

MEDISTEM INC.  
Form SC 13D  
December 30, 2013

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

**SCHEDULE 13D**  
**Under the Securities Exchange Act of 1934**

**Medistem Inc.**

**(Name of Issuer)**

**Common Stock, \$0.0001 par value per share**

**(Title of Class of Securities)**

**58501F207**

**(CUSIP Number)**

**Third Security, LLC**

**1881 Grove Avenue**

**Radford, Virginia 24141**

**Attention: Marcus E. Smith, Esq.**

**(540) 633-7900**

**(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)**

*Copy to:*

**Intrexon Corporation**

**Attention: Donald P. Lehr, Chief Legal Officer**

**20374 Seneca Meadows Parkway**

**Germantown, Maryland 20876**

**(301) 556-9809**

**December 19, 2013**

**(Date of Event Which Requires Filing of This Statement)**

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. "

**Note.** Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See § 240.13d-7 for other parties to whom copies are to be sent.

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.  
The information required on the remainder of this cover page shall not be deemed to be filed for the purpose of Section 18 of the Securities Exchange Act of 1934 ( Act ) or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1 Names of reporting persons

I.R.S. identification nos. of above persons

Randal J. Kirk

2 Check the appropriate box if a member of group

(a)  (b)

3 SEC use only

4 Source of funds

PF

5 Check if disclosure of legal proceedings is required pursuant to Item 2(d) or 2(e)

6 Citizenship or place of organization

United States

7 Sole voting power

Number of

shares

0

beneficially

8 Shared voting power

owned by

each

12,066,218 (1)

9 Sole dispositive power

reporting

person

0

with

10 Shared dispositive power

12,066,218 (1)

11 Aggregate amount beneficially owned by each reporting person

12,066,218 (1)

12 Check if the aggregate amount in Row (11) excludes certain shares "

13 Percent of class represented by amount in Row (11)

83.6% (2)

14 Type of reporting person

IN

- (1) Represents the aggregate number of outstanding shares of Medistem Inc. ( Issuer ) common stock, \$0.0001 par value ( Common Stock ) beneficially owned by Alan Lewis, Thomas Ichim, John Salvador, Donald Dickerson, Vladimir Bogin, Vladimir Zaharchook-Williams, Sergey Sablin, John Chiplin and Herm Rosenman (the Stockholders ), each of whom is an executive officer and/or director of the Issuer and has entered into a Voting Agreement dated as of December 19, 2013 (the Voting Agreements ) with Intrexon Corporation ( Intrexon ). Neither the filing of this Statement on Schedule 13D nor any of its contents shall be deemed to constitute an admission by any reporting person that it is the beneficial owner of any of the Issuer 's common stock referred to herein for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the Exchange Act ), or for any other purpose, and such beneficial ownership is expressly disclaimed by each reporting person.
- (2) As of the date hereof, Intrexon does not own any shares of Common Stock. However, for purposes of Rule 13d-3 under the Exchange Act, as a result of the Voting Agreements, Intrexon may be deemed to share with each Stockholder the power to vote or to direct the voting of the shares of Common Stock of such Stockholder covered by the Voting Agreements solely with respect to those matters described in the Voting Agreements. Accordingly, Intrexon may be deemed to be the beneficial owner of the shares of Common Stock. As set forth in the Voting Agreements (and, for purposes of determining the number of shares of Common Stock that the Stockholders may acquire within 60 days, taking into account the information set forth under the heading Security Ownership of Certain Beneficial Owners and Management in Issuer 's registration statement on Form 10 as amended and filed with the SEC on December 12, 2013), there were an aggregate of 12,066,218 shares of Common Stock that were beneficially owned by the Stockholders, which constitutes approximately 83.6% of the outstanding voting securities of Issuer (based upon Issuer 's representation in the Merger Agreement that there were 14,434,288 shares of Common Stock outstanding as of the close of business on December 17, 2013). If restricted stock and shares issuable upon exercise of options are excluded, the aggregate number of outstanding shares of Common Stock subject to the Voting Agreements is 4,828,432 or approximately 33.5% of the issued and outstanding shares of Common Stock based on the number of shares outstanding as of December 17, 2013.

1 Names of reporting persons

I.R.S. identification nos. of above persons

Intrexon Corporation

I.R.S. IDENTIFICATION NO.: 26-0084895

2 Check the appropriate box if a member of group

(a)  (b)

3 SEC use only

4 Source of funds

WC

5 Check if disclosure of legal proceedings is required pursuant to Item 2(d) or 2(e)

6 Citizenship or place of organization

Virginia

7 Sole voting power

Number of

shares

0

beneficially

8 Shared voting power

owned by

each

12,066,218 (1)

9 Sole dispositive power

reporting

person

0

with

10 Shared dispositive power

12,066,218 (1)

11 Aggregate amount beneficially owned by each reporting person

12,066,218 (1)

12 Check if the aggregate amount in Row (11) excludes certain shares

13 Percent of class represented by amount in Row (11)

83.6% (2)

14 Type of reporting person

CO

- (1) Represents the aggregate number of outstanding shares of Common Stock beneficially owned by the Stockholders, each of whom is an executive officer and/or director of the Issuer and has entered into a Voting Agreement dated as of December 19, 2013 with Intrexon. Neither the filing of this Statement on Schedule 13D nor any of its contents shall be deemed to constitute an admission by any reporting person that it is the beneficial owner of any of the Issuer's common stock referred to herein for purposes of Section 13(d) of the Exchange Act, or for any other purpose, and such beneficial ownership is expressly disclaimed by each reporting person.
- (2) As of the date hereof, Intrexon does not own any shares of Common Stock. However, for purposes of Rule 13d-3 under the Exchange Act, as a result of the Voting Agreements, Intrexon may be deemed to share with each Stockholder the power to vote or to direct the voting of the shares of Common Stock of such Stockholder covered by the Voting Agreements solely with respect to those matters described in the Voting Agreements. Accordingly, Intrexon may be deemed to be the beneficial owner of the shares of Common Stock. As set forth in the Voting Agreements (and, for purposes of determining the number of shares of Common Stock that the Stockholders may acquire within 60 days, taking into account the information set forth under the heading "Security Ownership of Certain Beneficial Owners and Management" in Issuer's registration statement on Form 10 as amended and filed with the SEC on December 12, 2013), there were an aggregate of 12,066,218 shares of Common Stock that were beneficially owned by the Stockholders, which constitutes approximately 83.6% of the outstanding voting securities of Issuer (based upon Issuer's representation in the Merger Agreement that there were 14,434,288 shares of Common Stock outstanding as of the close of business on December 17, 2013). If restricted stock and shares issuable upon exercise of options are excluded, the aggregate number of outstanding shares of Common Stock subject to the Voting Agreements is 4,828,432 or approximately 33.5% of the issued and outstanding shares of Common Stock based on the number of shares outstanding as of December 17, 2013.

**Item 1. Security and Issuer.**

The class of equity securities to which this Statement on Schedule 13D (the Statement ), relates is the common stock, \$0.0001 par value per share (the Common Stock ), of Medistem Inc., a Nevada corporation ( Issuer ), whose principal executive offices are located at 9255 Towne Centre Drive, Suite 450, San Diego, CA 92121.

**Item 2. Identity and Background.**

This Statement is being filed on behalf of Mr. Randal J. Kirk ( Mr. Kirk ) and Intrexon Corporation, a Virginia corporation that is controlled by Mr. Kirk ( Intrexon and, together with Mr. Kirk, the Reporting Persons ).

(a)-(c) The present principal occupation/employment of Mr. Kirk is as the Chairman and CEO of Intrexon. Mr. Kirk also serves as the Senior Managing Director of Third Security, LLC, an investment management firm founded by Mr. Kirk. The address of the principal business office of Mr. Kirk in connection with his role at Intrexon is 222 Lakeview Avenue, Suite 1400, West Palm Beach, Florida 33401. The address of the principal business office of Mr. Kirk in connection with his role at Third Security, LLC is The Governor Tyler, 1881 Grove Avenue, Radford, Virginia 24141. The address of the principal business office of Intrexon is 20374 Seneca Meadows Parkway, Germantown, Maryland 20876. The principal business of Intrexon is designing, building and regulating gene programs, or sequences of DNA that control cellular function, and cellular systems, or activities that take place within a cell and the interaction of those systems in the greater cellular environment, to enable the development of new and improved products and manufacturing processes across a variety of end markets, including healthcare, food, energy and environmental sciences. The name, present business address and country of citizenship of each director and executive officer of Intrexon is set forth on Schedule A hereto.

(d)-(e) During the last five years, none of the Reporting Persons has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding is or was subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) Mr. Kirk is a citizen of the United States. Intrexon is a corporation organized under the laws of the Commonwealth of Virginia.

**Item 3. Source and Amount of Funds or Other Consideration**

Issuer entered into an Agreement and Plan of Merger, dated as of December 19, 2013, a copy of which is attached hereto as Exhibit 1 (the Merger Agreement ), with Intrexon and XON Cells, Inc., a Nevada corporation and a wholly owned subsidiary of Intrexon ( Merger Sub ), that provides for the acquisition of Issuer by Intrexon by means of a merger of Merger Sub with and into Issuer, with Issuer as the surviving corporation (the Merger ). As a result of the Merger, Issuer would become a wholly owned subsidiary of Intrexon. As an inducement for Intrexon to enter into the Merger Agreement and in consideration thereof, the directors and executive officers of Issuer as set forth on Schedule B hereto (collectively, the Stockholders ), each entered into separate voting agreements (the Voting Agreements ) with Intrexon, dated as of December 19, 2013, the form of which is attached hereto as Exhibit 2 and more fully described in Item 4 below, whereby, subject to the terms of each such Voting Agreement, the Stockholders agreed, among other things, to vote their shares in favor of the approval of the Merger Agreement and against the approval of any proposal made in opposition to, or in competition with, the Merger or any other transactions contemplated by the Merger Agreement. Pursuant to the Voting Agreements, each of these Stockholders also granted certain representatives of Intrexon an irrevocable proxy granting such Intrexon representatives the right to vote such shares in favor of such matters. Intrexon did not pay additional consideration to the Stockholders in connection with the execution and

delivery of the Voting Agreements.

References to, and descriptions of, the Merger, the Merger Agreement and the Voting Agreements throughout this Schedule 13D are qualified in their entirety by reference to the Merger Agreement included as Exhibit 1 to this Schedule 13D and the Voting Agreements included as Exhibit 2 to this Schedule 13D. These agreements are incorporated into this Schedule 13D where such references and descriptions appear.

**Item 4: Purpose of Transaction**

(a) (b) As described in Item 3 above, this Schedule 13D relates to the proposed acquisition of Issuer by Intrexon pursuant to the terms of the Merger Agreement. To induce Intrexon to enter into the Merger Agreement, each of the Stockholders entered into the Voting Agreements. The purpose of the Voting Agreements is to facilitate the consummation of the Merger.



Subject to the terms and conditions of the Merger Agreement, at the effective time and as a result of the Merger each outstanding share of Common Stock of Issuer will be converted into the right to receive consideration equal to \$1.35, payable as (i) \$0.27 in cash, without interest and subject to applicable withholding tax, and (ii) \$1.08 worth of shares of Intrexon common stock, based on the volume-weighted average price of Intrexon common stock, as reported on the New York Stock Exchange, for the 20 trading days immediately preceding the last trading day prior to the date of the closing of the Merger, together with cash in lieu of fractional units subject to possible adjustment pursuant to the Merger Agreement in the event of any share distribution or other distribution payable in Intrexon common stock or Issuer common shares and in the event of any share split, exchange of shares or similar event. In no event, however, will the total consideration paid to Issuer stockholders exceed \$26.0 million in the aggregate.

Completion of the Merger is subject to various conditions, including, among others: (i) approval of the holders of a majority of Issuer's shares of outstanding common stock, (ii) the absence of any judgment, injunction, order or decree prohibiting or enjoining the completion of the Merger, (iii) effectiveness of the Form S-4 registration statement relating to the Intrexon common stock to be issued in the Merger, and (iv) listing of such Intrexon common stock on the New York Stock Exchange.

In addition, the obligation of the parties to complete the Merger is subject to certain other conditions, including (i) subject to the standards set forth in the Merger Agreement, the accuracy of the representations and warranties of the other party, (ii) compliance of each party with its covenants in all material respects, (iii) and Intrexon's having completed, to its satisfaction in its sole discretion, its business, financial and legal due diligence investigation of Issuer; provided that this closing condition is no longer applicable and/or exercisable by Intrexon on and after January 16, 2014.

### **The Voting Agreements**

On December 19, 2013, each of the Stockholders entered into Voting Agreements with Intrexon. The following summary describes certain material provisions of the form of Voting Agreement and is qualified in its entirety by reference to the form of Voting Agreement, the form of which is included as Exhibit 2 hereto, and is incorporated by reference herein. This summary does not purport to be complete and may not contain all of the information about the Voting Agreements that may be important to you. You are encouraged to read the form of Voting Agreement carefully and in its entirety.

#### Agreement to Vote and Irrevocable Proxy

Under the Voting Agreements, each Stockholder agreed to vote in favor of adoption and approval of the Merger Agreement and in favor of adoption and approval of the Merger and any other transactions contemplated by the Merger Agreement at every meeting of Issuer stockholders and on every action by written consent of Issuer stockholders.

Each Stockholder also agreed, while the Voting Agreements remain in effect and subject to certain exceptions, to vote or execute consents, as applicable, with respect to their shares of capital stock of Issuer:

in favor of adoption and approval of the Merger Agreement and all other transactions contemplated by the Merger Agreement as to which stockholders of Issuer are called upon to vote in favor of or consent to any matter necessary for consummation of the Merger and other transactions contemplated by the Merger Agreement; and against any acquisition proposal;

against any of the following actions (other than those actions that relate to the Merger and any other transactions contemplated by the Merger Agreement): (a) any Merger, consolidation, business combination, sale of assets, reorganization or recapitalization of or involving Issuer or any of its subsidiaries; (b) any sale, lease or transfer of all or substantially all of the assets of Issuer; (c) any reorganization, recapitalization, dissolution, liquidation or winding up of Issuer or any of its subsidiaries; (d) any material change in the capitalization of Issuer or any of its subsidiaries or in the corporate structure of Issuer or any of its subsidiaries; or (e) any other action that is intended to, or would reasonably be expected to materially impede, interfere with, delay, postpone, discourage or adversely affect the Merger or any other transactions contemplated by the Merger Agreement;

In connection with the foregoing voting covenants and to secure their duties under the Voting Agreements, each Stockholder irrevocably appointed Intrexon as such director or executive officer's true and lawful attorney and proxies to vote, if the Stockholder is unable to perform his, her or its obligations under the Voting Agreement, with respect to the matters relating to the Merger described above.

The Voting Agreements also provide that each Stockholder may not, among other things (a) initiate, solicit, seek or knowingly encourage or support any inquiries, proposals or offers that constitute or may reasonably be expected to lead to, an acquisition proposal, (b) engage or participate in, or facilitate, any discussions or negotiations regarding, or furnish any nonpublic information to any person in connection with, any inquiries, proposals or offers that constitute, or may reasonably be expected to lead to, an acquisition proposal, (c) enter into any letter of intent, agreement in principle or other similar type of agreement relating to an acquisition proposal, or enter into any agreement or agreement in principle requiring Issuer to abandon, terminate or fail to consummate the transactions contemplated by the Voting Agreements, (d) initiate a stockholders' vote or action by consent of Issuer's stockholders with respect to an acquisition proposal, (e) except by reason of the Voting Agreements, become a member of a group (within the meaning of Section 13(d) of the Exchange Act) with respect to any voting securities of Issuer that takes any action in support of an acquisition proposal, or (f) propose or agree to do any of the foregoing.

The Voting Agreements do not limit or restrict such Stockholders in their respective capacities as directors or executive officers of Issuer, including such Stockholder's ability to vote in his or her sole discretion on any matter in his or her capacity as a director of Issuer.

#### Transfer Restrictions

While the Voting Agreements remain in effect, each of the Stockholders agreed not to (1) transfer any shares of Issuer that are subject to the Voting Agreement (or cause or permit the transfer of such shares); or (2) grant any proxies or powers of attorney or deposit any shares of Common Stock into a voting trust or enter into a voting agreement with respect to any shares of Common Stock.

#### Termination

The Voting Agreements will terminate upon the earlier to occur of:

the valid termination of the Merger Agreement in certain circumstances in accordance with its terms; and

the completion of the Merger.

The Voting Agreements may be terminated by the Stockholders if Issuer's board of directors has withdrawn or changed its recommendation with respect to the Merger.

#### **Item 5. Interest in Securities of Issuer**

(a) and (b) As of the date hereof, Intrexon does not own any shares of Common Stock. However, for purposes of Rule 13d-3 under the Exchange Act, as a result of the Voting Agreements, Intrexon may be deemed to share with each Stockholder the power to vote or to direct the voting of the shares of Common Stock of such Stockholder covered by the Voting Agreements solely with respect to those matters described in the Voting Agreements. Accordingly, Intrexon may be deemed to be the beneficial owner of the shares of Common Stock. As set forth in the Voting Agreements (and, for purposes of determining the number of shares of Common Stock that the Stockholders may acquire within 60 days, taking into account the information set forth under the heading "Security Ownership of Certain Beneficial Owners and Management" in Issuer's registration statement on Form 10 as amended and filed with the SEC on December 12, 2013), there were an aggregate of 12,066,218 shares of Common Stock that were beneficially owned by the Stockholders, which constitutes approximately 83.6% of the outstanding voting securities of Issuer (based upon Issuer's representation in the Merger Agreement that there were 14,434,288 shares of Common Stock outstanding as of

the close of business on December 17, 2013). If restricted stock and shares issuable upon exercise of options are excluded, the aggregate number of outstanding shares of Common Stock subject to the Voting Agreements is 4,828,432 or approximately 33.5% of the issued and outstanding shares of Common Stock based on the number of shares outstanding as of December 17, 2013.

Except as described in Item 4 of this Schedule 13D and in the Voting Agreements, Intrexon is not entitled to any rights as a stockholder of Issuer. Intrexon disclaims beneficial ownership of the shares of Common Stock covered by the Voting Agreements and nothing herein shall be construed as an admission that Intrexon is the beneficial owner of such shares.

Neither the filing of this Schedule 13D nor any of its contents shall be deemed to constitute an admission by Intrexon or any other person that he, she or it is a member of a group for purposes of Section 13(d) of the Exchange Act, or for any other purpose, and membership in a group is hereby expressly disclaimed.

For more detailed descriptions of the Merger Agreement and the Voting Agreements, see Item 4 above, which descriptions are incorporated by reference herein in response to this Item 5.

(c) To the knowledge of Intrexon, neither Intrexon nor any person set forth on Schedules A hereto has effected any transactions in the shares of Common Stock during the past 60 days.

(d) To the knowledge of Intrexon, no person (other than the Stockholders) has the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the Subject Shares.

(e) Not applicable.

**Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of Issuer**

The matters set forth in Item 4 above are incorporated in this Item 6 by reference as if fully set forth herein.

**Item 7. Material to Be Filed as Exhibits**

The following documents are filed as exhibits to this Schedule:

<b>Exhibit</b>	<b>Title</b>
1	Agreement and Plan of Merger, dated as of December 19, 2013, by and among Intrexon Corporation., Medistem Inc., and XON Cells, Inc. (incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K filed by Intrexon Corporation on December 23, 2013 (File No. 001-36042)).
2	Form of Voting Agreement, dated December 19, 2013, by and among Intrexon Corporation and each of the directors and executive officers of Medistem Inc. (incorporated by reference to Exhibit 99.1 to the Current Report on Form 8-K filed by Intrexon Corporation on December 23, 2013 (File No. 001-36042)).
3	Joint Filing Agreement, dated as of December 30, 2013, by and between Mr. Kirk and Intrexon Corporation.

**SIGNATURES**

After reasonable inquiry and to the best of their knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct.

Date: December 30, 2013

/s/ Randal J. Kirk  
Randal J. Kirk

**INTREXON CORPORATION**

By: /s/ Randal J. Kirk  
Randal J. Kirk  
Chief Executive Officer

Schedule A**Directors and Executive Officers of****Intrexon Corporation**

The following tables set forth the name, present principal occupation or employment. The country of citizenship of each director and executive officer is the United States of America, and the business address of each director and executive officer is: c/o Intrexon Corporation, 20374 Seneca Meadows Parkway, Germantown, Maryland 20876.

**Board of Directors**

<b>Name</b>	<b>Present Principal Occupation</b>
Randal J. Kirk	Chief Executive Officer of Intrexon Corporation and Senior Managing Director of Third Security, LLC
Thomas D. Reed, Ph.D.	Chief Science Officer of Intrexon Corporation
Cesar L. Alvarez	Executive Chairman of Greenberg Traurig, LLP
Steven Frank	Chairman of Global Healthcare Investment Banking of J.P. Morgan Securities LLC
Larry D. Horner	Director of Intrexon Corporation
Jeffrey B. Kindler	Venture partner with Lux Capital
Dean J. Mitchell	President and Chief Executive Officer of Lux Biosciences, Inc.
Robert B. Shapiro	Co-Founder and Managing Director of Sandbox Industries

**Executive Officers**

<b>Name</b>	<b>Present Principal Occupation</b>
Randal J. Kirk	Chief Executive Officer of Intrexon Corporation and Senior Managing Director of Third Security, LLC
Krish S. Krishnan	Chief Operating Officer
Thomas D. Reed, Ph.D.	Chief Science Officer
Donald P. Lehr	Chief Legal Officer
Rick L. Sterling	Chief Financial Officer
Suma M. Krishnan	Senior Vice President Regulatory Affairs
Darryl Webster	Senior Vice President Intellectual Property
Samuel Broder	Senior Vice President Health Sector
Thomas R. Kasser, Ph.D.	Senior Vice President Food Sector

Robert F. Walsh, III

Senior Vice President Energy and Chemicals Sector

Nick Macris

Vice President Environmental Sector



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Schedule B**Directors and Executive Officers of Medistem Inc.**

<b>Name</b>	<b>Shares</b>	<b>Stock Options</b>	<b>Restricted Stock</b>
Alan J. Lewis, Ph.D.	100,000	1,183,000	0
Thomas E. Ichim, Ph.D.	69,000	600,000	514,286
John P. Salvador, J.D.	180,000	500,000	0
Donald F. Dickerson	30,750	100,000	186,214
Vladimir Bogin, M.D.	1,879,473	100,000	1,714,286
Vladimir Zaharchook-Williams	1,929,473	50,000	1,142,857
Sergey Sablin	639,736	50,000	857,143
John Chiplin, Ph.D.	0	120,000	0
Herm Rosenman	0	120,000	0

**Joint Filing Agreement**

In accordance with Rule 13d-1(k) promulgated under the Securities Exchange Act of 1934, as amended, the persons named below agree to the joint filing on behalf of each of them a Statement on Schedule 13D (including amendments thereto) with regard to the common stock of Medistem Inc., and further agree that this Joint Filing Agreement be included as an exhibit to such joint filings. In evidence thereof, the undersigned, being duly authorized, hereby execute this agreement as of the 30th day of December, 2013.

/s/ Randal J. Kirk  
Randal J. Kirk

**INTREXON CORPORATION**

By: /s/ Randal J. Kirk  
Randal J. Kirk  
Chief Executive Officer