



Zimmer® Trabecular Metal™ Reverse Shoulder System

1155



Hope is within reach.



# **Optimize patient outcomes across a broad range of indications**

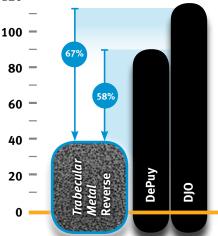
Demands put on reverse shoulder systems have been increasing: Returning cuff deficient patients to simple activities of daily living, optimizing range of motion in the face of glenoid erosion, and ensuring tuberosity repair in complex fractures. The *Trabecular Metal*<sup>™</sup> Reverse Shoulder System presents a comprehensive solution to meet these objectives.<sup>1,2</sup>

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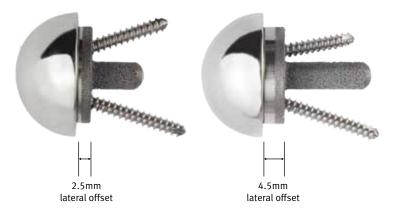
## Trabecular Metal base plate provides proven fixation and stability<sup>3</sup>

- *Trabecular Metal* material supports vascularization and biologic in-growth<sup>4-7</sup>
- Greater screw engagement and less bone removal than convex base plate designs<sup>8</sup>
- Center post lengths up to 30mm maximize bony engagement to minimize base plate micromotion
- Center of rotation (COR) lateral offset counters glenoid erosion<sup>2</sup>
- Personalized glenoid component planning, sizing and positioning when used with *Zimmer*<sup>®</sup> PSI Shoulder

Comparison of Reverse Base Plate Stability

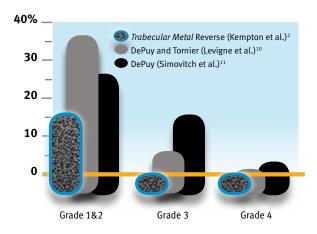


*Trabecular Metal* Reverse BasePlate micromotion is less than half that of DePuy and DJO reverse shoulder systems<sup>3,9</sup>



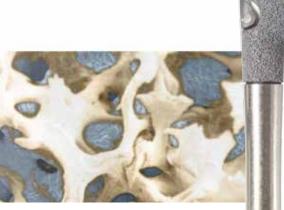


## Reduced likelihood of scapular notching<sup>6-8</sup>



- Less than 1% grade 3 and 4 notching at 16 months compared to typically reported 6% or more<sup>2,10,11</sup>
- Glenosphere COR lateral offset and inferior overhang reduce probability of impingement with the scapular pillar<sup>2</sup>
- Humeral component angle of 150° helps provide greater clearance during adduction versus a "Grammont" prosthesis<sup>2</sup>







Trabecular Metal Reverse Humeral Stem facilitates strong fixation, healing and enhanced range of motion

- Seven years of clinical history and over 32,000 global implantations.
- *Trabecular Metal* material's scaffold facilitates vascularization and biologic in-growth<sup>1-4</sup>
- High coefficient of friction between *Trabecular Metal* material and cancellous bone to enhance tuberosity fixation in 3- and 4-part fractures
- Extensive humeral liner and spacer combinations, ranging between +0mm and +18mm, to enable proper deltoid tensioning
- Precise retroversion control optimizes subscapularis and teres minor tension, to enhance internal and external rotation





#### **Base Plate**

- Trabecular Metal base plate pad
- 3 center post sizes: 15mm,
  - 25mm and 30mm

#### **Compression Screw**

- 4.5mm diameter
- 30° polyaxial placement
- Modular locking cap to secure the desired angle of each screw

#### Glenospheres

• 36mm and 40mm diameters

#### **UHMWPE Liner**

- 7° Standard Liner
- 12° Retentive Liner
- 3 thicknesses: +0mm, +3mm and +6mm

### **Spacer (Optional)**

• +9mm and +12mm

#### References:

1. Chalmers et al. Reverse total shoulder arthroplasty for acute proximal humeral fracture: comparison to open reduction-internal fixation and hemiarthroplasty. J Shoulder Elbow Surg 2014;23:197-204. 2. Kempton et al. A radiographic analysis of the effects of prosthesis design on scapular notching following reverse total shoulder arthroplasty. J Shoulder Elbow Surg 2011;20:571-576. 3. Mroczkowski MS, Wiley R. Initial Fixation of the Trabecular Metal Reverse Shoulder Glenoid Base Plate Implant. 2008. 4. Bobyn JD, et al. Characteristics of bone ingrowth and interface mechanics of a new porous tantalum biomaterial. JBJS 1999;81-B:907-914. 5. Bobyn JD, et al. Characterization of a new porous tantalum biomaterial for reconstructive orthopaedics. Scientific Exhibition: 66th Annual Meeting of the American Academy of Orthopaedic Surgeons; 1999; Anaheim, CA. 6. J Musculoskel Res. 1999;3:245-251. 7. Medlin DJ, et al. Metallurgical characterization of a porous tantalum biomaterial (*Trabecular Metal*<sup>™</sup>) for orthopaedic implant applications. Presentation, Materials & Processes for Medical Devices Conference, Anaheim, CA, 2003. 8. James et al. Does glenoid baseplate geometry affect its fixation in reverse shoulder arthroplasty? J Shoulder Elbow Surg 2012;21:917-924. 9. Harman M, Frankle M, Vasey M, Banks S. Initial glenoid component fixation in "reverse" total shoulder arthroplasty: a biomechanical evaluation. J Shoulder Elbow Surg 2005;14:162S-167S. 10. Levigne et al. Scapular notching in reverse shoulder arthroplasty. J Shoulder Elbow Surg 2008;17:925-935. 11. Simovitch et al. Predictors of Scapular Notching in Patients Managed with the Delta III Reverse Total Shoulder Replacement. J Shoulder Elbow Surg 2007;89:588-600. 12. Robertson et al. Three-Dimensional Analysis of the Proximal Part of the Humerus Relevance to Arthroplasty. J Bone Joint Surg 2000;82A:1594:1602.

#### Trabecular Metal Reverse Humeral Stem

- 8,10,12,14,16,18 x 130mm
- 8,10,12,14,16 x 170mm

#### Non-Porous Reverse Humeral Stem

- 6,8,9,10,11,12,13,14,15,16,18 x 130mm
- 8,10,12,14,16 x 200mm

Contact your Zimmer representative or visit us at www.zimmer.com

