

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

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment No.)*

HISTOGENICS CORPORATION

(Name of Issuer)

Common Stock, par value \$0.01 per share

(Title of Class of Securities)

43358V 109

(CUSIP Number)

Steven L.P. Schwen
Split Rock Partners II, LP
10400 Viking Drive, Suite 250
Eden Prairie, Minnesota 55344
(952) 995-7492

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

Copy to:
Amy E. Culbert
Oppenheimer Wolff & Donnelly LLP
Campbell Mithun Tower — Suite 2000
222 South Ninth Street
Minneapolis, Minnesota 55402
(612) 607-7000

December 2, 2014

(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 Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box: o

Note: Schedules filed in paper format shall include a signed original and five copies of the schedules, including all exhibits. See Rule 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 purposes 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)

CUSIP NO. 43358V 109

SCHEDULE 13D

1 Name of Reporting Persons:
Split Rock Partners II, LP

2 Check the Appropriate Box if a Member of a Group

(a) o

(b) o

3 SEC Use Only

4 Source of Funds
WC

5 Check Box if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6 Citizenship or Place of Organization
Delaware

7 Sole Voting Power
1,384,694(1)

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With:

8 Shared Voting Power
-0-

9 Sole Dispositive Power
1,384,694(1)

10 Shared Dispositive Power
-0-

11 Aggregate Amount Beneficially Owned by Each Reporting Person
1,384,694(1)

12 Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares

13 Percent of Class Represented by Amount in Row (11)
10.9%

14 Type of Reporting Person:
PN

(1) Voting and investment power over the securities is delegated to Split Rock Partners II Management, LLC ("SRPM II"), the general partner of Split Rock Partners II, LP ("SRP II"). SRPM II has delegated voting and investment decisions to three individuals who require a two-thirds vote to act. Each of SRP and SRPM II disclaims beneficial ownership of the securities except to the extent of any pecuniary interest therein.

1 Name of Reporting Persons:
Split Rock Partners II Management, LLC

2 Check the Appropriate Box if a Member of a Group

(a)

(b)

3 SEC Use Only

4 Source of Funds
WC

5 Check Box if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

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-0-

11 Aggregate Amount Beneficially Owned by Each Reporting Person
1,384,694(1)

12 Check Box if the Aggregate Amount in Row (11) Excludes Certain Shares

13 Percent of Class Represented by Amount in Row (11)
10.9%

14 Type of Reporting Person:
OO

(1) Shares are held by SRP II. Voting and investment power over the securities is delegated to SRPM II, the general partner of SRP II. SRPM II has delegated voting and investment decisions to three individuals who require a two-thirds vote to act. Each of SRP II and SRPM II disclaims beneficial ownership of the securities except to the extent of any pecuniary interest therein.

Item 1. Security and Issuer.

This Statement of Beneficial Ownership on Schedule 13D (this “Schedule 13D”) relates to the common stock, par value \$0.01 per share (the “Common Stock”), of Histogenics Corporation, a Delaware corporation (the “Company”). The address of the principal executive offices of the Company is 830 Winter Street, 3rd Floor, Waltham, Massachusetts 02451.

Item 2. Identity and Background.

(a) This Schedule 13D is being filed by Split Rock Partners II, LP, a Delaware limited partnership (“SRP II”), and Split Rock Partners II Management, LLC, a Delaware limited liability company (“SRPM II”) (SRP II and SRPM II are collectively referred to as the “Reporting Persons”). SRPM II is the general partner of SRP II.

(b) The business address of each of the Reporting Persons is 10400 Viking Drive, Suite 250, Eden Prairie, Minnesota 55344.

(c) The principal occupation of each of the Reporting Persons is the venture capital investment business. The principal business of SRP II is to make investments in private and public companies, and the principal business of SRPM II is to serve as the general partner of SRP II.

(d) Neither of the Reporting Persons has been convicted in a criminal proceeding in the past five years.

(e) In the past five years, neither of the Reporting Persons has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction as a result of which he was or is 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 a finding of any violation with respect to such laws.

(f) SRP II is a Delaware limited partnership. SRPM II is a Delaware limited liability company.

Information called for by Items 2-6 of this Schedule 13D concerning the managing members of SRPM II is set forth in Exhibit 99.1 attached hereto and is incorporated herein by reference.

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

In connection with the Company’s initial public offering of Common Stock, which closed on December 8, 2014 (“Offering”), 640,230 shares of Series A convertible preferred stock and 407,825 shares of Series A-1 convertible preferred stock previously acquired by SRP II from the Company were automatically converted into Common Stock on a one-for-one basis.

4

In addition, in connection with the Offering, a common stock warrant to purchase 9,713 shares of Common Stock held by SRP II was automatically exercised on a “net cashless” basis. SRP II paid the exercise price of the warrant on a “net cashless” basis, resulting in the Company withholding 668 shares of Common Stock underlying the warrant to pay the exercise price and issuing SRP II the remaining 9,045 shares of Common Stock.

In addition, in connection with the Offering, SRP II purchased 333,466 shares of Common Stock at the initial public offering price of \$11.00 per share in the Offering, or \$3,668,126 in the aggregate.

Also in connection with the Offering, SRP II transferred 5,872 shares of Common Stock to a strategic partner of the Company to satisfy SRP II’s contractual obligations under certain agreements between the Company, SRP II, certain of the Company’s other stockholders, and such strategic partner.

Immediately prior to the Offering, SRP II received paid-in-kind cumulative dividends on its shares of Series A convertible preferred stock and Series A-1 convertible preferred stock, which amounted to approximately \$1,347,215 and which shares converted into 122,473 shares of Common Stock in connection with the Offering, as described above.

The source of the funds for all purchases and acquisitions by the Reporting Persons was from working capital.

No part of the purchase price was borrowed by the Reporting Persons for the purpose of acquiring any securities discussed in this Item 3.

Item 4. Purpose of Transaction.

The Reporting Persons hold their securities of the Company for investment purposes. Depending on the factors discussed herein, the Reporting Persons may, from time to time, acquire additional shares of Common Stock and/or retain and/or sell all or a portion of the shares of Common Stock held by the Reporting Persons in the open market or in privately negotiated transactions, and/or may distribute the Common Stock held by the Reporting Persons to their respective limited partners or members. Any actions the Reporting Persons might undertake will be dependent upon the Reporting Persons’ review of numerous factors, including, among other things, the price levels of the Common Stock, general market and economic conditions, ongoing evaluation of the Company’s business, financial condition, operations and prospects; the relative attractiveness of alternative business and investment opportunities, and other future developments.

Except as set forth above, the Reporting Persons have no current plans or proposals which relate to or would result in (a) the acquisition by any person of additional securities of the Company or the disposition of securities of the Company; (b) an extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Company or any of its subsidiaries; (c) a sale or transfer of or material amount of assets of the Company or any of its subsidiaries; (d) any change in the present board of directors or management of the Company, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board; (e) any material change in the present capitalization or dividend policy of the Company; (f) any other material change in the Company’s business or corporate structure; (g) changes in the Company’s charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the

5

Company by any person; (h) causing a class of securities of the Company to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association; (i) a class of equity securities of the Company becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Securities Exchange Act of 1934, as amended; or (j) any action similar to any of those enumerated above.

Item 5. Interest in Securities of the Issuer.

(a) As of December 10, 2014, each of the Reporting Persons beneficially owned 1,384,694 shares of Common Stock, which represents 10.9% of the outstanding shares of Common Stock of the Company. This percentage is based upon 12,756,805 shares of Common Stock outstanding immediately after the Offering as disclosed in the Company's final prospectus dated December 2, 2014.

(b) Each of the Reporting Persons has sole voting and dispositive power with respect to all of the shares of Common Stock that the Reporting Person beneficially owns. Voting and investment power over the shares of Common Stock beneficially owned by SRP II has been delegated to SRPM II. SRPM II has delegated voting and investment decisions to three individuals who require a two-thirds vote to act. Each of SRP and SRPM II disclaims beneficial ownership of the securities except to the extent of any pecuniary interest therein

(c) Except as otherwise described in this Schedule 13D, neither of the Reporting Persons has effected any transactions in the Common Stock or other equity securities of the Company during the last 60 days.

(d) Under certain circumstances set forth in the limited partnership agreement of SRP II, the general partner and limited partners of SRP II may be deemed to have the right to receive dividends from, or the proceeds from, the sale of shares of the Company owned by such entity of which they are a partner.

(e) Not applicable.

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

In connection with the Offering, SRP II and certain other persons entered into a lock-up agreement with the underwriters in the Offering and agreed not to sell or transfer any shares of Common Stock or securities convertible into, exchangeable for, exercisable for, or repayable with shares of Common Stock, for 180 days after the date of the Offering without first obtaining the written consent of Cowen and Company, LLC, as representative of the underwriter. Specifically, SRP II has agreed, with certain limited exceptions, not to directly or indirectly:

- offer, pledge, announce the intention to sell, sell or contract to sell any shares of Common Stock;
- sell any option or contract to purchase any shares of Common Stock;
- purchase any option or contract to sell any shares of Common Stock;

6

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- grant any option, right or warrant to purchase any shares of Common Stock;
 - dispose of or otherwise transfer any shares of Common Stock;
 - demand that the Company file a registration statement related to Common Stock; or
 - enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of any shares of Common Stock, whether any such swap or transaction is to be settled by delivery of shares or other securities, in cash or otherwise.

This lock-up provision also applies to securities convertible into or exchangeable or exercisable for or repayable with shares of Common Stock. It also applies to shares of Common Stock owned now or acquired later by SRP II.

SRP II is party to a second amended and restated investors' rights agreement (the "Investors' Rights Agreement") with the Company and certain other stockholders of the Company. Under this agreement, the Company granted information and inspection rights that terminated upon closing of the Offering. In addition, SRP II has certain registration rights under this agreement which survived the closing of the Offering.

The form of lock-up agreement and the Investors' Rights Agreement are being filed as Exhibit 99.2 and Exhibit 99.3, respectively, to this Schedule 13D and are incorporated herein by reference.

Pursuant to Rule 13d-1(k)(1) promulgated under the Securities Exchange Act of 1934, as amended, the Reporting Persons have entered into an agreement with respect to the joint filing of this Schedule 13D, and any amendment or amendments hereto, a copy of which has been filed as Exhibit 99.4 to this Schedule 13D and is incorporated herein by reference.

Except as described herein and in Exhibit 99.4 to this Schedule 13D, there are no contracts, arrangements, understandings or relationships among the persons named in Item 2 or among the Reporting Persons and any other person with respect to any securities of the Company.

Item 7. Material to be Filed as Exhibits.

Exhibit No.	Description
99.1	Information concerning Managing Directors and Executive Officers of Split Rock Partners II Management, LLC (filed herewith).

Exhibit No.	Description
99.3	Second Amended and Restated Investors' Rights Agreement dated as of December 18, 2013 among the Company and the Investors party thereto (incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form S-1, as filed with the Securities and Exchange Commission on October 7, 2014 (SEC Reg. No. 333-199202)).
99.4	Joint Filing Agreement (filed herewith).

SIGNATURE

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

Date: December 12, 2014

SPLIT ROCK PARTNERS II, LP, a Delaware limited partnership

By: SPLIT ROCK PARTNERS II MANAGEMENT, LLC,
a Delaware limited liability company
Its: General Partner

By: /s/ Steven L.P. Schwen
Name: Steven L.P. Schwen
Title: Chief Financial Officer

SPLIT ROCK PARTNERS II MANAGEMENT, LLC,
a Delaware limited liability company

By: /s/ Steven L.P. Schwen
Name: Steven L.P. Schwen
Title: Chief Financial Officer

**SCHEDULE 13D
Exhibit Index**

Exhibit No.	Description	Method of Filing
99.1	Information concerning the Managing Directors and Executive Officers of Split Rock Partners II Management, LLC	Filed herewith
99.2	Form of Lock-Up Agreement among the Company, the Underwriters and Certain Stockholders of the Company	Incorporated by reference to Exhibit A to Exhibit 1.1 to the Company's Amendment No. 1 to Registration Statement on Form S-1, as filed with the Securities and Exchange Commission on November 7, 2014 (SEC Reg. No. 333-199202)
99.3	Second Amended and Restated Investors' Rights Agreement dated as of December 18, 2013 among the Company and the investors party thereto	Incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form S-1, as filed with the Securities and Exchange Commission on October 7, 2014 (SEC Reg. No. 333-199202)
99.4	Joint Filing Agreement	Filed herewith

The names of the current managing directors and executive officers of Split Rock Partners II Management, LLC are set forth below. The business address of each of the individuals named below is 10400 Viking Drive, Suite 250, Eden Prairie, Minnesota 55344. The principal occupation of each of the individuals named below is managing member of Split Rock Partners II Management, LLC.

During the last five years, none of the individuals has been convicted in any criminal proceeding (excluding traffic violations and similar misdemeanors) or has been a party to any civil proceeding of a judicial or administrative body as a result of which such person was or is 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 violations with respect to such laws. All of the individuals listed below are citizens of the United States.

Name	Position with SRPM II	Shares of Histogenics Corporation Beneficially Owned	Description of any contract, arrangement, understanding or relationship with respect to any securities of Histogenics Corporation
Michael B. Gorman	Managing Director	-0-	Not applicable
James R. Simons	Managing Director	-0-	Not applicable
David W. Stassen	Managing Director	-0-	Not applicable
Steven L.P. Schwen	Chief Financial Officer	-0-	Not applicable

JOINT FILING AGREEMENT

The undersigned hereby agree that a single Schedule 13D (or any amendment thereto) relating to the Common Stock of Histogenics Corporation shall be filed on behalf of each of the undersigned and that this Agreement shall be filed as an exhibit to such Schedule 13D.

Date: December 12, 2014

SPLIT ROCK PARTNERS II, LP, a Delaware limited partnership

By: SPLIT ROCK PARTNERS II MANAGEMENT, LLC,
a Delaware limited liability company
Its: General Partner

By: /s/ Steven L.P. Schwen
Name: Steven L.P. Schwen
Title: Chief Financial Officer

SPLIT ROCK PARTNERS II MANAGEMENT, LLC,
a Delaware limited liability company

By: /s/ Steven L.P. Schwen
Name: Steven L.P. Schwen
Title: Chief Financial Officer
