

September 27, 2013

VIA EDGAR

United States Securities and Exchange Commission Division of Corporation Finance 100 F. Street, N.E. Washington, D.C. 20549

RE: MRI Interventions, Inc.
Form AW/Request for Withdrawal of Post-Effective Amendment No. 1 to Form S-1 on Form S-3 File No. 333-186573

Ladies and Gentlemen:

MRI Interventions, Inc. (the "<u>Company</u>") previously filed a Post-Effective Amendment No. 1 to Form S-1 on Form S-3, file number 333-186573 (the "<u>Post-Effective Amendment</u>"), with the Securities and Exchange Commission (the "<u>Commission</u>") on August 26, 2013. The Post-Effective Amendment relates to the Company's Registration Statement on Form S-1, file number 333-186573, declared effective by the Commission on March 21, 2013. No securities have been sold under the Post-Effective Amendment, which has not been declared effective by the Commission.

Pursuant to Rule 477 of the Securities Act of 1933, as amended, the Company hereby requests the withdrawal of the Post-Effective Amendment, effective as of the date hereof or at the earliest practicable date hereafter. The Company is seeking withdrawal of the Post-Effective Amendment as the Registrant is not currently eligible to use Form S-3 under either General Instruction I.B.3 or I.B.1.

If you have any questions regarding this application for withdrawal, please contact the undersigned at (901) 522-9344.

Very truly yours,

MRI Interventions, Inc.

By: /s/ Oscar Thomas

Oscar Thomas

Vice President, Business Affairs