

August 19, 2016

VIA EDGAR AND EMAIL

U.S. Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549 Attn: Heather Percival

Re: MRI Interventions, Inc.

Registration Statement on Form S-1 (File No. 333-211647) and Form 8-A (File No. 001-34822)

Dear Ms. Percival:

Pursuant to Rule 477 promulgated under the Securities Act of 1933, as amended (the "Securities Act"), MRI Interventions, Inc. (the "Company") hereby respectfully requests that the U.S. Securities and Exchange Commission (the "Commission") consent to the withdrawal, effective as of the date hereof or at the earliest practicable date hereafter, of the Company's Registration Statement on Form S-1 (File No. 333-211647), together with all exhibits thereto, initially filed with the Commission on May 26, 2016, as subsequently amended on July 6, 2016, July 25, 2016 and August 2, 2016, and declared effective by the Commission on August 8, 2016 (the "Registration Statement").

The Company has determined at this time not to proceed with the offering due to market conditions and requests that the Commission consent to this application on the grounds that withdrawal of the Registration Statement is consistent with the public interest and the protection of investors, as contemplated by paragraph (a) of Rule 477 under the Securities Act. The Company may undertake a subsequent private offering in reliance on Rule 155(c) of the Securities Act.

No securities were issued or sold pursuant to the Registration Statement. In accordance with Rule 457(p) under the Securities Act, the Company requests that all fees paid to the Commission in connection with the filing of the Registration Statement be credited as an offset to the filing fees for future registration statements. In addition, the Registrant requests that the Commission consent to the withdrawal of the Registrant's registration statement on Form 8-A (File No. 001-34822), filed with the Commission on July 6, 2016, with such request to be approved effective as of the date hereof or at the earliest practicable date hereafter.

Your assistance in this matter is greatly appreciated. Please contact our legal counsel, Richard F. Mattern, of Bass, Berry & Sims PLC, at (901) 543-5933, if you have any questions concerning this request. In addition, please notify Mr. Mattern when this request for withdrawal has been granted.

Sincerely,

MRI Interventions, Inc.

By: /s/ Harold A. Hurwitz
Name: Harold A. Hurwitz

Title: Chief Financial Officer and Secretary