



August 24, 2015

VIA EDGAR

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

**Re: MRI Interventions, Inc.
Registration Statement on Form S-3
File Number 333-206442
REQUEST FOR ACCELERATION OF EFFECTIVENESS**

Ladies and Gentlemen:

In accordance with Rule 461 under the Securities Act of 1933, as amended, MRI Interventions, Inc. (the "Company") hereby respectfully requests acceleration of the effectiveness of the Company's Registration Statement on Form S-3, File Number 333-206442, so that it will be declared effective on August 26, 2015 at 4:30 p.m. Eastern Time, or as soon as practicable thereafter.

This letter will confirm that the Company acknowledges that:

- should the Securities and Exchange Commission (the "Commission") or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the Company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact our legal counsel, Richard F. Mattern, of Baker, Donelson, Bearman, Caldwell & Berkowitz, PC, at (901) 577-2343, if you have any questions concerning this request.

Very truly yours,

MRI Interventions, Inc.

By: /s/ Harold A. Hurwitz

Name: Harold A. Hurwitz

Title: Chief Financial Officer and Secretary