8,415,127	04/09/2013
US	KETOREDUCTASES AND USES THEREOF	Published	13/793158	03/11/2013	2013/0196408		
JP	ALCOHOL DEHYDROGENASE FOR THE STEREOSELECTIVE PRODUCTION OF HYDROXY COMPOUNDS	Allowed	2007-526267	06/04/2005		5042831	
DE	ALCOHOL DEHYDROGENASE FOR THE STEREOSELECTIVE PRODUCTION OF HYDROXY COMPOUNDS	Granted	102004029112.8	06/11/2004		1763577	10/06/2010

EP	ALCOHOL DEHYDROGENASE FOR THE STEREOSELECTIVE PRODUCTION OF HYDROXY COMPOUNDS	Granted	5756002.1	06/04/2005	1763577	1763577	10/06/2010
US	ALCOHOL DEHYDROGENASE FOR THE STEREOSELECTIVE PRODUCTION OF HYDROXY COMPOUNDS	Granted	11/629000	12/08/2006	2009/0162893	7,943,356	05/17/2011
GB	ALCOHOL DEHYDROGENASE FOR THE STEREOSELECTIVE PRODUCTION OF HYDROXY COMPOUNDS	Granted	5756002.1	06/04/2005	1763577	1763577	10/06/2010
IT	ALCOHOL DEHYDROGENASE FOR THE STEREOSELECTIVE PRODUCTION OF HYDROXY COMPOUNDS	Granted	5756002.1	06/04/2005	1763577	1763577	10/06/2010
AT	ALCOHOL DEHYDROGENASE FOR THE STEREOSELECTIVE PRODUCTION OF HYDROXY COMPOUNDS	Granted	5756002.1	06/04/2005	1763577	1763577	10/06/2010

FR	ALCOHOL DEHYDROGENASE FOR THE STEREOSELECTIVE PRODUCTION OF HYDROXY COMPOUNDS	Granted	5756002.1	06/04/2005	1763577	1763577	10/06/2010
SG	KETOREDUCTASE POLYPEPTIDES FOR THE STEREOSELECTIVE PRODUCTION OF (R)-3-HYDROXYTHIOLANE	Granted	201000745-8	08/24/2008		159008	09/14/2012
IN	KETOREDUCTASE POLYPEPTIDES FOR THE STEREOSELECTIVE PRODUCTION OF (R)-3-HYDROXYTHIOLANE	Pending	1624/CHENP/2010	08/24/2008			
EP	KETOREDUCTASE POLYPEPTIDES FOR THE STEREOSELECTIVE PRODUCTION OF (R)-3-HYDROXYTHIOLANE	Published	8798570.1	08/24/2008	2195443		
CN	KETOREDUCTASE POLYPEPTIDES FOR THE STEREOSELECTIVE PRODUCTION OF (R)-3-HYDROXYTHIOLANE	Published	200880104011.7	08/24/2008	101784669		

US	KETOREDUCTASE POLYPEPTIDES FOR THE STEREOSELECTIVE PRODUCTION OF (R)-3-HYDROXYTHIOLANE	Granted	12/197286	08/24/2008	2009/0093031	7,977,078	07/12/2011
US	KETOREDUCTASE POLYPEPTIDES FOR THE PRODUCTION OF (r)-3-HYDROXYTHIOLANE	Granted	13/110789	05/18/2011	2011/0217754	8,227,229	07/24/2012
US	KETOREDUCTASE POLYPEPTIDES FOR THE PRODUCTION OF (r)-3-HYDROXYTHIOLANE	Published	13/525048	06/15/2012	2012/0276599		
CN	KETOREDUCTASE POLYPEPTIDES FOR THE REDUCTION OF ACETOPHENONES	Granted	200880115770.3	09/13/2008	101855342	ZL 2008 8 0115770.3	07/10/2013
JP	KETOREDUCTASE POLYPEPTIDES FOR THE REDUCTION OF ACETOPHENONES	Published	2010-525057	09/13/2008	2010-538657		
US	KETOREDUCTASE POLYPEPTIDES FOR THE REDUCTION OF ACETOPHENONES	Granted	12/210195	09/13/2008	2009/0191605	8,748,143	06/10/2014
IN	KETOREDUCTASE POLYPEPTIDES FOR THE REDUCTION OF ACETOPHENONES	Pending	2039/CHENP/2010	09/13/2008			
SG	KETOREDUCTASE POLYPEPTIDES FOR THE REDUCTION OF ACETOPHENONES	Granted	201001576-6	09/13/2008		159828	04/13/2012

EP	KETOREDUCTASE POLYPEPTIDES FOR THE REDUCTION OF ACETOPHENONES	Granted	8830789.7	09/13/2008	2198018	2198018	11/20/2013
KR	KETOREDUCTASE POLYPEPTIDES FOR THE REDUCTION OF ACETOPHENONES	Pending	10-2010-7007675	09/13/2008			
US	KETOREDUCTASE POLYPEPTIDES FOR THE REDUCTION OF ACETOPHENONES	Granted	13/682600	11/20/2012	2013/0078692	8,512,973	08/20/2013
US	KETOREDUCTASE POLYPEPTIDES FOR THE REDUCTION OF ACETOPHENONES	Allowed	13/970284	08/19/2013	2013/0344552		
DE	KETOREDUCTASE POLYPEPTIDES FOR THE REDUCTION OF ACETOPHENONES	Granted	8830789.7	09/13/2008	2198018	602008028883.8	11/20/2013
FR	KETOREDUCTASE POLYPEPTIDES FOR THE REDUCTION OF ACETOPHENONES	Granted	8830789.7	09/13/2008	2198018	2198018	11/20/2013
CH	KETOREDUCTASE POLYPEPTIDES FOR THE REDUCTION OF ACETOPHENONES	Granted	8830789.7	09/13/2008	2198018	2198018	11/20/2013
GB	KETOREDUCTASE POLYPEPTIDES FOR THE REDUCTION OF ACETOPHENONES	Granted	8830789.7	09/13/2008	2198018	2198018	11/20/2013
IE	KETOREDUCTASE POLYPEPTIDES FOR THE REDUCTION OF ACETOPHENONES	Granted	8830789.7	09/13/2008	2198018	2198018	11/20/2013

NL	KETOREDUCTASE POLYPEPTIDES FOR THE REDUCTION OF ACETOPHENONES	Granted	8830789.7	09/13/2008	2198018	2198018	11/20/2013
SG	KETOREDUCTASE POLYPEPTIDES AND USES THEREOF	Granted	201001902-4	09/28/2008		160022	07/31/2013
US	KETOREDUCTASE POLYPEPTIDES AND USES THEREOF	Granted	12/240986	09/29/2008	2009/0155863	8,088,610	01/03/2012
CN	KETOREDUCTASE POLYPEPTIDES AND USES THEREOF	Allowed	200880118039.6	09/28/2008	101889081	ZL200880118039.6	06/18/2014
EP	KETOREDUCTASE POLYPEPTIDES AND USES THEREOF	Granted	8833139.2	09/28/2008	2203557	2203557	02/29/2012
IN	KETOREDUCTASE POLYPEPTIDES AND USES THEREOF	Pending	2378/CHENP/2010	09/28/2008			
IL	KETOREDUCTASE POLYPEPTIDES AND USES THEREOF	Granted	204331	09/28/2008		204331	07/31/2013
US	KETOREDUCTASE POLYPEPTIDES FOR THE PRODUCTION OF (S,3)-METHYL2-(3-(3-(2(7-CHLOROQUINOLIN-2-YL)VINYL)PHENYL)-3-HYDROXYPROPYL)BENZOATE	Granted	13/329986	12/19/2011	2012/0184000	8,617,853	12/31/2013
DE	KETOREDUCTASE POLYPEPTIDES AND USES THEREOF	Granted	8833139.2	09/28/2008	2203557	2203557	02/29/2012

IE	KETOREDUCTASE POLYPEPTIDES AND USES THEREOF	Granted	8833139.2	09/28/2008	2203557	2203557	02/29/2012
NL	KETOREDUCTASE POLYPEPTIDES AND USES THEREOF	Granted	8833139.2	09/28/2008	2203557	2203557	02/29/2012
CH	KETOREDUCTASE POLYPEPTIDES AND USES THEREOF	Granted	8833139.2	09/28/2008	2203557	2203557	02/29/2012
GB	KETOREDUCTASE POLYPEPTIDES AND USES THEREOF	Granted	8833139.2	09/28/2008	2203557	2203557	02/29/2012
EP	BIOCATALYSTS AND METHODS FOR THE SYNTHESIS OF ARMODAFINIL	Published	EP11846568.1	06/14/2013	2649187		
[***]	[***]	[***]	[***]	[***]			
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US	BIOCATALYSTS AND METHODS FOR THE SYNTHESIS OF ARMODAFINIL	Published	13/992138	06/06/2013	2013/0260426		
EP	BIOCATALYSTS AND METHODS FOR THE SYNTHESIS OF (S)-3-(1-AMINOETHYL)-PHENOL	Published	11796441.1	12/17/2012	2582799		

[***] 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.

IN	BIOCATALYSTS AND METHODS FOR THE SYNTHESIS OF (S)-3-(1-AMINOETHYL)-PHENOL	Pending	267/CHENP/2013	01/11/2013			
US	BIOCATALYSTS AND METHODS FOR THE SYNTHESIS OF (S)-3-(1-AMINOETHYL)-PHENOL	Allowed	13/704507	12/14/2012	2013/0089898		
EP	BIOCATALYSTS AND METHODS FOR THE SYNTHESIS OF (1R,2R)-2-(3,4-DIMETHOXYPHENETHOXY)CYCLOHEXANAMINE	Published	11818555.2	04/29/2013	2606139		
[***]	[***]	[***]	[***]	[***]			
US	BIOCATALYSTS AND METHODS FOR THE SYNTHESIS OF (1R,2R)-2-(3,4-DIMETHOXYPHENETHOXY)CYCLOHEXANAMINE	Published	13/817295	03/12/2013	2013/0164794		
SG	KETOREDUCTASE POLYPEPTIDES FOR THE PRODUCTION OF AZETIDINONE	Granted	201001989-1	10/01/2008		160517	05/05/2014
US	KETOREDUCTASE POLYPEPTIDES FOR THE PRODUCTION OF AZETIDINONE	Granted	12/243,968	10/01/2008	2009/0162909	7,883,879	02/08/2011

[***] 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.

EP	KETOREDUCTASE POLYPEPTIDES FOR THE PRODUCTION OF AZETIDINONE	Published	8836133.2	10/01/2008	2205727		
IL	KETOREDUCTASE POLYPEPTIDES FOR THE PRODUCTION OF AZETIDINONE	Pending	204379	10/01/2008			
JP	KETOREDUCTASE POLYPEPTIDES FOR THE PRODUCTION OF AZETIDINONE	Pending	2010-527257	10/01/2008			
IN	KETOREDUCTASE POLYPEPTIDES FOR THE PRODUCTION OF AZETIDINONE	Pending	2450/CHENP/2010	10/01/2008			
US	KETOREDUCTASE POLYPEPTIDES FOR THE PRODUCTION OF AZETIDINONE	Granted	12/977,825	12/23/2010	2011/0159567	8,257,952	09/04/2012
US	KETOREDUCTASE POLYPEPTIDES FOR THE PRODUCTION OF AZETIDINONE	Granted	13/569900	08/08/2012	2013/0034895	8,470,572	06/25/2013
US	KETOREDUCTASE POLYPEPTIDES FOR THE PRODUCTION OF AZETIDINONE	Published	13/925096	06/24/2013	2014/0057330		
[***]	[***]	[***]	[***]	[***]			
EP	BIOCATALYTIC PROCESS FOR PREPARING ESLICARBAZEPINE AND ANALOGS THEREOF	Published	12771861.7	11/06/2013	2697662		

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WO	BIOCATALYSTS AND METHODS FOR HYDROXYLATION OF CHEMICAL COMPOUNDS	Published	PCT/US13/039874	05/07/2013	WO2013/169725		
[***]	[***]	[***]	[***]	[***]			
[***]	[***]	[***]	[***]	[***]			
[***]	[***]	[***]	[***]	[***]			
WO	BIOCATALYSTS FOR THE PREPARATION OF HYDROXY SUBSTITUTED CARBAMATES	Published	PCT/US2012/065046	11/14/2012	WO2013/074650		

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IN	IMPROVED KETOREDUCTASE POLYPEPTIDES AND RELATED POLYNUCLEOTIDES	Granted	514/CHENP/2006	08/11/2004		239120	03/09/2010

[***] 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.

SG	IMPROVED KETOREDUCTASE POLYPEPTIDES AND RELATED POLYNUCLEOTIDES	Granted	200600860-1	08/11/2004		119648	12/31/2008
US	KETOREDUCTASE POLYPEPTIDES AND RELATED POLYNUCLEOTIDES	Granted	10/916311	08/11/2004	2006/0195947	7,629,157	12/08/2009
US	KETOREDUCTASE POLYPEPTIDES AND RELATED POLYNUCLEOTIDES	Granted	12/576195	10/08/2009	2010/0028972	7,833,767	11/16/2010
EP	ENZYMATIC PROCESSES FOR THE PRODUCTION OF 4-SUBSTITUTED 3-HYDROXYBUTYRIC ACID DERIVATIVES	Granted	3785237.3	08/11/2003	1537222	1537222	03/09/2011
US	ENZYMATIC PROCESSES FOR THE PRODUCTION OF 4-SUBSTITUTED 3-HYDROXYBUTYRIC ACID DERIVATIVES	Granted	11/502745	08/10/2006	2007/0161094	7,807,423	10/05/2010
US	ENZYMATIC PROCESSES FOR THE PRODUCTION OF 4-SUBSTITUTED 3-HYDROXYBUTYRIC ACID DERIVATIVES AND VICINAL CYANO, HYDROXY SUBSTITUTED CARBOXYLIC ACID ESTERS	Granted	10/782258	02/18/2004	2004/0214297 A1	7,132,267	11/07/2006

US	ENZYMATIC PROCESSES FOR THE PRODUCTION OF 4-SUBSTITUTED 3-HYDROXYBUTYRIC ACID DERIVATIVES	Granted	10/639159	08/11/2003	2004/0137585	7,125,693	10/24/2006
IN	ENZYMATIC PROCESSES FOR THE PRODUCTION OF 4-SUBSTITUTED 3-HYDROXYBUTYR1C ACID DERIVATIVES	Granted	158/CHENP/2005	08/11/2003		220964	06/11/2008
SG	ENZYMATIC PROCESSES FOR THE PRODUCTION OF 4-SUBSTITUTED 3-HYDROXYBUTYRIC ACID DERIVATIVES	Granted	2005007634-8	08/11/2003		109875	08/31/2007
SG	ENZYMATIC PROCESSES FOR THE PRODUCTION OF 4-SUBSTITUTED 3-RYDROXYBUTYRIC ACID DERIVATIVES AND VICINAL CYANO, HYDROXY SUBSTITUTED CARBOXYLIC ACID ESTERS	Granted	200600847-8	02/18/2004		119636	02/29/2008
JP	ENZYMATIC PROCESSES FOR THE PRODUCTION OF 4-SUBSTITUTED 3-HYDROXYBUTYRIC ACID DERIVATIVES	Granted	2004-528083	08/11/2003	2005-535330	4578240	09/03/2010
HK	ENZYMATIC PROCESSES FOR THE PRODUCTION OF 4-SUBSTITUTED 3-HYDROXYBUTYRIC ACID DERIVATIVES	Granted	5108017.7	08/11/2003		HK1074059	09/09/2011

FR	ENZYMATIC PROCESSES FOR THE PRODUCTION OF 4-SUBSTITUTED 3-HYDROXYBUTYRIC ACID DERIVATIVES	Granted	3785237.3	08/11/2003	1537222	1537222	03/09/2011
DE	ENZYMATIC PROCESSES FOR THE PRODUCTION OF 4-SUBSTITUTED 3-HYDROXYBUTYRIC ACID DERIVATIVES	Granted	3785237.3	08/11/2003	1537222	1537222	03/09/2011
IE	ENZYMATIC PROCESSES FOR THE PRODUCTION OF 4-SUBSTITUTED 3-HYDROXYBUTYRIC ACID DERIVATIVES	Granted	3785237.3	08/11/2003	1537222	1537222	03/09/2011
NL	ENZYMATIC PROCESSES FOR THE PRODUCTION OF 4-SUBSTITUTED 3-HYDROXYBUTYRIC ACID DERIVATIVES	Granted	3785237.3	08/11/2003	1537222	1537222	03/09/2011
GB	ENZYMATIC PROCESSES FOR THE PRODUCTION OF 4-SUBSTITUTED 3-HYDROXYBUTYRIC ACID DERIVATIVES	Granted	3785237.3	08/11/2003	1537222	1537222	03/09/2011
SG	IMPROVED GLUCOSE DEHYDROGENASE POLYPEPTIDES AND RELATED POLYNUCLEOTIDES	Granted	200600859-3	08/11/2004		119647	02/27/2009
US	IMPROVED GLUCOSE DEHYDROGENASE POLYPEPTIDES AND RELATED POLYNUCLEOTIDES	Granted	12/790784	05/28/2010	2010/0304459	7,939,309	05/10/2011

IN	IMPROVED GLUCOSE DEHYDROGENASE POLYPEPTIDES AND RELATED POLYNUCLEOTIDES	Granted	521/CHENP/2006	08/11/2004		239922	04/09/2010
AU	IMPROVED GLUCOSE DEHYDROGENASE POLYPEPTIDES AND RELATED POLYNUCLEOTIDES	Granted	2004288134	08/11/2004		2004288134	04/01/2010
US	IMPROVED GLUCOSE DEHYDROGENASE POLYPEPTIDES AND RELATED POLYNUCLEOTIDES	Granted	10/915927	08/11/2004	2005/0095619A1	7,816,111	10/19/2010
EP	IMPROVED GLUCOSE DEHYDROGENASE POLYPEPTIDES AND RELATED POLYNUCLEOTIDES	Granted	4816807.4	08/11/2004	1660648	1660648	10/09/2013
FR	IMPROVED GLUCOSE DEHYDROGENASE POLYPEPTIDES AND RELATED POLYNUCLEOTIDES	Granted	4816807.4	08/11/2004	1660648	1660648	10/09/2013
DE	IMPROVED GLUCOSE DEHYDROGENASE POLYPEPTIDES AND RELATED POLYNUCLEOTIDES	Granted	4816807.4	08/11/2004	1660648	602004043547.3	10/09/2013
IE	IMPROVED GLUCOSE DEHYDROGENASE POLYPEPTIDES AND RELATED POLYNUCLEOTIDES	Granted	4816807.4	08/11/2004	1660648	1660648	10/09/2013

NL	IMPROVED GLUCOSE DEHYDROGENASE POLYPEPTIDES AND RELATED POLYNUCLEOTIDES	Granted	4816807.4	08/11/2004	1660648	1660648	10/09/2013
CH	IMPROVED GLUCOSE DEHYDROGENASE POLYPEPTIDES AND RELATED POLYNUCLEOTIDES	Granted	4816807.4	08/11/2004	1660648	1660648	10/09/2013
GB	IMPROVED GLUCOSE DEHYDROGENASE POLYPEPTIDES AND RELATED POLYNUCLEOTIDES	Granted	4816807.4	08/11/2004	1660648	1660648	10/09/2013
US	HALOHYDRIN DEHALOGENASES AND RELATED POLYNUCLEOTIDES	Granted	12/573824	10/05/2009	2010/0167345	8,101,395	01/24/2012
US	HALOHYDRIN DEHALOGENASES AND RELATED POLYNUCLEOTIDES	Granted	10/917179	08/11/2004	2005/0153417	7,824,898	11/02/2010
IN	IMPROVED HALOHYDRIN DEHALOGENASES AND RELATED POLYNUCLEOTIDES	Granted	519/CHENP/2006	08/11/2004		239852	04/06/2010
SG	IMPROVED HALOHYDRIN DEHALOGENASES AND RELATED POLYNUCLEOTIDES	Granted	200808477-4	11/14/2008	148180	148180	01/30/2014
US	IMPROVED HALOHYDRIN DEHALOGENASES AND RELATED POLYNUCLEOTIDES	Granted	11/266747	11/02/2005	2006/0099700	7,588,928	09/15/2009

US	IMPROVED HALOHYDRIN DEHALOGENASES AND RELATED POLYNUCLEOTIDES	Granted	11/067323	02/23/2005	2005/0272064	7,541,171	06/02/2009
US	IMPROVED HALOHYDRIN DEHALOGENASES AND RELATED POLYNUCLEOTIDES	Granted	12/505374	07/17/2009	2009/0298125	8,252,554	08/28/2012
US	HALOHYDRIN DEHALOGENASES AND RELATED POLYNUCLEOTIDES	Granted	13/349514	01/12/2012	2012/0208259	8,535,910	09/17/2013
US	ALANINE 2,3-AMINOMUTASES AND RELATED POLYNUCLEOTIDES	Granted	11/919271	03/20/2009	2010/0099143	7,790,432	09/07/2010
IN	COMPOSITIONS AND METHODS FOR PRODUCING STEREOISOMERICALLY PURE STATINS AND SYNTHETIC INTERMEDIATES THEREFOR	Pending	2322/CHENP/2009	10/01/2007			
SG	COMPOSITIONS AND METHODS FOR PRODUCING STEREOISOMERICALLY PURE STATINS AND SYNTHETIC INTERMEDIATES THEREFOR	Granted	200901677-5	10/01/2010		150849	01/30/2014

EP	COMPOSITIONS AND METHODS FOR PRODUCING STEREOISOMERICALLY PURE STATINS AND SYNTHETIC INTERMEDIATES THEREFOR	Allowed	7843631.8	10/01/2007	2066788		
CN	COMPOSITIONS AND METHODS FOR PRODUCING STEREOISOMERICALLY PURE STATINS AND SYNTHETIC INTERMEDIATES THEREFOR	Published	200780036841.6	10/01/2007	101528917		
US	COMPOSITIONS AND METHODS FOR PRODUCING STEREOISOMERICALLY PURE STATINS AND SYNTHETIC INTERMEDIATES THEREFOR	Granted	11/865696	10/01/2007	2004/0248539	7,879,585	02/01/2011
US	COMPOSITIONS AND METHODS FOR PRODUCING STEREOISOMERICALLY PURE STATINS AND SYNTHETIC INTERMEDIATES THEREFOR	Granted	12/978022	12/23/2010	2011/0195465	8,273,547	09/25/2012
US	POLYNUCLEOTIDES ENCODING KETOREDUCTASES FOR PRODUCING STEREOISOMERICALLY PURE STATINS AND SYNTHETIC INTERMEDIATES THEREFOR	Granted	13/571,248	08/09/2012	2013/0040364	8,617,864	12/31/2013

EP	ENZYMATIC CONVERSION OF EPOXIDES	Granted	1934641.0	05/23/2001	1287155	1287155	08/23/2006
CH	ENZYMATIC CONVERSION OF EPOXIDES	Granted	1934641.0	05/23/2001	1287155	1287155	08/23/2006
US	ENZYMATIC CONVERSION OF EPDXIDES	Granted	11/833933	08/03/2007	2008/0220485	7,695,942	04/13/2010
FR	ENZYMATIC CONVERSION OF EPOXIDES	Granted	1934641.0	05/23/2001	1287155	1287155	08/23/2006
DE	ENZYMATIC CONVERSION OF EPOXIDES	Granted	1934641.0	05/23/2001	1287155	60122505.8	08/23/2006
GB	ENZYMATIC CONVERSION OF EPOXIDES	Granted	1934641.0	05/23/2001	1287155	1287155	08/23/2006
IE	ENZYMATIC CONVERSION OF EPOXIDES	Granted	1934641.0	05/23/2001	1287155	1287155	08/23/2006
NL	ENZYMATIC CONVERSION OF EPOXIDES	Granted	1934641.0	05/23/2001	1287155	1287155	08/23/2006
[***]	[***]	[***]	[***]	[***]			

[***] 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.

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Exhibit 1.30

Codexis Mayflower Patents

CODEXIS MAYFLOWER PATENTS							
Country	**Application Title**	**Application Status**	**Application Number**	**Filing Date**	**Publication Number**	**Patent Number**	**Issue Date**
GB	METHOD FOR IN VITRO RECOMBINATION	Granted	96940934.1	12/02/1996	876509	876509	09/19/2001
US	METHOD FOR IN VITRO RECOMBINATION	Granted	09/075511	05/08/1998		6,165,793	12/26/2000
AU	METHOD FOR IN VITRO RECOMBINATION	Granted	2005202165	12/02/1996		2005202165	06/26/2008
CA	METHOD FOR IN VITRO RECOMBINATION	Granted	2239099	12/02/1996	2239099	2239099	11/30/2004
EP	METHOD FOR IN VITRO RECOMBINATION	Granted	96940934.1	12/02/1996	876509	876509	09/19/2001
BE	METHOD FOR IN VITRO RECOMBINATION	Granted	96940934.1	12/02/1996	876509	876509	09/19/2001
NL	METHOD FOR IN VITRO RECOMBINATION	Granted	96940934.1	12/02/1996	876509	876509	09/19/2001
DK	METHOD FOR IN VITRO RECOMBINATION	Granted	96940934.1	12/02/1996	876509	876509	09/19/2001

FR	METHOD FOR IN VITRO RECOMBINATION	Granted	96940934.1	12/02/1996	876509	876509	09/19/2001
DE	METHOD FOR IN VITRO RECOMBINATION	Granted	96940934.1	12/02/1996	876509	876509	09/19/2001
KR	METHOD FOR IN VITRO RECOMBINATION	Granted	96-0704465	02/17/1995		491810	05/19/2005
CH	METHOD FOR IN VITRO RECOMBINATION	Granted	96940934.1	12/02/1996	876509	876509	09/19/2001
US	END-COMPLEMENTARY POLYMERASE REACTION	Granted	08/425684	04/18/1995		5,834,252	11/10/1998
US	END-COMPLEMENTARY POLYMERASE REACTION	Granted	08/675502	07/03/1996		5,928,905	07/27/1999
US	END-COMPLEMENTARY POLYMERASE REACTION	Granted	09/245802	02/05/1999		6,489,146	12/03/2002
US	EVOLVING CELLULAR DNA UPTAKE BY RECURSIVE SEQUENCE RECOMBINATION	Granted	09/724067	11/28/2000		6,482,647	11/19/2002
US	EVOLVING CELLULAR DNA UPTAKE BY RECURSIVE SEQUENCE RECOMBINATION	Granted	08/792409	02/03/1997		6,096,548	08/01/2000

US	EVOLVING CELLULAR DNA UPTAKE BY RECURSIVE SEQUENCE RECOMBINATION	Granted	09/430927	11/01/1999		6,358,742	03/19/2002
US	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	10/646221	08/22/2003		7,534,564	05/19/2009
US	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	09/954692	09/12/2001		6,946,296	09/20/2005
US	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	08/769062	12/18/1996		6,335,160	01/01/2002
GB	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	1202350.3	12/17/1997		1149905	09/15/2010
US	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	09/693389	10/20/2000		6,586,182	07/01/2003
US	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	09/693350	10/20/2000		6,579,678	06/17/2003
US	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	09/339913	06/24/1999		6,303,344	10/16/2001
US	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	09/339926	06/24/1999		6,653,072	11/25/2003

US	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	12/069011	02/05/2008		7,776,598	08/17/2010
CA	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	2274319	12/17/1997		2274319	04/09/2013
BE	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	1202350.3	12/17/1997		1149905	09/15/2010
CA	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Published	2589337	12/17/1997	2589337		
MC	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	1202350.3	12/17/1997		1149905	09/15/2010
CH	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	1202350.3	12/17/1997		1149905	09/15/2010
EP	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	10075154.4	12/17/1997		2202308	02/13/2013
EP	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	1202350.3	12/17/1997		1149905	09/15/2010
DK	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	1202350.3	12/17/1997		1149905	09/15/2010

JP	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	10-528054	12/17/1997		5008784	06/08/2012
FR	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	1202350.3	12/17/1997		1149905	09/15/2010
LU	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	1202350.3	12/17/1997		1149905	09/15/2010
FI	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	1202350.3	12/17/1997		1149905	09/15/2010
DE	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	1202350.3	12/17/1997	1149905	69739996.6-08	09/15/2010
GR	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	1202350.3	12/17/1997		1149905	09/15/2010
NL	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	1202350.3	12/17/1997		1149905	09/15/2010
BE	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	10075154.4	12/17/1997		2202308	02/13/2013
DE	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	10075154.4	12/17/1997		2202308	02/13/2013

GB	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	10075154.4	12/17/1997		2202308	02/13/2013
CH	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	10075154.4	12/17/1997		2202308	02/13/2013
DK	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	10075154.4	12/17/1997		2202308	02/13/2013
FR	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	10075154.4	12/17/1997		2202308	02/13/2013
NL	METHODS AND COMPOSITIONS FOR POLYPEPTIDE ENGINEERING	Granted	10075154.4	12/17/1997		2202308	02/13/2013
US	METHOD FOR PRODUCING POLYNUCLEOTIDES WITH DESIRED PROPERTIES	Granted	09/333762	06/15/1999		6,337,186	01/08/2002
US	OPTIMIZATION OF INSECT RESISTANCE GENES USING DNA SHUFFLING	Granted	09/296886	04/22/1999		6500617	12/31/2002
US	DNA SHUFFLING OF MONOOXYENASE GENES FOR PRODUCTION OF INDUSTRIAL CHEMICALS	Granted	09/373,928	08/12/1999		6,605,430	08/12/2003

US	HIGH THROUGHPUT MASS SPECTROMETRY	Granted	09/502,283	02/11/2000		7,384,387	06/10/2008
US	METHODS OF MAKING CHARACTER STRINGS, POLYNUCLEOTIDES & POLYPEPTIDES HAVING DESIRED CHARACTERISTICS	Granted	11/339090	01/24/2006		7,620,502	11/17/2009
US	METHODS OF MAKING CHARACTER STRINGS, POLYNUCLEOTIDES & POLYPEPTIDES HAVING DESIRED CHARACTERISTICS	Granted	11/975638	10/18/2007		7,853,410	12/14/2010
US	METHODS OF MAKING CHARACTER STRINGS, POLYNUCLEOTIDES & POLYPEPTIDES HAVING DESIRED CHARACTERISTICS	Granted	12/557463	09/10/2009		7,957,912	06/07/2011
US	METHODS OF MAKING CHARACTER STRINGS, POLYNUCLEOTIDES & POLYPEPTIDES HAVING DESIRED CHARACTERISTICS	Granted	11/982405	10/31/2007		7,904,249	03/08/2011

US	METHODS OF MAKING CHARACTER STRINGS, POLYNUCLEOTIDES & POLYPEPTIDES HAVING DESIRED CHARACTERISTICS	Granted	09/618579	07/18/2000		7,024,312	04/04/2006
US	METHODS OF MAKING CHARACTER STRINGS, POLYNUCLEOTIDES & POLYPEPTIDES HAVING DESIRED CHARACTERISTICS	Granted	09/539486	03/30/2000		7,058,515	06/06/2006
US	METHODS OF MAKING CHARACTER STRINGS, POLYNUCLEOTIDES & POLYPEPTIDES HAVING DESIRED CHARACTERISTICS	Granted	09/494282	01/18/2000		6,917,882	07/12/2005
US	METHODS OF MAKING CHARACTER STRINGS, POLYNUCLEOTIDES & POLYPEPTIDES HAVING DESIRED CHARACTERISTICS	Granted	11/075231	03/07/2005		7,421,347	09/02/2008
US	OLIGONUCLEOTIDE MEDIATED NUCLEIC ACID RECOMBINATION	Granted	09/626929	07/27/2000		6,319,714	11/20/2001
GB	OLIGONUCLEOTIDE MEDIATED NUCLEIC ACID RECOMBINATION	Granted	909923.5	01/18/2000		1072010	04/21/2010

US	OLIGONUCLEOTIDE MEDIATED NUCLEIC ACID RECOMBINATION	Granted	09/694863	10/23/2000		6,521,453	02/18/2003
US	OLIGONUCLEOTIDE MEDIATED NUCLEIC ACID RECOMBINATION	Granted	11/987555	11/30/2007		8,029,988	10/04/2011
US	OLIGONUCLEOTIDE MEDIATED NUCLEIC ACID RECOMBINATION	Granted	12/557829	09/11/2009		8,058,001	11/15/2011
CA	OLIGONUCLEOTIDE MEDIATED NUCLEIC ACID RECOMBINATION	Published	2320697	01/18/2000	2320697		
CH	OLIGONUCLEOTIDE MEDIATED NUCLEIC ACID RECOMBINATION	Granted	909923.5	01/18/2000		1072010	04/21/2010
EP	OLIGONUCLEOTIDE MEDIATED NUCLEIC ACID RECOMBINATION	Granted	909923.5	01/18/2000		1072010	04/21/2010
EP	OLIGONUCLEOTIDE MEDIATED NUCLEIC ACID RECOMBINATION	Published	10075153.6	01/18/2000	2253704		
BE	OLIGONUCLEOTIDE MEDIATED NUCLEIC ACID RECOMBINATION	Granted	909923.5	01/18/2000		1072010	04/21/2010
DK	OLIGONUCLEOTIDE MEDIATED NUCLEIC ACID RECOMBINATION	Granted	909923.5	01/18/2000		1072010	04/21/2010

FR	OLIGONUCLEOTIDE MEDIATED NUCLEIC ACID RECOMBINATION	Granted	909923.5	01/18/2000		1072010	04/21/2010
DE	OLIGONUCLEOTIDE MEDIATED NUCLEIC ACID RECOMBINATION	Granted	909923.5	01/18/2000		1072010	04/21/2010
NL	OLIGONUCLEOTIDE MEDIATED NUCLEIC ACID RECOMBINATION	Granted	909923.5	01/18/2000		1072010	04/21/2010
US	OLIGONUCLEOTIDE MEDIATED NUCLEIC ACID RECOMBINATION	Granted	09/626595	07/27/2000		6,479,652	11/12/2002
US	RECOMBINATION OF INSERTION MODIFIED NUCLEIC ACIDS	Granted	09/723520	11/27/2000		6,413,745	07/02/2002
US	RECOMBINATION OF INSERTION MODIFIED NUCLEIC ACIDS	Granted	09/723473	11/27/2000		6,358,740	03/19/2002
US	RECOMBINATION OF INSERTION MODIFIED NUCLEIC ACIDS	Granted	09/517933	03/03/2000		6,365,377	04/02/2002
US	OPTIMIZATION OF CROSSOVER POINTS FOR DIRECTED EVOLUTION	Granted	12/557434	09/10/2009		8,108,150	01/31/2012
US	OPTIMIZATION OF CROSSOVER POINTS FOR DIRECTED EVOLUTION	Granted	11/818237	06/12/2007		8,224,580	07/17/2012

US	OPTIMIZATION OF CROSSOVER POINTS FOR DIRECTED EVOLUTION	Granted	10/386903	03/10/2003	198988	7620500	11/17/2009
JP	OPTIMIZATION OF CROSSOVER POINTS FOR DIRECTED EVOLUTION	Granted	2003-576577	03/10/2003		4851687	
EP	OPTIMIZATION OF CROSSOVER POINTS FOR DIRECTED EVOLUTION	Published	3711540.9	03/10/2003	1488335		
US	INTEGRATED SYSTEMS AND METHODS FOR DIVERSITY GENERATION AND SCREENING	Granted	11/677505	02/21/2007		8,014,961	09/06/2011
US	INTEGRATED SYSTEMS AND METHODS FOR DIVERSITY GENERATION AND SCREENING	Granted	10/154936	05/23/2002		7,462,469	12/09/2008
US	METHODS OF POPULATING DATA STRUCTURES FOR USE IN EVOLUTIONARY SIMULATIONS	Granted	12/557746	09/11/2009		8,170,806	05/01/2012
US	METHODS OF POPULATING DATA STRUCTURES FOR USE IN EVOLUTIONARY SIMULATIONS	Granted	11/973805	10/09/2007		7,873,499	01/18/2011

US	METHODS OF POPULATING DATA STRUCTURES FOR USE IN EVOLUTIONARY SIMULATIONS	Granted	11/210239	08/22/2005		7,430,477	09/30/2008
US	METHODS OF POPULATING DATA STRUCTURES FOR USE IN EVOLUTIONARY SIMULATIONS	Granted	13/434261	03/29/2012		8,589,085	11/19/2013
US	METHODS OF POPULATING DATA STRUCTURES FOR USE IN EVOLUTIONARY SIMULATIONS	Granted	09/495668	02/01/2000		6,961,664	11/01/2005
CA	METHODS OF POPULATING DATA STRUCTURES FOR USE IN EVOLUTIONARY SIMULATIONS	Granted	2337949	01/18/2000		2337949	03/15/2011
US	METHOD AND SYSTEM USING SYSTEMATICALLY VARIED DATA LIBRARIES	Granted	10/225564	08/20/2002		7,873,477	01/18/2011
US	METHOD AND APPARATUS FOR PREFERREED CODON DETERMINING SIMULATIONS	Granted	10/232770	08/30/2002		7,702,464	04/20/2010

US	METHOD AND APPARATUS FOR PREFERREED CODON DETERMINING SIMULATIONS	Granted	13/229228	09/09/2011		8,457,903	06/04/2013
EP	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	10181057.0	09/28/2010		2390803	11/20/2013
US	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Published	12/979,637	12/28/2010	2011/0161265		
BE	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	5779687.2	06/21/2005		1761879	08/14/2013
FR	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	5779687.2	06/21/2005		1761879	08/14/2013
GB	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	5779687.2	06/21/2005		1761879	08/14/2013

DE	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	5779687.2	06/21/2005		1761879	08/14/2013
DK	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	5779687.2	06/21/2005		1761879	08/14/2013
BE	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	10181057.0	09/28/2010		2390803	11/20/2013
GB	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	10181057.0	09/28/2010		2390803	11/20/2013
DE	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	10181057.0	09/28/2010		2390803	11/20/2013
NL	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	10181057.0	09/28/2010		2390803	11/20/2013

[***]	[***]	[***]	[***]	[***]			
FR	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	10181057.0	09/28/2010		2390803	11/20/2013
CH	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	10181057.0	09/28/2010		2390803	11/20/2013
DK	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	10181057.0	09/28/2010		2390803	11/20/2013
CH	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	5779687.2	06/21/2005		1761879	08/14/2013
NL	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	5779687.2	06/21/2005		1761879	08/14/2013

[***] 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.

JP	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	2003-573522	03/03/2003		5,319,865	07/19/2013
US	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	11/981577	10/30/2007		7,751,986	07/06/2010
US	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	11/706034	02/12/2007		7,747,393	06/29/2010
US	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Allowed	11/429628	05/05/2006	2006/0205003		
US	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	10/629351	07/29/2003		7,747,391	06/29/2010
US	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	10/379378	03/03/2003		7,783,428	08/24/2010

EP	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	5779687.2	06/21/2005		1761879	08/14/2013
EP	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Allowed	3743748.0	03/03/2003	1493027		
EP	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Published	10181000.0	09/28/2010	2278509		
US	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Granted	11/981578	10/30/2007		8,762,066	06/24/2014
EP	METHODS, SYSTEMS AND SOFTWARE FOR IDENTIFYING FUNCTIONAL BIOMOLECULES	Published	10181159.4	09/28/2010	2315145		

Exhibit 1.74

In-License Agreements

[***]

[***] 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.

Exhibit 1.77

In-Licensed Patents

Country	Application Title	Application Status	Application No.	Filing Date	Publication No.	Pat. No.	Issue Date
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
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[***] 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.

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[***] 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.

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[***] 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.

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[***] 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.

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[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
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[***] 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.

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[***] 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.

[***]	[***]	[***]	[***] [***]	[***]	[***] [***]		
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[***] 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.

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[***] 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.

Exhibit 1.80

Invoice Requirements

All payments subsequent to the Upfront Payment to Codexis due under this Agreement shall be paid within [***] days after the date of receipt of the relevant Invoice by GSK, and as according to Article 7 of this Agreement. The Upfront Payment to Codexis shall be paid within [***] after receipt of the relevant Invoice from Codexis by GSK in accordance with Section 7.1.

The invoice should include the following details:

(a) "INVOICE" stated at the top and addressed to

GlaxoSmithKline Intellectual Property Development Limited
980 Great West Road,
Brentford,
Middlesex,
TW8 9GS
United Kingdom

(b) Bank details

(c) Codexis letterhead.

(d) Invoice Number, Currency and Date

(e) Complete Name, Address, Contact name and number

(f) Amount being invoiced

(g) VAT Registration number where VAT is being charged

(i) Following GSK Information:

• GSK Contact for Invoices : [***]

[***] 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.

Exhibit 1.112

Restricted Enzymes

To be provided in accordance with Section 3.7.1

Exhibit 1.117

Technology Transfer Plan

Technology Transfer Plan

Establishment of Codexis CodeEvolver® Directed Evolution Technology at GSK's site in Upper Merion, PA

CODEXIS CONFIDENTIAL INFORMATION

1. EXECUTIVE SUMMARY

The scope of this Plan is the full implementation of Codexis' biocatalyst screening and CodeEvolver® directed evolution technology within GlaxoSmithKline (GSK), in order to augment GSK's capabilities in cost efficient development and manufacture of pharmaceutical compounds (also referred to within the plan as API's). The complete transfer of Codexis technology to one GSK site (Upper Merion, PA (UM)) will be accomplished across the following three Waves:

1) Transfer of the Codexis [***].
2) Enabling GSK to practice CodeEvolver® comprising:
   a. GSK laboratory set-up; including transfer of the Codexis informatics [***].
   b. Training in Codexis labs with Technology Transfer Evolution [***]
   c. Training in GSK labs with Technology Transfer Evolution [***]
3) Demonstration of proficiency of the GSK team with Technology Transfer Evolution [***].

Codexis and GSK will establish dedicated Training Teams to facilitate the Technology Transfer. Codexis Team (as defined in Section 2.2.5 (b) in the Platform Technology Transfer, Collaboration, and License Agreement) will include personnel for [***]. Based on the work plan, [***].

Likewise, dedicated GSK personnel will shadow Codexis Team and then conduct evolution programs at GSK, to set up and deploy equipment, and provide general program management support. [***].

2. TECHNOLOGY TRANSFER PROGRAM SCOPE

2.1 WAVE 1: TRANSFER OF CODEXIS SCREENING CAPABILITIES TO GSK

[***]

[***]

[***]

[***] 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.

[***]

[***]

[***]

Step	Inputs	Process	Output
Materials			
	[***] [***]	[***]	[***]
	[***]	[***]	[***]
	[***]	[***]	[***]
	[***]	[***]	[***]
Methods			
	[***]		[***]

[***] 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.

	[***]	[***]	[***]
	[***] **[***]**	[***]	[***]
	[***] **[***]**	[***]	[***]

- **Wave 1 Milestone Success Criteria**

  1. [***]
  2. [***]
  3. [***]
  4. [***]

  [***]

2.2 WAVE 2: ENABLING GSK TO PRACTICE CODEEVOLVER®

[***]

[***]

1) [***]

2) [***]

[***] 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.

3) [***]

[***]

[***]

Step	Inputs	Process	Output
Materials			
	[***]	[***]	[***]
Methods			
	[***]	• [***]	[***]
	[***]	• [***]	[***]
	[***]	• [***] • [***] • [***] • [***] • [***] • [***]	[***]

[***] 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.

	[***]	• [***] • [***]	[***]
	[***]	• [***] • [***]	[***]
	[***]	• [***] • [***]	[***]
	[***]	• [***] • [***]	[***]
	[***]	• [***] • [***] • [***] • [***] • [***] • [***]	[***]

[***] 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.

	[***]	• [***] • [***]	[***]
	[***]	• [***] • [***]	[***]
	[***]	• [***] • [***]	[***]
	[***]	• [***] • [***]	[***]
	[***]	[***]	[***] • [***] • [***]
	[***]	[***]	[***] • [***] • [***]

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[***] 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.

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[***]

- **Wave 2 Milestone Success Criteria**
  1. [***]
  2. [***]
     - [***]
     - [***]
     - [***]
     - [***]
     - [***]
  3. [***]

2.3 WAVE 3: DEMONSTRATED PROFICIENCY OF GSK TEAM ACROSS TWO INDEPENDENT PROJECTS

[***]

[***]

[***]

- [***]
- [***]
- [***]
- [***]
- [***]
- [***]

[***]

- **Wave 3 Milestone Success Criteria**
  4. [***]
     - [***]
     - [***]

- [***]
- [***]

5. [***]

- [***]
- [***]
- [***]
- [***]

2.4 INDICATIVE GANTT CHART

[***]

3. PERSONNEL COMPETENCY REQUIREMENTS

Codexis will provide the following competencies to support successful technology transfer:

- [***]
- [***]
- [***]
- [***]
- [***]
- [***]
- [***]
- [***]
- [***]
- [***]
- [***]

[***] 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.

APPENDIX I - TRANSFER OF MATERIALS (WAVE 1)

[***]

1) [***]

A) [***]

Platform	Short Name	# of 96-well Plates per Panel	# of Enzymes per Kit	Format	Quantity Provided
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]

[***]
[***]
[***]
[***] [***]

B) [***]

- [***]
- [***]
- [***]

[***] 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.

2) [***]

Platform	Short Name	Format	Number of Enzymes	Quantity Provided
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]
[***]		[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]

3) [***]

Platform	Short Name	Format
[***]	[***]	[***]

[***]

APPENDIX II – EQUIPMENT LIST

Principal Equipment
[***]
[***]
[***]
[***]
[***]
[***]
[***]
[***]
[***]
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[***] 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.

APPENDIX III - SOFTWARE LIST

- [***]
- [***]
- [***]
- [***]
- [***]
- [***]
- [***]

[***] 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.

APPENDIX IV- PROTOCOLS AND SOP LIST

[***]

[***]
[***]
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[***] 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.

Exhibit 2.5

Material Transfer Record Form

GSK and Codexis

Capitalized terms used herein that are not defined herein shall have the meanings set forth in the Platform Technology Transfer and License Agreement dated 10 July 2014 made between GSK and Codexis.

In connection with the performance of the Agreement and pursuant to the terms of the Agreement:

(i) GSK will transfer to Codexis the Materials set forth below;
and/or
(ii) Codexis will transfer to GSK the Materials set forth below.

This Material Transfer Record Form shall be used as the record of all such Material transfers, whether from GSK to Codexis or from Codexis to GSK.

Transfer Date:

Description of Materials

Description of Research for which the Material(s) will be Used

Signature – GSK Scientific Lead …….

Date

Signature – Codexis Scientific Lead ……..

Date

Note: This MTR is to be completed and signed by the Codexis and the GSK Scientific Lead for each transfer. A copy of each completed MTR is to be timely provided to Alliance Manager (for GSK) and to the Alliance Manager (for Codexis). This MTR should not be used to transfer any materials in which the Transferor believes that Third Parties have rights, or which the Transferor believes infringe or misappropriate any Intellectual Property rights held by any Third Party. If there are any questions about the appropriateness of a transfer, please contact the GSK Scientific Lead or the Codexis Scientific Lead, as appropriate, identified herein before making the transfer.

Exhibit 3.3.1

Codexis Strain-Related Protocols

[***]

[***]

[***]

[***]

[***] 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.

Exhibit 8.5.4

Third Party In-License Agreements

[***]

[***] 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.

Exhibit 9.6

Press Release

Exhibit 13.14

Prevention of Corruption – Third Party Guidelines

PREVENTION OF CORRUPTION – THIRD PARTY GUIDELINES

The GSK Anti-Bribery and Corruption Policy (POL-GSK-007) requires compliance with the highest ethical standards and all anti-corruption laws applicable in the countries in which GSK (whether through a third party or otherwise) conducts business. POL-GSK-007 requires all GSK employees and any third party acting for or on behalf of GSK to ensure that all dealings with third parties, both in the private and government sectors, are carried out in compliance with all relevant laws and regulations and with the standards of integrity required for all GSK business. GSK values integrity and transparency and has zero tolerance for corrupt activities of any kind, whether committed by GSK employees, officers, or third-parties acting for or on behalf of the GSK.

Corrupt Payments – GSK employees and any third party acting for or on behalf of GSK, shall not, directly or indirectly, promise, authorize, ratify or offer to make or make any "payments" of "anything of value" (as defined in the glossary section) to any individual (or at the request of any individual) including a "government official" (as defined in the glossary section) for the improper purpose of influencing or inducing or as a reward for any act, omission or decision to secure an improper advantage or to improperly assist the company in obtaining or retaining business.

Government Officials – Although GSK´s policy prohibits payments by GSK or third parties acting for or on its behalf to any individual, private or public, as a "quid pro quo" for business, due to the existence of specific anticorruption laws in the countries where we operate, this policy is particularly applicable to "payments" of "anything of value" (as defined in the glossary section), or at the request of, "government officials" (as defined in the glossary section).

Facilitating Payments – For the avoidance of doubt, facilitating payments (otherwise known as "greasing payments" and defined as payments to an individual to secure or expedite the performance of a routine government action by government officials) are no exception to the general rule and therefore prohibited.

GLOSSARY

The terms defined herein should be construed broadly to give effect to the letter and spirit of the ABAC Policy. GSK is committed to the highest ethical standards of business dealings and any

acts that create the appearance of promising, offering, giving or authorizing payments prohibited by this policy will not be tolerated.

Anything of Value: this term includes cash or cash equivalents, gifts, services, employment offers, loans, travel expenses, entertainment, political contributions, charitable donations, subsidies, per diem payments, sponsorships, honoraria or provision of any other asset, even if nominal in value.

Payments: this term refers to and includes any direct or indirect offers to pay, promises to pay, authorizations of or payments of anything of value.

Government Official shall mean:

- Any officer or employee of a government or any department, agency or instrument of a government;
- Any person acting in an official capacity for or on behalf of a government or any department, agency, or instrument of a government;
- Any officer or employee of a company or business owned in whole or part by a government;
- Any officer or employee of a public international organization such as the World Bank or United Nations;
- Any officer or employee of a political party or any person acting in an official capacity on behalf of a political party; and/or
- Any candidate for political office

Codexis, Inc.
200 Penobscot Drive
Redwood City, CA 94063
Tel: 650.421.8100
Fax: 650.421-8135
www.codexis.com

July 10, 2014

Gordon Sangster
603 Benvenue Avenue
Los Altos, CA 94024

Dear Gordon:

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

Compensation

If you accept this offer and you begin employment with Codexis, you will receive an initial salary of $325,000 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 40% of your Codexis base salary earnings. If Codexis meets all of its corporate goals for 2014, and you also perform well against your individual and group goals, to be established with your supervisor, you can expect to receive an Incentive Plan payout at or near this target after our Board of Directors' (the "Board") approval of our 2014 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 will be based on your service during 2014 as a percentage of the full year; and you must be an employee of the Company on the date the bonus is paid. 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.

You will also receive a sign-on bonus of $50,000.00, which will be subject to all applicable withholdings and will be paid out in your first 30 days of employment. If within one year of your employment start date (i) you choose to resign employment or (ii) your employment is terminated for cause, you will be required to repay this sign-on bonus within 30 days of your termination. The

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gross (before withholding) amount of the sign-on bonus that must be repaid will be determined by the following repayment guidelines, which are based on the amount of time that has lapsed between your employment start date and your termination date:

a) within six months of your employment start date : 100%
b) between six and twelve months: prorated monthly.

Equity Awards

Stock Options
Subject to approval by the Board, you will be granted an option to purchase 115,000 shares of common stock (the "Option") at an exercise price equal to the fair market value of the shares on the date the option is granted. 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.

Performance Stock Units
Subject to approval by the Board, you will be granted 50,000 performance stock units (the "PSUs"). There is no exercise price for PSUs. The actual number of PSUs that will be distributed to you upon vesting is contingent upon the satisfaction by Codexis of pre-determined performance criteria. You may not receive any PSUs if the minimum performance criteria are not met. If the minimum performance criteria are met, the PSUs will vest in two, equal annual installments beginning on March 5, 2015.

Restricted Stock Units
Subject to approval by the Board, you will be granted 50,000 restricted stock units (the "RSUs"). There is no exercise price for RSUs. The RSUs will vest in three, equal annual installments beginning on the first anniversary of your employment start date until the RSUs are 100% vested on the three-year anniversary of your employment start date.

General Equity Terms
The Option, PSUs and RSUs will be presented to the Board for approval on August 6, 2014 (assuming your employment start date occurs on or before this date). Vesting of the Option, the PSUs and the RSUs is contingent upon your continued employment through the applicable vesting date. Each of your equity awards will be subject to the terms of the Codexis, Inc. 2010 Equity Incentive Award Plan, and will be conditioned on your acceptance of an appropriate equity agreement for each grant.

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

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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. 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 to be effective.

Employment with any other entity or for yourself in competition with Codexis, or any direct or indirect subsidiary of Codexis, is not permitted. If you want to take an outside job, please discuss the opportunity with your manager and the Human Resources Department in advance so that a determination can be made if any actual or potential conflict of interest exists.

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 A.

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, relocation payments 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.

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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 JAMS 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.

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 Kenneth Reed (Codexis HR) by July 15, 2014.

Sincerely,

Codexis, Inc.

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

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

/s/Gordon Sangster

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7/11/14 8/18/14
Date / Start Date

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ATTACHMENT A

CODEXIS EMPLOYEE CONFIDENTIAL INFORMATION AND INVENTIONS ASSIGNMENT AGREEMENT

SEPARATION AGREEMENT

This Separation Agreement (the "Agreement") by and between David O'Toole (" Executive") and Codexis, Inc., a Delaware corporation (the "Company"), is made effective as of the eighth (8th) day following the date Executive signs this Agreement (the " Effective Date") with reference to the following facts:

A. Executive's employment with the Company and status as an officer and employee of the Company and each of its affiliates will end effective upon the Termination Date (as defined below).

B. Executive and the Company want to end their relationship amicably and also to establish the obligations of the parties including, without limitation, all amounts due and owing to Executive.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth, the parties agree as follows:

1. Termination Date. Executive acknowledges and agrees that his status as an officer and employee of the Company will end effective as of July 3, 2014 (the "Termination Date"). Executive hereby agrees to execute such further document(s) as shall be determined by the Company as necessary or desirable to give effect to the termination of Executive's status as an officer of the Company and each of its subsidiaries; provided that such documents shall not be inconsistent with any of the terms of this Agreement.

2. Final Paycheck; Payment of Accrued Wages and Expenses .

(a) *Final Paycheck.* As soon as administratively practicable on or after the Termination Date, the Company will pay Executive all accrued but unpaid base salary and all accrued and unused vacation earned through the Termination Date, subject to standard payroll deductions and withholdings. Executive is entitled to these payments regardless of whether Executive executes this Agreement.

(b) *Business Expenses*. The Company shall reimburse Executive for all outstanding expenses incurred prior to the Termination Date which are consistent with the Company's policies in effect from time to time with respect to travel, entertainment and other business expenses, subject to the Company's requirements with respect to reporting and documenting such expenses. Executive is entitled to these reimbursement regardless of whether Executive executes this Agreement.

3. Separation Benefits. Without admission of any liability, fact or claim, the Company hereby agrees, subject to the execution of this Agreement and Executive's performance of his continuing obligations pursuant to this Agreement and that certain Employee Confidential Information and Inventions Assignment Agreement entered into between Executive and the Company as of August 31, 2012 (the "Confidentiality Agreement"), to provide Executive the severance benefits set forth below. Specifically, the Company and Executive agree as follows:

(a) *Equity Awards*. As of the Termination Date, Executive holds 37,500 shares of restricted stock ("Restricted Stock") and 34,038 restricted stock units ("RSUs").

As of immediately prior to the Termination Date, the vesting of (i) 10,417 shares of Restricted Stock and (ii) 4,728 RSUs shall accelerate and the restrictions thereon shall lapse. The remaining 27,083 shares of Restricted Stock and 29,310 RSUs shall be immediately forfeited as of the Termination Date. In addition, all performance stock units and all unvested stock options shall terminate and be forfeited as of the Termination Date. Any vested stock options held by Executive shall remain exercisable until the three (3) month anniversary of the Termination Date and shall terminate to the extent unexercised as of such date. The agreements evidencing Executive's September 10, 2012 restricted stock award and Executive's January 22, 2013 restricted stock unit award (collectively, the "Equity Award Agreements") shall be deemed amended to the extent necessary to reflect the terms of this Agreement.

(b) *Laptop Computer*. Executive shall retain his Company-issued laptop computer with full proprietary rights; *provided, however*, that Executive shall immediately provide the Company with a computer-useable copy of any confidential or proprietary data, materials or information stored on his laptop computer and then permanently delete and expunge such Company confidential information from the laptop computer. Executive further agrees to provide the Company access to the laptop computer as requested to verify that the necessary copying and/or deletion is completed.

(c) *Taxes*. Executive understands and agrees that all payments under this Agreement will be subject to appropriate tax withholding and other deductions. To the extent any taxes may be payable by Executive for the benefits provided to him by this Agreement beyond those withheld by the Company, Executive agrees to pay them himself and to indemnify and hold the Company and the other entities released herein harmless for any tax claims or penalties, and associated attorneys' fees and costs, resulting from any failure by him to make required payments.

(d) *SEC Reporting.* Executive acknowledges that to the extent required by the Securities Exchange Act of 1934, as amended (the "Exchange Act"), he will have continuing obligations under Sections 16(a) and 16(b) of the Exchange Act to report his transactions in Company common stock for six (6) months following the Termination Date. Executive hereby agrees not to undertake, directly or indirectly, any reportable transactions until the end of such six (6) month period.

(e) *Sole Separation Benefit*. Executive agrees that the benefits provided by this Section 3 are not required under the Company's normal policies and procedures and are provided as a severance solely in connection with this Agreement. Executive acknowledges and agrees that the benefits referenced in this Section 3 constitute adequate and valuable consideration, in and of themselves, for the promises contained in this Agreement.

4. Full Payment. Executive acknowledges that the payment and arrangements herein shall constitute full and complete satisfaction of any and all amounts properly due and owing to Executive as a result of his employment with the Company and the termination thereof. Executive further acknowledges that, other than the Confidentiality Agreement and the Indemnification Agreement between Executive and the Company effective September 26, 2012 (the "Indemnification Agreement"), this Agreement shall supersede each agreement entered into between Executive and the Company regarding Executive's employment, including, without

limitation, the Change of Control Severance Agreement between Executive and the Company effective August 31, 2012 (the " Change of Control Agreement"), any offer letter, employment agreement, any other severance and/or change in control agreement, and each such agreement other than the Equity Award Agreements shall be deemed terminated and of no further effect as of the Termination Date.

5. Executive's Release of the Company. Executive understands that by agreeing to the release provided by this Section 5, Executive is agreeing not to sue, or otherwise file any claim against, the Company or any of its employees or other agents for any reason whatsoever based on anything that has occurred as of the date Executive signs this Agreement.

(a) On behalf of Executive and Executive's heirs, assigns, executors, administrators, trusts, spouse and estate, Executive hereby releases and forever discharges the "Releasees" hereunder, consisting of the Company, and each of its owners, affiliates, subsidiaries, predecessors, successors, assigns, agents, directors, officers, partners, employees, and insurers, and all persons acting by, through, under or in concert with them, or any of them, of and from any and all manner of action or actions, cause or causes of action, in law or in equity, suits, debts, liens, contracts, agreements, promises, liability, claims, demands, damages, loss, cost or expense, of any nature whatsoever, known or unknown, fixed or contingent (hereinafter called "Claims"), which Executive now has or may hereafter have against the Releasees, or any of them, by reason of any matter, cause, or thing whatsoever from the beginning of time to the date hereof, including, without limiting the generality of the foregoing, any Claims arising out of, based upon, or relating to Executive's hire, employment, remuneration or resignation by the Releasees, or any of them, Claims arising under federal, state, or local laws relating to employment, Claims of any kind that may be brought in any court or administrative agency, including any Claims arising under Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000, et seq.; Americans with Disabilities Act, as amended, 42 U.S.C. § 12101 et seq.; the Rehabilitation Act of 1973, as amended, 29 U.S.C. § 701 et seq.; Age Discrimination in Employment Act, as amended, 29 U.S.C. § 621, et seq.; Civil Rights Act of 1866, and Civil Rights Act of 1991; 42 U.S.C. § 1981, et seq.; Equal Pay Act, as amended, 29 U.S.C. § 206(d); regulations of the Office of Federal Contract Compliance, 41 C.F.R. Section 60, et seq.; the Family and Medical Leave Act, as amended, 29 U.S.C. § 2601 et seq.; the Fair Labor Standards Act of 1938, as amended, 29 U.S.C. § 201 et seq.; the Employee Retirement Income Security Act, as amended, 29 U.S.C. § 1001 et seq.; the Worker Adjustment and Retraining Notification Act, as amended, 29 U.S.C. § 2101 et seq.; the California Fair Employment and Housing Act, as amended, Cal. Lab. Code § 12940 et seq.; the California Equal Pay Law, as amended, Cal. Lab. Code §§ 1197.5(a),199.5; the Moore-Brown-Roberti Family Rights Act of 1991, as amended, Cal. Gov't Code §§12945.2, 19702.3; California Labor Code §§ 1101, 1102; the California WARN Act, California Labor Code §§ 1400 et. seq; California Labor Code §§ 1102.5(a),(b); claims for wages under the California Labor Code and any other federal, state or local laws of similar effect; the employment and civil rights laws of California; Claims for breach of contract; Claims arising in tort, including, without limitation, Claims of wrongful dismissal or discharge, discrimination, harassment, retaliation, fraud, misrepresentation, defamation, libel, infliction of emotional distress, violation of public policy, and/or breach of the implied covenant of good faith and fair dealing; and Claims for damages or other remedies of any sort, including, without limitation, compensatory damages, punitive damages, injunctive relief and attorney's fees.

(b) Notwithstanding the generality of the foregoing, Executive does not release the following claims:

(i) Claims for unemployment compensation or any state disability insurance benefits pursuant to the terms of applicable state law;

(ii) Claims for workers' compensation insurance benefits under the terms of any worker's compensation insurance policy or fund of the Company;

(iii) Claims to continued participation in certain of the Company's group benefit plans pursuant to the terms and conditions of COBRA;

(iv) Claims to any benefit entitlements vested as the date of Executive's employment termination, pursuant to written terms of any Company employee benefit plan;

(v) Claims for indemnification under the Indemnification Agreement, the Company's Bylaws, California Labor Code Section 2802 or any other applicable law; and

(vi) Executive's right to bring to the attention of the Equal Employment Opportunity Commission claims of discrimination; *provided*, *however*, that Executive does release Executive's right to secure any damages for alleged discriminatory treatment.

(c) *Acknowledgement.* In accordance with the Older Workers Benefit Protection Act of 1990, Executive has been advised of the following:

(i) Executive should consult with an attorney before signing this Agreement;

(ii) Executive has been given at least twenty-one (21) days to consider this Agreement;

(iii) Executive has seven (7) days after signing this Agreement to revoke it. If Executive wishes to revoke this Agreement, Executive must deliver notice of Executive's revocation in writing, no later than 5:00 p.m. on the 7th day following Executive's execution of this Agreement to Kenneth Reed, 200 Penobscot Drive, Redwood City, California 94063, fax: (650) 421-8135. Executive understands that if he revokes this Agreement, it will be null and void in its entirety, and he will not be entitled to any payments or benefits provided in this Agreement, other than as provided in Section 2.

(d) EXECUTIVE ACKNOWLEDGES THAT EXECUTIVE HAS BEEN ADVISED OF AND IS FAMILIAR WITH THE PROVISIONS OF CALIFORNIA CIVIL CODE SECTION 1542, WHICH PROVIDES AS FOLLOWS:

"A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH, IF KNOWN BY HIM OR

HER, MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR."

BEING AWARE OF SAID CODE SECTION, EXECUTIVE HEREBY EXPRESSLY WAIVES ANY RIGHTS EXECUTIVE MAY HAVE THEREUNDER, AS WELL AS UNDER ANY OTHER STATUTES OR COMMON LAW PRINCIPLES OF SIMILAR EFFECT.

6. Non-Disparagement, Transition, Transfer of Company Property and Limitations on Service. Executive further agrees that:

(a) *Non-Disparagement.* Executive agrees that he shall not disparage, criticize or defame the Company, its affiliates and their respective affiliates, directors, officers, agents, partners, stockholders, employees, products, services, technology or business, either publicly or privately. The Company agrees that it shall not, and it shall instruct its officers and members of its Board of Directors to not, disparage, criticize or defame Executive, either publicly or privately. Nothing in this Section 6(a) shall have application to any evidence or testimony required by any court, arbitrator or government agency.

(b) *Transition.* Each of the Company and Executive shall use their respective reasonable efforts to cooperate with each other in good faith to facilitate a smooth transition of Executive's duties to other executive(s) of the Company.

(c) *Transfer of Company Property*. Subject to Section 3(b) hereof, on or before the Termination Date, Executive shall turn over to the Company all files, memoranda, records, and other documents, and any other physical or personal property which are the property of the Company and which he had in his possession, custody or control at the time he signed this Agreement.

7. Executive Representations. Executive warrants and represents that (a) he has not filed or authorized the filing of any complaints, charges or lawsuits against the Company or any affiliate of the Company with any governmental agency or court, and that if, unbeknownst to Executive, such a complaint, charge or lawsuit has been filed on his behalf, he will immediately cause it to be withdrawn and dismissed, (b) he has reported all hours worked as of the date of this Agreement and has been paid all compensation, wages, bonuses, commissions, and/or benefits to which he may be entitled and no other compensation, wages, bonuses, commissions and/or benefits are due to him, except as provided in this Agreement, (c) he has no known workplace injuries or occupational diseases and has been provided and/or has not been denied any leave requested under the Family and Medical Leave Act or any similar state law, (d) the execution, delivery and performance of this Agreement by Executive does not and will not conflict with, breach, violate or cause a default under any agreement, contract or instrument to which Executive is a party or any judgment, order or decree to which Executive is subject, and (e) upon the execution and delivery of this Agreement by the Company and Executive, this Agreement will be a valid and binding obligation of Executive, enforceable in accordance with its terms.

8. No Assignment by Executive. Executive warrants and represents that no portion of any of the matters released herein, and no portion of any recovery or settlement to which Executive might be entitled, has been assigned or transferred to any other person, firm or corporation not a party to this Agreement, in any manner, including by way of subrogation or

operation of law or otherwise. If any claim, action, demand or suit should be made or instituted against the Company or any other Releasee because of any actual assignment, subrogation or transfer by Executive, Executive agrees to indemnify and hold harmless the Company and all other Releasees against such claim, action, suit or demand, including necessary expenses of investigation, attorneys' fees and costs. In the event of Executive's death, this Agreement shall inure to the benefit of Executive and Executive's executors, administrators, heirs, distributees, devisees, and legatees. None of Executive's rights or obligations may be assigned or transferred by Executive, other than Executive's rights to payments hereunder, which may be transferred only upon Executive's death by will or operation of law.

9. Non-Solicitation. Without limiting the Confidentiality Agreement, Executive hereby agrees that Executive shall not, at any time within the two (2) year period immediately following the Termination Date, directly or indirectly, either for himself or on behalf of any other person, recruit or otherwise solicit or induce any employee or consultant of the Company to terminate its employment or arrangement with the Company, or otherwise change its relationship with the Company. Notwithstanding the foregoing, nothing herein shall prevent Executive from directly or indirectly hiring any individual who submits a resume or otherwise applies for a position in response to a publicly posted job announcement or otherwise applies for employment with any person with whom Executive may be associated absent any violation of Executive's obligations pursuant to the preceding sentence.

10. Governing Law. This Agreement shall be construed and enforced in accordance with, and the rights of the parties shall be governed by, the laws of the State of California or, where applicable, United States federal law, in each case, without regard to any conflicts of laws provisions or those of any state other than California.

11. Miscellaneous. This Agreement, collectively with the Confidentiality Agreement, the Indemnification Agreement and the Equity Award Agreements comprise the entire agreement between the parties with regard to the subject matter hereof and supersede, in their entirety, any other agreements between Executive and the Company with regard to the subject matter hereof, including without limitation, the Change of Control Agreement. Executive acknowledges that there are no other agreements, written, oral or implied, and that he may not rely on any prior negotiations, discussions, representations or agreements. This Agreement may be modified only in writing, and such writing must be signed by both parties and recited that it is intended to modify this Agreement. This Agreement may be executed in separate counterparts, each of which is deemed to be an original and all of which taken together constitute one and the same agreement.

12. Company Assignment and Successors. The Company shall assign its rights and obligations under this Agreement to any successor to all or substantially all of the business or the assets of the Company (by merger or otherwise). This Agreement shall be binding upon and inure to the benefit of the Company and its successors, assigns, personnel and legal representatives.

13. Maintaining Confidential Information. Executive reaffirms his obligations under the Confidentiality Agreement. Executive acknowledges and agrees that the benefits provided in Section 3 above shall be subject to Executive's continued compliance with Executive's obligations under the Confidentiality Agreement.

14. Executive's Cooperation. After the Termination Date, Executive shall cooperate with the Company and its affiliates, upon the Company's reasonable request, with respect to any internal investigation or administrative, regulatory or judicial proceeding involving matters within the scope of Executive's duties and responsibilities to the Company or its affiliates during his employment with the Company (including, without limitation, Executive being available to the Company upon reasonable notice for interviews and factual investigations, appearing at the Company's reasonable request to give testimony without requiring service of a subpoena or other legal process, and turning over to the Company all relevant Company documents which are or may have come into Executive's possession during his employment); *provided*, *however*, that any such request by the Company shall not be unduly burdensome or interfere with Executive's personal schedule or ability to engage in gainful employment.

15. Section 409A of the Code. This Agreement is intended, to the greatest extent permitted under law, to comply with the short-term deferral exemption and the separation pay exemption provided in Section 409A of the Internal Revenue Code of 1986, as amended, and the regulations and other interpretative guidance issued thereunder ("Section 409A") such that no benefits or payments under this Agreement are subject to Section 409A. Notwithstanding anything herein to the contrary, the timing of any payments under this Agreement shall be made consistent with such exemption. Executive's right to receive a series of installment payments under this Agreement, if any, shall be treated as a right to receive a series of separate payments. To the extent applicable, this Agreement shall be interpreted in accordance with Section 409A, including without limitation any such regulations or other guidance that may be issued after the Termination Date. Notwithstanding any provision of this Agreement to the contrary, in the event that the Company determines that any amounts payable hereunder may be subject to Section 409A, the Company may, to the extent permitted under Section 409A cooperate in good faith to adopt such amendments to this Agreement or adopt other appropriate policies and procedures, including amendments and policies with retroactive effect, that the Company determines are necessary or appropriate to avoid the imposition of taxes under Section 409A; provided, however, that this paragraph shall not create an obligation on the part of the Company to adopt any such amendment, policy or procedure or take any such other action, nor shall the Company have any liability for failing to do so. To the extent that any reimbursements payable pursuant to this Agreement are subject to the provisions of Section 409A, such reimbursements shall be paid to Executive no later than December 31 of the year following the year in which the expense was incurred, the amount of expenses reimbursed in one year shall not affect the amount eligible for reimbursement in any subsequent year, and Executive's right to reimbursement under this Agreement will not be subject to liquidation or exchange for another benefit.

(Signature page(s) follow)

IN WITNESS WHEREOF, the undersigned have caused this Separation Agreement to be duly executed and delivered as of the date indicated next to their respective signatures below.

DATED: July 1, 2014

/s/ David O'Toole
David O'Toole

CODEXIS, INC.

DATED: July 3, 2014

By: /s/ John J. Nicols
Name: John J Nicols
Title: President & CEO

Exhibit 31.1

CERTIFICATION

I, John 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 6, 2014

/s/ John Nicols

John Nicols

President and Chief Executive Officer
(principal executive officer)

Exhibit 31.2

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 6, 2014

/s/ Gordon Sangster

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

Exhibit 32.1

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

In connection with the Quarterly Report of Codexis, Inc. (the "Company") on Form 10-Q for the fiscal quarter ended September 30, 2014, as filed with the Securities and Exchange Commission (the "Report"), John 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 6, 2014

/s/ John Nicols

John 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)