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

**Amendment No. 4
to
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

HISTOGENICS CORPORATION

(Exact Name of Registrant as Specified in its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

3842
(Primary Standard Industrial
Classification Code Number)

04-3522315
(I.R.S. Employer
Identification Number)

**830 Winter Street, 3rd Floor
Waltham, Massachusetts 02451
(781) 547-7900**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Adam Gridley
Chief Executive Officer
Histogenics Corporation
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(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee(2)
Common Stock, \$0.01 par value	\$75,000,000	\$8,715.00

(1) Estimated pursuant to Rule 457(o) under the Securities Act of 1933, as amended. Includes the offering price attributable to additional shares that the underwriters have the option to purchase to cover over-allotments, if any.

(2) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.

(2) Of this amount, \$7,553 was previously paid in connection with the initial filing of this Registration Statement on October 7, 2014.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to such Section 8(a), may determine.

Explanatory Note

The sole purpose of this Amendment No. 4 to the Registration Statement on Form S-1 (Registration No. 333-199202), as amended, is to amend the registration fee calculation on the facing page. Accordingly, this Amendment No. 4 consists of only the facing page, this explanatory note, Part II of the Registration Statement, the signature pages to the Registration Statement and the filed exhibits. The Prospectus, constituting Part I of the Registration Statement, is unchanged and has therefore been omitted.

PART II
INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table presents the costs and expenses, other than underwriting discounts and commissions, payable in connection with the sale of common stock being registered. All amounts are estimates except the SEC registration fee, the FINRA filing fee and the exchange listing fee. Except as otherwise noted, all the expenses below will be paid by us.

SEC registration fee	\$ 8,715.00
FINRA filing fee	17,750.00
Exchange listing fee	25,000.00
Printing and engraving expenses	250,000.00
Legal fees and expenses	1,800,000.00
Accounting fees and expenses	775,000.00
Transfer agent and registrar fees	10,000.00
Miscellaneous fees and expenses	400,500.00
Total	<u>\$3,286,965.00</u>

Item 14. Indemnification of Directors and Officers.

Sections 145 and 102(b)(7) of the General Corporation Law of the State of Delaware provide that a corporation may indemnify any person made a party to an action by reason of the fact that he or she was a director, officer, employee or agent of the corporation or is or was serving at the request of a corporation against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of an action by or in right of the corporation, no indemnification may generally be made in respect of any claim as to which such person is adjudged to be liable to the corporation.

In connection with the completion of this offering, the Registrant's amended and restated certificate of incorporation will contain provisions that eliminate, to the maximum extent permitted by the General Corporation Law of the State of Delaware, the personal liability of the Registrant's directors for monetary damages for breach of their fiduciary duties as directors. The Registrant's amended and restated bylaws to be in effect immediately prior to the completion of this offering provide that the Registrant must indemnify its directors and officers and may indemnify its employees and other agents to the fullest extent permitted by the General Corporation Law of the State of Delaware.

The Registrant has entered into indemnification agreements with its directors and executive officers, in addition to the indemnification provided for in its amended and restated bylaws, and intends to enter into indemnification agreements with any new directors and executive officers in the future.

The Registrant has purchased and intends to maintain insurance on behalf of any person who is or was a director or officer of the Registrant against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions.

The Underwriting Agreement, the form of which is attached as Exhibit 1.1 hereto, provides for indemnification by the underwriters of the Registrant and its executive officers and directors, and by the Registrant of the underwriters, for certain liabilities, including liabilities arising under the Securities Act and affords certain rights of contribution with respect thereto.

See also "Undertakings" set out in response to Item 17 herein.

Item 15. Recent Sales of Unregistered Securities.

Set forth below is information regarding the shares of common stock and preferred stock and the warrants issued, and options granted, by us since December 2, 2011 that were not registered under the Securities Act of 1933, as amended.

- (1) Under the 2012 Equity Incentive Plan, we granted stock options to purchase shares of our common stock to certain of our employees, officers, consultants and advisors, as follows: (a) from August 15, 2012 to July 16, 2013, we granted stock options to purchase an aggregate of 549,023 shares of our common stock at an exercise price of \$0.76 per share; (b) on October 31, 2012, we issued 5,654 shares of restricted common stock at a price of \$0.01 per share; (c) on April 23, 2013, we issued 7,554 shares of restricted common stock at a price of \$0.01 per share; (d) on December 11,

2013, we granted stock options to purchase an aggregate of 125,246 shares of our common stock at an exercise price of \$7.13 per share; (e) on April 30, 2014, we granted stock options to purchase an aggregate of 213,935 shares of our common stock at an exercise price of \$7.99 per share; and (f) on July 17, 2014, we granted stock options to purchase an aggregate of 91,493 shares of our common stock at an exercise price of \$8.97 per share.

- (2) In 2012, we issued and sold an aggregate of 2,647,350 shares of Series A convertible preferred stock to investors for an aggregate purchase price of \$26.5 million, net of issuance costs.
- (3) In 2012, in connection with our Series A Financing, we issued warrants to investors and advisors exercisable for an aggregate of 209,805 shares of our common stock at a weighted average exercise price of \$0.58 per share. These warrants are or will be exercisable upon the occurrence of certain defined events for an aggregate of up to 209,805 shares of our common stock.
- (4) In December 2013, we issued and sold an aggregate of 955,568 shares of Series A-1 convertible preferred stock to investors for an aggregate purchase price of \$10.3 million.
- (5) In May 2014, we issued and sold an aggregate of 955,565 shares of Series A-1 convertible preferred stock for an aggregate purchase price of \$10.3 million.
- (6) In July 2014, in connection with entering into a loan and security agreement with Silicon Valley Bank, we issued a warrant to Silicon Valley Bank exercisable for an aggregate of 6,566 shares of our common stock, subject to certain adjustments, at an exercise price of \$7.99 per share. The warrant is immediately exercisable and terminates ten years after the date issued.
- (7) In September 2014, we issued a 6% convertible promissory note to Intrexon Corporation in a principal amount of \$10.0 million as partial consideration for the execution and delivery of our Exclusive Channel Collaboration Agreement with Intrexon Corporation. The convertible promissory note provides that it shall convert in connection with a public offering of our securities and therefore immediately prior to the closing of this offering, the principal and accrued but unpaid interest on the note shall convert into shares of our common stock at a price per share equal to the initial public offering price for common stock listed on the cover page of this prospectus.
- (8) In November 2014, we authorized the issuance of up to \$2.5 million of 6% convertible promissory notes, of which we have issued convertible promissory notes to certain of our existing stockholders in a principal amount of \$1.0 million as part of a bridge financing. The convertible promissory notes provide that they shall convert in connection with a public offering of our securities and therefore immediately prior to the closing of this offering, the principal on such notes shall convert into shares of our common stock at a price per share equal to the initial public offering price for common stock listed on the cover page of this prospectus. Accrued but unpaid interest is payable in cash.

The offers, sales, grants and issuances of the securities described in paragraph (1) were deemed to be exempt from registration under the Securities Act in reliance on Rule 701. The recipients of such securities were our employees, officers, bona fide consultants and advisors and received the securities under our 2012 Equity Incentive Plan. Appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions had adequate access, through employment, business or other relationships, to information about us.

The offer, sale and issuance of the securities described in paragraphs (2) through (8) were deemed to be exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act in that the issuance of the securities to the accredited investors did not involve a public offering. The recipients of the securities in this transaction acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were affixed to the securities issued in this transaction. The recipients of the securities in this transaction were accredited investors under Rule 501 of Regulation D.

Item 16. Exhibits and Financial Statement Schedules.

The list of exhibits in the Index to Exhibits to this registration statement is incorporated herein by reference.

Item 17. Undertakings.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act of 1933, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933, and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes to provide the underwriters, at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

The undersigned registrant hereby undertakes that:

1. For purposes of determining any liability under the Securities Act of 1933, the information omitted from a form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act of 1933 shall be deemed to be part of this registration statement as of the time it was declared effective.
2. For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
3. For the purpose of determining liability under the Securities Act to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
4. In a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - (1) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
 - (2) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (3) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (4) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

EXHIBIT INDEX

<u>Exhibit</u>	<u>Description</u>
1.1†‡	Form of Underwriting Agreement
3.1†‡	Fifth Amended and Restated Certificate of Incorporation, as amended (currently in effect)
3.2†‡	Bylaws (currently in effect)
3.3†‡	Form of Sixth Amended and Restated Certificate of Incorporation (to be effective immediately prior to the closing of this offering)
3.4†‡	Form of Amended and Restated Bylaws (to be effective immediately prior to the closing of this offering)
4.1†‡	Specimen stock certificate evidencing the shares of common stock
4.2†‡	Second Amended and Restated Investors' Rights Agreement dated as of December 18, 2013
4.3†‡	Second Amended and Restated Stockholders' Agreement dated as of December 18, 2013
4.4†‡	Warrant to Purchase Common Stock dated July 9, 2014 issued to Silicon Valley Bank
4.5†‡	Amended and Restated Royalty Agreement dated as of October 14, 2014
4.6†‡	Convertible Promissory Note dated as of September 30, 2014 issued to Intrexon Corporation
4.7†‡	Form of Convertible Promissory Note issued to existing stockholders in November 2014
5.1†‡	Opinion of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP
10.1†‡	Form of Indemnity Agreement for directors and officers
10.2+†‡	Employment Agreement dated June 5, 2013 between the Registrant and Peter Greenleaf
10.3+†‡	Offer letter effective as of May 15, 2011 between the Registrant and Kevin McArdle
10.4+†‡	Offer letter dated September 23, 2013, between the Registrant and Nancy Lynch, M.D.
10.5+†‡	Offer letter effective as of August 5, 2013 between the Registrant and Stephen Kennedy
10.6+†‡	2012 Equity Incentive Plan, as amended, and form of option agreement thereunder
10.7+†‡	2013 Equity Incentive Plan
10.8+†‡	2013 Employee Stock Purchase Plan
10.9+†‡	Independent Director Compensation Policy
10.10†‡	License Agreement dated as of May 12, 2005 among the Registrant and Angiotech Pharmaceuticals (US), Inc. and Angiodevice International GmbH
10.11†‡	Amendment to License Agreement dated as of August 31, 2007 among the Registrant and Angiotech Pharmaceuticals (US), Inc. and Angiodevice International GmbH
10.12†‡	Second Amendment to License Agreement dated as of January 1, 2008 among the Registrant and Angiotech Pharmaceuticals (US), Inc. and Angiodevice International GmbH
10.13†‡	Third Amendment to License Agreement dated as of April 15, 2008 among the Registrant and Angiotech Pharmaceuticals (US), Inc. and Angiodevice International GmbH
10.14†‡	Fourth Amendment to License Agreement dated as of November 1, 2008 among the Registrant and Angiotech Pharmaceuticals (US), Inc. and Angiodevice International GmbH
10.15†‡	Fifth Amendment to License Agreement dated as of August 6, 2010 among the Registrant and Angiotech Pharmaceuticals (US), Inc. and Angiodevice International GmbH
10.16†‡	Reinstatement Agreement and Sixth Amendment to License Agreement dated as of February 8, 2011 among the Registrant and Angiotech Pharmaceuticals (US), Inc. and Angiodevice International GmbH
10.17†‡	Seventh Amendment to License Agreement dated as of March 31, 2011 among the Registrant and Angiotech Pharmaceuticals (US), Inc. and Angiodevice International GmbH
10.18†‡	Eighth Amendment to License Agreement dated as of June 29, 2012 among the Registrant and Angiotech Pharmaceuticals (US), Inc. and Angiodevice International GmbH
10.19†‡	Paid-up License Agreement dated as of March 6, 2013 between the Registrant and Koken Co., Ltd.
10.20†‡	Agreement dated as of June 22, 2012 between the Registrant and Purpose Co., Ltd. f/k/a Takagi Sangyo Co. Ltd. and f/k/a Takagi Industrial Co., Ltd.

<u>Exhibit</u>	<u>Description</u>
10.21†‡	Exclusive Agreement dated as of April 15, 2001 between the Registrant and The Board of Trustees of The Leland Stanford Junior University
10.22‡	First Amendment to Exclusive Agreement dated as of October 26, 2005 between the Registrant and The Board of Trustees of The Leland Stanford Junior University
10.23†‡	Second Amendment to Exclusive Agreement dated as of January 15, 2006 between the Registrant and The Board of Trustees of The Leland Stanford Junior University
10.24†‡	Amendment No. 3 to the License Agreement Effective 4/15/2001 dated as of May 1, 2009 between the Registrant and The Board of Trustees of The Leland Stanford Junior University
10.25‡	Amendment No. 4 to the License Agreement Effective 4/15/2001 dated as of April 29, 2010 between the Registrant and The Board of Trustees of The Leland Stanford Junior University
10.26†‡	License Agreement dated as of January 6, 2008 between the Registrant (ProChon Biotech Ltd.) and Yeda Research and Development Company Limited
10.27†‡	Amendment to License Agreement dated as of March 23, 2010 between the Registrant (ProChon Biotech Ltd.) and Yeda Research and Development Company Limited
10.28‡	Lease Agreement dated of June 9, 2006 between the Registrant and Intercontinental Fund III 830 Winter Street LLC
10.29‡	First Amendment to Lease dated as of October 1, 2009 between the Registrant and Intercontinental Fund III 830 Winter Street LLC
10.30‡	Separation Agreement, dated February 28, 2014, between the Registrant and Peter Greenleaf
10.31†‡	Collagen Technology Transfer Agreement dated as of April 15, 2014 between the Registrant and Advanced BioMatrix, Inc.
10.32+‡	Employment Agreement dated April 26, 2014 between the Registrant and Adam Gridley
10.33‡	Lease Agreement dated as of June 2, 2014 between the Registrant and ARE-60 Westview, LLC
10.34‡	Loan and Security Agreement dated as of July 9, 2014 between the Registrant and Silicon Valley Bank
10.35†‡	Exclusive Channel Collaboration Agreement dated as of September 30, 2014 between the Registrant and Intrexon Corporation
21.1‡	List of Subsidiaries
23.1‡	Consent of Grant Thornton LLP, independent registered public accounting firm
23.2‡	Consent of Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP (included in Exhibit 5.1)
24.1‡	Power of Attorney

+ Indicates management contract or compensatory plan.

† Portions of this exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment. The omitted portions of this exhibit have been filed with the SEC.

‡ Previously filed.