

Report of Organizational Actions Affecting Basis of Securities

▶ See separate instructions.

Part I Reporting Issuer

| | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| 1 Issuer's name Intrexon Corporation | | 2 Issuer's employer identification number (EIN) 26-0084895 | |
| 3 Name of contact for additional information Christopher Basta | 4 Telephone No. of contact 561-410-7052 | 5 Email address of contact investors@intrexon.com | |
| 6 Number and street (or P.O. box if mail is not delivered to street address) of contact 20374 Seneca Meadows Parkway | | 7 City, town, or post office, state, and Zip code of contact Germantown, MD 20876 | |
| 8 Date of action June 16, 2017 | | 9 Classification and description Acquisition of GenVec, Inc. ("GenVec") | |
| 10 CUSIP number 46122T102 | 11 Serial number(s) N/A | 12 Ticker symbol XON | 13 Account number(s) N/A |

Part II Organizational Action Attach additional statements if needed. See back of form for additional questions.

14 Describe the organizational action and, if applicable, the date of the action or the date against which shareholders' ownership is measured for the action ▶ On June 16, 2017, Intrexon Corporation ("Intrexon") and its subsidiary, Intrexon GV Holding, Inc., completed the acquisition of GenVec, as Intrexon GV Holding, Inc. was merged with and into GenVec, with GenVec surviving. Intrexon issued 0.297 shares of Intrexon common stock and 1 contingent payment right in exchange for each common share of GenVec. The contingent payment rights entitle the holders, in the aggregate, to an amount equal to half of certain payments actually received by GenVec under a certain collaboration agreement. As a result of the merger, GenVec common stock is no longer publicly traded.

15 Describe the quantitative effect of the organizational action on the basis of the security in the hands of a U.S. taxpayer as an adjustment per share or as a percentage of old basis ▶ See attached statement.

16 Describe the calculation of the change in basis and the data that supports the calculation, such as the market values of securities and the valuation dates ▶ The value of Intrexon common stock as of the close of business on June 15, 2017, the date immediately prior to the merger, was \$22.82. Intrexon has estimated the value of the contingent payment rights to be approximately \$585,000 in the aggregate, which equates to \$0.25 per GenVec share. This valuation was determined through the use of a probability-weighted discounted cash flow model.

Part II Organizational Action (continued)


17 List the applicable Internal Revenue Code section(s) and subsection(s) upon which the tax treatment is based ▶ The merger is intended to be treated as a reorganization within the meaning of Section 368(a)(2)(E) of the Internal Revenue Code ("IRC"). IRC Section 354 governs exchanges of stock in reorganizations. IRC Section 356 governs receipt of additional consideration in reorganizations. IRC Section 358 governs basis to distributees. IRC Section 1001 governs the amount and recognition of gain or loss. IRC Section 1223 governs the holding period of property.

18 Can any resulting loss be recognized? ▶ The only loss that may be recognized is any resulting loss from the disposition of fractional shares.

19 Provide any other information necessary to implement the adjustment, such as the reportable tax year ▶ The reportable tax year of this transaction is the taxpayer's year that includes the merger date of June 16, 2017, which for a calendar year taxpayer is 2017.

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than officer) is based on all information of which preparer has any knowledge.

Sign Here

Signature ▶  Date ▶ 7/31/17
Print your name ▶ Rick L. Sterling Title ▶ Chief Financial Officer

Paid Preparer Use Only

| | | | | |
|----------------------------|----------------------|------|-------------------------------------------------|------|
| Print/Type preparer's name | Preparer's signature | Date | Check <input type="checkbox"/> if self-employed | PTIN |
| Firm's name ▶ | | | Firm's EIN ▶ | |
| Firm's address ▶ | | | Phone no. | |

Intrexon Corporation
Attachment to Form 8937

Form 8937, Part II, Item 15

Describe the quantitative effect of the organizational action on the basis of the security in the hands of a U.S. taxpayer as an adjustment per share or as a percentage of old basis ►

GenVec shareholders are urged to consult their own tax advisors as well as the Schedule 14A filed by GenVec with the Securities and Exchange Commission on May 12, 2017 for a discussion of the risk factors surrounding the characterization for income tax purposes of the merger and additional details regarding receipt of the contingent payment rights, as well as additional details that pertain to non-individual or ex-United States GenVec shareholders.

The foregoing discussion assumes that the transaction qualifies as a reorganization under Internal Revenue Code Section 368(a)(2)(E) and that the receipt of the contingent payment right is a closed transaction.

A United States citizen individual GenVec shareholder would undertake the following steps to determine their recognized gain and basis of Intrexon common stock received in the merger.

1. Multiply the number of GenVec shares exchanged by 0.297. This is the number of Intrexon shares to be received, inclusive of fractional shares.
2. Multiply the result of step 1 by \$22.82, the value per share of Intrexon common stock (see Item 16).
3. Multiply the number of GenVec shares exchanged by \$0.25, the estimated value of the contingent payment right (see Item 16).
4. Add the results of steps 2 and 3.
5. Compare the result of step 4 to the tax basis of the surrendered GenVec shares. This amount is a shareholder's realized gain or loss.
6. Recognize gain, but not loss, to the extent of the lesser of the results of steps 3 and 5.
7. The Intrexon common stock basis, inclusive of fractional shares, will be the basis of the GenVec stock exchanged, decreased by the result of step 3, then increased by the result of step 6.
8. Compare the cash received in lieu of any fractional Intrexon share to the basis allocable to the fractional share based on the result of step 7 and recognize any gain or loss on the disposition of the fractional share.

The contingent payment right will have an initial basis of \$0.25 per contingent payment right. Its holding period will begin for tax purposes on June 17, 2017.

The holding period for Intrexon common stock will include the holding period of the exchanged GenVec common stock.