

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No.)*

MRI Interventions, Inc.
(Name of Issuer)

Common Stock
(Title of Class of Securities)

55347P209
(CUSIP Number)

December 31, 2017
(Date of event which requires filing of this statement)

Check the appropriate box to designate the rule pursuant to which this Schedule 13G is filed:

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

(Page 1 of 10 Pages)

*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 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 E. Jeffrey Peierls ⁽¹⁾	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a) <input type="checkbox"/> (b) <input type="checkbox"/>
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION United States	
	5	SOLE VOTING POWER: 85,000 shares of Common Stock 85,000 shares of Common Stock issuable upon exercise of Warrants
	6	SHARED VOTING POWER 605,000 shares Common Stock 605,000 shares of Common Stock issuable upon exercise of Warrants
	7	SOLE DISPOSITIVE POWER 85,000 shares of Common Stock 85,000 shares of Common Stock issuable upon exercise of Warrants
	8	SHARED DISPOSITIVE POWER 605,000 shares Common Stock 605,000 shares of Common Stock issuable upon exercise of Warrants
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY REPORTING PERSON 690,000 shares of Common Stock 690,000 shares of Common Stock issuable upon exercise of Warrants	
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	<input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 9.99% (See Item 4)*	
12	TYPE OF REPORTING PERSON IN	

* As more fully described in Item 4, each of the Warrants are subject to a 9.99% blocker, and the percentage set forth in row (11) gives effect to such blocker. However, as more fully described in Item 4, the securities reported in rows (6), (8) and (9) show the number of shares of Common Stock that would be issuable upon exercise of such reported securities and do not give effect to such blocker. Therefore, the actual number of shares of Common Stock beneficially owned by such Reporting Person, after giving effect to such blocker, is less than the number of securities reported in rows (6), (8) and (9). Without giving effect to the blocker, the Reporting Person would be deemed to beneficially own 12.44% of the issued and outstanding shares of the Issuer.

(1) This Schedule 13G is filed by E. Jeffrey Peierls, Brian Eliot Peierls and The Peierls Foundation, Inc. E. Jeffrey Peierls may be deemed the beneficial owner of securities held by trusts of which E. Jeffrey Peierls is a fiduciary. E. Jeffrey Peierls and Brian Eliot Peierls may be deemed to share indirect beneficial ownership of securities held by The Peierls Foundation, Inc.

1	NAMES OF REPORTING PERSONS Brian Eliot Peierls ⁽¹⁾	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 60,000 shares of Common Stock 60,000 shares of Common Stock issuable upon exercise of Warrants
	6	SHARED VOTING POWER 605,000 shares Common Stock 605,000 shares of Common Stock issuable upon exercise of Warrants
	7	SOLE DISPOSITIVE POWER 60,000 shares of Common Stock 60,000 shares of Common Stock issuable upon exercise of Warrants
	8	SHARED DISPOSITIVE POWER 605,000 shares Common Stock 605,000 shares of Common Stock issuable upon exercise of Warrants

9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY REPORTING PERSON 665,000 shares Common Stock 665,000 shares of Common Stock issuable upon exercise of Warrants
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 9.99 (See Item 4)*%
12	TYPE OF REPORTING PERSON IN

* As more fully described in Item 4, each of the Warrants are subject to a 9.99% blocker, and the percentage set forth in row (11) gives effect to such blocker. However, as more fully described in Item 4, the securities reported in rows (6), (8) and (9) show the number of shares of Common Stock that would be issuable upon exercise of such reported securities and do not give effect to such blocker. Therefore, the actual number of shares of Common Stock beneficially owned by such Reporting Person, after giving effect to such blocker, is less than the number of securities reported in rows (6), (8) and (9). Without giving effect to the blocker, the Reporting Person would be deemed to beneficially own 12.02% of the issued and outstanding shares of the Issuer.

(1) This Schedule 13G is filed by E. Jeffrey Peierls, Brian Eliot Peierls and The Peierls Foundation, Inc. Brian Eliot Peierls may be deemed the beneficial owner of securities held by trusts of which Brian Eliot Peierls is a fiduciary.

E. Jeffrey Peierls and Brian Eliot Peierls may be deemed to share indirect beneficial ownership of securities held by The Peierls Foundation, Inc.

1	NAMES OF REPORTING PERSONS The Peierls Foundation, Inc. ⁽¹⁾	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	CITIZENSHIP OR PLACE OF ORGANIZATION United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5	SOLE VOTING POWER 360,000 shares of Common Stock 360,000 shares of Common Stock issuable upon exercise of Warrants
	6	SHARED VOTING POWER -0-
	7	SOLE DISPOSITIVE POWER 360,000 shares of Common Stock 360,000 shares of Common Stock issuable upon exercise of Warrants
	8	SHARED DISPOSITIVE POWER -0-

9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY REPORTING PERSON 360,000 shares Common Stock 360,000 shares of Common Stock issuable upon exercise of Warrants
10.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 6.69%
12	TYPE OF REPORTING PERSON IN

⁽¹⁾ This Schedule 13G is filed by E. Jeffrey Peierls, Brian Eliot Peierls and The Peierls Foundation, Inc. E. Jeffrey Peierls and Brian Eliot Peierls may be deemed to share indirect beneficial ownership of securities held by The Peierls Foundation, Inc.

Item 1(a). NAME OF ISSUER:

The name of the issuer is MRI Interventions, Inc. (the "Company").

Item 1(b). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES:

The Issuer's principal executive offices are located at 5 Musick, Irvine, Ca. 92618

Item 2(a). NAME OF PERSON FILING:

This statement is filed by the entities and persons listed below, who are collectively referred to herein as "Reporting Persons," with respect to the shares of Common Stock (as defined in Item 2(d) below) of the Company:

Reporting Individuals/entities

- (i) E. Jeffrey Peierls with respect to securities owned by himself individually and with respect to securities owned by various trusts and with respect to securities owned by The Peierls Foundation, Inc. of which he is a fiduciary.
- (ii) Brian Eliot Peierls with respect to securities owned by himself individually and with respect to securities owned by various trusts and with respect to securities owned by The Peierls Foundation, Inc. of which he is a fiduciary.
- (iii) The Peierls Foundation, Inc. with respect to securities owned by itself.

Item 2(b). ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE:

The address of Reporting Person E. Jeffrey Peierls is:

73 South Holman Way
Golden, CO 80401

The address of Reporting Person Brian Eliot Peierls is:

3017 McCurdy St.
Austin, TX 78723

The address of Reporting Person The Peierls Foundation is:

c/o E. Jeffrey Peierls
73 South Holman Way
Golden, CO 80401

Item 2(c).

CITIZENSHIP:

Citizenship is set forth in Row 4 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each such Reporting Person.

Item 2(d).

TITLE OF CLASS OF SECURITIES:

Incorporated by reference from the Cover Page

Item 2(e).

CUSIP NUMBER:

Incorporated by reference from the Cover Page

Item 3. IF THIS STATEMENT IS FILED PURSUANT TO RULES 13d-1(b) OR 13d-2(b) OR (c), CHECK WHETHER THE PERSON FILING IS A:

- (a) Broker or dealer registered under Section 15 of the Act,
- (b) Bank as defined in Section 3(a)(6) of the Act,
- (c) Insurance Company as defined in Section 3(a)(19) of the Act,
- (d) Investment Company registered under Section 8 of the Investment Company Act of 1940,
- (e) Investment Adviser registered under Section 203 of the Investment Advisers Act of 1940,
- (f) Employee Benefit Plan or Endowment Fund in accordance with Rule 13d-1(b)(1)(ii)(F),
- (g) Parent Holding Company or control person in accordance with Rule 13d-1(b)(1)(ii)(G),
- (h) Savings Association as defined in Section 3(b) of the Federal Deposit Insurance Act,
- (i) Church Plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act of 1940,
- (j) A non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J);
- (k) Group, in accordance with Rule 13d-1(b)(1)(ii)(K).

If filing as a non-U.S. institution in accordance with Rule 13d-1(b)(1)(ii)(J), please specify the type of institution: _____

Item 4.**OWNERSHIP:**

The information as of the date of the event which requires filing of this statement 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. The percentage set forth in Row 11 of the cover page for each Reporting Person is based on 10,401,115 shares of Common Stock of the issuer outstanding as of November 1, 2017, as reported by the issuer in its Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, filed with the Securities and Exchange Commission on November 6, 2017.

Pursuant to the terms of the Reported Warrants, the Reporting Persons cannot exercise the Reported Warrants to the extent the Reporting Persons would beneficially own, after any such conversion or exercise, more than 9.99% of the outstanding shares of Common Stock (the Blocker"), and the percentage set forth in Row 11 of the cover page for each Reporting Person gives effect to the Blocker. Consequently, as of the date of the event which requires filing of this statement, the Reporting Persons were not able to exercise all of the Reported Warrants due to the Blocker.

The foregoing should not be construed in and of itself as an admission by any Reporting Person as to beneficial ownership of shares of Common Stock owned by another Reporting Person. Each of the Reporting Individuals hereby disclaims any beneficial ownership of any such shares of Common Stock.

Item 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS.

Not applicable.

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.

Not applicable.

Item 9. NOTICE OF DISSOLUTION OF GROUP.

Not applicable.

Item 10. CERTIFICATION.

Each of the Reporting Persons hereby makes the following certification:

By signing below each Reporting Person certifies that, to the best of its 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.

SIGNATURES

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

DATED: February 9, 2018

/s/ E. Jeffrey Peierls
E. Jeffrey Peierls

/s/ Brian Eliot Peierls
Brian Eliot Peierls

The Peierls Foundation, Inc.

By: /s/ E. Jeffrey Peierls
E. Jeffrey Peierls, President

EXHIBIT 1

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

The undersigned acknowledge and agree that the foregoing statement on Schedule 13G/A-1 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 filing 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 9, 2018

/s/ E. Jeffrey Peierls
E. Jeffrey Peierls

/s/ Brian Eliot Peierls
Brian Eliot Peierls

The Peierls Foundation, Inc.

By: /s/ E. Jeffrey Peierls
E. Jeffrey Peierls, President