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): April 12, 2019

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)

	ck 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 twing provisions (see General Instruction A.2. below):	
	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)	
	Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))	
	Pre-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 \Box		
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 8.01 Other Events.

Intrexon Corporation, a Virginia corporation ("Intrexon"), filed a prospectus supplement to its registration statement on Form S-3 (File No. 333-220326) on April 12, 2019 covering the resale of shares (the "Shares") of Intrexon common stock issued pursuant to that certain Securities Purchase, Assignment and Assumption Agreement, dated as of December 19, 2018, by and Intrexon, Ares Trading S.A. and Precigen, Inc., a wholly owned subsidiary of Intrexon.

In connection with the resale of the Shares, the Company is filing the opinion of Hogan Lovells US LLP as Exhibit 5.1 to this Current Report on Form 8-K.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	<u>Description</u>
5.1	Opinion of Hogan Lovells US LLP.
23.1	Consent of Hogan Lovells US LLP (included in Exhibit 5.1).

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/ Donald P. Lehr

Donald P. Lehr Chief Legal Officer

Dated: April 12, 2019



April 12, 2019

Intrexon Corporation 20374 Seneca Meadows Parkway Germantown, Maryland 20876

Board of Directors

Ladies and Gentlemen:

Hogan Lovells US LLP Harbor East 100 International Drive **Suite 2000** Baltimore, MD 21202 T +1 410 659 2700 F +1 410 659 2701 www.hoganlovells.com

We are acting as counsel to Intrexon Corporation, a Virginia corporation (the "Company"), in connection with its registration statement on Form S-3, as amended (the "Registration Statement"), including the base prospectus contained therein (the "Base Prospectus") and the prospectus supplement, dated April 12, 2019 (the "Prospectus Supplement," and together with the Base Prospectus and all documents incorporated by reference therein, the "Prospectus") related to the offer and sale from time to time of up to 20,640,119 shares of common stock, no par value, of the Company (the "Shares"), all of which may be sold from time to time and on a delayed or continuous basis, as set forth in the Prospectus Supplement. This opinion letter is furnished to you at your request to enable you to fulfill the requirements of Item 601(b)(5) of Regulation S-K, 17 C.F.R. § 229.601(b)(5), in connection with the Registration Statement.

For purposes of this opinion letter, we have examined copies of such agreements, instruments and documents as we have deemed an appropriate basis on which to render the opinions hereinafter expressed. In our examination of the aforesaid documents, we have assumed the genuineness of all signatures, the legal capacity of all natural persons, the accuracy and completeness of all documents submitted to us, the authenticity of all original documents, and the conformity to authentic original documents of all documents submitted to us as copies (including pdfs). As to all matters of fact, we have relied on the representations and statements of fact made in the documents so reviewed, and we have not independently established the facts so relied on. This opinion letter is given, and all statements herein are made, in the context of the foregoing.

This opinion letter is based as to matters of law solely on the applicable provisions, as currently in effect, of the Virginia Stock Corporation Act, as amended (but not including any laws, statutes, ordinances, administrative decisions, rules or regulations of any political subdivision below the state level). We express no opinion herein as to any other statutes, rules, or regulations (and in particular, we express no opinion as to any effect that such other statutes, rules, or regulations may have on the opinions expressed herein).

Based upon, subject to and limited by the foregoing, we are of the opinion that the Shares are validly issued, fully paid and nonassessable.

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This opinion letter has been prepared for use in connection with the Registration Statement. We assume no obligation to advise of any changes in the foregoing subsequent to the effective date of the Registration Statement.

We hereby consent to the filing of this opinion letter as Exhibit 5.1 to Current Report on Form 8-K and to the reference to this firm under the caption "Legal Matters" in the prospectus constituting a part of the Registration Statement. In giving this consent, we do not thereby admit that we are an "expert" within the meaning of the Act.

Very truly yours,

/s/ HOGAN LOVELLS US LLP

HOGAN LOVELLS US LLP