### UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

### FORM 8-K

### CURRENT REPORT Pursuant to Section 13 or 15(d)

of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): November 8, 2018

### **INTREXON CORPORATION**

(Exact Name of Registrant as Specified in Charter)

Virginia (State or Other Jurisdiction of Incorporation) 001-36042 (Commission File Number) 26-0084895 (I.R.S. Employer Identification No.)

20374 Seneca Meadows Parkway, Germantown, Maryland 20876 (Address of Principal Executive Offices) (Zip Code)

> (301) 556-9900 (Registrant's Telephone Number, including area code)

> > N/A

(Former Name or Former Address, if change since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

 $\hfill\square$  Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Dere-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Dere-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 or Rule 12b-2 of the Securities Exchange Act of 1934.

Emerging growth company  $\ \square$ 

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

### Item 2.02 Results of Operations and Financial Condition.

Attached as Exhibit 99.1 is a copy of a press release of Intrexon Corporation, dated November 8, 2018, reporting its financial results for the quarter ended September 30, 2018.

This information, including the Exhibit attached hereto, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, except as shall be expressly set forth by specific reference in such filing.

### Item 7.01 Regulation FD Disclosure.

On November 8, 2018, Intrexon Corporation provided slides to accompany its earnings presentation. A copy of the slides is furnished as Exhibit 99.2 hereto.

This information, including the Exhibit attached hereto, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, except as shall be expressly set forth by specific reference in such filing.

### Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No. Description

99.1	Press release dated November 8, 2018.
99.2	Slide presentation of Intrexon Corporation dated November 8, 2018.

### SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Intrexon Corporation

By: /s/ Rick L. Sterling Rick L. Sterling Chief Financial Officer

Dated: November 8, 2018



Intrexon Announces Third Quarter 2018 Financial Results

 Quarterly GAAP revenues of \$32.4 million and net loss attributable to Intrexon of \$57.3 million including non-cash charges of \$38.7 million –
 Adjusted EBITDA of \$(28.9) million –

GERMANTOWN, MD, November 8, 2018 – Intrexon Corporation (NASDAQ: XON), a leader in the engineering and industrialization of biology to improve the quality of life and health of the planet, today announced its third quarter financial results for 2018.

### **Recent Commercial Achievements:**

- · Intrexon continues discussions with several major energy companies concerning partnering of its Methane Bioconversion Platform;
- Site selection on Intrexon's first 2,3 BDO plant is on track for year end;
- Okanagan Specialty Fruits, a wholly owned subsidiary of Intrexon, completed the 2018 Arctic® Apple harvest, yielding ten times last year's
  production, and expects to make pre-sliced Arctic® apples available through over 500 retail outlets this month;
- EnviroFlight, Intrexon's joint venture with Darling Ingredients Inc., is scheduled to open phase one of the largest black soldier fly larvae
   (BSFL) facility in the U.S. this month; and
- Intrexon commenced deployment of its Botticelli™ platform, beginning with a collaboration in tomato with a large international producer.

### **Recent Technical/Business Achievements:**

- Precigen, Inc., a wholly owned subsidiary of Intrexon, recently reported data on a multigenic therapeutic candidate that in appropriate
  pre-clinical models suggests potential superiority to approved anti-PD-1 checkpoint inhibitors;
- From Intrexon's methane bioconversion platform, the Company now is producing 2,3, BDO from natural gas at roughly 50% of the
  theoretical target yield, has demonstrated performance at 500X scale-up and has conducted sustained production runs exceeding 1,000
  hours;
- Oxitec, Ltd., a wholly owned subsidiary of Intrexon, entered into a second cooperative agreement with the Bill & Melinda Gates Foundation
  to develop a new strain of Oxitec's Friendly<sup>TM</sup> biological engineering platform to develop a self-limiting *Anopheles stephensi* mosquito to
  help combat this mosquito that spreads malaria in India, Middle East and the Horn of Africa;
- ActoBio Therapeutics, Inc., a wholly owned subsidiary of Intrexon, and T1D Partners, LLC, announced that the first patient has been dosed in the Company's Phase Ib/IIa clinical trial for AG019 for the treatment of early onset type 1 diabetes (T1D);
- Continuing its expansion into regenerative medicine, Exemplar Genetics, a wholly owned subsidiary of Intrexon, reported the first pig has been born with the potential to produce organs for human transplant;
- Trans Ova Genetics, a wholly owned subsidiary of Intrexon, created six bull calves that rank at the top of the global Holstein bull population;
- Intrexon announced advances in the development of its engineered yeast platform to produce cannabinoids for medical use via fermentation. This microbe-based process has potential to provide greater supply-chain security and avoids the resource-intensive isolation that often leads to quality and quantity variability in end products;

- The U.S. Food and Drug Administration (FDA) recommended amendment of the Association of American Feed Control Officials (AAFCO)
  ingredient definition of dried BSFL to include feeding to poultry. The approval of BSFL for use in poultry feed expands the potential for this
  ingredient as a more sustainable source of protein and enables EnviroFlight to support this new market opportunity with its new facility;
- Collaborator Fibrocell Science, Inc. (NASDAQ: FCSC) reported the FDA granted Fast Track Designation to FCX-013, the company's
  clinical stage candidate for the treatment of moderate to severe localized scleroderma, and the FDA's Office of Orphan Products
  Development awarded Fibrocell a \$1.4 million clinical trial research grant for continued clinical development of FCX-007, the company's
  gene therapy candidate for the treatment of recessive dystrophic epidermolysis bullosa (RDEB); and
- Collaborator Oragenics, Inc. (NYSE: OGEN) announced the resumption of its Phase 2 clinical trial for AG013 for the potential treatment of oral mucositis (OM).

### **Recent Corporate Highlights:**

- Intrexon completed its registered underwritten public offering of \$200 million aggregate principal amount of 3.50% convertible senior notes due in 2023 (Convertible Notes);
- Precigen Inc., a wholly owned subsidiary of Intrexon, and Ziopharm Oncology, Inc. (NASDAQ: ZIOP) announced a new definitive license
  agreement to replace all existing agreements between the companies that will provide Ziopharm exclusive and non-exclusive rights to
  technology controlled by Precigen, Inc., as well as securing for Precigen developmental control over the majority of its portfolio.
- The Company, through its subsidiary ActoBio Therapeutics, acquired the remaining interests in certain entities previously owned by a
  related party. As a result, ActoBio owns the exclusive rights to use its technologies to develop therapeutics in the fields of chronic
  rhinosinusitis and celiac disease;
- Intrexon transferred its stock exchange listing from the New York Stock Exchange (NYSE) to the Nasdaq Global Select Market (Nasdaq) and began trading under "XON" ticker on the Nasdaq exchange on September 25, 2018; and
- · Intrexon announced the formation of a Bioinformatics Hub in Munich, establishing Intrexon Bioinformatics Germany GmbH (IBG).

### Third Quarter 2018 Financial Highlights:

- Total revenues of \$32.4 million, a decrease of 30% from the third quarter of 2017;
- Net loss of \$57.3 million attributable to Intrexon, or \$(0.44) per basic share, including non-cash charges of \$38.7 million;
- Adjusted EBITDA of \$(28.9) million, or \$(0.22) per basic share;
- The net change in deferred revenue related to upfront and milestone payments, which represents the cash and stock received from collaborators less the amount of revenue recognized during the period, was a decrease of \$17.3 million compared to a decrease of \$8.6 million in the third quarter of 2017; and
- Cash, cash equivalents, and short-term investments totaled \$246.6 million, the value of preferred shares totaled \$158.4 million, and the value of common equity securities totaled \$4.7 million at September 30, 2018.

### Year-to-Date 2018 Financial Highlights:

- Total revenues of \$117.4 million, a decrease of 24% from the nine months ended September 30, 2017;
- Net loss of \$168.9 million attributable to Intrexon, or \$(1.31) per basic share, including non-cash charges of \$109.0 million;
- Adjusted EBITDA of \$(75.3) million, or \$(0.58) per basic share; and

 The net change in deferred revenue related to upfront and milestone payments, which represents the cash and stock received from collaborators less the amount of revenue recognized during the period, was a decrease of \$34.5 million compared to a decrease of \$28.2 million in the nine months ended September 30, 2017.

"Our company is transitioning from one with great science and technology to one with great products and product candidates that embody our engineered biology," commented Randal J. Kirk, Chairman and Chief Executive Officer of Intrexon. "Recognizing our requirements, we are fully occupied on the development of systems, teams and plans to successfully commercialize products that we believe will be transformative in their fields."

Mr. Kirk concluded, "While we do not underestimate the challenges that face us – or anyone – in making such a transition, we have persevered in the execution of our plans laid long ago and believe that we are seeing the fruits of our prior labors. It long has been our goal to create one of the truly great companies in the world and all of us at intrexon are excited to be where we are today and looking with great anticipation toward our future."

### Third Quarter 2018 Financial Results Compared to Prior Year Period

Total revenues decreased \$13.6 million, or 30%, from the quarter ended September 30, 2017. Collaboration and licensing revenues decreased \$13.8 million from the quarter ended September 30, 2017 due to (i) a decrease in research and development services for certain of the Company's exclusive channel collaborations, or ECCs, as the Company redeployed certain resources towards supporting prospective new platforms and partnering opportunities and began to focus more on the further development of relationships and structures that provide the Company with more control and ownership over the development process and commercialization path, (ii) a decrease in research and development services for certain of the Company's ECCs as a result of program progression where the Company's collaborators have taken responsibility of the execution of the programs, (iii) changes in revenue recognized based on the amount of services the Company forms for its collaborators, and (iv) the mutual termination of the Company's second ECC with ZIOPHARM for the treatment of graft-versus-host disease in December 2017. Gross margin on services improved in the current period as a result of increased operating costs associated with new product offerings and cloned products. Gross margin on services improved in the current period as a result of pricing changes and an increase in the number of embryos produced per bovine *in vitro* fertilization cycle due to improved period.

Research and development expenses increased \$8.4 million, or 23%, and include \$8.7 million expense related to in-process research and development reacquised as part of an asset acquisition in September 2018. Although selling, general and administrative (SG&A) expenses were consistent period over period, legal and professional fees decreased \$2.9 million primarily due to a decline in the use of regulatory and other consultants. This decrease was offset primarily by higher compensation expenses related to performance and retention incentives for SG&A employees.

### Year-to-Date 2018 Financial Results Compared to Prior Year Period

Total revenues decreased \$36.6 million, or 24%, from the nine months ended September 30, 2017. Collaboration and licensing revenues decreased \$37.8 million from the nine months ended September 30, 2017 primarily due to (i) a decrease in research and development services for certain of the Company's ECCs as the Company redeployed certain resources towards supporting prospective new platforms and partnering opportunities and began to focus more on the further development of relationships and structures that provide the Company with more control and ownership over the development process and commercialization path, (ii) a decrease in research and development services for certain of the Company's ECCs as a result of program progression where the Company's collaborators have taken responsibility of the execution of the programs, (iii) changes in revenue

recognition for upfront and milestone payments under the new ASC 606 revenue standard whereby revenues are recognized based on the amount of services the Company performs for its collaborators, and (iv) the mutual termination of the Company's second ECC with ZIOPHARM for the treatment of graft-versus-host disease in December 2017. Product revenues decreased \$2.2 million or 9% primarily due to lower customer demand for live calves, cows previously used in production, and cloned products. These decreases were partially offset by increased customer demand for live calves, Gross margin on products declined in the current period as a result of lower product sales and increased operating costs associated with new product offerings and cloned products. The increase in service revenues of \$2.5 million, or 7%, as well as the gross margin thereon relates to pricing changes and an increase in the number of embryos produced per bovine *in vitro* fertilization cycle due to improved production results.

Research and development expenses increased \$19.4 million, or 19%, and include (i) \$8.7 million expense related to in-process research and development reacquired as part of an asset acquisition in September 2018 and (ii) \$5.3 million of one-time costs associated with closing one of Oxitec's Brazilian subsidiary's leased research and development facilities as the Company decentralized operations previously conducted in this facility. Research and development consultants and lab supplies increased \$3.1 million primarily due to increased expenses from contract research organizations and consultants providing services for both programs being developed internally and pursuant to some of the Company's collaborations. Depreciation and amortization increased \$2.1 million primarily as a result of the depreciation expense on research and development assets and amortization of developed technology acquired from GenVec, Inc. in June 2017. Although SG&A expenses were consistent period, legal and professional fees decreased \$7.5 million primarily due to decreased legal fees associated with ongoing litigation and decreased fees incurred for regulatory and other consultants. This decrease was offset by an increase of \$6.9 million in compensation expenses related to performance and retention incentives for SG&A employees.

### **Conference Call and Webcast**

The Company will host a conference call today Thursday, November 8th, at 5:30 PM ET to discuss the third quarter 2018 financial results and provide a general business update. The conference call may be accessed by dialing 1-888-317-6003 (Domestic US), 1-866-284-3684 (Canada), and 1-412-317-6001 (International) and providing the number 8225818 to join the Intrexon Corporation Call. Participants may also access the live webcast through Intrexon's website in the Investors section at <u>http://investors.dna.com/events</u>.

### About Intrexon Corporation

Intrexon Corporation (NASDAQ: XON) is Powering the Bioindustrial Revolution with Better DNA<sup>™</sup> to create biologically-based products that improve the quality of life and the health of the planet. Intrexon's integrated technology suite provides its partners across diverse markets with industrial-scale design and development of complex biological systems delivering unprecedented control, quality, function, and performance of living cells. We call our synthetic biology approach Better DNA<sup>®</sup>, and we invite you to discover more at <u>www.dna.com</u> or follow us on Twitter at <u>@Intrexon</u>, on <u>Facebook</u>, and <u>LinkedIn</u>.

### **Non-GAAP Financial Measures**

This press release presents Adjusted EBITDA and Adjusted EBITDA per share, which are non-GAAP financial measures within the meaning of applicable rules and regulations of the Securities and Exchange Commission (SEC). For a reconciliation of these measures to the most directly comparable financial measure calculated in accordance with generally accepted accounting principles and for a discussion of the reasons why the company believes that these non-GAAP financial measures provide information that is useful to investors see the tables below under "Reconciliation of GAAP to Non-GAAP Measures." Such information is provided as additional information, not as an alternative to Intrexon's cursolidated financial statements presented in accordance with GAAP, and is intended to enhance an overall understanding of the Intrexon's current financial performance.

### Trademarks

Intrexon, Arctic, Botticelli, Friendly, Powering the Bioindustrial Revolution with Better DNA, and Better DNA are trademarks of Intrexon and/or its affiliates. Other names may be trademarks of their respective owners.

### Safe Harbor Statement

Some of the statements made in this press release are forward-looking statements that involve a number of risks and uncertainties and are made pursuant to the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements made in this press release include, but are not limited to, statements regarding clinical and pre-clinical development activities by Intrexon and its collaborators, commercial and business development plans and the submission of regulatory filings. These forward-looking statements are based upon Intrexon's current expectations and projections about future events and generally relate to Intrexon's plans, objectives and expectations for the development of Intrexon's business. Although management believes that the plans and objectives reflected in or suggested by these forward-looking statements are reasonable, all forward-looking statements involve risks and uncertainties and actual future results may be materially different from the plans, objectives and expectations expressed in this press release. These risks and uncertainties include, but are not limited to, (i) Intrexon's strategy and overall approach to its business model, including its ability to successfully enter into optimal strategic relationships with its subsidiaries and operating companies that Intrexon may form in the future; (ii) Intrexon's ability to successfully enter new markets or develop additional products, whether with its collaborators or ridependently; (iii) actual or anticipated variations in Intrexon's operating results; (iv) actual or anticipated fluctuations in Intrexon's ability, and the ability of its collaborators, to protect Intrexon's intellectual property and other proprietary rights and technologies; (ix) Intrexon's ability, and the ability of its collaborators, to adapt to changes in laws or regulations and policies; (x) the vate and degree of market acceptance of any products developed by a collaborator under an ECC or through a joint venture; (xii) Intrexon's abil

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For more information regarding Intrexon Corporation, contact: Investor Contact: Steven Harasym Vice President, Investor Relations Tel: +1 (214) 721-0607 investors@dna.com

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### Intrexon Corporation and Subsidiaries Consolidated Balance Sheets (Unaudited)

(Amounts in thousands)	September 30, 2018	December 31, 2017		
Assets				
Current assets				
Cash and cash equivalents	\$ 82,417	\$ 68,111		
Restricted cash	6,987	6,987		
Short-term investments	164,162	6,273		
Equity securities	714	5,285		
Receivables				
Trade, net	18,161	19,775		
Related parties, net	8,841	17,913		
Other	3,305	2,153		
Inventory	18,294	20,493		
Prepaid expenses and other	7,589	7,057		
Total current assets	310,470	154,047		
Equity securities, noncurrent	3,983	9,815		
Investments in preferred stock	158,421	161,225		
Property, plant and equipment, net	122,707	112,674		
Intangible assets, net	213,244	232,877		
Goodwill	151,276	153,289		
Investments in affiliates	17,944	18,870		
Other assets	2,370	4,054		
Total assets	\$ 980,415	\$ 846,851		
Current liabilities				
Accounts payable	\$ 8.522	\$ 8.701		
Accrued compensation and benefits	23,885	6,474		
Other accrued liabilities	20,998	21.080		
Deferred revenue	38,036	42,870		
Lines of credit	200	233		
Current portion of long-term debt	546	502		
Related party payables	143	313		
Total current liabilities	92,330	80,173		
Long-term debt, net of current portion	183.133	7,535		
Deferred revenue, net of current portion	136,942	193,527		
Deferred tax liabilities, net	9,363	15,620		
Other long-term liabilities	3,204	3,451		
Total liabilities	424.972	300,306		
	121,072			
Commitments and contingencies				
Total equity				
Common stock	—	-		
Additional paid-in capital	1,552,379	1,397,005		
Accumulated deficit	(990,080)	(847,820)		
Accumulated other comprehensive loss	(22,900)	(15,554)		
Total Intrexon shareholders' equity	539,399	533,631		
Noncontrolling interests	16,044	12,914		
Total equity	555,443	546,545		
Total liabilities and total equity	\$ 980,415	\$ 846.851		

### Intrexon Corporation and Subsidiaries Consolidated Statements of Operations (Unaudited)

		Three months ended September 30,				Nine months ended September 30,			
(Amounts in thousands, except share and per share data)		2018	2017		2018		2017		
Revenues									
Collaboration and licensing revenues	\$	14,324	\$	28,155	\$	51,622	\$	89,384	
Product revenues		6,829		7,670		23,549		25,780	
Service revenues		10,414		9,975		40,379		37,890	
Other revenues		881		216		1,839		899	
Total revenues		32,448		46,016		117,389		153,953	
Operating Expenses									
Cost of products		8,877		8,001		28,046		25,625	
Cost of services		6,449		7,013		21,127		21,805	
Research and development		44,885		36,472		124,072		104,663	
Selling, general and administrative		38,708		39,277	_	112,872	_	113,258	
Total operating expenses		98,919		90,763		286,117		265,351	
Operating loss		(66,471)	_	(44,747)	_	(168,728)		(111,398)	
Other Income (Expense), Net									
Unrealized and realized appreciation (depreciation) in fair value of									
equity securities and preferred stock, net		(7,287)		2,175		(27,565)		9,240	
Interest expense		(3,999)		(138)		(4,240)		(498)	
Interest and dividend income		6,107		5,070		17,323		14,437	
Other income (expense), net		1,452		(1,021)		571		4,453	
Total other income (expense), net		(3,727)		6,086		(13,911)		27,632	
Equity in net loss of affiliates		(2,870)		(2,993)		(9,880)		(11,273)	
Loss before income taxes		(73,068)		(41,654)		(192,519)		(95,039)	
Income tax benefit		14,322		818		19,535		2,164	
Net loss	\$	(58,746)	\$	(40,836)	\$	(172,984)	\$	(92,875)	
Net loss attributable to the noncontrolling interests		1,422		1,147		4,113		3,123	
Net loss attributable to Intrexon	\$	(57,324)	\$	(39,689)	\$	(168,871)	\$	(89,752)	
Net loss attributable to Intrexon per share, basic and diluted	\$	(0.44)	\$	(0.33)	\$	(1.31)	\$	(0.75)	
Weighted average shares outstanding, basic and diluted	12	29,518,989	12	0,518,885	1	28,843,991	11	9,741,291	

### Intrexon Corporation and Subsidiaries Reconciliation of GAAP to Non-GAAP Measures ((Inaudited)

Adjusted EBITDA and Adjusted EBITDA per share. To supplement Intrexon's financial information presented in accordance with U.S. generally accepted accounting principles ("GAAP"), Intrexon presents Adjusted EBITDA and Adjusted EBITDA per share. A reconciliation of Adjusted EBITDA to net income or loss attributable to Intrexon under GAAP appears below. Adjusted EBITDA is a non-GAAP financial measure that Intrexon calculates as net income or loss attributable to Intrexon adjusted for income tax expense or benefit, interest expense, depreciation and amortization stock-based compensation, shares issued as compensation for services, impairment loss, expense for in-process research and development acquired in an asset acquisition, bad debt expense, litigation expense, realized and unrealized appreciation or depreciation in the fair value of equity securities and preferred stock, and equity in net loss of affiliates. Adjusted EBITDA and Adjusted EBITDA per share are key metrics for Intrexon's management and Board of Directors for evaluating the Company's financial and operating performance, generating future operating plans and making strategic decisions about the allocation of capital. Intrexon's management and Board of Directors believe that Adjusted EBITDA and Adjusted EBITDA per share are useful to understand the long-term performance of Intrexon's core business and facilitate comparisons of the Company's operating results over multiple reporting periods. Intrexon is providing this information to investors and others to assist them in understanding and evaluating the Company's operating results in a manner similar to how its management and Board of Directors evaluate operating results (except for the impact of the change in deferred revenue related to upfront and milestone payments, which is adjusted in the measures evaluated by management and the Board of Directors as discussed below). While Intrexon believes that its non-GAAP financial measures are useful in evaluating its business, and may be of use to investors, this information should be considered supplemental in nature and not as a substitute for the related financial information prepared in accordance with GAAP. In addition, these non-GAAP financial measures may not be the same as non-GAAP financial measures presented by other companies. Adjusted EBITDA and Adjusted EBITDA per share are not measures of financial performance under GAAP, and are not intended to represent cash flows from operations nor earnings per share under GAAP and should not be used as an alternative to net income or loss as an indicator of operating performance or to represent cash flows from operating, investing or financing activities as a measure of liquidity. Intrexon compensates for the limitations of Adjusted EBITDA and Adjusted EBITDA per share by using them only to supplement the Company's GAAP results to provide a more complete understanding of the factors and trends affecting the Company's business. Adjusted EBITDA and Adjusted EBITDA per share have limitations as an analytical tool and you should not consider them in isolation or as a substitute for analysis of Intrexon's results as reported under GAAP.

In addition to the reasons stated above, which are generally applicable to each of the items Intrexon excludes from its non-GAAP financial measure, Intrexon believes it is appropriate to exclude certain items from the definition of Adjusted EBITDA for the following reasons:

- Interest expense may be subject to changes in interest rates which are beyond Intrexon's control;
- Depreciation of Intrexon's property and equipment and amortization of acquired identifiable intangibles can be affected by the timing and magnitude of business combinations and capital asset purchases;
- Stock-based compensation expense is a noncash expense and may vary significantly based on the timing, size and nature of awards granted
  and also because the value is determined using formulas which incorporate variables, such as market volatility;
- Shares issued as compensation for services and bad debt expense are noncash expenses which Intrexon excludes in evaluating its financial and operating performance;
- Impairment loss is a noncash expense which represents the write down of the book value of acquired goodwill and intangible assets when
  fair value is determined to be less than book value. These charges are nonrecurring and may vary significantly based on economic,
  regulatory, political and other circumstances;
- Expense for in-process research and development acquired in an asset acquisition is a noncash expense which is expected to be an infrequent item and may vary significantly based on the scope of the repurchased rights;
- Unrealized and realized appreciation or depreciation in the fair value of securities which Intrexon holds in its collaborators may be significantly impacted by market volatility and other factors which are outside of the Company's control in the short term and Intrexon intends to hold these securities over the long term, except as otherwise disclosed; and

• Equity in net loss of affiliate reflects Intrexon's proportionate share of the income or loss of entities over which the Company has significant influence, but not control, and accounts for using the equity method of accounting. Intrexon believes excluding the impact of such losses or gains on these types of strategic investments from its operating results is important to facilitate comparisons between periods.

Furthermore, supplemental information about the impact of the change in deferred revenue related to upfront and milestone payments is provided below. GAAP requires Intrexon to account for its collaborations as multiple-element arrangements. As a result, the Company initially defers certain collaboration revenues because certain of its performance obligations cannot be separated and must be accounted for as one unit of accounting. The collaboration revenues that Intrexon so defers arise from upfront and milestone payments received from the Company's collaborators, which Intrexon recognizes over the future performance period even though the Company's right to such consideration is neither contingent on the results of Intrexon's future performance nor refundable in the event of nonperformance. The supplemental information about the change in deferred revenue removes the noncash revenue recognized during the period and includes the cash and stock received from collaborators for upfront and milestone payments during the period. Management and the Board of Directors consider this information in evaluating Intrexon's operating performance as they believe it permits the quarterly and annual comparisons of the Company's ability to consummate new collaborations or to achieve significant milestones with existing collaborators.

The following table presents a reconciliation of net loss attributable to Intrexon to EBITDA and also to Adjusted EBITDA, as well as the calculation of Adjusted EBITDA per share, for each of the periods indicated:

		Three months ended September 30,				Nine months ended September 30,			
		2018	,	2017		2018	,	2017	
					ousands)				
Net loss attributable to Intrexon	\$	(57,324)	\$	(39,689)	\$	(168,871)	\$	(89,752)	
Interest expense		3,985		122		4,196		451	
Income tax benefit		(14,322)		(818)		(19,535)		(2,164)	
Depreciation and amortization		8,023		7,866		24,540		22,502	
EBITDA	\$	(59,638)	\$	(32,519)	\$	(159,670)	\$	(68,963)	
Stock-based compensation		8,094		12,042		28,246		31,913	
Shares issued as payment for services		2,917		2,730		8,404		8,440	
Expense for in-process research and development									
acquired in an assets acquisition		8,721		_		8,721		_	
Bad debt expense		808		511		1,597		1,093	
Unrealized and realized (appreciation) depreciation in fair value of equity securities and preferred stock,									
net		7,287		(2,175)		27,565		(9,240)	
Equity in net loss of affiliates		2,870		2,993		9,880		11,273	
Adjusted EBITDA	\$	(28,941)	\$	(16,418)	\$	(75,257)	\$	(25,484)	
Weighted average shares outstanding, basic and									
diluted	12	29,518,989	12	0,518,885	12	8,843,991	11	9,741,291	
Adjusted EBITDA per share, basic and diluted	\$	(0.22)	\$	(0.14)	\$	(0.58)	\$	(0.21)	
Supplemental information:									
Impact of change in deferred revenue related to									
upfront and milestone payments	\$	(17,328)	\$	(8,613)	\$	(34,536)	\$	(28,218)	

# Third Quarter 2018 Business Update

November 8, 2018



## **Forward Looking Statements**

### Safe Harbor Statement

2

Some of the statements made in this presentation are forward-looking statements that involve a number of risks and uncertainties and are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based upon Intrexon's current expectations and projections about future events and generally relate to Intrexon's plans, objectives and expectations for the development of Intrexon's business, discussion of anticipated clinical trials and future collaborations. Although management believes that the plans and objectives reflected in or suggested by these forward-looking statements are reasonable, all forward-looking statements involve risks and uncertainties and actual future results may be materially different from the plans, objectives and expectations expressed in this presentation. These risks and uncertainties include, but are not limited to, (i) Intrexon's strategy and overall approach to its business model; (ii) Intrexon's ability to successfully enter new markets or develop additional products, whether with its collaborators or independently; (iii) Intrexon's ability to successfully enter into optimal strategic relationships with its subsidiaries and operating companies that it may form in the future; (iv) actual or anticipated variations in Intrexon's operating results; (v) actual or anticipated fluctuations in Intrexon's competitors' or its collaborators' operating results or changes in their respective growth rates; (vi) Intrexon's cash position; (vii) market conditions in Intrexon's industry; (viii) the volatility of Intrexon's stock price; (ix) Intrexon's ability, and the ability of its collaborators, to protect Intrexon's intellectual property and other proprietary rights and technologies; (x) Intrexon's ability, and the ability of its collaborators, to adapt to changes in laws or regulations and policies; (xi) the outcomes of pending and future litigation; (xii) the rate and degree of market acceptance of any products developed by Intrexon, its subsidiaries, collaborations or joint ventures; (xiii) Intrexon's ability to retain and recruit key personnel; (xiv) Intrexon's expectations related to the use of proceeds from its public offerings and other financing efforts; and (xv) Intrexon's estimates regarding expenses, future revenue, capital requirements and needs for additional financing. For a discussion of other risks and uncertainties, and other important factors, any of which could cause Intrexon's actual results to differ from those contained in the forward-looking statements, see the section entitled "Risk Factors" in Intrexon's Annual Report on Form 10-K and subsequent reports filed with the Securities and Exchange Commission. All information in this presentation is as of the date of the release, and Intrexon undertakes no duty to update this information unless required by law.

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## intrexon and Engineered Biology

3

- *Engineered biology:* The largest industrial revolution the planet has ever seen and we are a technological leader in the field
- Unique toolbox two decades in the making: Our precision engineering capabilities allow for controllable, multi-genic payload capacity of our gene programs
- Attainable value of this revolution: Gives us the opportunity to pursue targets that are difficult technologically but promising for global health, and at the same time, we meter our approach by augmenting our platforms for use across multiple targets





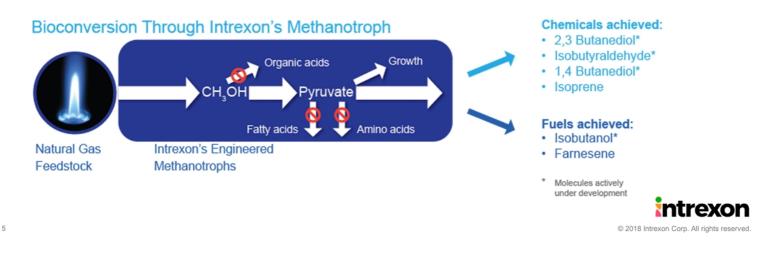


# Leveraging Microbes for Industrial and Therapeutic Applications

Methane Bioconversion Platform (MBP) to produce high-value fuels and chemicals Yeast fermentation platform for production of compounds for medical use

# intrexon's Proprietary Methane Bioconversion Platform (MBP) – Pioneering Approach in Gas-to-Liquids Industry

- Over past several years intrexon has built a proprietary genetic toolbox for MBP to unlock its potential in methane bioconversion
- The cost-effective transformation of methane to higher value chemicals and fuels through fermentation is central to our fuels, lubricants and chemicals initiatives



## intrexon's MBP – Advancing Toward Large Industrial Markets



Sobutanol is attractive as a less corrosive, more potent, and more valuable gasoline additive relative to 2-carbon ethanol

Expansion into specialty chemicals once major carbon flux pathways are optimized

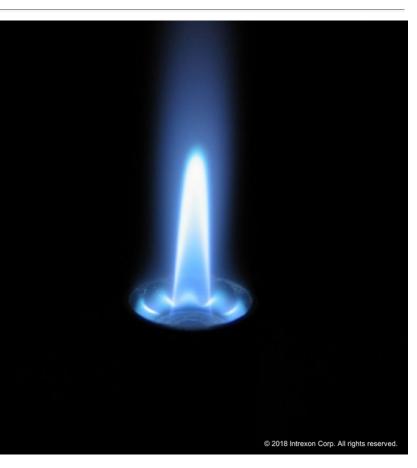
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Source: IHS Chemical, ICIS, Markets and Markets, MicroMarket Monitor, Grandview Research, Transparency Market Research Currently limited to \$80bn by regulations, IEA World Outlook 2016 data ; IEA World Energy Outlook 2016 data ; Market size for 1-butene and isobutene, the main applications for butylene

intrexon

## Q3 Advances

- Producing BDO from natural gas at roughly 50% of the theoretical final target yield
- Demonstrated performance at 500X scale-up
- Sustained production runs exceeding 1,000 hours without reduction in output



## Robust Microbial Production of Cannabinoids for Medical Use

- North American Cannabis market estimated to be \$47.3 billion by 2027
- Volume and market will demand production routes beyond current plant-based methods
- intrexon's proprietary yeast strains enable a transformative process for robust production of cannabinoids with consistent yield and purity

### **Cannabis Plant**

- Mixture of products
- Typically low product accumulation
- Difficult to isolate and purify
- Contamination possible
- Large-scale cultivation required





- High product accumulation
  - Isolation and purification On-demand production

**Intrexon's Yeast** 

Controlled process performed in standard assets

Pure cannabinoid products

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8

# **Bioengineering Cells for Human Gene** and Cellular Therapies

Next generation targeted, controllable, multigenic therapeutic treatments across broad range of diseases

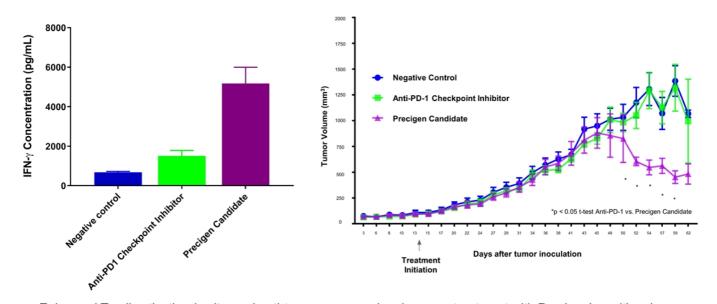
Microbe-based delivery of biopharmaceuticals

PRECIGE

ACT[]BIO intrexor © 2018 Intrexon Corp. All rights rese

Subsidiant of Interno

### Precigen's Multigenic Candidate Provides Improved T Cell Activation and Anti-Tumor Response Compared to Approved Anti-PD-1 Checkpoint Inhibitor



Enhanced T-cell activation in vitro and anti-tumor response in mice upon treatment with Precigen's multigenic . candidate. trexon

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10

# ActoBiotics<sup>®</sup> – Microbe-based Biopharmaceuticals for Expression and Local Delivery of Therapeutics at Disease Sites

	PRODUCT CANDIDATE		PRECLINICAL	PHASE I	PHASE II	PHASE III	EST 2018 GLOE ADDRESSABLE POPULATION			
	IMMUNOTHER	RAPY:						_		
Harnessing	AG013	Oral Mucositis					850 K			
L. lactis Yields	AG020	Inflammatory Bowel Disease					> 4 M			
New Opportunities	AG018	Chronic Rhinosinusitis					12.3 M	J		
	DESENSITIZATION:									
	Research	Food, seasonal, perennial and venom allergy								
	TOLERANCE									
	AG019	Type 1 Diabetes					> 70 K new case	s		
	AG017	Celiac Disease			Phase Ib/Ila		per year 1.9 M			
	ADDITIONAL PROGRAMS IN EARLY STAGE:									
	Research	Phenylketonuria					51 K			
	Research	Metabolic Disease					40 M			
	Research	Auto-immune Skin [	Disease							

## ActoBio Updates



- Oragenics, Inc. continues to enroll patients in the Phase IIb trial for AG013 in the treatment for Oral Mucositis
- ActoBio has dosed the first patient in the AG019 Ib/IIa trial in the treatment of early onset Type 1 Diabetes
- AG017, an immune tolerance approach, for the treatment of Celiac Disease is targeting a Q1 2019 IND

# Engineering Biology for Food, Agriculture, Environmental, and Health Solutions

Okanagan Specialty Fruits Trans Ova elite bovine genetics Exemplar MiniSwine research models EnviroFlight black soldier fly larvae for animal feed AquaBounty land-based salmon production



## Scaling Arctic® Apple Plantings to Meet Consumer Demand



- The 2018 harvest is complete yielding 2,100 bins, 10 times more than the 2017 harvest
- Targeting >500 retail outlets for our fresh sliced, whole apples and ApBitz<sup>™</sup> snacks
- Consumer reception to the apples has been highly favorable

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 Expected to plant ~1,000,000 trees in the spring of 2019; additional to the existing ~980,000 trees on 600 acres of orchards



## Trans Ova and Exemplar Q3 Updates

### Trans Ova Genetics

- Sales of embryos with elite genetics continue to a growing number of customers domestically and abroad
- Created six bull calves that rank at the top of the global Holstein bull population

### **Exemplar Genetics**

- Demand for the MiniSwine Models continues to grow
- Expansion into regenerative medicine continues; through collaboration, the first pig has been born with the potential to produce organs for human transplant



### Black Soldier Fly Larvae Commercial Facility to be Operational in Q4



- Advancing on schedule toward opening the largest black soldier fly larvae facility in the US in Q4 2018
- Modular facility Phase one will have the ability to produce 900mt of product a year and is designed to scale up to 3,200mt

16

- Black soldier fly larvae was approved for poultry diet in September
- Orders for product from the new facility are being generated

## Sustainable AquAdvantage® Salmon Update

### Domestically-produced alternative to imported ocean cage reared salmon

- Currently distributed throughout Canada
- November 19, 2015 FDA approval for production, sale, and consumption in the U.S.
- April 27, 2018 FDA approval to raise AquAdvantage<sup>®</sup> Salmon at land-based Indiana facility; conventional salmon is currently being raised at the facility
- AquaBounty granted a CA\$2.0M loan from the Department of Economic Development of the Province of Prince Edward Island to complete the construction of a 250mt facility
- Production and sales of AquAdvantage<sup>®</sup> Salmon in U.S. await official labeling guidelines by the FDA

17



# Innovations in Plant Biology and Vector Control

**botticelli** 

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## The Botticelli™ Advantage



Advanced tissue culture technology that offers a sustainable, scalable, and more economical solution for growers to meet the rapidly expanding demand for premium quality products



Indefinite replication of genetics and consistent product performance with "clean" plants



Improved bottom line due to scalable and sustainable high quality plantlet production

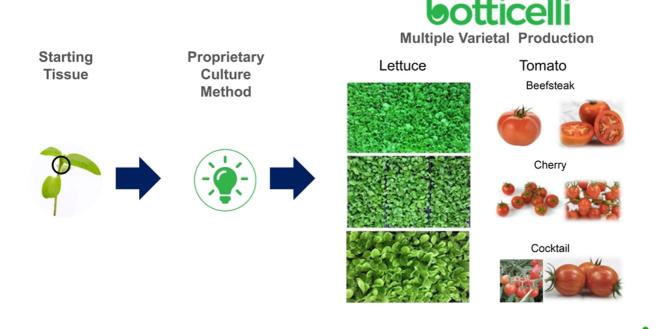


19

Speed to market and top line growth with new and improved varietals



## Next Gen Tissue Culture Technology



## Oxitec – Progressing Programs for Friendly™ Mosquitoes



## Second Collaborative Agreement with the Bill & Melinda Gates Foundation

 Grant to develop Friendly<sup>™</sup> Anopheles stephensi strain is being designed to combat malaria in India, Middle East and Horn of Africa

## Continue to Advance Oxitec's Second Generation *Aedes* Technology

Ongoing transition to 5034 in US, Brazil and Caymans