

## Intrexon

### 2Q14: Model Update

We are updating our XON financial model following yesterday's release of 2Q14 results and filing of the 10Q, coupled with the company's first earnings call. We continue to model modestly increasing ECC signings throughout the year across healthcare (particularly, in oncology and CNS) and are encouraged by progress around the recent energy collaboration, including the announcement regarding the successful production of farnesene via methane bioconversion in the lab. We are also updating our estimates to include the recent acquisition of Trans Ova Genetics, a provider of bovine reproductive technologies with ~\$63M in revenue and \$4.8M in net income in 2013. We note that XON is expected to provide further financial details around the deal by late October.

In conjunction with the quarter, we are also updating our DCF and establish a December 2015 PT of \$28 (unchanged vs. our previous December 2014 PT). For more details on our XON investment thesis, please see our initiation [note](#).

## Overweight

**XON, XON US**

Price: \$21.64

**Price Target: \$28.00**

### Life Science Tools & Diagnostics

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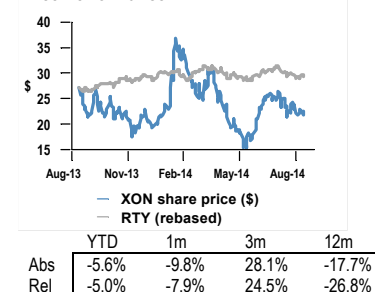
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### Price Performance



### Intrexon Corporation (XON;XON US)

FYE Dec	2014E (Prev)	2014E (Curr)	2015E (Prev)	2015E (Curr)	2016E
Revenue (\$ mn)					
Q1 (Mar)	8A	8A	10	25	40
Q2 (Jun)	8A	12A	12	42	61
Q3 (Sep)	8	15	13	36	54
Q4 (Dec)	10	24	19	35	53
FY	34	58	54	138	209

Source: Company data, Bloomberg, J.P. Morgan estimates.

### Company Data

Price (\$)	21.64
Date Of Price	15-Aug-14
52-week Range (\$)	38.50-13.13
Market Cap (\$ mn)	2,140.04
Fiscal Year End	Dec
Shares O/S (mn)	99
Price Target (\$)	28.00
Price Target End Date	31-Dec-15

### See page 6 for analyst certification and important disclosures.

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## Investment Thesis, Valuation and Risks

### **Intrexon** (*Overweight; Price Target: \$28.00*)

#### **Investment Thesis**

Intrexon is a first mover and leader in the rapidly emerging field of synthetic biology, leveraging its expertise to target high-potential verticals within a diverse set of end-markets, including healthcare, food, energy and environmental science. The company has a unique and highly scalable ECC (exclusive channel collaboration) business model that should generate significant operating leverage over time. Moreover, we believe XON is led by a best-in-class management team with a proven track record of building and commercializing R&D-driven companies, including New River Pharmaceuticals (sold to Shire for \$2.6B) and Clinical Data (sold to Forest Labs for \$1.2B).

#### **Valuation**

Our December 2015 price target of \$28 and is derived from a 10-year discounted cash flow analysis, with a CAPM-derived WACC discount rate of 13.9% and terminal growth of 1.5%.

#### **Risks to Rating and Price Target**

Downside risks to our rating, estimates, and price target include: (1) limited near-term revenue visibility due to partnership driven business model; (2) equity stakes in lieu of cash payments from ECC partners provide future optionality but also the risk of impairment; (3) regulatory risk associated with current and future collaborations given exposure to healthcare, food and environmental science end markets; (4) acquisition integration risk related to the Trans Ova Genetics deal.

Figure 1 XON Model

<b>Income Statement</b> (in millions, except per share amounts)			1QA	2QA	3QA	4QA		1QA	2QA	3QE	4QE			<b>CAGR</b>
	<b>2011A</b>	<b>2012A</b>	Mar	Jun	Sep	Dec	<b>2013A</b>	Mar	Jun	Sep	Dec	<b>2014E</b>	<b>2015E</b>	13-18
<b>Total Revenues (GAAP)</b>	<b>8</b>	<b>14</b>	<b>4</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>24</b>	<b>8</b>	<b>12</b>	<b>15</b>	<b>24</b>	<b>58</b>	<b>138</b>	<b>72%</b>
R&D	70	64	11	14	11	13	48	12	14	21	28	76	131	
G&A	18	25	6	7	7	12	34	14	15	15	19	63	89	
TransOva (OpEx)	0	0	0	0	0	0	0	0	0	18	12	30	75	
Other operating expenses (incl. AquaBounty)	2	0	0	0	0	0	0	0	0	1	1	2	4	
<b>Operating Profit (Loss) (EBIT) GAAP</b>	<b>(82)</b>	<b>(75)</b>	<b>(14)</b>	<b>(14)</b>	<b>(12)</b>	<b>(18)</b>	<b>(58)</b>	<b>(18)</b>	<b>(18)</b>	<b>(40)</b>	<b>(37)</b>	<b>(113)</b>	<b>(162)</b>	<b>N/A</b>
<b>Reported EBITDA</b>	<b>(82)</b>	<b>(74)</b>	<b>(34)</b>	<b>(4)</b>	<b>17</b>	<b>(10)</b>	<b>(32)</b>	<b>6</b>	<b>(50)</b>	<b>(37)</b>	<b>(33)</b>	<b>(115)</b>	<b>(150)</b>	
<b>Adjusted EBITDA</b>		<b>(60)</b>	<b>(7)</b>	<b>(5)</b>	<b>(5)</b>	<b>(7)</b>	<b>(24)</b>	<b>18</b>	<b>(10)</b>	<b>(31)</b>	<b>(25)</b>	<b>(48)</b>	<b>(113)</b>	
<b>Pretax income (loss) GAAP</b>	<b>(85)</b>	<b>(82)</b>	<b>(36)</b>	<b>(7)</b>	<b>15</b>	<b>(13)</b>	<b>(41)</b>	<b>4</b>	<b>(53)</b>	<b>(39)</b>	<b>(36)</b>	<b>(125)</b>	<b>(159)</b>	<b>N/A</b>
Income tax	0	0	0	0	0	0	0	0	(0)	0	0	0	(60)	
Net Income (loss) GAAP	(85)	(82)	(36)	(7)	15	(13)	(41)	3	(53)	(39)	(36)	(125)	(99)	
Net income (loss) attributable to minority interest	0	0	(0)	(1)	(0)	(1)	(2)	(1)	(1)	0	0	(2)	(0)	
Accr. of dividends on redeemable conv.	(14)	(22)	(6)	(8)	(7)	0	(18)	0	0	0	0	0	0	
<b>Net income (loss) attributable to common shareholders</b>	<b>(99)</b>	<b>(104)</b>	<b>(43)</b>	<b>(14)</b>	<b>8</b>	<b>(12)</b>	<b>(57)</b>	<b>4</b>	<b>(52)</b>	<b>(39)</b>	<b>(36)</b>	<b>(123)</b>	<b>(98)</b>	
Diluted Shares Outstanding	9	6	6	6	56	97	41	99	99	100	100	99	101	
<b>GAAP Diluted EPS</b>	<b>(\$10.81)</b>	<b>(\$18.79)</b>	<b>(\$7.54)</b>	<b>(\$2.45)</b>	<b>\$0.15</b>	<b>(\$0.13)</b>	<b>(\$1.40)</b>	<b>\$0.04</b>	<b>(\$0.53)</b>	<b>(\$0.39)</b>	<b>(\$0.36)</b>	<b>(\$1.24)</b>	<b>(\$0.97)</b>	<b>N/A</b>
R&D Margin (as % of total revenue)	861%	461%	294%	202%	175%	176%	202%	154%	123%	145%	120%	132%	95%	
SG&A Margin	224%	179%	167%	111%	121%	172%	141%	174%	131%	100%	80%	108%	65%	
Operating (EBIT) Margin GAAP	-1009%	-540%	-361%	-213%	-196%	-248%	-243%	-228%	-153%	-272%	-155%	-194%	-118%	
Effective Tax Rate	0%	0%	0%	0%	0%	0%	0%	9%	1%	0%	0%	0%	38%	
Net Margin GAAP	-1213%	-746%	-1100%	-208%	135%	-171%	-241%	52%	-442%	-266%	-152%	-212%	-71%	
Revenue growth y/y		70%	140%	145%	110%	7%	71%	102%	76%	140%	229%	144%	138%	
EPS growth y/y														

Source: J.P. Morgan estimates, Company data.

Figure 2: XON DCF Analysis

Target Period: **Dec 2015**

Projected FY Ending Dec	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Adj. EBIT (\$M)	(58)	(125)	48	129	247	358	465	556	658	736	813	889
Tax-affected adj. EBIT (\$M)	(58)	(77)	30	80	153	222	289	345	408	456	504	551
<b>Free Cash Flow</b>	<b>(51)</b>	<b>(73)</b>	<b>31</b>	<b>84</b>	<b>154</b>	<b>222</b>	<b>288</b>	<b>347</b>	<b>406</b>	<b>457</b>	<b>504</b>	<b>551</b>
growth y/y				169%	83%	44%	30%	21%	17%	13%	10%	9%

Discount Rate	Discounted Cash Flows (\$M)	PV of Terminal Value (\$M) at a Perpetual Growth Rate of					Enterprise Value (\$M)					Equivalent Terminal EBITDA Multiple (forward 12 mos)				
	2015-2024	0.5%	1.0%	1.5%	2.0%	2.5%	0.5%	1.0%	1.5%	2.0%	2.5%	0.5%	1.0%	1.5%	2.0%	2.5%
12.9%	1,414	1,419	1,486	1,559	1,639	1,727	2,834	2,901	2,974	3,054	3,141	3.2x	3.2x	3.3x	3.4x	0.0x
13.4%	1,378	1,308	1,368	1,432	1,503	1,580	2,686	2,745	2,810	2,880	2,957	3.0x	3.1x	3.1x	3.2x	0.0x
<b>13.9%</b>	1,342	1,207	1,261	<b>1,318</b>	1,380	1,448	2,550	2,603	<b>2,660</b>	2,723	2,791	2.8x	2.9x	<b>3.0x</b>	3.0x	0.0x
14.4%	1,308	1,116	1,164	1,215	1,271	1,331	2,425	2,472	2,523	2,579	2,639	2.7x	2.8x	2.8x	2.9x	0.0x
14.9%	1,275	1,034	1,076	1,122	1,172	1,225	2,309	2,352	2,398	2,447	2,500	2.6x	2.6x	2.7x	2.7x	0.0x

Net Debt (Cash) (\$M)	Equity Value (\$M)					Equity Value per Share					Terminal Value as a % of Enterprise Value				
	0.5%	1.0%	1.5%	2.0%	2.5%	0.5%	1.0%	1.5%	2.0%	2.5%	0.5%	1.0%	1.5%	2.0%	2.5%
(160)	2,994	3,061	3,134	3,214	3,301	\$29.63	\$30.30	\$31.02	\$31.81	\$32.68	50%	51%	52%	54%	55%
(160)	2,846	2,905	2,970	3,041	3,117	\$28.17	\$28.76	\$29.40	\$30.10	\$30.86	49%	50%	51%	52%	53%
<b>(160)</b>	2,710	2,763	<b>2,821</b>	2,883	2,951	<b>\$26.82</b>	<b>\$27.35</b>	<b>\$27.92</b>	<b>\$28.54</b>	<b>\$29.21</b>	47%	48%	<b>50%</b>	51%	52%
(160)	2,585	2,632	2,684	2,739	2,799	\$25.59	\$26.06	\$26.56	\$27.11	\$27.71	46%	47%	48%	49%	50%
(160)	2,469	2,512	2,558	2,607	2,660	\$24.44	\$24.86	\$25.32	\$25.81	\$26.33	45%	46%	47%	48%	49%

Source: J.P. Morgan estimates, Company data.

## Intrexon: Summary of Financials

Income Statement - Annual	FY13A	FY14E	FY15E	FY16E	Income Statement - Quarterly	1Q14A	2Q14A	3Q14E	4Q14E
Revenues	24	58	138	209	Revenues	8A	12A	15	24
Cost of products sold	-	-	-	-	Cost of products sold	-	-	-	-
Gross profit	-	-	-	-	Gross profit	-	-	-	-
SG&A	(34)	(63)	(89)	(50)	SG&A	(14)A	(15)A	(15)	(19)
R&D	(41)	(66)	(119)	(66)	R&D	(10)A	(13)A	(18)	(25)
Operating income	(40)	(83)	(162)	(19)	Operating income	4A	(52)A	(40)	(37)
EBITDA	(32)	(73)	(150)	(7)	EBITDA	6A	(50)A	(37)	(33)
Net interest (income) / expense	-	-	-	-	Net interest (income) / expense	-	-	-	-
Other income / (expense)	18	(10)	3	3	Other income / (expense)	22A	(34)A	1	1
Income taxes	0	(0)	60	6	Income taxes	(0)A	0A	0	0
Net income	(57)	(123)	(98)	(10)	Net income	4A	(86)A	(39)	(36)
Diluted shares outstanding	41	99	101	102	Diluted shares outstanding	99A	99A	100	100
Diluted EPS	(1.40)	(1.24)	(0.97)	(0.10)	Diluted EPS	0.04A	(0.87)A	(0.39)	(0.36)
Balance Sheet and Cash Flow Data	FY13A	FY14E	FY15E	FY16E	Ratio Analysis	FY13A	FY14E	FY15E	FY16E
Cash and cash equivalents	50	43	61	55	Sales growth	70.6%	143.6%	137.7%	51.7%
Accounts receivable	7	10	15	23	EBIT growth	(51.7%)	109.6%	95.6%	(88.1%)
Inventories	-	-	-	-	EPS growth	(92.6%)	(11.6%)	(21.4%)	(90.0%)
Other current assets	3	3	3	3	Gross margin	-	-	-	-
Current assets	188	157	180	182	EBIT margin	(166.3%)	(143.1%)	(117.7%)	(9.2%)
PP&E	17	19	23	26	EBITDA margin	(136.2%)	(126.3%)	(109.0%)	(3.5%)
Total assets	469	463	481	479	Tax rate	0.0%	(0.0%)	(38.0%)	(38.0%)
Total debt	2	2	2	2	Net margin	(241.1%)	(212.3%)	(71.4%)	(4.8%)
Total liabilities	88	208	269	280	Net Debt / EBITDA	147.9%	56.3%	39.4%	735.2%
Shareholders' equity	381	255	213	199	Net Debt / Capital (book)	(14.4%)	(19.3%)	(38.4%)	(36.5%)
Net income (including charges)	(41)	(125)	(99)	(10)	Return on assets (ROA)	(18.4%)	(26.4%)	(20.8%)	(2.1%)
D&A	7	10	12	12	Return on equity (ROE)	(24.6%)	(38.6%)	(42.0%)	(4.8%)
Change in working capital	(8)	21	(2)	(4)	Enterprise value / sales	91.0	37.6	15.7	10.4
Other	(12)	29	5	5	Enterprise value / EBITDA	NM	NM	NM	NM
Cash flow from operations	(54)	(65)	(84)	3	Free cash flow yield	(6.2%)	(3.2%)	(3.9%)	0.0%
Capex	(2)	(5)	(2)	(2)					
Free cash flow	(55)	(69)	(86)	1					
Cash flow from investing activities	(224)	2	41	(9)					
Cash flow from financing activities	316	56	60	0					
Dividends	-	-	-	-					
Dividend yield	-	-	-	-					

Source: Company reports and J.P. Morgan estimates.

Note: \$ in millions (except per-share data). Fiscal year ends Dec

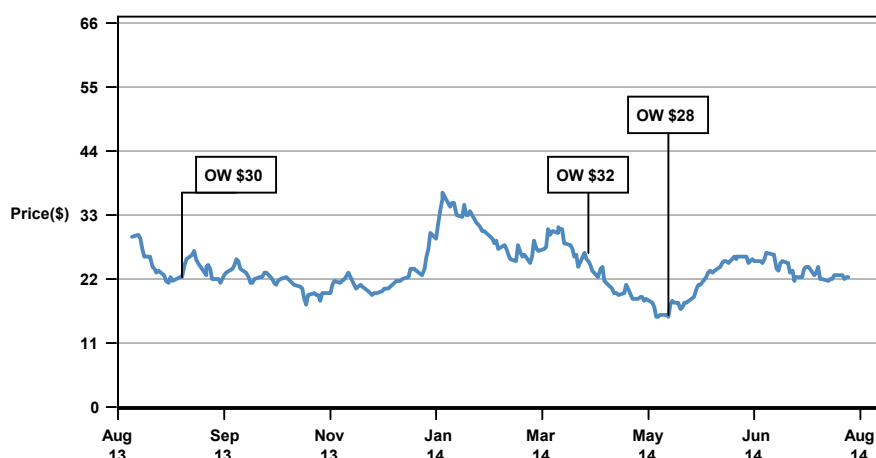
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Intrexon (XON, XON US) Price Chart



Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends.  
Initiated coverage Sep 03, 2013.

The chart(s) show J.P. Morgan's continuing coverage of the stocks; the current analysts may or may not have covered it over the entire period.

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