



## UPDATE REPORT

Biotechnology Industry • November 8, 2013

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### INTREXON CORPORATION (NYSE: XON)

- **Results from the first nine months show good progress in operations:**
  - **Revenues increased 131%, to more than \$16 million, in the first three quarters.** Exclusive channel collaborations signed in the past 18 months account for marked increase in revenues. Intrexon now has 16 active collaborations and negotiations are ongoing to further increase use of its technologies in synthetic biology for its four targeted market segments, healthcare, food, energy & chemicals, and environment. We expect more collaborations in the near term.
  - **Expenses declined following a streamlining of operations.** Lower R&D costs, offset partly by higher general & administrative expenditures, cut the loss from operations by nearly 36% from last year's nine-month tally.
  - **Three factors improved the adjusted EBITDA in the year to date.** Adjustments for non-cash charges, notably depreciation/amortization and stock-based compensation, and recognition of upfront technology access fees received figured importantly in revealing that operations used less cash in the third quarter than in prior periods. We are looking for further progress as new collaborations are signed.
- **Intrexon has secured collaborations with major players in healthcare.** In the past month, collaborations were established with Sun Pharmaceuticals and Mesoblast (through Ziopharm Oncology) that have market capitalizations of \$19.9 billion and \$1.85 billion, respectively. These complemented another ECC, one with the multi-national pharmaceutical corporation, Eli Lilly, that has a market capitalization of \$56.9 billion.

**We reiterate our BUY recommendation and maintain our price target at \$36.00.**

Share Price (11/6/2013)	\$19.01
52-Week Price Low / High	\$17.52 - \$31.44
Mkt. Capitalization (issued)	\$1.84 billion
Shares Outstanding (issued)	97.0 million
12-month Target Price	\$36.00
Average Daily Volume (3 mos.)	575,169
Website	<a href="http://www.intrexon.com">www.intrexon.com</a>
Est'd 2013 Earn's (Loss)/shr	(\$0.44)
Est'd 2013 Adj EBITDA/shr	(\$0.11)
Est'd 2014 Earn's (Loss)/shr	(\$0.30)
Est'd 2014 Adj EBITDA/shr	\$0.78



**Intrexon Corporation (NYSE: XON)** is a leader in synthetic biology, a discipline that applies engineering principles to biological systems and uses the genetic code (ACTGs) much the same way that computers rely on 1s and 0s to store and transfer

information. Thus, the field of synthetic biology promises to yield new insights into biology and to revolutionize healthcare, food production, energy sources, chemicals and materials, and global security.

## OPERATIONS PERFORM ON TARGET

The formation of exclusive channel collaborations (ECCs) with companies in four distinct industry sectors has increased the adoption of Intrexon's technological expertise in synthetic biology. Just as important, they provided \$16.6 million in revenue, more than double the \$7.2 million booked in the first three quarters of 2012. Nonetheless, R&D expenses declined by 70%, since Intrexon streamlined operations and temporarily scaled-up its capacity last year to ensure that it is prepared to support the future needs of its clients. With that work completed, R&D costs have declined. General and administrative costs increased 11.4% in the first three quarters, to \$21.3 million, as the Company added personnel selectively and consolidated AquaBounty as of March 31, 2013. Overall, the operating loss dropped by 36% from a year ago, while the net loss attributable to Intrexon was slashed by 50%, to \$24.8 million.

Adjusted EBITDA, which is a measure of cash generated or used by operations, revealed that the Company consumed only \$5 million in the third quarter and \$22 million in the year to date. The improvement reflects today's efficient operating structure and new sources of cash supplied via recent ECCs. We expect quarterly adjusted EBITDA results will remain somewhat volatile, as they are influenced by the signing of new ECCs.

The following tables provide an update on historical data and our projections with only modest changes since our initiation report:

### Quarterly Income Statements<sup>#</sup> (Fiscal year ends December 31<sup>st</sup>.)

<sup>#</sup> Data are in thousands, except for per-share figures. *Estimates are in italics.*

	2013			
	Q1A	Q2A	Q3A	Q4E
<b>Revenues</b>				
Collaboration revenues	\$ 3,864	\$ 6,674	\$ 6,028	\$ 6,934
Other	112	107	105	111
Total Revenues	\$ 3,976	\$ 6,781	\$ 6,133	\$ 7,045
<b>Operating expenses</b>				
Cost of products sold	\$ -	\$ -	\$ -	\$ -
Research & development	11,502	13,602	10,763	10,883
General & administrative	6,480	7,433	7,407	7,180
Total operating costs	17,982	21,035	18,170	18,063
Operating profit/(loss)	\$ (14,006)	\$ (14,254)	\$ (12,037)	\$ (11,018)
<b>Other Income (Expense)</b>				
Unrealized increase (decrease) in fair value of equity securities	(29,369)	7,734	27,339	-
Realized gain on equity investments	7,415	-	-	-
Interest (expense)	(14)	(11)	(6)	(1)
Other	2	12	(305)	6
Total other income (expense)	(21,966)	7,735	27,028	5
Equity in net loss of affiliate	(390)	-	-	-
Pretax profit/(loss)	\$ (35,972)	\$ (6,519)	\$ 14,991	\$ (11,013)
Income taxes	-	-	-	-
Net profit/(loss)	\$ (35,972)	\$ (6,519)	\$ 14,991	\$ (11,013)
Net loss attributable to non-controlling interest	158	507	449	501
<b>Net profit/(loss) to common</b>	\$ (35,814)	\$ (6,012)	\$ 15,440	\$ (10,512)
<b>Earnings/(loss) per share</b>	\$ (0.47)	\$ (0.07)	\$ 0.16	\$ (0.11)
Shares outstanding	75,879	83,141	97,000	97,500

Note that the numbers of shares presented in the first half are *pro forma* as presented in Intrexon's Form S-1. The number shown for the third quarter is an estimate.

**ANNUAL INCOME STATEMENTS<sup>#</sup>** (Fiscal year ends December 31<sup>st</sup>.)<sup>#</sup> Data are in thousands, except for per-share figures. *Estimates are in italics.*

<b>Revenues</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Collaboration Revenues	\$ 13,706	\$ 23,500	\$ 45,050	\$ 75,723	\$ 138,219	\$ 237,225	\$ 418,151
Other revenues	219	400	400	400	400	400	400
Total Revenues	\$ 13,925	\$ 23,900	\$ 45,450	\$ 76,123	\$ 138,619	\$ 237,625	\$ 418,551
<b>Operating expenses</b>							
Cost of products sold	-	-	1,250	1,300	3,100	6,300	10,000
Research & development	\$ 64,185	46,750	48,000	55,000	70,000	68,000	61,000
General & administrative	24,897	28,500	27,000	28,000	29,000	30,000	31,000
Total operating costs	89,082	75,250	75,000	83,000	99,000	98,000	92,000
Operating profit/(loss)	\$ (75,157)	\$ (51,350)	\$ (29,550)	\$ (6,877)	\$ 39,619	\$ 139,625	\$ 326,551
<b>Other Income (Expense)</b>							
Unrealized increase (decrease) in fair value of equity securities	\$ (6,290)	\$ 5,704					
Realized gain on equity investments	-	7,415					
Interest expense	(57)	(32)					
Other	(96)	(285)					
Total other income (expense)	(6,443)	12,802	-	-	-	-	-
Equity in net loss of affiliate	\$ (274)	\$ (390)					
Pretax profit/(loss)	\$ (81,874)	\$ (38,938)	\$ (29,550)	\$ (6,877)	\$ 39,619	\$ 139,625	\$ 326,551
Income taxes	-	-	-	-	15,055	53,057	124,089
Net profit/(loss)	\$ (82,148)	\$ (39,328)	\$ (29,550)	\$ (6,877)	\$ 24,564	\$ 86,567	\$ 202,461
Net loss (profit) attributable to non-controlling interest	-	1,615	1,800	1,760	-	(2,000)	(4,875)
<b>Net profit/(loss) to Common</b>	<b>\$ (82,148)</b>	<b>\$ (37,713)</b>	<b>\$ (27,750)</b>	<b>\$ (5,117)</b>	<b>\$ 24,564</b>	<b>\$ 84,567</b>	<b>\$ 197,586</b>
<b>Earnings/(loss) per share</b>	<b>\$ (1.17)</b>	<b>\$ (0.44)</b>	<b>\$ (0.30)</b>	<b>\$ (0.07)</b>	<b>\$ 0.25</b>	<b>\$ 0.86</b>	<b>\$ 1.99</b>
Shares outstanding	70,266	88,380	98,000	99,000	100,000	101,000	101,500

**Adjusted EBITDA**

	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
EBT	\$ (81,874)	\$ (38,938)	\$ (29,550)	\$ (6,877)	\$ 39,619	\$ 139,625	\$ 326,551
Interest expense	-	32					
Depreciation	7,984	7,400	7,500	7,700	7,800	8,000	8,000
Stock-based compensation	3,008	2,500	2,500	2,750	2,750	3,000	3,000
Unrealized (increase) decrease in fair value of equity securities	-	(5,704)	-	-	-	-	-
Realized gain on equity securities	3,591	(7,415)	-	-	-	-	-
Other		1,550	1,550	1,550	1,550	1,550	1,550
Change in deferred revenue from upfront and milestones	(7,491)	30,914	94,375	116,950	84,850	76,700	47,600
<b>Adjusted EBITDA</b>	<b>\$ (74,782)</b>	<b>\$ (9,661)</b>	<b>\$ 76,375</b>	<b>\$ 122,073</b>	<b>\$ 136,569</b>	<b>\$ 228,875</b>	<b>\$ 386,701</b>
<b>Adjusted EBITDA/share</b>	<b>\$ (1.06)</b>	<b>\$ (0.11)</b>	<b>\$ 0.78</b>	<b>\$ 1.23</b>	<b>\$ 1.37</b>	<b>\$ 2.27</b>	<b>\$ 3.81</b>

**BALANCE SHEET<sup>#</sup>** (Fiscal year ends December 31<sup>st</sup>.)

# Data are in thousands.

<b>ASSETS</b>	<b>9/30/2013</b>	<b>12/31/2012</b>
Current Assets		
Cash & equivalents	197,894	10,403
Accounts Receivable	5,349	707
Other	2,992	2,423
Total Current Assets	\$ 206,235	\$ 13,533
Long-term investments	\$ 81,109	-
Equity securities	107,567	\$ 83,116
Property & equipment	17,020	18,687
Intangible assets	42,263	29,506
Goodwill	13,846	-
Other	6,158	6,804
<b>Total Assets</b>	<b>\$ 474,198</b>	<b>\$ 151,646</b>
<b>LIABILITIES</b>		
Current Liabilities	<b>9/30/2013</b>	<b>12/31/2012</b>
Accounts payable	\$ 949	\$ 632
Debt due	244	49
Deferred revenue	7,398	9,963
Accruals	5,992	5,974
Related party payables	5,134	99
Total Current Liabilities	\$ 19,717	\$ 16,717
Long-term debt	\$ 2,321	\$ 42
Deferred revenue	59,994	48,673
Other	958	1,108
Total Long-Term Liabilities	\$ 63,273	\$ 49,823
Shareholders Equity		
Preferred Equity	\$ -	\$ 406,659
Common Stock, par value	-	-
Additional Paid-In Capital	741,315	-
Accumulated Deficit	(364,210)	(321,553)
Accum. Comprehensive Loss	28	-
Total Shareholders Equity	\$ 377,133	\$ (321,553)
Non-controlling interest	14,075	-
<b>Total liabilities &amp; equity</b>	<b>\$ 474,198</b>	<b>\$ 151,646</b>

**ECCs WITH MAJOR HEALTHCARE CORPORATIONS**

Intrexon has 16 active ECCs and two research collaborations under way that may lead to ECCs. Many are with small, innovative companies that were able to act quickly recognizing the enormous potential of synthetic biology and the opportunity to collaborate with the technological leader in the field. However, three large companies have also signed on to work with Intrexon:

- **Eli Lilly:** This ECC is developing products to prevent infection in pigs and to create therapies for companion animals that develop chronic diseases associated with aging. These markets are enormous, as pork is a major meat source that generated \$97 billion of sales in 2011, and veterinary medicine sales totaled \$22.5 billion worldwide last year. Just as important, we believe, is that the development of therapies for chronic diseases in companion pets may lead to a new collaboration focused on human health.
- **Sun Pharmaceuticals:** Intrexon entered into an ECC with this multi-national corporation in October to develop products for ophthalmic diseases, including dry age-related macular degeneration (dry AMD), glaucoma, and retinitis pigmentosa, a rare disease. Here, too, the markets for new drugs are very large, as dry AMD afflicts approximately 8 million individuals in the United States and glaucoma threatens the vision of 2.2 million.
- **Mesoblast Ltd.:** This Australian company is a leader in stem cell therapeutics, having developed proprietary Mesenchymal Lineage Cells that obviate the need to harvest cells from a patient's bone marrow. The ECC, which is developing genetically modified cell therapeutics to combat cancer, involves Intrexon and Ziopharm

Oncology. As we discussed in our October 16<sup>th</sup> report on Ziopharm, Intrexon and Ziopharm have already completed a proof-of-concept study demonstrating that a genetically modified cell could be created that retains the normal homing capability of mesenchymal stem cells and responds appropriately to the RheoSwitch activator ligand. Indeed, the research showed that expression of genes for interleukin-12, interferon- $\alpha$ , and a CTLA-4 decoy could be controlled *in vivo*. Mesoblast provides the collaboration with proprietary cells that will offer the opportunity to create off-the-shelf therapies to treat numerous types of cancer. The initial goal of the ECC is to develop a treatment for lung cancer. With success against that malignancy, the companies intend to form a joint venture to advance development of other therapeutic candidates. We believe this is an extraordinary collaboration that brings together leading technologies in synthetic biology and cellular therapeutics in an attempt to solve the unsolvable, malignant growth.

## INVESTMENT CONSIDERATIONS

We believe the recent price of Intrexon shares offers an attractive entry point to investors seeking to participate in the emergence of perhaps the most exciting new industry of the 21<sup>st</sup> century. As such, Intrexon has special appeal as a long-term holding, though its stock trades in sufficient volume for the trader.

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## INTREXON PRICE CHART



Source: BigCharts.com

**9/30/13 – Initiating Coverage:** share price, \$23.01; rating, BUY; 12-month price target, \$36.00; **10/4/2013 Update:** share price, \$25.10; rating, BUY, 12-month price target, \$36.00; **11/8/2013 Update:** share price, \$19.01; rating, BUY; 12-month price target, \$36.00.

## ZIOPHARM ONCOLOGY 2-YR. PRICE CHART



Source: BigCharts.com

**6/26/2006 – Initiating Coverage:** share price: \$5.05; rating: BUY; 12-month price target: \$18.00. **Updating coverage:** **12/07/2006:** share price \$6.36; rating: BUY; 12-month price target: \$20; **5/03/2007:** share price \$5.80; rating: BUY; 12-month price target: \$20.00; **3/13/2008:** share price: \$2.52; rating: BUY; 12-month price target: \$15.00; **7/02/2008:** share price: \$1.87; rating: BUY; 12-month price target: \$15.00; **5/18/2009:** share price: \$0.77; rating: BUY; 12-month price target: \$3.00; **6/09/2009:** share price: \$1.87; rating: BUY; 12-month price target: \$3.00; **3/4/2010:** share price: \$3.53; rating: BUY; 12-month price target: \$8.00; **1/20/2011:** share price: \$5.60; rating: BUY; 12-month price target: \$11.00; **4/25/2011:** share price: \$6.36; rating: BUY; 12-month price target: \$11.00; **5/18/2011:** share price: \$6.85; rating: BUY; 12-month price target: \$11.00; **9/21/2011:** share price: \$4.57; rating: BUY; 12-month price target: \$11.00; **3/30/2012:** share price: \$5.40; rating: BUY; 12-month price target: \$12.00; **12/12/2012:** share price: \$4.44; rating: BUY; 12-month price target: \$12.00; **10/16/2013:** share price, \$4.09; rating, BUY; 12-month price target, \$10.75.

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