



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

DIVISION OF  
CORPORATION FINANCE

Mail Stop 3030

August 24, 2016

Harold A. Hurwitz  
Chief Financial Officer  
MRI Interventions, Inc.  
5 Musick  
Irvine, California 92618

**Re: MRI Interventions, Inc.**  
**Form 10-K for the fiscal year ended December 31, 2015**  
**Filed March 25, 2016**  
**File No. 000-54575**

Dear Mr. Hurwitz:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filing and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Tim Buchmiller for

Amanda Ravitz  
Assistant Director  
Office of Electronics and Machinery

cc: Richard Mattern, Esq.  
Bass Berry & Sims PLC