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From: Ronald Boueri Phone: +9611960196 E-mail: <u>Ronald.boueri@zimmerbiomet.com</u> Date: January 18, 2017

Subject: MRI Compatibility

TO WHOM IT MAY CONCERN

Dear Sir/Madam

Zimmer Biomet confirms that all metal we are using today for medical implants have ferromagnetic behavior. Magnetic behavior in general is quite complex phenomena and is well understood. Ferromagnetic material has a spontaneous magnetic moment. In metals, the crystalline structure of ferrite may result in ferromagnetic behavior.

Austenitic crystal structure like implantable metal alloys CoCr and stainless steel have non-ferromagnetic behavior as well as titanium alloys.

Following metals and implants have non-ferromagnetic behavior:

- 1. ANATOMICAL 2.0 Standard Press-fit uncemented stem
- 2. ANATOMICAL 2.0 Standard Cemented stem
- 3. ANATOMICAL Shoulder Domelock Head
- 4. Ball Taper
- 5. T-Dome Adaptor Centric & Eccentric
- 6. A.S. GLENOID cemented
- 7. ANATOMICAL 2.0 REVERSE Inverse/Reverse Screw System
- 8. ANATOMICAL 2.0 REVERSE Inverse/Reverse Humeral Cup
- 9. AS INVERSE Glenoid Fixation
- 10. AS INVERSE Glenoid Head
- 11. AS INVERSE Humeral PE-Inlay
- 12. Trabecular Metal Glenoid
- 13. Trabecular Metal Glenoid Articular Surface
- 14. PERSONA Partial Knee Femoral Component
- 15. PERSONA Partial Knee Tibial Component
- 16. PERSONA Partial Knee Vivacit-E Polyethylene
- 17. PERSONA Partial Knee UHMWPE Polyethylene
- 18. Headless Compression Screws 2.5/3.0mm
- 19. Twist-Off Screws 2.0mm (Cortical)
- 20. Twist-Off Screws 2.7mm (Cancellous)



Studies indicated that MRI procedure has minimal effects on most Zimmer Orthopedic implant devices up to 3 Tesla.

Patient should note that there are several different manufacturers and generations of MRI equipment available, and Zimmer Biomet cannot make claims regarding compatibility of Zimmer Biomet implants with any specific MRI unit. It is recommended that the patient contact the surgeons or the manufacturer of the MRI devices to discuss the compatibility of Zimmer Biomet implants with the MRI equipment before undergoing any test.

We remain at your disposal for any additional information you may require.

Ronald Boueri

General Manager MENA, Greece & Balkans