

SECURITIES & EXCHANGE COMMISSION  
Washington, D.C. 20549

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SCHEDULE 13G  
(Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT  
TO RULES 13d-1(b), (c) AND (d) AND AMENDMENTS THERETO FILED  
PURSUANT TO RULE 13d-2

(Amendment No. 1)\*

**SeaSpine Holdings Corporation**  
(Name of Issuer)

Common Stock, \$.01 Par Value Per Share  
(Title of Class of Securities)

81255T108  
(CUSIP Number)

December 31, 2015  
(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)  
 Rule 13d-1(c)  
 Rule 13d-1(d)

(Page 1 of 15 Pages)

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\*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 the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for 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).

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(1) NAMES OF REPORTING PERSONS  
HealthCor Management, L.P.

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(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)

(a)   
(b)

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(3) SEC USE ONLY

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(4) CITIZENSHIP OR PLACE OF ORGANIZATION  
Delaware

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NUMBER OF (5) SOLE VOTING POWER  
SHARES 0

---

BENEFICIALLY (6) SHARED VOTING POWER  
OWNED BY 604,000

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EACH (7) SOLE DISPOSITIVE POWER  
REPORTING 0

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PERSON WITH (8) SHARED DISPOSITIVE POWER  
604,000

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(9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
604,000

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(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)

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(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
5.44%

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(12) TYPE OF REPORTING PERSON (see instructions)  
PN

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(1) NAMES OF REPORTING PERSONS  
HealthCor Associates, LLC

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)

(a)   
(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION  
Delaware

NUMBER OF (5) SOLE VOTING POWER  
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER  
OWNED BY 604,000

EACH (7) SOLE DISPOSITIVE POWER  
REPORTING 0

PERSON WITH (8) SHARED DISPOSITIVE POWER  
604,000

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
604,000

(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)

(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
5.44%

(12) TYPE OF REPORTING PERSON (see instructions)  
OO - limited liability company

(1) NAMES OF REPORTING PERSONS  
HealthCor Offshore Master Fund, L.P.

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)

(a)

(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION  
Cayman Islands

NUMBER OF (5) SOLE VOTING POWER  
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER  
OWNED BY 421,661

EACH (7) SOLE DISPOSITIVE POWER  
REPORTING 0

PERSON WITH (8) SHARED DISPOSITIVE POWER  
421,661

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
421,661

(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)

(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
3.80%

(12) TYPE OF REPORTING PERSON (see instructions)  
PN

(1) NAMES OF REPORTING PERSONS  
HealthCor Offshore GP, LLC

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)

(a)   
(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION  
Delaware

NUMBER OF (5) SOLE VOTING POWER  
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER  
OWNED BY 421,661

EACH (7) SOLE DISPOSITIVE POWER  
REPORTING 0

PERSON WITH (8) SHARED DISPOSITIVE POWER  
421,661

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
421,661

(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)

(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
3.80%

(12) TYPE OF REPORTING PERSON (see instructions)  
OO – limited liability company

(1) NAMES OF REPORTING PERSONS  
HealthCor Group, LLC

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)

(a)   
(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION  
Delaware

NUMBER OF (5) SOLE VOTING POWER  
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER  
OWNED BY 604,000

EACH (7) SOLE DISPOSITIVE POWER  
REPORTING 0

PERSON WITH (8) SHARED DISPOSITIVE POWER  
604,000

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
604,000

(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)

(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
5.44%

(12) TYPE OF REPORTING PERSON (see instructions)  
OO - limited liability company

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(1) NAMES OF REPORTING PERSONS  
Arthur Cohen

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(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)

(a)   
(b)

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(3) SEC USE ONLY

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(4) CITIZENSHIP OR PLACE OF ORGANIZATION  
United States

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NUMBER OF (5) SOLE VOTING POWER  
SHARES 0

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BENEFICIALLY (6) SHARED VOTING POWER  
OWNED BY 604,000

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EACH (7) SOLE DISPOSITIVE POWER  
REPORTING 0

---

PERSON WITH (8) SHARED DISPOSITIVE POWER  
604,000

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(9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
604,000

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(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)

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(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
5.44%

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(12) TYPE OF REPORTING PERSON (see instructions)  
IN

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(1) NAMES OF REPORTING PERSONS  
Joseph Healey

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)

(a)   
(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION  
United States

NUMBER OF (5) SOLE VOTING POWER  
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER  
OWNED BY 604,000

EACH (7) SOLE DISPOSITIVE POWER  
REPORTING 0

PERSON WITH (8) SHARED DISPOSITIVE POWER  
604,000

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
604,000

(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)

(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
5.44%

(12) TYPE OF REPORTING PERSON (see instructions)  
IN



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(1) NAMES OF REPORTING PERSONS  
HealthCor Sanatate Offshore Master Fund, L.P.

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(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)

(a)   
(b)

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(3) SEC USE ONLY

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(4) CITIZENSHIP OR PLACE OF ORGANIZATION  
Cayman Islands

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NUMBER OF (5) SOLE VOTING POWER  
SHARES 0

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BENEFICIALLY (6) SHARED VOTING POWER  
OWNED BY 182,339

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EACH (7) SOLE DISPOSITIVE POWER  
REPORTING 0

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PERSON WITH (8) SHARED DISPOSITIVE POWER  
182,339

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(9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
182,339

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(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)

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(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
1.64%

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(12) TYPE OF REPORTING PERSON (see instructions)  
PN

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(1) NAMES OF REPORTING PERSONS  
HealthCor Offshore II GP, LLC

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)

(a)   
(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION  
Delaware

NUMBER OF (5) SOLE VOTING POWER  
SHARES 0

BENEFICIALLY (6) SHARED VOTING POWER  
OWNED BY 182,339

EACH (7) SOLE DISPOSITIVE POWER  
REPORTING 0

PERSON WITH (8) SHARED DISPOSITIVE POWER  
182,339

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
182,339

(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)

(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)  
1.64%

(12) TYPE OF REPORTING PERSON (see instructions)  
OO - limited liability company

Item 1(a). Name of Issuer:  
SeaSpine Holdings Corporation

Item 1(b). Address of Issuer's Principal Executive Offices:  
5770 Armada Drive, Carlsbad, California 92008

Item 2(a, b, c). Name of Person Filing:

(i) HealthCor Management, L.P., a Delaware limited partnership, Carnegie Hall Tower, 152 West 57th Street, 43rd Floor, New York, New York 10019;

(ii) HealthCor Associates, LLC, a Delaware limited liability company, Carnegie Hall Tower, 152 West 57th Street, 43rd Floor, New York, New York 10019;

(iii) HealthCor Offshore Master Fund, L.P., a Cayman Islands limited partnership, Carnegie Hall Tower, 152 West 57th Street, 43rd Floor, New York, New York 10019;

(iv) HealthCor Offshore GP, LLC, a Delaware limited liability company, Carnegie Hall Tower, 152 West 57th Street, 43rd Floor, New York, New York 10019;

(v) HealthCor Group, LLC, a Delaware limited liability company, Carnegie Hall Tower, 152 West 57th Street, 43rd Floor, New York, New York 10019;

(vi) Joseph Healey, Carnegie Hall Tower, 152 West 57th Street, 43rd Floor, New York, New York 10019;

(vii) Arthur Cohen, 12 South Main Street, #203 Norwalk, CT 06854;

(viii) HealthCor Sanatate Offshore Master Fund, L.P., a Cayman Islands limited partnership, Carnegie Hall Tower, 152 West 57th Street, 43rd Floor, New York, New York 10019; and

(ix) HealthCor Offshore II GP, LLC, a Delaware limited liability company, Carnegie Hall Tower, 152 West 57th Street, 43rd Floor, New York, New York 10019.

Both Mr. Healey and Mr. Cohen are United States citizens.

The persons at (i) through (ix) above are collectively referred to herein as the "Reporting Persons".

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Item 2(d). Title of Class of Securities: Common Stock, \$.01 Par Value Per Share (the "Common Stock")

Item 2(e). CUSIP Number: 81255T108

Item 3. Not applicable.

Item 4. Ownership.

The information required by Items 4(a) - (c) is set forth in Rows 5 - 11 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each such Reporting Person.

Collectively, HealthCor Offshore Master Fund, L.P. and HealthCor Sanatate Offshore Master Fund, L.P. (each a "Fund" and together, the "Funds") are the beneficial owners of a total of 604,000 shares of the Common Stock of the Issuer.

HealthCor Offshore GP, LLC is the general partner of HealthCor Offshore Master Fund, L.P. Accordingly, HealthCor Offshore GP, LLC may be deemed to beneficially own the shares of Common Stock that are beneficially owned by HealthCor Offshore Master Fund, L.P. HealthCor Group, LLC is the managing member of HealthCor Offshore GP, LLC and, therefore, may be deemed to beneficially own the shares of Common Stock that are beneficially owned by HealthCor Offshore Master Fund, L.P.

HealthCor Offshore II GP, LLC is the general partner of HealthCor Sanatate Offshore Master Fund, L.P. Accordingly, HealthCor Offshore II GP, LLC may be deemed to beneficially own the shares of Common Stock that are beneficially owned by HealthCor Sanatate Offshore Master Fund, L.P. HealthCor Group, LLC is the managing member of HealthCor Offshore II GP, LLC and, therefore, may be deemed to beneficially own the shares of Common Stock that are beneficially owned by HealthCor Sanatate Offshore Master Fund, L.P.

By virtue of its position as the investment manager of the Funds, HealthCor Management, L.P. may be deemed a beneficial owner of all the shares of Common Stock owned by the Funds. HealthCor Associates, LLC is the general partner of HealthCor Management, L.P. and thus may also be deemed to beneficially own the shares of Common Stock that are beneficially owned by the Funds.

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As the Managers of HealthCor Associates, LLC, Arthur Cohen and Joseph Healey exercise both voting and investment power with respect to the shares of Common Stock reported herein, and therefore each may be deemed a beneficial owner of such Common Stock.

Each of the Reporting Persons hereby disclaims any beneficial ownership of any such shares of Common Stock in excess of their actual pecuniary interest therein.

Item 5. Ownership of Five Percent or Less of a Class:

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following .

Item 6. Ownership of More than Five Percent on Behalf of Another Person.  
Not Applicable

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company.  
Not Applicable

Item 8. Identification and Classification of Members of the Group.  
See Exhibit I.

Item 9. Notice of Dissolution of Group.  
Not Applicable

Item 10. Certification.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

Exhibits:

Exhibit I: Joint Acquisition Statement, dated as of February 16, 2016

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SIGNATURE

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

DATED: February 16, 2016

HEALTHCOR MANAGEMENT, L.P.

By: HealthCor Associates, LLC, its general partner

/s/ Anabelle P. Gray

Name: Anabelle P. Gray

Title: General Counsel

HEALTHCOR OFFSHORE GP, LLC, for itself and as general partner of behalf of  
HEALTHCOR OFFSHORE MASTER FUND, L.P.

By: HealthCor Group, LLC, its general partner

/s/ Anabelle P. Gray

Name: Anabelle P. Gray

Title: General Counsel

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HEALTHCOR OFFSHORE II GP, LLC, for itself and as general partner of behalf of HEALTHCOR SANATATE OFFSHORE MASTER FUND, L.P.

By: HealthCor Group, LLC, its general partner

/s/ Anabelle P. Gray

Name: Anabelle P. Gray

Title: General Counsel

HEALTHCOR ASSOCIATES, LLC

/s/ Anabelle P. Gray

Name: Anabelle P. Gray

Title: General Counsel

HEALTHCOR GROUP, LLC

By: /s/ Anabelle P. Gray

Name: Anabelle P. Gray

Title: General Counsel

JOSEPH HEALEY, Individually

/s/ Joseph Healey

ARTHUR COHEN, Individually

/s/ Arthur Cohen

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EXHIBIT 1

JOINT ACQUISITION STATEMENT PURSUANT TO RULE 13d-1(k)

The undersigned acknowledge and agree that the foregoing statement on Schedule 13G is filed on behalf of each of the undersigned and that all subsequent amendments to this statement on Schedule 13G shall be filed on behalf of each of the undersigned without the necessity of filing additional joint acquisition statements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning him or it contained therein, but shall not be responsible for the completeness and accuracy of the information concerning the others, except to the extent that he or it knows or has reason to believe that such information is inaccurate.

Dated: February 16, 2016

HEALTHCOR MANAGEMENT, L.P.

By: HealthCor Associates, LLC, its general partner

/s/ Anabelle P. Gray

Name: Anabelle P. Gray

Title: General Counsel

HEALTHCOR OFFSHORE GP, LLC, for itself and as general partner of  
behalf of HEALTHCOR OFFSHORE MASTER FUND, L.P.

By: HealthCor Group, LLC, its general partner

/s/ Anabelle P. Gray

Name: Anabelle P. Gray

Title: General Counsel

HEALTHCOR OFFSHORE II GP, LLC, for itself and as general  
partner of behalf of HEALTHCOR SANATATE OFFSHORE MASTER FUND, L.P.

By: HealthCor Group, LLC, its general partner

/s/ Anabelle P. Gray

Name: Anabelle P. Gray

Title: General Counsel

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HEALTHCOR ASSOCIATES, LLC

/s/ Anabelle P. Gray

Name: Anabelle P. Gray

Title: General Counsel

HEALTHCOR GROUP, LLC

/s/ Anabelle P. Gray

Name: Anabelle P. Gray

Title: General Counsel

JOSEPH HEALEY, Individually

/s/ Joseph Healey

ARTHUR COHEN, Individually

/s/ Arthur Cohen

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