
**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 June 30, 2010

OR

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

For the transition period from _____ to _____

Commission file number: 001-34705

Codexis, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

200 Penobscot Drive, Redwood City
(Address of principal executive offices)

71-0872999
(I.R.S. Employer
Identification No.)

94063
(Zip Code)

650 421 8100

(Registrant's telephone number, including area code)

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

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

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

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

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

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

As of July 29, 2010, there were 34,198,661 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 June 30, 2010

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

	June 30, 2010	December 31, 2009
Assets		
Current assets:		
Cash and cash equivalents	\$ 51,413	\$ 31,785
Marketable securities	48,894	23,778
Accounts receivable, net of allowances of \$12 at June 30, 2010 and December 31, 2009, respectively	7,197	7,246
Related party accounts receivable	92	—
Inventories	2,176	2,915
Prepaid expenses and other current assets	4,788	1,658
Total current assets	<u>114,560</u>	<u>67,382</u>
Restricted cash	668	731
Property and equipment, net	21,332	21,581
Intangible assets, net	650	928
Goodwill	3,241	3,241
Other non-current assets	3,224	5,173
Total assets	<u>\$ 143,675</u>	<u>\$ 99,036</u>
Liabilities, Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit)		
Current liabilities:		
Accounts payable	\$ 8,036	\$ 9,999
Accrued compensation	5,041	6,518
Related party payable	268	1,314
Other accrued liabilities	7,550	10,376
Redeemable convertible preferred stock warrant liability	—	2,009
Deferred revenues	501	2,240
Related party deferred revenues	4,084	13,161
Financing obligations	5,367	5,368
Total current liabilities	<u>30,847</u>	<u>50,985</u>
Deferred revenues, net of current portion	1,764	1,856
Related party deferred revenues, net of current portion	5,445	7,487
Financing obligations, net of current portion	—	2,574
Other long-term liabilities	1,324	1,307
Commitments and contingencies		
Redeemable convertible preferred stock issuable in series A to F	—	179,672
Stockholders' equity (deficit):		
Common stock	4	—
Additional paid-in capital	269,077	15,015
Accumulated other comprehensive income (loss)	137	(252)
Accumulated deficit	<u>(164,923)</u>	<u>(159,608)</u>
Total stockholders' equity (deficit)	<u>104,295</u>	<u>(144,845)</u>
Total liabilities, redeemable convertible preferred stock and stockholders' equity (deficit)	<u>\$ 143,675</u>	<u>\$ 99,036</u>

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

	<u>Three Months Ended June 30,</u>		<u>Six Months Ended June 30,</u>	
	<u>2010</u>	<u>2009</u>	<u>2010</u>	<u>2009</u>
Revenues:				
Product	\$ 8,484	\$ 4,193	\$ 14,760	\$ 8,765
Related party collaborative research and development	14,653	14,544	30,695	28,963
Collaborative research and development	851	461	1,511	869
Government grants	492	—	3,214	12
Total revenues	<u>24,480</u>	<u>19,198</u>	<u>50,180</u>	<u>38,609</u>
Costs and operating expenses:				
Cost of product revenues	6,075	3,412	11,293	7,268
Research and development	13,004	12,112	25,986	27,246
Selling, general and administrative	8,652	6,178	17,252	12,241
Total costs and operating expenses	<u>27,731</u>	<u>21,702</u>	<u>54,531</u>	<u>46,755</u>
Loss from operations	(3,251)	(2,504)	(4,351)	(8,146)
Interest income	46	45	74	76
Interest expense and other, net	(654)	(358)	(1,012)	(786)
Loss before provision for income taxes	(3,859)	(2,817)	(5,289)	(8,856)
Provision for income taxes	87	41	26	95
Net loss	<u>\$ (3,946)</u>	<u>\$ (2,858)</u>	<u>\$ (5,315)</u>	<u>\$ (8,951)</u>
Net loss per share of common stock, basic and diluted	<u>\$ (0.15)</u>	<u>\$ (1.09)</u>	<u>\$ (0.36)</u>	<u>\$ (3.44)</u>
Weighted average common shares used in computing net loss per share of common stock, basic and diluted	<u>26,557</u>	<u>2,613</u>	<u>14,701</u>	<u>2,602</u>

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

	<u>Six Months Ended June 30,</u>	
	<u>2010</u>	<u>2009</u>
Operating activities:		
Net loss	\$ (5,315)	\$ (8,951)
Adjustments to reconcile net loss to net cash used in operating activities:		
Amortization of intangible assets	302	462
Depreciation and amortization of property and equipment	3,438	2,346
Revaluation of redeemable convertible preferred stock warrant liability	677	6
Stock-based compensation	3,951	1,893
Amortization of debt discount	104	200
Accretion (amortization) of premium/discount on marketable securities	183	131
Changes in operating assets and liabilities:		
Accounts receivable	(42)	91
Inventories	739	(630)
Prepaid expenses and other current assets	(3,126)	(617)
Other assets	2,395	50
Accounts payable	(1,413)	(1,952)
Accrued compensation	(1,477)	139
Related party payable	(1,046)	2
Other accrued liabilities	(5,133)	(3,924)
Deferred revenues	(12,950)	1,290
Net cash used in operating activities	(18,713)	(9,464)
Investing activities:		
Decrease in restricted cash	65	203
Purchase of property and equipment	(3,192)	(4,518)
Purchase of marketable securities	(49,051)	(28,802)
Proceeds from sale of marketable securities	1,605	—
Proceeds from maturities of marketable securities	21,960	11,500
Net cash used in investing activities	(28,613)	(21,617)
Financing activities:		
Principal payments on financing obligations	(2,681)	(2,674)
Payments in preparation for initial public offering	(3,106)	—
Proceeds from issuance of preferred stock	—	40,000
Proceeds from issuance of common stock on IPO	72,539	—
Proceeds from exercises of stock options	254	62
Net cash provided by financing activities	67,006	37,388
Effect of exchange rate changes on cash and cash equivalents	(52)	(56)
Net increase in cash and cash equivalents	19,628	6,251
Cash and cash equivalents at the beginning of the period	31,785	21,903
Cash and cash equivalents at the end of the period	<u>\$ 51,413</u>	<u>\$ 28,154</u>
Reclassification of preferred stock from liability to additional paid-in capital	<u>\$ 2,686</u>	<u>\$ —</u>
Conversion of preferred stock to common stock and additional paid-in capital	<u>\$ 179,672</u>	<u>\$ —</u>

Codexis, Inc.
Notes to Condensed Consolidated Financial Statements
(UNAUDITED)

1. Description of Business

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

2. Summary of Significant Accounting Policies

Basis of Presentation and Consolidation

The accompanying interim condensed consolidated balance sheets as of December 31, 2009 and June 30, 2010, and the interim condensed consolidated statements of operations for the three and six months ended June 30, 2009 and 2010, and cash flows for the six months ended June 30, 2009 and 2010 are unaudited. These interim condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”) and the applicable rules and regulations of the Securities and Exchange Commission (“SEC”) for interim financial information. Accordingly, they do not include all of the information and notes required by GAAP for complete financial statements. These interim condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto contained in our Prospectus filed with the SEC on April 22, 2010 pursuant to Rule 424(b) under the Securities Act of 1933, as amended. The December 31, 2009 condensed consolidated balance sheet included herein was derived from the audited financial statements as of that date, but does not include all disclosures including notes required by GAAP for complete financial statements.

The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and, in the opinion of management, reflect all adjustments of a normal recurring nature considered necessary to present fairly our financial position as of June 30, 2010 and results of our operations for the three and six months ended June 30, 2009 and 2010, and cash flows for the six months ended June 30, 2009 and 2010. The interim results for the six months ended June 30, 2010 are not necessarily indicative of the results that may be expected for the year ending December 31, 2010.

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

Initial Public Offering (IPO)

On April 27, 2010, we completed our initial public offering of common stock (“IPO”) selling 6,000,000 shares at an offering price of \$13.00 per share, resulting in net proceeds of approximately \$67.5 million, after deducting underwriting discounts, commissions and other related transaction costs

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

Use of Estimates

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

Foreign Currency Translation

The assets and liabilities of foreign subsidiaries, where the local currency is the functional currency, are translated from their respective functional currencies into U.S. dollars at the exchange rates in effect at the balance sheet date, with resulting foreign currency translation adjustments recorded in accumulated other comprehensive income (loss) in the condensed consolidated balance sheets. Revenue and expense amounts are translated at average rates during the period. For the six months ended June 30, 2009 and

Codexis, Inc.

**Notes to Condensed Consolidated Financial Statements—(Continued)
(UNAUDITED)**

2010, we recorded a translation adjustment loss of \$56,000 and \$66,000, respectively. For the three months ended June 30, 2009, we recorded a translation adjustment gain of \$221,000 and a translation adjustment loss of \$38,000 for the three months ended June 30, 2010. Where the U.S. dollar is the functional currency, nonmonetary assets and liabilities originally acquired or assumed in other currencies are recorded in U.S. dollars at the exchange rates in effect at the date they were acquired or assumed. Monetary assets and liabilities denominated in other currencies are translated into U.S. dollars at the exchange rates in effect at the balance sheet date.

Fair Value of Financial Instruments

The carrying amounts of certain of our financial instruments, including cash and cash equivalents, marketable securities, restricted cash, accounts receivable and accounts payable, approximate fair value due to their short maturities. Based on borrowing rates currently available to us for loans with similar terms, the carrying values of our financing obligations approximate their fair values. The fair value of the redeemable convertible preferred stock warrants as of December 31, 2009 and at the date of conversion from a preferred stock warrant to a common stock warrant was measured by using the Black-Scholes option pricing model.

Cash, Cash Equivalents and Marketable Securities

We consider all highly liquid investments with maturity dates of three months or less at the date of purchase to be cash equivalents. Cash and cash equivalents consist of cash on deposit with banks, corporate debt obligations, government-sponsored enterprise securities, and money market accounts. The majority of cash and cash equivalents are maintained with major financial institutions in North America. Deposits with these financial institutions may exceed the amount of insurance provided on such deposits. Marketable securities included in current assets are primarily comprised of government-sponsored enterprise securities and U.S. Treasury obligations. Our investment in common shares of CO₂ Solution Inc. (“CO₂ Solution”) is included in other non-current assets. Our investments in debt and equity securities are classified as available-for-sale and are carried at estimated fair value. There were no significant realized gains or losses from sales of marketable securities during the six months ended June 30, 2009 and 2010. At June 30, 2010, we did not have any other-than-temporary declines in the fair value of our marketable securities.

Goodwill

Goodwill represents the excess of the purchase price over the fair value of assets acquired and liabilities assumed. Goodwill is presumed to have an indefinite life and is not subject to annual amortization. We review goodwill for impairment at the company level, which is the sole reporting unit, on at least an annual basis and at any interim date whenever events or changes in circumstances indicate that the carrying value may not be recoverable. We performed the annual impairment test for these assets as of October 1, 2009. This test did not indicate an impairment. There have been no events since October 1, 2009 that would require us to perform an additional assessment for the impairment of our goodwill.

Intangible Assets and Impairment of Long-Lived Assets

Intangible assets are recorded at their fair values at the date of the acquisition. Intangible assets having finite useful lives are amortized using the straight-line method over their estimated useful lives, which range from one to seven years.

Revenue Recognition

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

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

- Up-front fees received in connection with collaborative research and development agreements, including license fees, technology access fees, and exclusivity fees, are deferred upon receipt, are not considered a separate unit of accounting and are recognized as revenues over the relevant performance periods.

Codexis, Inc.

Notes to Condensed Consolidated Financial Statements—(Continued)
(UNAUDITED)

- Revenues related to FTE services are recognized as research services are performed over the related performance periods for each contract. We are required to perform research and development activities as specified in each respective agreement. The payments received are not refundable and are based on a contractual reimbursement rate per FTE working on the project. When up-front payments are combined with FTE services in a single unit of accounting, we recognize the up-front payments using the proportionate performance method of revenue recognition based upon the actual amount of research and development labor hours incurred relative to the amount of the total expected labor hours to be incurred by us, up to the amount of cash received. In cases where the planned levels of research services fluctuate substantially over the research term, we are required to make estimates of the total hours required to perform our obligations. Research and development expenses related to FTE services under the collaborative research and development agreements approximate the research funding over the term of the respective agreements.
- Revenues related to milestones that are determined to be at risk at the inception of the arrangement and substantive are recognized upon achievement of the milestone event and when collectability is reasonably assured. Fees associated with milestones for which performance was not at risk at the inception of the arrangement or that are determined not to be substantive are accounted for in the same manner as the up-front fees, provided collectability is reasonably assured.
- We recognize revenues from royalties based on licensees' sales of products using our technologies. Royalties are recognized as earned in accordance with the contract terms when royalties from licensees can be reasonably estimated and collectability is reasonably assured.
- Product revenues are recognized once passage of title and risk of loss has occurred and contractually specified acceptance criteria have been met, provided all other revenue recognition criteria have also been met. Product revenues consist of sales of biocatalysts, intermediates, active pharmaceutical ingredients and Codex Biocatalyst Panels. Cost of product revenues includes both internal and third-party fixed and variable costs including amortization of purchased technology, materials and supplies, labor, facilities and other overhead costs associated with our product revenues.
- We license mutually agreed upon third-party technology for use in our research and development collaboration with Shell. We record the license payments to research and development expense and offset related reimbursements received from Shell. These payments made by Shell to us are direct reimbursements of our costs. We account for these direct reimbursable costs as a net amount, whereby no expense or revenue is recorded for the costs reimbursed by Shell. For any payments not reimbursed by Shell, we will recognize these as expenses in the statement of operations. We elected to present the reimbursement from Shell as a component of our research and development expense since presenting the receipt of payment from Shell as revenues does not reflect the substance of the arrangement.
- We receive payments from government entities in the form of government grants. Government grants are agreements that generally provide us with cost reimbursement for certain types of expenditures in return for research and development activities over a contractually defined period. Revenues from government grants are recognized in the period during which the related costs are incurred, provided that the conditions under which the government grants were provided have been met and we have only perfunctory obligations outstanding.
- Shipping and handling costs charged to customers are recorded as revenues. Shipping costs are included in our cost of product revenues. Such charges were not significant in any of the periods presented.

Income Taxes

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

Codexis, Inc.

Notes to Condensed Consolidated Financial Statements—(Continued)
(UNAUDITED)**Stock-Based Compensation**

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

Comprehensive Loss

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2010	2009	2010	2009
Net loss	\$ (3,946)	\$ (2,858)	\$ (5,315)	\$ (8,951)
Currency translation adjustments	(38)	221	(66)	(56)
Unrealized gain on marketable securities	168	12	455	5
Comprehensive loss	<u>\$ (3,816)</u>	<u>\$ (2,625)</u>	<u>\$ (4,926)</u>	<u>\$ (9,002)</u>

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2010	2009	2010	2009
Numerator:				
Net loss	\$ (3,946)	\$ (2,858)	\$ (5,315)	\$ (8,951)
Denominator:				
Weighted-average shares of common stock outstanding	26,561	2,628	14,706	2,619
Less: Weighted-average shares of common stock subject to repurchase	(4)	(15)	(5)	(17)
Weighted-average shares of common stock used in computing net loss per share of common stock, basic and diluted	<u>26,557</u>	<u>2,613</u>	<u>14,701</u>	<u>2,602</u>
Net loss per share of common stock, basic and diluted	<u>\$ (0.15)</u>	<u>\$ (1.09)</u>	<u>\$ (0.36)</u>	<u>\$ (3.44)</u>

Codexis, Inc.**Notes to Condensed Consolidated Financial Statements—(Continued)
(UNAUDITED)**

The following table presents the securities not included in the net loss per share calculations for the periods ended June 30, 2009 and 2010 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2010	2009	2010	2009
Redeemable convertible preferred stock	—	24,754	—	24,754
Common stock subject to repurchase	3	12	3	12
Options to purchase common stock	8,463	7,133	8,463	7,133
Warrants to purchase redeemable convertible preferred stock	—	288	—	288
Warrants to purchase common stock	297	39	297	39
Total	<u>8,763</u>	<u>32,226</u>	<u>8,763</u>	<u>32,226</u>

Recent Accounting Pronouncements

In October 2009, the FASB issued Accounting Standards Update (“ASU”) 2009-13, which amends ASC Topic 605, *Revenue Recognition*, to require companies to allocate revenues in multiple-element arrangements based on an element’s estimated selling price if vendor-specific or other third-party evidence of value is not available. ASU 2009-13 is effective beginning January 1, 2011. Earlier application is permitted. We are currently evaluating both the timing and the impact of the pending adoption of ASU 2009-13 on our consolidated financial statements.

In April 2010, the Financial Accounting Standards Board issued Accounting Standards Update (ASU) No. 2010-17, *Revenue Recognition — Milestone Method* (ASU 2010-017). ASU 2010-017 provides guidance in applying the milestone method of revenue recognition to research or development arrangements. Under this guidance, management may recognize revenue contingent upon the achievement of a milestone in its entirety, in the period in which the milestone is achieved, only if the milestone meets all the criteria within the guidance to be considered substantive. This ASU is effective on a prospective basis for research and development milestones achieved in fiscal years, beginning on or after June 15, 2010. The Company does not expect adoption of this standard to have a material impact on its financial position or results of operations.

3. Collaborative Research and Development Agreements*Shell*

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

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

In March 2009, we amended our collaborative research agreement and license agreement with Shell. In connection with these amendments, Shell purchased Series F redeemable convertible preferred stock for gross proceeds of \$30.0 million and agreed to pay us (1) additional research funding at specified rates per FTE working on the project during the research term and (2) additional milestone payments upon the achievement of milestones.

In accordance with our revenue recognition policy, the \$20.0 million up-front exclusivity fee and the research funding fees to be received for FTE services are recognized in proportion to the actual research efforts incurred relative to the amount of total expected effort to be incurred by us over the five-year research period commencing November 2007. Milestones to be earned under this agreement have been determined to be at risk at the inception of the arrangement and substantive and are expected to be recognized upon achievement of the milestone and when collectability is reasonably assured. We recorded milestone revenues of \$1.4 million during six months ended June 30, 2010, (none in the three and six months ended June 30, 2009 or for the three months ended June 30, 2010).

Codexis, Inc.

**Notes to Condensed Consolidated Financial Statements—(Continued)
(UNAUDITED)**

Under the agreements with Shell, we have the right to license technology from third parties that will assist us in meeting objectives under the collaboration. If a third-party technology is identified and mutually agreed upon by both parties, Shell is obligated to reimburse us for the licensing costs of the technology. Payments made by us to the third-party providers were recorded as research and development expenses related to our collaborative research agreement with Shell. None of the acquired licenses are expected to be used in products that will be sold within the next year and the phase of the project has not reached technological feasibility. Shell reimbursed us for licensing costs of \$7.3 million and \$175,000 for the six months ended June 30, 2009 and 2010, respectively. Shell reimbursed us for licensing costs of \$5.3 million and \$58,000 for the three months ended June 30, 2009 and 2010, respectively. We record these reimbursements against the costs incurred.

Manufacturing Collaboration

Arch

In October 2005, we entered into a technology transfer and supply agreement with Arch Pharmed Labs, Ltd. (“Arch”), a company based in India engaged in the manufacturing and sale of active pharmaceutical ingredients, or APIs, and intermediaries to pharmaceutical companies worldwide. We granted to Arch a non-exclusive, royalty free license, with no right to grant sublicense rights, to certain of our patent rights and technology, to solely manufacture an intermediate called ATS-8 for us and on our behalf.

In August 2006, we broadened our relationship with Arch by entering into an enzyme and supply agreement, a supply agreement and a master services agreement, which we call the 2006 Agreements. The 2006 Agreements, among other things, provided biocatalyst supply specifications from us to Arch, intermediate supply from Arch to us, and services to be performed by Arch over the four-year term of the agreements. Under the 2006 Agreements, we agreed to pay Arch up to \$1.6 million for certain chemical process and manufacturing method development services as Arch delivers them over the course of the master services agreement. As of June 30, 2010, we had a remaining obligation of \$100,000 due to Arch. As of December 31, 2009, we had a remaining obligation of \$350,000 due to Arch.

In August 2008, we further expanded our relationship with Arch by entering into several enzyme and supply agreements, and product territory agreements (“2008 Agreements”). The 2008 Agreements, among other things, provided biocatalyst supply from us to Arch, intermediate supply from Arch to us, and services to be performed by Arch over the term of the agreements for an expanded product portfolio.

In February 2010, we consolidated certain of the contractual terms in our agreements with Arch by simultaneously terminating all of our existing agreements with Arch, other than the Master Services Agreement with Arch entered into as of August 1, 2006, and entering into new agreements with Arch. The new agreements, among other things, provide for biocatalyst supply from us to Arch and intermediate supply from Arch to us. We sell the biocatalysts to Arch at cost, and Arch manufactures the intermediates on our behalf. Arch sells the intermediates to us at a formula-based price, which results in a fixed percentage profit share. We then directly market and sell the intermediates to a specified group of customers in the generic pharmaceutical industry. Under the new agreements, Arch may also sell intermediates directly to other customers, and a license royalty is owed by Arch to us based on the volume of product they sell to us and their other customers. Sales of intermediates Arch under the prior agreements were recognized net of the manufacturing costs charged by Arch. Total product and collaborative research and development revenues recorded from Arch were \$126,000 and \$191,000 during the three and six months ended June 30, 2009 and \$11,000 in the three and six months ended June 30, 2010. Royalties owed by Arch were \$135,000 and \$162,000 for the three and six months ended June 30, 2010. No royalties were owed by Arch in 2009.

In May 2010, we paid Arch an advance of \$2.0 million for the production of certain enzyme products. This amount is recorded as a prepaid asset on our condensed consolidated balance sheet at June 30, 2010. Upon our future purchases of this product from Arch, we will offset amounts billed by Arch against the prepaid amount. We expected to purchase this inventory in 2010.

4. Joint Development Agreement with CO₂ Solution

On December 15, 2009, we entered into an exclusive joint development agreement with CO₂ Solution, a company based in Quebec City, Quebec, Canada, whose shares are publicly traded in Canada on TSX Venture Exchange. The joint development agreement expires in January 2011. Under the agreement, we obtained a research license to CO₂ Solution’s intellectual property and agreed to conduct research and development activities jointly with CO₂ Solution with the goal of advancing the development of carbon capture technology. We also purchased 10,000,000 common shares (approximately 16.6% of total common shares outstanding) of CO₂ Solution in a private placement subject to a four-month statutory resale restriction. This restriction expired April 15, 2010. In February of 2010, our Chief Executive Officer was appointed to the board of directors of CO₂ Solution.

Codexis, Inc.

Notes to Condensed Consolidated Financial Statements—(Continued)
(UNAUDITED)

We concluded that through June 30, 2010, we did not have the ability to exercise significant influence over CO₂ Solution's operating and financial policies. We consider our investment in CO₂ Solution common shares as an investment in a marketable security that is available for sale, and carry it at fair value in other non-current assets, with changes in fair value recognized in accumulated other comprehensive income (loss). As of June 30, 2010 our shares of CO₂ Solution are no longer subject to any restrictions on sales and we have estimated the fair value of common shares using the fair value as of June 30, 2010, as determined by trading on TSX Venture Exchange. Accordingly, we have reclassified our investment in CO₂ Solution from a level 3 to level 1 investment as discussed in Note 6.

At December 31, 2009, the estimated fair value of our investment in CO₂ Solution restricted common stock was \$1.2 million and the unrealized loss was \$145,000. At June 30, 2010, the estimated fair value of our investment in CO₂ Solution common stock was \$1.8 million and the unrealized gain was for the three and six months ended June 30, 2010 was \$0.1 million and \$0.6 million, respectively recorded in accumulated other comprehensive income (loss) on the condensed consolidated balance sheet.

5. Balance Sheets and Statements of Operations Details

Cash Equivalents and Marketable Securities

At June 30, 2010, cash equivalents and marketable securities consisted of the following (in thousands):

	June 30, 2010			Estimated Fair Value	Average Contractual Maturities (in days)
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses		
Money market funds	\$ 13,653	\$ —	\$ —	\$ 13,653	n/a
Government-sponsored enterprise securities	69,882	14	—	69,896	49
Corporate debt obligations	10,340	5	(1)	10,344	59
Common shares of CO ₂ Solution	1,316	497	—	1,813	n/a
Total	\$ 95,191	\$ 516	\$ (1)	\$ 95,706	

At December 31, 2009, cash equivalents and marketable securities consisted of the following (in thousands):

	December 31, 2009			Estimated Fair Value	Average Contractual Maturities (in days)
	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses		
Money market funds	\$ 23,722	\$ —	\$ —	\$ 23,722	n/a
U.S. Treasury obligations	1,754	1	—	1,755	61
Government-sponsored enterprise securities	23,507	20	(2)	23,525	77
Common shares of CO ₂ Solution	1,316	—	(145)	1,171	n/a
Total	\$ 50,299	\$ 21	\$ (147)	\$ 50,173	

Codexis, Inc.
Notes to Condensed Consolidated Financial Statements—(Continued)
(UNAUDITED)

Inventories

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

	June 30, 2010	December 31, 2009
Raw materials	\$ 1,380	\$ 1,210
Work in process	97	198
Finished goods	699	1,507
Total inventories	<u>\$ 2,176</u>	<u>\$ 2,915</u>

Property and Equipment, net

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

	June 30, 2010	December 31, 2009
Laboratory equipment	\$ 26,912	\$ 24,381
Leasehold improvements	10,673	9,221
Computer equipment and software	2,677	2,079
Office equipment and furniture	773	732
Construction in progress (1)	957	2,449
	41,992	38,862
Less: accumulated depreciation and amortization	(20,660)	(17,281)
Property and equipment, net	<u>\$ 21,332</u>	<u>\$ 21,581</u>

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

Intangible Assets

Intangible assets consisted of the following (in thousands):

	June 30, 2010			December 31, 2009		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Customer relationships	\$ 3,098	\$ (2,894)	\$ 204	\$ 3,098	\$ (2,753)	\$ 345
Developed and core technology	1,534	(1,090)	444	1,534	(968)	566
Tradename	99	(99)	—	99	(99)	—
Noncompete agreements	90	(88)	2	90	(73)	17
	<u>\$ 4,821</u>	<u>\$ (4,171)</u>	<u>\$ 650</u>	<u>\$ 4,821</u>	<u>\$ (3,893)</u>	<u>\$ 928</u>

Amortization expense for intangible assets totaled \$278,000 and \$438,000 for six months ended June 30, 2010 and 2009, respectively. Amortization expense for intangible assets totaled \$93,000 and \$225,000 for three months ended June 30, 2010 and 2009, respectively.

Codexis, Inc.

Notes to Condensed Consolidated Financial Statements—(Continued)
(UNAUDITED)**6. Fair Value**

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

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

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

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

The following table presents our financial instruments that were measured at fair value on a recurring basis at June 30, 2010 by level within the fair value hierarchy (in thousands):

	June 30, 2010			Total
	Level 1	Level 2	Level 3	
Financial Assets				
Money market funds	\$13,653	\$ —	\$ —	\$13,653
Government-sponsored enterprise securities	—	69,896	—	69,896
Corporate debt obligations	—	10,344	—	10,344
Common shares of CO ₂ Solution	1,813	—	—	1,813
Total	<u>\$15,466</u>	<u>\$80,240</u>	<u>\$ —</u>	<u>\$95,706</u>
Financial Liability				
Redeemable convertible preferred stock warrant liability	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

The following table presents our financial instruments that were measured at fair value on a recurring basis at December 31, 2009 by level within the fair value hierarchy (in thousands):

	December 31, 2009			Total
	Level 1	Level 2	Level 3	
Financial Assets				
Money market funds	\$23,722	\$ —	\$ —	\$23,722
U.S. Treasury obligations	—	1,755	—	1,755
Government-sponsored enterprise securities	—	23,525	—	23,525
Common shares of CO ₂ Solution	—	—	1,171	1,171
Total	<u>\$23,722</u>	<u>\$25,280</u>	<u>\$1,171</u>	<u>\$50,173</u>
Financial Liability				
Redeemable convertible preferred stock warrant liability	<u>\$ —</u>	<u>\$ —</u>	<u>\$2,009</u>	<u>\$ 2,009</u>

The valuation of the common shares of CO₂ Solution and the redeemable convertible preferred stock warrant liability are discussed in Notes 4 and 10, respectively.

Codexis, Inc.**Notes to Condensed Consolidated Financial Statements—(Continued)
(UNAUDITED)**

The change in the fair value of the common shares of CO₂ Solution is summarized below (in thousands):

	Estimated Fair Value
Fair value at December 31, 2009	\$ 1,171
Change in fair value recorded in accumulated other comprehensive income (loss)	642
Fair value at June 30, 2010	<u>\$ 1,813</u>

The change in the fair value of the warrant liability is summarized below (in thousands):

	Estimated Fair Value
Fair value at December 31, 2009	\$ 2,009
Change in fair value recorded in interest expense and other, net	677
Reclass of redeemable convertible preferred stock warrant liability to additional paid-in capital on IPO	<u>(2,686)</u>
Fair value at June 30, 2010	<u>\$ —</u>

7. Related Party Transactions with Maxygen

Maxygen founded Codexis in 2002 and remains one of our stockholders. We are required to pay Maxygen a fee based on a percentage of all consideration we receive from third parties related to the use of certain intellectual property owned or controlled by Maxygen in the specified field of biofuels. We expense all payments owed to Maxygen as they become due as collaborative research and development expenses, which we report as research and development expenses in our condensed consolidated statements of operations. Currently, we pay Maxygen a fee based on our collaborative research and development agreement with Shell (see Note 3). We expensed \$3.9 million and \$0.7 million during the six months ended June 30, 2009 and 2010, respectively. We expensed \$0.4 million and \$0.2 million during the three months ended June 30, 2009 and 2010, respectively. Amounts payable to Maxygen were \$1.3 million and \$0.3 million at December 31, 2009 and June 30, 2010, respectively recorded as related party payable in our consolidate balance sheets.

8. Financing Obligations

Financing obligations, net of debt discounts and issuance costs, consisted of the following (in thousands):

	June 30, 2010	December 31, 2009
General Electric Capital Corporation and Oxford Finance Corporation (2007 agreement)	\$ 5,315	\$ 7,789
Oxford Finance Corporation (2005 agreement)	52	153
Total loans payable	5,367	7,942
Less: current portion	<u>(5,367)</u>	<u>(5,368)</u>
Financing obligations, net of current portion	<u>\$ —</u>	<u>\$ 2,574</u>

Codexis, Inc.**Notes to Condensed Consolidated Financial Statements—(Continued)
(UNAUDITED)**

In September 2007, we entered into a loan and security agreement with General Electric Capital Corporation and Oxford Finance Corporation (“GE Capital Loan”) under which we can borrow up to \$15.0 million. During the year ended December 31, 2007, we drew down the entire \$15.0 million, net of issuance costs. In connection with the execution of the loan and security agreement, we incurred costs of \$269,000 and, in addition, we issued the lenders a warrant to purchase 72,727 shares of Series D redeemable convertible preferred stock with an estimated fair value of \$297,000, which as of June 30, 2010 was recorded in the condensed consolidated balance sheet as a debt discount that was being amortized to interest expense over the life of the loans (see Note 10). The loan and security agreement provides for six monthly payments of interest only and 36 monthly installments of principal and interest, with an additional 4% payment due upon final maturity of each funding. Interest accrues at 9.4% per annum.

The loan is secured by substantially all of our assets except for intellectual property and contains a number of covenants and restrictions. As of December 31, 2009 and June 30, 2010, we were in compliance with the covenants of the loan and security agreement.

9. Commitments and Contingencies***Litigation***

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

Indemnifications

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

Other contingencies

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

10. Warrants

In connection with debt offerings at various times between the years ended December 31, 2004 and 2007, we issued warrants to purchase a total of 574,152 shares of our Series D redeemable convertible preferred stock and warrants to purchase a total of 39,234 shares of our common stock. The warrants are exercisable at any time during their respective terms.

Upon completion of our initial public offering on April 27, 2010, (see Note 11), all redeemable convertible preferred stock warrants were automatically converted to common stock warrants. At June 30, 2010, the following warrants were issued and outstanding:

<u>Class of Shares upon Exercise</u>	<u>Shares Subject to warrants</u>	<u>Exercise Price per Share</u>	<u>Expiration</u>
Common	6,066	\$ 1.05	October 25, 2012
Common	215,711	\$ 5.96	May 25, 2013
Common	2,384	\$ 12.45	February 9, 2016
Common	72,727	\$ 8.25	September 28, 2017

Codexis, Inc.**Notes to Condensed Consolidated Financial Statements—(Continued)
(UNAUDITED)****11. Stockholders' Deficit**

In 2002, we adopted the 2002 Stock Plan (the "2002 Plan"), under which our board of directors may issue incentive stock options, non-statutory stock options (options that do not qualify as incentive stock options) and restricted stock to our employees, officers, directors or consultants. On March 30, 2010, our board of directors approved the 2010 Equity Incentive Award Plan (the "2010 Plan"), which became effective upon the completion of the IPO. A total of 1,100,000 shares of common stock were initially reserved for future issuance under the 2010 Plan and any shares of common stock reserved for future grant or issuance under our 2002 Plan but which remain unissued were added to the shares reserved under our 2010 Plan. As of June 30, 2010, we had reserved 10,505,094 shares of common stock for issuance under the 2002 Plan, which were added to the 1,100,000 shares reserved under our 2010 Plan. We do not expect any further grants under the 2002 Plan.

During the six months ended June 30, 2010, we issued 192,186 common shares for stock options exercised and 29,408 common shares for warrants exercised.

Stock-Based Compensation Expense

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

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2010	2009	2010	2009
Cost of sales	\$ 110	\$ 119	\$ 194	\$ 200
Research and development	769	382	1,374	803
Sales, general and administrative	1,417	461	2,383	890
	<u>\$ 2,296</u>	<u>\$ 962</u>	<u>\$ 3,951</u>	<u>\$ 1,893</u>

12. Restructuring Charges

In 2009, the board of directors approved and committed to plans to reduce our cost structure, which included a relocation of our operation in Germany to facilities in the United States and in Singapore, a rationalization of the our product offerings and closure of the facility in Germany, and employee terminations in Germany and the United States.

In 2008, the board of directors approved and committed to plans to reduce our cost structure. The restructuring plan applied to employees and facilities worldwide.

Codexis, Inc.

Notes to Condensed Consolidated Financial Statements—(Continued)
(UNAUDITED)

Changes in restructuring related to the 2008 and 2009 restructuring plans in accrued liabilities in our condensed consolidated balance sheets as of June 30, 2010 were as follows (in thousands):

	Severance		Facilities and contract termination costs		Total	
	2009 Plan	2008 Plan	2009 Plan	2008 Plan	2009 Plan	2008 Plan
Balance at December 31, 2009	\$ 155	\$ 63	\$ —	\$ 391	\$ 155	\$ 454
Restructuring	—	—	—	—	—	—
Cash payments	(155)	—	—	(156)	(155)	(156)
Non-cash charges	—	—	—	—	—	—
Balance at June 30, 2010	\$ —	\$ 63	\$ —	\$ 235	\$ —	\$ 298

13. Segment Reporting

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

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

Revenues	Three Months Ended June 30,		Six Months Ended June 30,	
	2010	2009	2010	2009
Americas(1)	\$ 17,003	\$ 15,463	\$ 33,534	\$ 31,000
Europe	1,548	1,752	4,594	3,560
Asia	5,929	1,983	12,052	4,049
	\$ 24,480	\$ 19,198	\$ 50,180	\$ 38,609

(1) Primarily United States

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

	June 30, 2010	December 31, 2009
Long-lived assets		
Americas(1)	\$17,359	\$ 19,439
Europe	3,907	3,911
Asia	3,940	4,332
	\$25,206	\$ 27,682

(1) Primarily United States

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the unaudited condensed consolidated financial statements and the related notes thereto included elsewhere in this Quarterly Report on Form 10-Q and the audited consolidated financial statements and notes thereto and management's discussion and analysis of financial condition and results of operations for the year ended December 31, 2009 included in our final prospectus dated April 22, 2010 and filed with the Securities and Exchange Commission, or SEC. 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, or the Exchange Act. These statements are often identified by the use of words such as "may," "will," "expect," "believe," "anticipate," "intend," "could," "should," "estimate," or "continue," and similar expressions or variations. Such forward-looking statements are subject to risks, uncertainties and other factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the section titled "Risk Factors," set forth in Part II, Item 1A of this Quarterly Report on Form 10-Q and elsewhere in this Report. The forward-looking statements in this Quarterly Report on Form 10-Q represent our views as of the date of this Quarterly Report on Form 10-Q. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this Quarterly Report on Form 10-Q.

Overview

Our proprietary technology platform enables the creation of optimized biocatalysts that make existing industrial processes faster, cleaner and more efficient than current methods and has the potential to make new industrial processes possible on a commercial scale. We have focused our biocatalyst development efforts on large and rapidly growing markets, including pharmaceuticals and advanced biofuels. We have commercialized our biocatalysts in the pharmaceutical industry and are developing biocatalysts for use in producing advanced biofuels under a multi-year research and development collaboration with Shell. We have enabled biocatalyst-based drug manufacturing processes at commercial scale and have delivered biocatalysts and drug products to some of the world's leading pharmaceutical companies. In our research and development collaboration with Shell, we are developing biocatalysts for use in producing advanced biofuels from renewable sources of non-food plant materials, known as cellulosic biomass. We are also using our technology platform to pursue biocatalyst-enabled solutions in other bioindustrial markets, including carbon management, water treatment and chemicals. We were incorporated in Delaware in January 2002 as a wholly-owned subsidiary of Maxygen, Inc.

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

To date, we have generated revenues primarily from collaborative research and development funding, pharmaceutical product sales and government grants. Our revenues have increased in each of the last three fiscal years, growing from \$25.3 million in 2007, to \$50.5 million in 2008 to \$82.9 million in 2009. Our revenues increased from \$38.6 million for the six months ended June 30, 2009 to \$50.2 million for the six months ended June 30, 2010.

Most of our revenues since inception have been derived from collaborative research and development arrangements, which accounted for 52%, 66% and 78% of our revenues in 2007, 2008 and 2009, respectively. Collaborative research and development arrangements accounted for 77% and 64% of our revenues for the six months ended June 30, 2009 and 2010, respectively. Related party collaborative research and development received from Shell accounted for 33%, 60% and 76% of our revenues in 2007, 2008 and 2009, respectively. Related party collaborative research and development received from Shell accounted for the 75% and 61% of our revenues for the six months ended June 30, 2009 and 2010, respectively. Our product sales have increased in each of the last three fiscal years, from \$11.4 million in 2007, to \$16.9 million in 2008 and to \$18.6 million in 2009. Our product sales increased from \$8.8 million for the six months ended June 30, 2009 to \$14.8 million for the six months ended June 30, 2010.

Notwithstanding our revenue growth, we have continued to experience significant losses as we have invested heavily in research and development and administrative infrastructure in connection with the growth in our business. In light of the growth in market acceptance of our products and services to date, we currently intend to increase our investment in research and development, such that we do not expect to achieve profitability prior to at least 2012. As of June 30, 2010, we had an accumulated deficit of \$164.9 million. We incurred net losses of \$39.0 million, \$45.1 million and \$20.3 million in the years ended December 31, 2007, 2008 and 2009, respectively and a net loss of \$5.3 million for the six months ended June 30, 2010.

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

Revenues and Operating Expenses

Revenues

Our revenues are comprised of collaborative research and development revenues, product revenues and government grants. Collaborative research and development revenues include license, technology access and exclusivity fees, FTE payments, milestones, royalties, and optimization and screening fees. We report our collaborative research and development revenues under two categories consisting of revenues from (i) related parties and (ii) all other collaborators. Related party collaborative research and development revenues consist of revenues from Shell. Product revenues consist of sales of biocatalysts, intermediates, API's and Codex Biocatalyst Panels. Government grants consist of payments from government entities. The terms of these grants generally provide us with cost reimbursement for certain types of expenditures in return for research and development activities over a contractually defined period. Historically, we have received government grants from Germany and the United States. We expect to receive additional grants from the United States and other governments in the future. During the six months ended June 30, 2010, we received \$3.2 million from the Singapore Economic Development Board ("EDB") as part of a development grant.

Cost of Product Revenues

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

Research and Development Expenses

Research and development expenses consist of costs incurred for internal projects as well as partner funded collaborative research and development activities. These costs include license and royalty fees payable to Maxygen for consideration that we receive in connection with our biofuels collaboration, our direct and research-related overhead expenses, which include salaries and other personnel-related expenses (including stock-based compensation), facility costs, supplies, depreciation of facilities, and laboratory equipment, as well as research consultants and the cost of funding research at universities and other research institutions, and are expensed as incurred. License and royalty fees payable to Maxygen may fluctuate depending on the timing and type of consideration received from Shell in connection with our biofuels research and development collaboration. Costs to acquire technologies that are utilized in research and development and that have no alternative future use are expensed when incurred.

Selling, General and Administrative Expenses

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

Critical Accounting Policies and Estimates

The interim condensed consolidated financial statements have been prepared in conformity with generally accepted accounting principles in the United States and include our accounts and the accounts of our wholly-owned subsidiaries. The preparation of our condensed consolidated financial statements requires our management to make estimates, assumptions, and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the applicable periods. Management bases its estimates, assumptions and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances. Different assumptions and judgments would change the estimates used in the preparation of our condensed consolidated financial statements, which, in turn, could change the results from those reported. Our management evaluates its estimates, assumptions and judgments on an ongoing basis. There have been no significant changes since we filed our Prospectus with the SEC on April 22, 2010.

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Financial Operations Overview

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

	Three Months Ended June 30,		% of Total Revenues		Six Months Ended June 30,		% of Total Revenues	
	2010	2009	2010	2009	2010	2009	2010	2009
Revenues:								
Product	\$ 8,484	\$ 4,193	35%	22%	\$14,760	\$ 8,765	30%	23%
Related party collaborative R&D	14,653	14,544	60%	76%	30,695	28,963	61%	75%
Collaborative R&D	851	461	3%	2%	1,511	869	3%	2%
Government grants	492	—	2%	0%	3,214	12	6%	0%
Total Revenues	<u>24,480</u>	<u>19,198</u>	100%	100%	<u>50,180</u>	<u>38,609</u>	100%	100%
Costs and operating expenses:								
Cost of product revenues	6,075	3,412	25%	18%	11,293	7,268	23%	19%
Research and development	13,004	12,112	53%	63%	25,986	27,246	52%	71%
Selling, general and administrative	8,652	6,178	35%	32%	17,252	12,241	34%	32%
Total costs and operating expenses	<u>27,731</u>	<u>21,702</u>	113%	113%	<u>54,531</u>	<u>46,755</u>	109%	121%
Loss from operations	(3,251)	(2,504)	nm	nm	(4,351)	(8,146)	nm	nm
Interest income	46	45	0%	0%	74	76	0%	0%
Interest expense and other, net	(654)	(358)	nm	nm	(1,012)	(786)	nm	nm
Loss before provision for income taxes	(3,859)	(2,817)	nm	nm	(5,289)	(8,856)	nm	nm
Provision for income taxes	87	41	0%	0%	26	95	0%	0%
Net loss	<u>\$ (3,946)</u>	<u>\$ (2,858)</u>	nm	nm	<u>\$ (5,315)</u>	<u>\$ (8,951)</u>	nm	nm

NM = not meaningful

Three months ended June 30, 2010 compared to three months ended June 30, 2009.

Revenues

(In Thousands)	Three Months Ended June 30,		Change	
	2010	2009	\$	%
Product	\$ 8,484	\$ 4,193	\$4,291	102%
Related party collaborative R&D	14,653	14,544	109	1%
Collaborative R&D	851	461	390	85%
Government grants	492	—	492	nm
Total revenues	<u>\$ 24,480</u>	<u>\$ 19,198</u>	<u>\$5,282</u>	28%

Revenues increased during the three months ended June 30, 2010 compared to the three months ended June 30, 2009 primarily due to increased product sales, government grants, and collaborative research and development projects.

Product revenues increased during the three months ended June 30, 2010 compared to the three months ended June 30, 2009 primarily due to an increase in product sales to certain pharmaceutical customers during 2010 and the sale of new product offerings during 2010.

Related party collaborative research and development revenues increased during the three months ended June 30, 2010 compared to the three months ended June 30, 2009 due to contractual increases in the billing rates for FTEs engaged in our expanded research and development collaboration with Shell.

Collaborative research and development revenues increased during the three months ended June 30, 2010 compared to the three months ended June 30, 2009 primarily due to pharmaceutical research services performed under the December, 2009 research agreement with Teva Pharmaceutical Industries, Ltd (“2009 Teva Agreement”).

Government grant revenues increased due to the recognition of a grant from the EDB for \$0.5 million during the three months ended June 30, 2010. There was no grant revenue in the second quarter of 2009.

Our top five customers accounted for 88% and 90% of our total revenues for the three months ended June, 30, 2010 and 2009, respectively. Shell accounted for 60% and 76% of our total revenues for the three months ended June, 30, 2010 and 2009, respectively.

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Cost of Product Revenues

(In Thousands)	Three Months Ended June 30,		Change	
	2010	2009	\$	%
Cost of revenues:				
Product	\$ 6,075	\$ 3,412	\$2,663	78%
Gross profit:				
Product	\$ 2,409	\$ 781	\$1,628	208%
Product gross margin %	28%	19%		

The increase in cost of product revenues during the three months ended June 30, 2010 compared to the three months ended June 30, 2009 was primarily attributable to an increase in product sales. Gross margins in the three months ended June 30, 2010 increased to 28% from 19% in the three months ended June 30, 2009, due to several sales with higher product margins during 2010 and a decrease in inventory write downs of approximately \$0.5 million during the three months ended June 30, 2010 compared to the three months ended June 30, 2009.

Operating Expenses

(In Thousands)	Three Months Ended June 30,		Change	
	2010	2009	\$	%
Research and development	\$ 13,004	\$ 12,112	\$ 892	7%
Selling, general and administrative	8,652	6,178	2,474	40%
Total operating expenses	\$ 21,656	\$ 18,290	\$3,366	18%

Research and Development. Research and development expenses increased during the three months ended June 30, 2010 compared to the three months ended June 30, 2009 primarily due to increases in depreciation and amortization expense of \$0.5 million due to leasehold improvements and capital equipment acquisitions for lab space expansion. Research and development expenses included stock-based compensation expense of \$0.9 million and \$0.5 million during the three months ended June 30, 2010 and 2009, respectively. The stock-based compensation expense increase is attributable to additional options granted which carried accelerated vesting provisions effective upon the IPO.

Selling, General and Administrative. Selling, general and administrative expenses increased during the three months ended June 30, 2010 compared to the three months ended June 30, 2009 primarily due to a \$1.5 million increase in compensation expenses (including stock-based compensation). Additionally, we had increased spending on consultants, contractors and outside advisory services by \$0.5 million related to our public company readiness efforts. We received a benefit of \$0.3 million in 2009 for the sublease of our former Pasadena facility. Selling, general and administrative expenses included stock-based compensation expense of \$1.4 million and \$0.5 million during the three months ended June 30, 2010 and 2009, respectively. The stock-based compensation expense increase is attributable to additional options granted which carried accelerated vesting provisions effective upon the IPO.

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Other Income (Expense), net

(In Thousands)	Three Months Ended June 30,		Change	
	2010	2009	\$	%
Interest income	\$ 46	\$ 45	\$ 1	2%
Interest expense and other, net	(654)	(358)	(296)	83%
Total other income (expense), net	<u>\$ (608)</u>	<u>\$ (313)</u>	<u>\$ (295)</u>	94%

Interest Income. Interest income increased marginally due to higher average cash, cash equivalents and marketable securities balances on hand during the three months ended June 30, 2010 compared to the three months ended June 30, 2009 offset by interest income received at lower average interest rates.

Interest Expense and Other, Net. Interest expense and other, net, increased during the three months ended June 30, 2010 compared to the three months ended June 30, 2009 due to the recognition of \$0.3 million in other expenses related to an increase in the fair value of our redeemable convertible preferred stock warrant liability through the IPO at which time redeemable convertible preferred stock warrants were converted into warrants to purchase common stock, and \$0.4 million in unrealized foreign exchange losses related to our operations in Hungary. These increases were partially offset by a decrease in interest expense of \$0.3 million due to the reduced debt obligation on our loan with General Electric Capital Corporation and Oxford Finance Corporation, or the GE Capital Loan.

Provision for Income Taxes. The tax provision for the three months ended June 30, 2009 and 2010 primarily consisted of income taxes attributable to foreign operations.

Six months ended June 30, 2010 compared to six months ended June 30, 2009.

Revenues

(In Thousands)	Six Months Ended June 30,		Change	
	2010	2009	\$	%
Product	\$ 14,760	\$ 8,765	\$ 5,995	68%
Related party collaborative R&D	30,695	28,963	1,732	6%
Collaborative R&D	1,511	869	642	74%
Government grants	3,214	12	3,202	nm
Total revenues	<u>\$ 50,180</u>	<u>\$ 38,609</u>	<u>\$ 11,571</u>	30%

Revenues increased during the six months ended June 30, 2010 compared to the six months ended June 30, 2009 primarily due to increases from product sales, government grants, and collaborative research and development projects.

Product revenues increased during the six months ended June 30, 2010 compared to the six months ended June 30, 2009 primarily due to an increase in product sales to certain pharmaceutical customers during 2010 and the sale of new products during 2010.

Related party collaborative research and development revenues increased during the six months ended June 30, 2010 compared to the six months ended June 30, 2009 due to a milestone payment of \$1.4 million, and an increase in the number of FTEs engaged in our research and development collaboration with Shell and the contractual increases in the billing rates for FTEs. The expansion of this collaboration resulted in an increase in the number of contractual FTEs from an average of 125 for the six months ended June 30, 2009 to an average of 128 for the six months ended June 30, 2010.

Collaborative research and development revenues increased during the six months ended June 30, 2010 compared to the six months ended June 30, 2009 primarily due to pharmaceutical research services performed under the 2009 Teva Agreement.

Government grant revenues increased due to the recognition of a grant from the EDB for \$3.2 million in the six months ended June 30, 2010.

Our top five customers accounted for 85% and 90% of our total revenues for the six months ended June 30 2010 and 2009, respectively. Shell accounted for 61% and 75% of our total revenues for the six months ended June, 30, 2010 and 2009, respectively.

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Cost of Product Revenues

(In Thousands)	Six Months Ended June 30,		Change	
	2010	2009	\$	%
Cost of revenues:				
Product	\$ 11,293	\$ 7,268	\$4,025	55%
Gross profit:				
Product	\$ 3,467	\$ 1,497	\$1,970	132%
Product gross margin %	23%	17%		

The increase in cost of product revenues during the six months ended June 30, 2010 compared to the six months ended June 30, 2009 was primarily attributable to an increase in product sales. Gross margins in the six months ended June 30, 2010 increased to 23% from 17% in the six months ended June 30, 2009, due to a change in sales mix towards higher margin product sales during 2010 and a decrease in inventory write downs of approximately \$0.3 million during the six months ended June 30, 2010 compared to the six months ended June 30, 2009.

Operating Expenses

(In Thousands)	Six Months Ended June 30,		Change	
	2010	2009	\$	%
Research and development	\$ 25,986	\$ 27,246	\$ (1,260)	-5%
Selling, general and administrative	17,252	12,241	5,011	41%
Total operating expenses	\$ 43,238	\$ 39,487	\$ 3,751	9%

Research and Development. Research and development expenses decreased during the six months ended June 30, 2010 compared to the six months ended June 30, 2009 primarily due to a \$3.1 million reduction in royalty fees paid to Maxygen. The six months ended June 30, 2009 included \$3.2 million paid to Maxygen as a royalty related to Shell's increased equity investment in our company in 2009. This was partially offset by increases in depreciation and amortization expense of \$1.0 million due to leasehold improvements and capital equipment acquisitions for lab space expansion and a \$0.3 million increase in related lab supply costs. Research and development expenses included stock-based compensation expense of \$1.6 million and \$1.0 million for the six months ended June 30, 2010 and 2009, respectively. The stock-based compensation expense increase is attributable to additional options granted which carried accelerated vesting provisions effective upon the IPO.

Selling, General and Administrative. Selling, general and administrative expenses increased during the six months ended June 30, 2010 compared to the six months ended June 30, 2009 primarily due to a \$2.9 million increase in compensation expenses (including stock-based compensation). Additionally, we had increased spending on consultants, contractors and outside advisory services by \$1.8 million due to our public company readiness efforts and \$0.3 million related to increased insurance costs associated with being a public company. Selling, general and administrative expenses included stock-based compensation expense of \$2.4 million and \$0.9 million during the six months ended June 30, 2010 and 2009, respectively. The stock-based compensation expense increase is attributable to additional options granted which carried accelerated vesting provisions effective upon the IPO.

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Other Income (Expense), net

(In Thousands)	Six Months Ended June 30,		Change	
	2010	2009	\$	%
Interest income	\$ 74	\$ 76	\$ (2)	-3%
Interest expense and other, net	(1,012)	(786)	(226)	29%
Total other income (expense), net	<u>\$ (938)</u>	<u>\$ (710)</u>	<u>\$ (228)</u>	32%

Interest Income. Interest income decreased due to lower average interest rates received on our cash, cash equivalents and marketable securities balances during the six months ended June 30, 2010 compared to the six months ended June 30, 2009.

Interest Expense and Other, Net. Interest expense and other, net, increased during the six months ended June 30, 2010 compared to the six months ended June 30, 2009 due to the recognition of \$0.7 million in other expenses related to an increase in the fair value of our redeemable convertible preferred stock warrant liability and \$0.3 million in unrealized foreign exchange losses related to our operations in Hungary. These increases were offset by \$0.4 million of other income due to contractual arrangements with Arch and a decrease in interest expense of \$0.4 million due to the reduced debt obligation on the GE Capital Loan.

Provision for Income Taxes. The tax provision for the six months ended June 30, 2010 and 2009 primarily consisted of income taxes attributable to foreign operations.

Restructuring Charges

Restructuring Charges. In 2009, we reduced our cost structure by relocating our operations in Germany to facilities in the United States and in Singapore, rationalizing our product offerings, closing of our facility in Germany and terminating certain employees in Germany and the United States. We expensed approximately \$0.4 million in employee severance and benefits, \$0.4 million in lease termination costs and \$0.5 million related to inventory write downs, for a total of \$1.4 million. The inventory write downs of \$0.5 million were included in cost of product revenues and the remaining \$0.9 million was included in selling, general and administrative expenses in the condensed consolidated statements of operations. As of December 31, 2009, \$1.2 million related to these expenses had been paid or charged off and the remaining \$0.2 million was recorded in other accrued liabilities on the condensed consolidated balance sheet. As of June 30, 2010, all remaining expenses associated with this restructuring were paid.

Liquidity and Capital Resources

(In Thousands)	June 30, 2010	December 31, 2009
Cash and cash equivalents	\$51,413	\$ 31,785
Marketable securities	48,894	23,778
Accounts receivable, net	7,289	7,246
Accounts payable, accrued compensation and accrued liabilities	20,895	28,207
Working capital (1)	83,713	16,397

(1) Working capital consists of total current assets less total current liabilities.

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(In Thousands)	Six Months Ended June 30,	
	2010	2009
Net cash used in operating activities	\$ (18,713)	\$ (9,464)
Net cash used in investing activities	(28,613)	(21,617)
Net cash provided by financing activities	67,006	37,388
Effect of foreign exchange rates on cash and cash equivalents	(52)	(56)
Net increase in cash and cash equivalents	<u>\$ 19,628</u>	<u>\$ 6,251</u>

Cash Flows from Operating Activities

Operating activities used \$18.7 million of net cash during the six months ended June 30, 2010. We incurred a net loss of \$5.3 million in the six months ended June 30, 2010, which included non-cash share-based compensation expense of \$4.0 million and depreciation and amortization of \$3.7 million. Changes in operating asset and liability accounts used \$22.1 million of net cash during the six months ended June 30, 2010.

Operating activities used \$9.4 million of net cash during the six months ended June 30, 2009. We incurred a net loss of \$9.0 million in the six months ended June 30, 2009, which included non-cash share-based compensation expense of \$1.9 million and depreciation and amortization of \$2.8 million. Changes in operating asset and liability accounts used \$5.5 million of net cash during the six months ended June 30, 2009.

Cash Flows from Investing Activities

Cash flows from investing activities primarily relate to capital expenditures to support our growth.

Cash used in investing activities totaled \$28.6 million during the six months ended June 30, 2010 and consisted of capital expenditures of \$3.2 million primarily related to the purchase of manufacturing and lab equipment and an increase in marketable securities of \$25.5 million.

Cash used by investing activities totaled \$21.6 million during the six months ended June 30, 2009 and consisted of capital expenditures of \$4.5 million primarily related to the purchase of manufacturing and lab equipment and an increase in marketable securities of \$17.3 million.

Cash Flows from Financing Activities

Cash provided by financing activities totaled \$67.0 million during the six months ended June 30, 2010 including gross proceeds received related to our IPO of \$72.5 million offset by payments in preparation for our IPO of \$3.1 million and payments on financing obligations of \$2.7 million.

Cash provided by our financing activities totaled \$37.4 million during the six months ended June 30, 2009, primarily from the issuance and sale of 2.4 million shares of Series F redeemable convertible preferred stock for gross proceeds of \$40.0 million, partially offset by \$2.7 million in principal payments on our financing obligations.

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Contractual Obligations and Commitments

Our contractual obligations relate primarily to borrowings under long-term debt obligations and operating leases. Our commitments for operating leases primarily relate to our leased facilities in Redwood City, California. The following table summarizes the future commitments arising from our contractual obligations at June 30, 2010 (in thousands):

Years ending December 31,	Loans payable (1)	Operating leases (2)
2011	2,711	1,528
2012	—	1,197
2013	—	329
2014	—	—
Total	<u>\$ 2,711</u>	<u>\$ 3,054</u>

(1) Amounts include interest on financing obligations.

(2) Amounts net of noncancellable subleases.

Off-Balance Sheet Arrangements

As of June 30, 2010, we had no off-balance sheet arrangements as defined in Item 303(a)(4) of Regulation S-K as promulgated by the SEC.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market Risk Management

Our cash flow and earnings are subject to fluctuations due to changes in foreign currency exchange rates, interest rates and other factors. There were no significant changes in our market risk exposures during the three and six months ended June 30, 2010. This is discussed in further detail in the registration document filed with the SEC on April 22, 2010.

Equity Price Risk

As described in Note 4 to the condensed consolidated financial statements, we have an investment in common shares of CO₂ Solution Inc., a company based in Quebec City, Canada, or CO₂ Solution, whose shares are publicly traded in Canada on TSX Venture Exchange. This investment is exposed to fluctuations in both the market price of CO₂ Solution's common shares and changes in the exchange rates between the U.S. dollar and the Canadian dollar. The effect of a 10% adverse change in the market price of CO₂ Solution's common shares as of June 30, 2010 would have been an unrealized loss of approximately \$168,000, recognized as a component of accumulated other comprehensive income (loss) in stockholders' deficit. The effect of a 10% adverse change in the exchange rates between the U.S. dollar and the Canadian dollar as of June 30, 2010 would have been an unrealized loss of approximately \$168,000, recognized as a component of accumulated other comprehensive income (loss) in stockholders' deficit.

ITEM 4. CONTROLS AND PROCEDURES

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

Management, including our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as required by Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended. Based on this review, our Chief Executive Officer and Chief Financial Officer concluded that these disclosure controls and procedures were effective as of June 30, 2010 at the reasonable assurance level.

Changes in Internal Controls. No changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the quarterly period ended June 30, 2010 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

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

Item 1A. Risk Factors

You should carefully consider the risks described below together with the other information set forth in this Quarterly Report on Form 10-Q and in our final prospectus dated April 22, 2010 and filed with the Securities and Exchange Commission, which could materially affect our business, financial condition or future results. The risks described below are not the only risks facing our company. Risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and/or operating results.

Risks Relating to Our Business and Strategy

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

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

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

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

- our ability to achieve or maintain profitability;
- actions that could cause us to lose any of our rights under our license from Maxygen;
- our relationships with and dependence on collaborators in our principal markets;
- our dependence on Shell for the development and commercialization of biofuels;
- the feasibility of producing and commercializing biofuels derived from cellulose;
- our dependence on a limited number of customers;

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

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

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

We have incurred net losses since our inception, including losses of \$39.0 million, \$45.1 million and \$20.3 million in 2007, 2008 and 2009, respectively, and a net loss of \$5.3 million for the six months ended June 30, 2010. As of June 30, 2010, we had an accumulated deficit of \$164.9 million. We expect to incur losses and negative cash flow from operating activities for the foreseeable future. To date, we have derived a substantial portion of our revenues from research and development agreements with our collaborators and expect to derive a substantial portion of our revenues from these sources for the foreseeable future. If we are unable to extend our existing agreements or enter into new agreements upon the expiration or termination of our existing agreements, our revenues could be adversely affected. In addition, some of our collaboration agreements provide for milestone payments and future royalty payments, the payment of which are uncertain as they are dependent on our and our collaborators' abilities and willingness to successfully develop and commercialize products. We expect to spend significant amounts to fund the development of additional pharmaceutical and potential bioindustrial products, including biofuels. As a result, we expect that our expenses will exceed revenues for the foreseeable future and we do not expect to achieve profitability prior to at least 2012, if ever. If we fail to achieve profitability, or if the time required to achieve profitability is longer than we anticipate, we may not be able to continue our business. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis.

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

In connection with the audit of our consolidated financial statements for 2009, we and our independent registered public accounting firm determined that the previously identified significant deficiency which related to an ineffective contract compliance process continued to exist as of December 31, 2009. Although we began to implement policies and processes to address this deficiency following the audit of our consolidated financial statements for 2008, we had not completed this implementation as of December 31, 2009. We have not performed an evaluation of our internal control over financial reporting, such as required by Section 404 of the Sarbanes-Oxley Act, nor have we engaged our independent registered public accounting firm to perform an audit of our internal control over financial reporting as of any balance sheet date or for any period reported in our financial statements. Had we performed such an evaluation or had our independent registered public accounting firm performed an audit of our internal control over financial reporting, control deficiencies, including material weaknesses and significant deficiencies, in addition to those discussed above, may have been identified.

We have taken numerous steps to address the underlying causes of the control deficiencies described above, primarily through the development and implementation of policies, improved processes and documented procedures, the retention of third-party experts and contractors, and the hiring of additional accounting and finance personnel with technical accounting, inventory accounting and financial reporting experience. If we fail to remediate deficiencies in our control environment or are unable to implement and maintain effective internal control over financial reporting to meet the demands that will be placed upon us as a public company, including the requirements of the Sarbanes-Oxley Act, we may be unable to accurately report our financial results, or report them within the timeframes required by law or exchange regulations. In addition, while we currently used a third-party contractor to assist us in the preparation of our financial statements for the period ended December 31, 2009, our internal accounting and finance groups have handled our financial reporting obligations since becoming a reporting company in April 2010. We may encounter difficulties as we reduce our use of this contractor, which could impact our ability to timely and accurately prepare our financial statements. We cannot assure you that we will be able to remediate our existing significant deficiency in a timely manner, if at all, or that in the future additional material weaknesses or significant deficiencies will not exist or otherwise be discovered, a risk that is significantly increased in light of the complexity of our business and multinational operations. If our efforts to remediate the significant deficiency are not successful or if other deficiencies occur, our ability to accurately and timely report our financial position, results of operations or cash flows could be impaired, which could result in late filings of our annual and quarterly reports under the Securities Exchange Act of 1934, as amended, restatements of our consolidated financial statements, a decline in our stock price, suspension or delisting of our common stock by The NASDAQ Global Market, or other material adverse effects on our business, reputation, results of operations, financial condition or liquidity.

If we lose our intellectual property rights licensed from Maxygen, we may be unable to continue our business.

We have licensed core enabling intellectual property rights and technology from Maxygen, Inc., or Maxygen, under our March 2002 license agreement with Maxygen, which was subsequently amended in September 2002, October 2002 and August 2006. Under the terms of the license agreement, we are obligated, among other things, to pay Maxygen a significant percentage of certain types of consideration we receive in connection with our biofuels research and development collaboration with Shell. As a result of consideration received in connection with this collaboration, we were obligated to pay Maxygen \$7.9 million, \$0.9 million and \$5.5 million for 2007, 2008 and 2009, respectively.

We rely heavily on the technology licensed to us by Maxygen and third parties under the Maxygen license. This technology includes advanced biotechnology methods, bioinformatics and years of accumulated know-how to develop the biocatalysts that are central to our business. Certain technologies sublicensed to us from Maxygen are owned by third parties, and our use of these technologies may be restricted by Maxygen's agreements with those third parties. Maxygen has the right to terminate our rights under the license with respect to fuels, but not with respect to chemicals or pharmaceuticals, if we breach our royalty obligations to Maxygen and do not cure such breach within 60 days after we receive notice of the breach. In addition, as part of the license we received from Maxygen, Maxygen assigned or sublicensed to us several license agreements between Maxygen and third parties, including an agreement with one of our competitors, Novozymes A/S, or Novozymes. These third party agreements may restrict our use of the licensed technology. If we breach one of these third party agreements and fail to cure such breach within the time period specified in such third party agreement, Maxygen has the right to terminate our license with respect to the subject matter covered by the applicable third party agreement. Maxygen also has the right to terminate our license with respect to any family of related patent applications if we fail to pay our share of costs for obtaining and maintaining a patent licensed to us by Maxygen more than three times within any three-year period. In addition, Maxygen has the first right to control prosecution, maintenance and enforcement of certain licensed intellectual property rights. If Maxygen is acquired by a third party or transfers to a third party some or all of the intellectual property rights that we have licensed, the acquirer may choose not to enforce the intellectual property rights on which our business relies, or may seek to enforce those rights ineffectively and have them invalidated, and our ability to develop and expand our business may be adversely impacted. Any termination of our license agreement with Maxygen or any of the rights licensed to us by third parties through Maxygen, or any loss of our intellectual property rights as a result of ineffective enforcement of such rights, would have a material adverse impact on our financial condition, results of operations and growth prospects and could prevent us from continuing our business.

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The license agreement with Maxygen, the related sublicenses to third party technologies and the third party agreements assigned to us under the Maxygen agreement, and the interplay between those agreements, are highly complex. For example, the agreements rely on highly technical definitions and delineate permitted and restricted activities. As a result of this complexity, the agreements may be subject to differing interpretations by the counterparties that could lead to disputes or litigation, including for alleged breaches or claims that our products or activities are not covered by the scope of the licenses. If Maxygen or a third party were to make such a contention and we were unable to reach agreement on the meaning or scope of the licenses, we could be subject to litigation. Any such litigation may divert management time from focusing on business operations and could cause us to spend significant amounts of money. If such litigation were to be decided adversely to us, we could: lose our rights to utilize the subject intellectual property in our business; be forced to stop selling or using our products or processes that use the subject intellectual property; be required to obtain a license to use the subject intellectual property, which license may not be available on commercially reasonable terms, or at all; be forced to redesign those products or processes that use the subject intellectual property, which may result in significant cost or delay to us, or which could be technically infeasible; or be required to pay monetary damages.

Under our license with Maxygen, there are limitations on our ability to enforce Maxygen's patents to which we hold a license, which could have a material adverse effect on our business.

Under our agreement with Maxygen, Maxygen has the first right to enforce many of the patents that we have licensed, particularly those directly related to gene shuffling technology. If Maxygen declines to enforce these patent rights, we can enforce these rights after a delay of up to six months, or Maxygen can deny us the ability to enforce if Maxygen concludes that such enforcement may have a material adverse impact on Maxygen or one or more other licensees of Maxygen's technology. Some portions of the technology licensed to us by Maxygen are owned by third parties that retain the right to enforce the patents. If Maxygen or these third parties fail to enforce their patent rights, our business could be materially adversely affected. Maxygen also has the right to control the defense of patent infringement claims made by third parties alleging infringement related to gene shuffling technology. If Maxygen does not provide a timely and adequate defense to these claims, we could be forced to stop using the licensed technology, redesign our products and/or obtain a license from the party claiming infringement, which may not be available on commercially reasonable terms or at all. If Maxygen were to become acquired or controlled by a competitor of ours or a third party who is not willing to work with us on the same terms or commit the same resources as Maxygen, our business could be harmed.

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

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

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

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

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

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

We cannot control the financial resources Shell devotes to our programs under the collaborative research agreement. Currently, we receive bi-monthly payments from Shell that are based on the number of full-time employee equivalents, or FTEs, that work on our research collaboration with Shell. The number of FTEs that work on the program, and the payments from Shell for these FTEs, are specified in our collaborative research agreement. Until November 1, 2010, Shell has the right to reduce the number of funded FTEs under the collaborative research agreement by up to 12 FTEs following 60 days' advance written notice. After November 1, 2010, Shell has the right to further reduce the number of funded FTEs, with any one reduction not to exceed 98 funded FTEs, following advance written notice. The required notice period ranges from 30 to 270 days, so the earliest an FTE reduction could take place would be December 2, 2010. Following any such reduction, Shell is subject to a standstill period of between 90 and 360 days during which period Shell cannot provide notice of any further FTE reductions. The notice and standstill periods are dependent on the number of funded FTEs reduced, with the length of notice and standstill periods increasing commensurate with the number of FTEs reduced. Any such reduction would have a material adverse impact on our revenues and business plan for biofuels. Moreover, disputes may arise between us and Shell, which could delay the programs on which we are working or could prevent the commercialization of products developed under our research and development collaboration. If that were to occur, we may have to use funds, personnel, equipment, facilities and other resources that we have not budgeted to undertake certain activities on our own. Disagreements with Shell could also result in expensive arbitration or litigation, which may not be resolved in our favor. Performance issues, program delay or termination or unbudgeted use of our resources may have a material adverse effect on our business and financial condition. Even if we successfully develop commercially viable technologies, our ability to derive revenues from those technologies will be dependent upon Shell's willingness and ability to commercialize them. Shell has the right, but not the obligation, to commercialize these technologies. If Shell decides to commercialize our technology, we would need to rely on Shell, or other parties selected by Shell, to design, finance and construct commercial scale biofuel facilities, and operate commercial scale facilities at costs that are competitive with traditional petroleum-based fuels and other alternative fuel technologies that may be developed. Shell could merge with or be acquired by another company or experience financial or other setbacks unrelated to our research collaboration agreement that could adversely affect us.

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

We cannot guarantee that our relationship with Shell will continue. After November 1, 2010, Shell can terminate its collaborative research agreement with us for any or no reason by providing us with nine months' notice. Each party also has the right to terminate the license agreement and the collaborative research agreement in the case of an uncured breach by the other party, and to terminate the collaborative research agreement if that party believes the other party has assigned the collaborative research agreement to a direct competitor of the terminating party. If our collaboration with Shell were to fail, we would likely need to find another collaborator to provide the financial assistance and infrastructure necessary for us to develop and commercialize our products and execute our strategy with respect to biofuels. Failure to maintain this relationship would have a material adverse effect on our business, financial condition and prospects.

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

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

We do not yet know what impact, if any, the proposed joint venture recently announced by Shell and Cosan will have on our business.

In February 2010, Shell International Petroleum Company Limited, or Shell International, an affiliate of Shell, announced that it had signed a non-binding memorandum of understanding with Cosan S.A. with the intention of forming a joint venture in Brazil for the production of ethanol, sugar and power, and the supply, distribution and retail of transportation fuels. According to the announcement, Shell International would contribute to the joint venture, among other assets, Shell's equity interest in us. The consummation of the joint venture is subject to the negotiation and execution of final transaction documentation, the satisfactory completion of due diligence and the receipt of regulatory approvals, among other conditions. As a result, there can be no certainty when or if the joint venture will be consummated. If the joint venture is formed, we do not know whether we will receive any benefits from it. Moreover, the joint venture may impact Shell's willingness to continue to fund our collaborative research program and to commercialize any advanced biofuels that may be produced utilizing our technology, and on the timing of any such commercialization. Any of these events, or other decisions made by Shell with respect to the proposed joint venture, could have a material adverse effect on our business.

Production and commercialization of biofuels derived from cellulose may not be feasible.

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

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

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We are dependent on a limited number of customers.

Our current revenues are derived from a limited number of key customers. For the year ended December 31, 2008, our top five customers accounted for 79% of our total revenues, with Shell alone accounting for 60% of our total revenues. For the year ended December 31, 2009, our top five customers accounted for 90% of our total revenues, with Shell accounting for 76% of our total revenues. Our top five customers accounted for 85% of our total revenues for the six months ended June 30, 2010. Shell accounted for 61% of our total revenues for the six months ended June, 30, 2010. We expect a limited number of customers to continue to account for a significant portion of our revenues for the foreseeable future. This customer concentration increases the risk of quarterly fluctuations in our revenues and operating results. The loss or reduction of business from one or a combination of our significant customers could materially adversely affect our revenues, financial condition and results of operations.

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

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

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

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

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

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

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

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

Our business has grown rapidly and we expect this growth to continue. Overall, we have grown from approximately 40 employees at the end of 2002 to approximately 290 employees as of December 31, 2009 and approximately 300 employees as of June 30, 2010. Currently, we are working simultaneously on multiple projects targeting several markets. Furthermore, we are conducting our business across several countries, including activities in the United States, India, Japan, Singapore, Austria, France, Germany, Hungary, Italy and the Netherlands. These diversified, global operations place increased demands on our limited resources and require us to substantially expand the capabilities of our administrative and operational resources and to attract, train, manage and retain qualified management, technicians, scientists and other personnel. As our operations expand domestically and internationally, we will need to continue to manage multiple locations and additional relationships with various customers, collaborators, suppliers and other third parties. Our ability to manage our operations, growth, and various projects effectively will require us to make additional investments in our infrastructure to continue to improve our operational, financial and management controls and our reporting systems and procedures and to attract and retain sufficient numbers of talented employees, which we may be unable to do effectively. As a result, we may be unable to manage our expenses in the future, which may negatively impact our gross margins or operating margins in any particular quarter. In addition, we may not be able to successfully improve our management information and control systems, including our internal control over financial reporting, to a level necessary to manage our growth and to remediate the existing significant deficiency in our internal control over financial reporting that was identified in our last audit, and we may discover additional deficiencies in existing systems and controls that we may not be able to remediate in an efficient or timely manner.

Our business could be adversely affected if pharmaceutical customers do not incorporate our biocatalysts into their manufacturing processes.

Historically, pharmaceutical companies have been reluctant to use biocatalysts in the manufacture of their intermediates or APIs because naturally occurring biocatalysts were not economically viable for production at commercial scale. For example, naturally occurring biocatalysts are often not stable enough to be used in industrial settings. Additionally, the activity and productivity of these biocatalysts are often too limited to be effective in commercial scale manufacturing and often result in incomplete reactions and insufficient product yields. Although our biocatalysts have been developed to address shortcomings of naturally occurring biocatalysts, we may still encounter reluctance by pharmaceutical companies to adopt processes that use our biocatalysts. If customers decide not to adopt processes using our biocatalysts over other methods of producing the intermediates or APIs for their drugs, our revenues and prospects will be negatively impacted.

Moreover, we believe that the lower manufacturing costs enabled by our technology platform is one of the principal reasons pharmaceutical companies have purchased and will continue to purchase our biocatalysts and optimization services. If we are unable to maintain the cost advantages provided by our technology platform, customers may be less willing to purchase our products and services, which would also negatively impact our revenues. In addition, we may be unable to reach agreement on pricing or other terms with potential customers, which may adversely impact our ability to grow our business.

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

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

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

We have launched several new intermediates and APIs for generic drugs, including for generic versions of Singulair and Cymbalta, in markets in which they are not patent protected, and plan to launch these same products in various other markets once the patent protection for each product in those other markets expires. In addition, we plan to launch other new intermediates and APIs in the future. These efforts are subject to numerous risks, including the following:

- we may be unable to successfully develop the biocatalysts or manufacturing processes for our intermediates and APIs in a timely and cost-effective manner, if at all;
- we may face difficulties in transferring the developed technologies to Arch, or other contract manufacturers that we may use, for commercial scale production;
- Arch, or other contract manufacturers that we may use, may be unable to scale their manufacturing operations to meet the demand for these products and we may be unable to secure additional manufacturing capacity;
- generics manufacturers may not be willing to purchase these products from us on favorable terms, if at all;
- we may face product liability litigation, unexpected safety or efficacy concerns and product recalls or withdrawals;
- changes in laws or regulations relating to the pharmaceutical industry could cause us to incur increased costs of compliance or otherwise harm our business;
- negative publicity may affect doctor or patient confidence in the products;
- we may face pressure from existing or new competitive products; and
- we may face pricing pressures from existing or new competitors, some of which may benefit from government subsidies or other incentives in their local markets.

In addition, our innovator customers may view us as competitors and be less willing to do business with us. Moreover, we may be subject to claims alleging that our pharmaceutical products violate the patent or other intellectual property rights of third parties, particularly in connection with any generic products on which the patent covering the branded drug is expiring. These claims could give rise to litigation, which may be costly and time-consuming and could divert management's attention. If we are unsuccessful in our defense of any such claims, we may lose our right to develop or manufacture the products, be required to pay monetary damages, or be required to enter into license agreements and pay substantial royalties. If one or more of these risks were to materialize, our future business, results of operations and financial condition could be materially adversely affected, and we may be unable to grow our business.

Consolidation in the pharmaceutical industry could adversely impact our business.

There has been significant consolidation in the pharmaceutical industry, including the mergers of Pfizer Inc. and Wyeth, Merck and Schering-Plough Corporation, and F. Hoffman-La Roche Ltd. and Genentech Inc., and the acquisition of several generics businesses by Novartis AG, and this consolidation may continue in the future. When pharmaceutical companies merge, they often rationalize their product portfolios by eliminating competing product programs, resulting in fewer drug programs for certain target indications. As a result of this consolidation, there are fewer potential pharmaceutical customers and fewer drug development programs that could utilize our products and services to enhance drug manufacturing processes. For example, the consolidation of two pharmaceutical companies may lead the acquiring company to suspend or terminate development programs for certain product candidates for which we may have been providing or had the opportunity to provide biocatalysts, intermediates or APIs. Merged pharmaceutical companies will also often rationalize their list of suppliers, which could cause us to lose some or all of our business with the newly merged pharmaceutical businesses. Either a reduction in the number of drug development programs or a reduction of previously approved suppliers by newly merged pharmaceutical companies could lead to diminished demand for our products and services, which could adversely impact our business. In addition, newly merged pharmaceutical companies may use their larger market share to put price pressure on their existing suppliers. Any resulting reduction in our prices would have an adverse effect on our pharmaceutical revenues and margins and negatively affect our ability to grow our business.

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

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

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be at the expense of other potentially profitable opportunities. If we focus our efforts and resources on one or more of these areas and they do not lead to commercially viable products, our revenues, financial condition and results of operations could be adversely affected.

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

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

Fluctuations in the price of and demand for petroleum-based fuels may reduce demand for biofuels.

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

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

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

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

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

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

The market for biofuels is heavily influenced by foreign, federal, state and local government regulations and policies concerning the petroleum industry. For example, in 2007, the U.S. Congress passed an alternative fuels mandate that currently calls for approximately 13 billion gallons of liquid transportation fuels sold in 2010 to come from alternative sources, including biofuels, a mandate that grows to 36 billion gallons by 2022. Of this amount, a minimum of 21 billion gallons must be advanced biofuels. In the United States and in a number of other countries, these regulations and policies have been modified in the past and may be modified again in the future. Any reduction in mandated requirements for fuel alternatives and additives to gasoline may cause demand for biofuels to decline and deter investment in the research and development of biofuels. Market uncertainty regarding future policies may also affect our ability to develop new biofuels products or to license our technologies to third parties. Any inability to address these requirements and any regulatory or policy changes could have a material adverse effect on our biofuels business, financial condition and operating results. Our other potential bioindustrial products may be subject to additional regulations.

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

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

We may need additional licenses from Maxygen to pursue certain future business opportunities in the chemicals market.

Under our license agreement with Maxygen, we obtained exclusive rights to manufacture certain types of chemicals for specified purposes within particular fields. Should we desire to work on any chemicals that are outside the scope of these license rights, we may need to seek additional rights from Maxygen. Maxygen has no obligation to grant such rights to us and may choose not to license such rights to us on favorable terms, if at all. If we are unable to obtain rights to those additional areas, we may not be able to develop products or services or pursue collaborations in those areas, which could limit our ability to expand into the chemicals market.

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

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

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

We face risks associated with our international business.

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

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

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

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

We have made acquisitions in the past, and if appropriate opportunities become available, we expect to acquire additional businesses, assets, technologies, or products to enhance our business in the future. In connection with any future acquisitions, we could:

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

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

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

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

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

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

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

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

Our success depends in part on our ability to obtain patents and maintain adequate protection of our intellectual property for our technologies and products and potential products in the United States and other countries. We have adopted a strategy of seeking patent protection in the United States and in foreign countries with respect to certain of the technologies used in or relating to our products and processes. As such, as of December 31, 2009, we owned or had licensed rights to approximately 235 issued patents and approximately 280 pending patent applications in the United States and in various foreign jurisdictions. Of the licensed patents and patent applications, most are owned by Maxygen and exclusively licensed to us for use with respect to certain products for specified purposes within certain fields. However, some of these patents will expire as early as 2014. As of December 31, 2009, we owned approximately 35 issued patents and approximately 115 pending patent applications in the United States and in various foreign jurisdictions. These patents and patent applications are directed to our enabling technologies and to our methods and products which support our business in the pharmaceuticals and bioindustrials markets. We intend to continue to apply for patents relating to our technologies, methods and products as we deem appropriate.

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

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

Our commercial success also depends in part on not infringing patents and proprietary rights of third parties, and not breaching any licenses or other agreements that we have entered into with regard to our technologies, products and business. We cannot ensure that patents have not been issued to third parties that could block our ability to obtain patents or to operate as we would like. There may be patents in some countries that, if valid, may block our ability to make, use or sell our products in those countries, or import our products into those countries, if we are unsuccessful in circumventing or acquiring the rights to these patents. There also may be claims in patent applications filed in some countries that, if granted and valid, may also block our ability to commercialize products or processes in these countries if we are unable to circumvent or license them.

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

- stop selling, incorporating or using our products that use the subject intellectual property;
- obtain from the third party asserting its intellectual property rights a license to sell or use the relevant technology, which license may not be available on reasonable terms, or at all; or
- redesign those products or processes that use any allegedly infringing technology, or relocate the operations relating to the allegedly infringing technology to another jurisdiction, which may result in significant cost or delay to us, or which could be technically infeasible.

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

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

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

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

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

Third parties, including our contract manufacturers, customers and those involved in shipping our biocatalysts often have custody or control of our biocatalysts. If our biocatalysts, or the genes that code for our biocatalysts, were stolen, misappropriated or reverse engineered, they could be used by other parties who may be able to reproduce these biocatalysts for their own commercial gain. If this were to occur, it would be difficult for us to challenge this type of use, especially in countries with limited intellectual property protection.

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

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

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

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

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

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

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

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

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

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

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

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

Our future capital requirements may be substantial, particularly as we continue to develop our business and expand our biocatalyst discovery and development process. Although we believe that, based on our current level of operations and anticipated growth, our existing cash, cash equivalents and marketable securities will provide adequate funds for ongoing operations, planned capital expenditures and working capital requirements for at least the next 12 months, we may need additional capital if our current plans and assumptions change. Our need for additional capital will depend on many factors, including the financial success of our pharmaceutical business, whether we are successful in obtaining payments from customers, whether we can enter into additional collaborations, the progress and scope of our collaborative and independent research and development projects performed by us and our collaborators, the effect of any acquisitions of other businesses or technologies that we may make in the future, whether we decide to develop an internal manufacturing capability, and the filing, prosecution and enforcement of patent claims.

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

The terms of our loan and security agreement with General Electric Capital Corporation and Oxford Finance Corporation may restrict our ability to engage in certain transactions.

In September 2007, we entered into a loan and security agreement with General Electric Capital Corporation, or GE Capital, and Oxford Finance Corporation, or Oxford. Pursuant to the terms of the loan and security agreement, we cannot engage in certain transactions, including disposing of certain assets, transferring capital to foreign subsidiaries, incurring additional indebtedness, declaring dividends, acquiring or merging with another entity or leasing additional real property unless certain conditions are met or unless we receive prior approval of GE Capital and Oxford. If GE Capital and Oxford do not consent to any of these actions that we desire to take, we could be prohibited from engaging in transactions which could be beneficial to our business and our stockholders.

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

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

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

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

- public attitudes about the safety and environmental hazards of, and ethical concerns over, genetic research and genetically engineered products and processes, which could influence public acceptance of our technologies, products and processes;
- public attitudes regarding, and potential changes to laws governing ownership of genetic material, which could harm our intellectual property rights with respect to our genetic material and discourage collaborators from supporting, developing, or commercializing our products, processes and technologies; and

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- governmental reaction to negative publicity concerning genetically modified organisms, which could result in greater government regulation of genetic research and derivative products. The subject of genetically modified organisms has received negative publicity, which has aroused public debate. This adverse publicity could lead to greater regulation and trade restrictions on imports of genetically altered products.

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

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

Any biofuels developed using our technologies will need to meet a significant number of regulations and standards, including regulations imposed by the U.S. Department of Transportation, the U.S. Environmental Protection Agency, various state agencies and others. Any failure to comply, or delays in compliance, with the various existing and evolving industry regulations and standards could prevent or delay the commercialization of any biofuels developed using our technologies and subject us to fines and other penalties.

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

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

We may be sued for product liability.

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

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

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

Risks Related to Owning our Common Stock

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

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

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

Based on the number of shares outstanding as of June 30, 2010, our officers, directors and existing stockholders who hold at least 5% of our stock together beneficially own approximately 67% of our outstanding common stock. As of June 30, 2010, Maxygen, Shell and Biomedical Sciences Investment Fund Pte Ltd beneficially owned approximately 17.6%, 16.4% and 9.9% of our common stock, respectively. If these officers, directors, and principal stockholders or a group of our principal stockholders act together, they will be able to exert a significant degree of influence over our management and affairs and control matters requiring stockholder approval, including the election of directors and approval of mergers or other business combination transactions. The interests of this concentration of ownership may not always coincide with our interests or the interests of other stockholders. For instance, officers, directors, and principal stockholders, acting together, could cause us to enter into transactions or agreements that we would not otherwise consider. Similarly, this concentration of ownership may have the effect of delaying or preventing a change in control of our company otherwise favored by our other stockholders. This concentration of ownership could depress our stock price.

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

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

- actual or anticipated fluctuations in our financial condition and operating results;
- the position of our cash, cash equivalents and marketable securities;
- actual or anticipated changes in our growth rate relative to our competitors;
- actual or anticipated fluctuations in our competitors' operating results or changes in their growth rate;
- announcements of technological innovations by us, our collaborators or our competitors;
- announcements by us, our collaborators or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- any changes in Shell's biofuels strategy or timelines, or in our relationship with Shell, including any decision by Shell to terminate our collaboration or reduce the number of FTEs funded by Shell under our collaborative research agreement;
- any announcements or developments with respect to the Shell-Cosan joint venture;
- any changes in our relationship with Maxygen, or any events that impact, or are perceived to impact, the rights we have licensed from Maxygen;
- announcements or developments regarding pharmaceutical products manufactured using our biocatalysts, intermediates and APIs;
- the entry into, modification or termination of collaborative arrangements;
- additions or losses of customers;
- additions or departures of key management or scientific personnel;
- competition from existing products or new products that may emerge;
- issuance of new or updated research reports by securities or industry analysts;

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

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

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

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

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

We have never operated as a stand-alone public company. As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act, as well as related rules implemented by the Securities and Exchange Commission and The Nasdaq Stock Market, impose various requirements on public companies. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect these rules and regulations to make it more expensive for us to maintain director and officer liability insurance.

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

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

(a) Sales of Unregistered Securities

None.

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

On April 27, 2010, we closed our IPO, in which we sold 6,000,000 shares of common stock at a price to the public of \$13.00 per share. The aggregate offering price for shares sold in the offering was \$78.0 million. The offer and sale of all of the shares in the IPO were registered under the Securities Act pursuant to a registration statement on Form S-1 (File No. 333-164044), which was declared effective by the SEC on April 21, 2010. The offering commenced as of April 21, 2010 and did not terminate before all of the securities registered in the registration statement were sold. Credit Suisse Securities (USA) LLC, Piper Jaffray, RBC Capital Markets Corporation and Pacific Crest Securities LLC, acted as the underwriters. We raised approximately \$68.0 million in net proceeds after deducting underwriting discounts and commissions of \$5.5 million and other offering expenses of \$4.5 million. No payments were made by us to directors, officers or persons owning ten percent or more of our common stock or to their associates, or to our affiliates, other than payments in the ordinary course of business to officers for salaries and to non-employee directors as compensation for board or board committee service, or as a result of sales of shares of common stock by selling stockholders in the offering. There has been no material change in the planned use of proceeds from our IPO as described in our final prospectus filed with the SEC on April 22, 2010 pursuant to Rule 424(b). We invested the funds received in registered money market funds.

Item 6. Exhibits

- 3.1 Amended and Restated Certificate of Incorporation of Codexis, Inc. filed with the Secretary of the State of Delaware on April 27, 2010 and effective as of April 27, 2010 (incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, filed on May 28, 2010).
- 3.2 Amended and Restated Bylaws of Codexis, Inc. effective as of April 27, 2010 (incorporated by reference to Exhibit 3.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, filed on May 28, 2010).
- 4.1 Specimen Stock Certificate (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-1/A No. 333-164044, filed on March 31, 2010).
- 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.

EXHIBIT INDEX

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

- 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).
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- 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.

CERTIFICATION

I, Alan Shaw, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Codexis, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) 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) 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
 - (c) 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: August 5, 2010

/s/ Alan Shaw

Alan Shaw

President and Chief Executive Officer

CERTIFICATION

I, Robert Lawson, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Codexis, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) 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) 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
 - (c) 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: August 5, 2010

/s/ Robert Lawson

Robert Lawson

Senior Vice President and Chief Financial Officer

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

In connection with the Quarterly Report of Codexis, Inc. (the "Company") on Form 10-Q for the fiscal quarter ended June 30, 2010, as filed with the Securities and Exchange Commission (the "Report"), Alan Shaw, President and Chief Executive Officer of the Company and Robert Lawson, Senior Vice President and Chief Financial Officer of the Company, respectively, do each hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: August 5, 2010

/s/ Alan Shaw

Alan Shaw
President and Chief Executive Officer

/s/ Robert Lawson

Robert Lawson
Senior Vice President and Chief Financial Officer