

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

SCHEDULE 13D

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

MRI Interventions, Inc.

(Name of Issuer)

Common Stock, \$0.01 par value per share

Warrants to Purchase Common Stock

(Title of Class of Securities)

55347P100

(CUSIP Number)

Voyager Therapeutics, Inc.
75 Sidney Street
Cambridge, Massachusetts 02139

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

September 2, 2016

(Date of Event Which Requires Filing of Statement on Schedule 13D)

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), checking the following box.

* 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).

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(1) Name of Reporting Persons:
Voyager Therapeutics, Inc.

(2) Check the Appropriate Box if a Member of a Group (See Instructions):

(a)

(b)

(3) SEC Use Only:

(4) Source of Funds (See Instructions):
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
760,000

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With:

(8) Shared Voting Power
0

(9) Sole Dispositive Power
760,000

(10) Shared Dispositive Power
0

(11) Aggregate Amount Beneficially Owned by Each Reporting Person:
760,000

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

(13) Percent of Class Represented by Amount in Row (11):
21.04%(1)

(14) Type of Reporting Person (See Instructions):
CO

(1) Based on 3,252,401 shares of Common Stock outstanding as of September 2, 2016 (as reported in that certain Securities Purchase Agreement by and among MRI Interventions, Inc. and each purchaser defined therein, dated September 2, 2016, filed as Exhibit 10.1 to the Issuer's Current Report on Form 8-K filed with the Commission on September 1, 2016), determined in accordance with Rule 13d-3 of the Exchange Act.

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Item 1. Security and Issuer

This Schedule 13D relates to shares of common stock, par value \$0.01 per share (the "**Common Stock**"), of MRI Interventions, Inc., a Delaware corporation (the "**Issuer**") and to warrants to purchase shares of the Common Stock of the Issuer (the "**Warrants**").

The address of the Issuer's principal executive offices is 5 Musick, Irvine, CA 92618.

Item 2. Identity and Background

This Schedule 13D is being filed by Voyager Therapeutics, Inc., a Delaware corporation ("**Voyager**"). Voyager is a clinical-stage gene therapy company focused on developing life-changing treatments for patients suffering from severe diseases of the central nervous system. The address of Voyager's principal executive offices is 75 Sidney Street, Cambridge, MA 02139. During the last five years, Voyager has not been convicted in a criminal proceeding. During the last five years, Voyager has not been party to any civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of any such proceeding 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 any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Consideration

Voyager is filing this Schedule 13D in connection with its entry into the Securities Purchase Agreement described in Item 4.

The shares of Common Stock and the Warrants beneficially owned by Voyager as reported in this Schedule 13D were acquired through funds from Voyager's working capital. Voyager's Board of Directors approved the use of the funds for the purpose of purchasing the shares of Common Stock and Warrants reported in this Schedule 13D.

Item 4. Purpose of Transaction

Voyager is filing this Schedule 13D in connection with its entry into the Securities Purchase Agreement described below.

On September 2, 2016, the Issuer and the purchasers defined in the Purchase Agreement, including Voyager, entered into a Securities Purchase Agreement (the "**Purchase Agreement**") pursuant to which, Issuer offered for sale units consisting of one share of Common Stock and a Warrant to purchase 0.90 shares of Common Stock.

In connection with the Purchase Agreement, the Issuer and the purchasers defined therein, including Voyager, entered into a Registration Rights Agreement, pursuant to which the Issuer agreed to register the Registrable Securities (as defined therein) by the thirtieth calendar day following the Closing Date of the Purchase Agreement.

The foregoing summary of the Purchase Agreement and the Registration Rights Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of such agreements, filed herewith as Exhibits 99.1 and 99.2, respectively, which are incorporated by reference in this Item 4.

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Other than as described above, Voyager does not have any present plan or proposal which relates to, or would result in any action with respect to, the matters listed in paragraphs (a) through (j) of Item 4 of Schedule 13D.

Voyager reserves the right to formulate plans and/or make proposals, and take such actions with respect to Voyager's investment in the Issuer, including, subject to applicable law, (i) to hold its shares as a passive investor or as an active investor (whether or not as a member of a "group" with other beneficial owners of shares or otherwise), (ii) to acquire beneficial ownership of additional shares in the open market, in privately negotiated transactions or otherwise, (iii) to dispose of all or part of its holdings of shares, (iv) to take other actions which could involve one or more of the types of transactions or have one or more of the results described in Item 4 of Schedule 13D, or (v) to change its intentions with respect to any or all of the matters referred to in this Item 4. Except as described in this Item 4 and elsewhere in this Schedule 13D and any plans or proposals that may from time to time be discussed or considered by the directors of the Issuer in their fiduciary capacities as directors, Voyager does not currently have any plans or proposals that relate to or would result in any of the actions specified in Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer

As of September 9, 2016, Voyager had sole voting and dispositive power with respect to 760,000 shares of Common Stock and shared voting and dispositive power with respect to 0 shares of Common Stock, representing in the aggregate approximately 21.04% of the shares of Common Stock outstanding as of September 2, 2016, based on 3,252, 401 shares of Common Stock outstanding as of September 2, 2016 (as reported in that certain Securities Purchase Agreement by and among MRI Interventions, Inc. and each purchaser defined therein, dated September 2, 2016, filed as Exhibit 10.1 to the Issuer's Current Report on Form 8-K filed with the Commission on September 1, 2016), determined in accordance with Rule 13d-3 of the Exchange Act.

No transactions in any shares of Common Stock were effected during the past 60 days by Voyager.

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

The information contained on the cover pages to this Schedule 13D and the information set forth or incorporated in Items 2, 3, 4 and 6 hereof are incorporated into this Item 6 by reference.

Item 7. Material to be Filed as Exhibits

- 99.1 Securities Purchase Agreement by and among MRI Interventions, Inc. and the purchasers named therein, dated as of September 2, 2016 (incorporated herein by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by MRI Interventions, Inc. on September 1, 2016).
- 99.2 Registration Rights Agreement by and among MRI Interventions, Inc. and the purchasers named therein, dated as of September 2, 2016 (incorporated herein by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by MRI Interventions, Inc. on September 1, 2016).

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SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, each of the undersigned certifies that the information set forth in this Schedule 13D is true, complete, and correct.

Dated as of September 12, 2016

Voyager Therapeutics, Inc.

By: /s/ Steven Paul

Name: Steven Paul

Title: Chief Executive Officer

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EXHIBIT INDEX

EXHIBIT NO.	DESCRIPTION
99.1	Securities Purchase Agreement by and among MRI Interventions, Inc. and the purchasers named therein, dated as of September 2, 2016 (incorporated herein by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by MRI Interventions, Inc. on September 1, 2016).
99.2	Registration Rights Agreement by and among MRI Interventions, Inc. and the purchasers named therein, dated as of September 2, 2016 (incorporated herein by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by MRI Interventions, Inc. on September 1, 2016).

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