Trabecular Metal Reverse Plus™ (TMR+™)

Shoulder System

TMR+ Shoulder System advances the TM Reverse glenoid solution that already demonstrates 12+ years of *clinical history*, and utilizes Trabecular Metal™ material for **biological fixation**. TMR+ System is designed to enable better† **biomechanical optimization** and **surgical ease of use** to deliver confidence in achieving the desired clinical outcomes, and in helping you restore mobility and alleviate pain for your patients.
Biomechanical Optimization

Glenosphere inferior overhang and broad range of lateral offsets to enable **optimal range of motion** and **avoidance of scapular notching**\(^1\).

Lateralization options of +0, +3 and +5mm, along with inferior overhang of the glenosphere

Enhanced taper mechanism designed to align readily for **definitive engagement** of glenosphere and baseplate.

Four post options (15, 20, 25 and 30mm) devised to accommodate various glenoid morphologies allowing for **fit** to patient anatomy.

The new post length of 20mm provides 33% greater contact surface area between cancellous bone and Trabecular Metal material for bone ingrowth, as compared to 15mm post length.
Biological Fixation

**Trabecular Metal** material closely resembles the structure, function and physiological properties of cancellous bone.\(^2,3\)

Pore size and shape of Trabecular Metal material is shown to support **bony ingrowth** and **vascularization**.\(^*,4\)

Trabecular Metal material has a high coefficient of friction (0.98) against cancellous bone for **initial implant stability**.\(^**,5\)

Over 300 publications over a span of 20 years documenting effectiveness of Trabecular Metal technology in a variety of applications.\(^6\)

TMR+ design leverages **12+ years of proven clinical usage** of Trabecular Metal Reverse Shoulder System that has exhibited **great survivorship performance**.\(^7,13\)
Surgical Ease and Efficiency

Low profile taper **takes 36% less volume**\(^{\dagger}\) in constrained joint space allowing for enhanced access to glenoid during glenosphere insertion.

Baseplate now has low profile central taper, instead of large peripheral taper.

**Sharp and low profile reamer** constructed to provide easier access to glenoid and predictable reaming performance for every surgery.

Reams for backside of baseplate and prepares center hole in one step.
Updated glenoid preparation technique and advanced instrumentation option allow for reduction in number of surgical steps.

Advanced glenosphere removal instrument designed for **rapid extraction of glenosphere**, with **nominal force**†, and **without compromising stability of the baseplate**.

**Redesigned instrument set** aimed at improving efficiency and intuitiveness of instrumentation through the surgical flow across the instrument set.
Complete compatibility between TMR+ glenoid construct and humeral constructs of Comprehensive® Reverse and Trabecular Metal Reverse Shoulder system