



### **RBC Capital Markets, LLC**

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FY Dec	2010A	2011E	2012E	
Revenue (MM)	107.1	121.4	168.7	
Prev.	101.9			
EBITDA (MM)	1.2	0.1	19.4	
Prev.	(0.9)			
EPS (Op) - FD	(0.25)	(0.27)	0.14	
Prev.	(0.29)			
P/E	NM	NM	65.4x	
Revenue (MM)	Q1	Q2	Q3	Q4
2010	25.7A	24.5A	27.1A	29.8A
Prev.				24.6E
2011	28.3E	28.5E	29.9E	34.7E
2012	38.8E	40.7E	43.3E	45.9E
EBITDA (MM)				
2010	0.7A	(1.3)A	(0.5)A	2.2A
Prev.				0.2E
2011	0.1E		(1.1)E	2.2E
2012	3.9E	4.1E	5.3E	6.1E
EPS (Op) - FD				
2010	(0.05)A	(0.15)A	A(80.0)	(0.01)A
Prev.				(0.05)E
2011		(0.10)E		٠, ,
2012	0.01E	0.01E	0.05E	0.07E

All values in USD unless otherwise noted.

# **COMPANY UPDATE | COMMENT**

FEBRUARY 4, 2011

Codexis, Inc. (NASDAQ: CDXS)

Q410 Results: Commercialization Path on Track; Firing on All Cylinders

# Outperform Speculative Risk

Price:	9.15	Price Target:	14.00
		Implied All-In Return:	53%
Shares O/S (MM):	34.2	Market Cap (MM):	313
Dividend:	0.00	Yield:	0.0%
Float (MM):	18.7	Enterprise Val. (MM):	228
		Avg. Daily Volume (MM):	0.16

# Reported Q410 Results on Thurs, Feb. 3rd Investment Opinion

**Net:** We remain buyers as company's strong execution on existing pipeline and opportunities to leverage proprietary enzyme technology into large end-markets seem to be growing. Revenue of \$29.8M was above our estimate of \$24.6M on higher product revenue, while expenses remain well controlled. We see management forecast of "\$120M or greater" for FY11 as conservative given visibility of pharma pipeline and track record of execution on biofuels milestones. Shell-Cosan joint venture receipt of EU approval in the quarter is a major milestone towards commercialization of biofuels, in our view, paving a path towards use of Codexis enzymes in large-scale production of ethanol. Management continues to see opportunities in adjacent large end-markets, with the \$4B market for detergent alcohols a potential opportunity to leverage IP from the Shell relationship.

- Continued Execution and Positive 2011 Outlook: Rev / EPS of \$29.8M / (\$0.01) exceeded our estimates of \$24.6M / (\$0.05) on higher product revenue. FY11 guidance for revenues of "\$120M or greater" assumes achievement of 80% of standard and 50% of stretch goals with Shell.
- Shell-Cosan J/V Clears Major Hurdle: The joint venture received regulatory approval from the EU during the quarter, marking a critical step towards commercialization. Remaining clearing procedures include Brazilian regulatory approval and shareholder approval, which the j/v expects to occur in 1H11. Upon closure, the j/v will have a 16.5% ownership interest in Codexis, providing incentive to utilize the company's technology platform. Approval would result in an entity with combined 9% market share in crushed sugar cane production and 18% market share of Brazilian fuels distribution market.
- Chemicals Industry Another Potential Addressable Market: Management sees attractive opportunities in the Chemicals industry, with specific reference to the \$4B end-market for detergent alcohols. Technology developed through the Shell R&D relationship may be leveraged into this market, as Shell exclusivity does not extend beyond liquid transportation fuels. Codexis believes its enzymes can be used to create an end-product with identical specifications to existing detergent alcohols, allowing manufacturers to implement the product without any needed changes to existing equipment.

## **Valuation**

Our valuation methodology employs EV/EBITDA, EV/Sales, and P/E multiples for both the pharma and the bioindustrials business segments. We derive our valuation multiples from public comparables and apply the multiples to our 2013 estimates, which we believe are the most representative of the company's intrinsic value given commercialization of the biofuels segment. Valuation for the pharma segment employs an EV/EBITDA multiple of 11.5x, an EV/Sales multiple of 3.25x, and a P/E multiple of 19x on our 2013 estimates. Valuation for the bioindustrials segment employs an EV/EBITDA multiple of 13x, EV/Sales multiple of 1.25x, and a P/E multiple of 26x on our 2013 estimates. We then discount back to present value at a 10% discount rate for pharma and an 18% discount rate for bioindustrials to arrive at our price target of \$14.

## **Price Target Impediment**

- Future product revenues and royalties from biofuels are contingent upon Shell's commercialization of biocatalysts developed by Codexis. Failure to reach commercialization or reduction in R&D funding will limit revenues that can be achieved from the Bioindustrials business segment.
- Lower prices of traditional sources of energy such as oil could potentially reduce the demand for alternative sources of energy, which would lower the outlook for biofuel production.
- Low levels of adoption of biocatalysts in pharma manufacturing could result in significantly lower growth rates than we are forecasting for pharma product and service revenue.
- Inability of biofuel production to meet regulatory requirements would result in a lower than expected growth rate for the biofuels industry.

# **Company Description**

Codexis commenced operations in March 2002 after being incorporated in January 2002 as a wholly owned subsidiary of Maxygen, Inc. The company operates a proprietary technology platform that enables the creation of optimized biocatalysts that make existing industrial manufacturing processes faster, cleaner, and more efficient than current methods. Codexis has commercialized its biocatalysts in the pharmaceutical industry and is developing biocatalysts for use in producing advanced biofuels under a multi-year research and development collaboration with Shell.



RBC Capital Markets® 2

121

Codexis, Inc CDXS Stuart Bush (512) 708-6384 stuart.bush@rbccm.com Fiscal Year 2011 Fiscal Year 2012 Annual Results Q111E Q211E Q311E Q411E Q112E Q212E Q312E Q412E FY10A FY11E FY12E FY13E Mar-11 Jun-11 Sep-11 Dec-11 Mar-12 Jun-12 Sep-12 Dec-12 Revenues Pharma 10,569.9 11,530.8 12,491.7 13,452.6 17,905.5 19,533.3 21,161.0 22,788.8 36,884.0 48,045.1 81,388.6 102,709.2 Bioindustrials 16,930.9 16,940.9 17,402.9 21,028.9 19,754.5 20,432.7 21,619.5 22,682.8 66,148.0 72,303.6 84,489.6 110,343.4 Grants 207.8 1,132.9 4,072.0 2,832.2 831.0 708.1 566.4 424.8 1,038.8 Total Revenues 28,331.9 28,471.7 29,894.6 34,689.3 38,792.9 40,674.0 43,347.0 45,896.4 107,104.0 121,387.5 168,710.3 213,052.6 Sequential Growth 0.5% 5.0% 16.0% 4.8% 6.6% 5.9% 11.8% YoY Growth 10.2% 16.3% 10.3% 36.9% 42.9% 45.0% 32.3% 16.4% Cost of Revenues 6.381.3 8,121.6 10,939,4 13,551.6 27,982.0 29.005.7 48,990.1 66,716,9 6,961,4 7,541.5 11.854.4 12,644,7 **Gross Profit** 21,950.6 21,510.3 22,353.1 26,567.7 27,853.5 28,819.7 30,702.3 32,344.8 79,122.0 92,381.7 119,720.2 146,335.6 Total Gross Margin 77.5% 75.5% 74.8% 76.6% 71.8% 70.9% 70.8% 70.5% 73.9% 76.1% 71.0% 68.7% Other Operating Expenses 76,597.3 14,653.0 15,283.1 15,970.8 16,673.5 18,709.4 19.441.8 62.580.4 R&D 17,326.3 18,004.6 52,405.0 73,482.0 SG&A 9,353.6 9,641.7 9,950.2 10,288.5 10,359.6 10,431.1 10,503.1 10,575.6 33,841.0 39,234.0 41,869.3 48,727.8 Total Operating Expenses 24,006.6 24,924.8 25,921.0 26,962.1 27,685.8 28,435.6 29,212.5 30,017.4 86,246.0 101,814.5 115,351.3 125,325.1 Sequential Growth 9.1% 3.8% 4.0% 4.0% 2.7% 2.7% 2.7% 2.8% **EBITDA** 129.4 (1,134.0) (1,097.4) 2,171.1 3,923.7 4,141.9 5,251.4 6,090.9 1,185.0 69.2 19,407.9 38,044.9 EBITDA Margin 0.5% (4.0%) (3.7%)6.3% 10.1% 10.2% 12.1% 13.3% 1.1% 0.1% 11.5% 17.9% (119.5%) 27965.8% YoY Growth (82.5%) 15.9% (5.4%) 2931.5% 180.5% (94.2%) 96.0% Operating Income (EBIT) (2,056.0) (3,414.4) (3,567.9) (394.4) 167.6 384.0 1,489.8 2,327.4 (7,124.0)(9,432.7) 4,368.9 21,010.5 Operating Margin (7.3%)(12.0%) (11.9%) (1.1%) 0.4% 0.9% 3.4% 5.1% (7.8%)2.6% 9.9% Sequential Growth (556.9%) NA 129.1% 287.9% (66.1%) (4.5%)88.9% 56.2% Other Income (Expense) 406.7 382 1 354.2 330.9 492.7 1,473.9 2,360.5 Interest Income 333.6 366.2 551.6 166.0 1,744.1 Interest Expense (105.6) (91.0) (73.9)(63.6) (50.6) (50.6) (50.6) (50.6)(1,200.0) (334.1) (202.3) (202.3) Interest (Net) 301.1 291.1 280.3 267.3 283.1 315.6 442.2 501.0 (1,034.0) 1,139.8 1,541.9 2,158.3 Other (Net) 27.6 (88.9) (141.3) 60.0 (142.6)Total Other Income (Expense) 361.1 318.7 191.4 126.0 283.1 315.6 442.2 501.0 (1,034.0) 997.2 1,541.9 2,158.3 2,828.4 Pretax Income (EBT) (1.694.9)(3,095.7)(3,376.5)(268.4)450.7 699.7 1,932.0 (8.158.0) (8,435.5)5,910.8 23,168.8 Income Taxes (Benefit) 192.7 192.7 192.7 192.7 275.0 275.0 275.0 275.0 384.0 770.8 1,100.0 1,100.0 Net Income (1,887.6)(3,288.4)(3,569.2)(461.1)175.7 424.7 1,657.0 2,553.4 (8,542.0)(9,206.3) 4,810.8 22,068.8 EPS from Cont, Ops 0.01 0.01 0.05 0.07 0.14 0.64 Extraordinary Items Foreign Exchange Gain (Loss) Warrants FV Adjustment (884.1) ÷ ÷ \_\_ ÷ \_ ÷ \_\_ ÷ ÷ \_\_ Total Extraordinary Items (884.1) (1,887.6) 4,810.8 Net Income to Common (GAAP) (3,569.2) (461.1) 175.7 1,657.0 2,553.4 (7.657.9) (9.206.3)22.068.8 (3,288.4)424.7 EPS from Extraordinary Items 0.03 EPS to Common (GAAP) (0.05)(0.10)(0.10)(0.01) 0.01 0.01 0.05 0.07 (0.22)(0.27)0.14 0.64 Average Shares Outstanding - Diluted 34,452 34,452 34,452 34,452 34,452 34,452 34,452 34,452 34,452 34,452 34,452 34,452 Company Reports, RBC Capital Markets estimates



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6