



**Zimmer®**  
**Trabecular Metal™**  
**Reverse Shoulder**  
**System**



Hope is within reach.

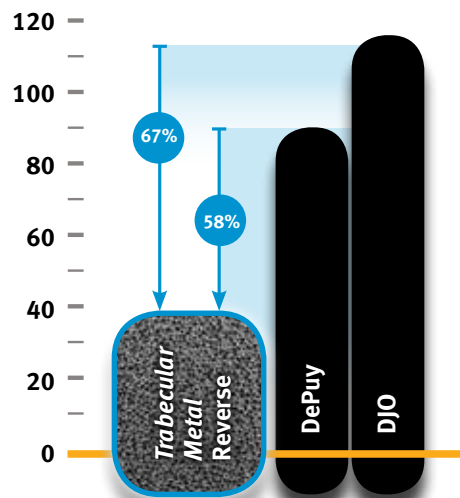
# Optimize patient outcomes across a broad range of indications

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*™ Reverse Shoulder System presents a comprehensive solution to meet these objectives.<sup>1,2</sup>

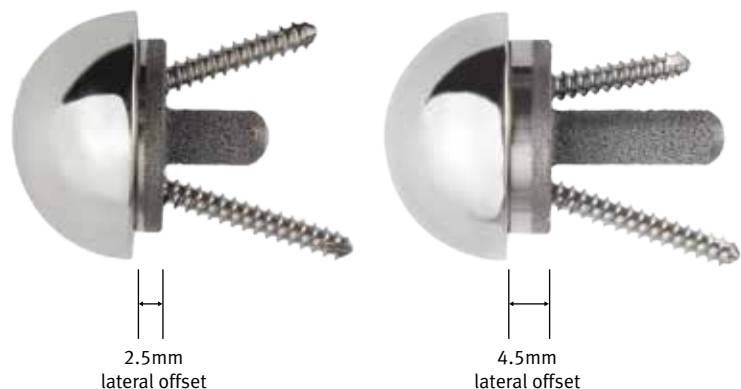
## Trabecular Metal base plate provides proven fixation and stability<sup>3</sup>

- *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*® PSI Shoulder

Comparison of Reverse Base Plate Stability

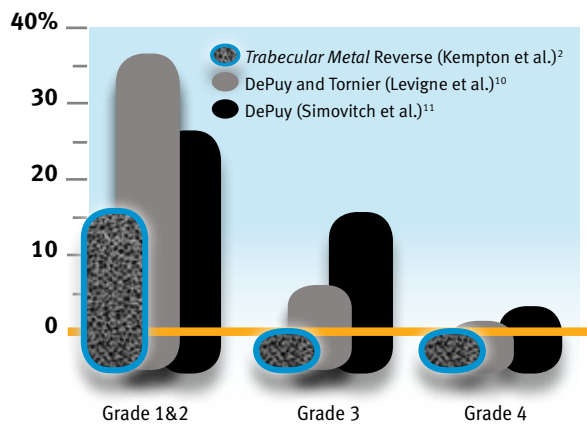


*Trabecular Metal* Reverse BasePlate micromotion is less than half that of DePuy and DJO reverse shoulder systems<sup>3,9</sup>





### 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



**Non-Porous Humeral Stem portfolio is designed to precisely match a range of humeral canal sizes<sup>12</sup>**

- 6 and 8mm stems to accommodate the smaller patients
- 200mm stems to facilitate revision from total shoulder to reverse shoulder arthroplasty
- Intraoperative flexibility between Non-Porous Reverse and *Trabecular Metal* Reverse humeral stems utilizing shared instrumentation



	6mm	8mm	9mm	10mm	11mm	12mm	13mm	14mm	15mm	16mm	18mm
130mm Length	●	●	●	●	●	●	●	●	●	●	●
200mm Length		●		●		●		●		●	



### 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

### 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

#### References:

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4. Bobyn JD, et al. Characteristics of bone ingrowth and interface mechanics of a new porous tantalum biomaterial. *JBJS* 1999;81-B:907-914.
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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.
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