Zimmer® PSI Shoulder for Trabecular Metal™ Reverse Glenoid

Zimmer PSI Shoulder for Trabecular Metal Reverse Glenoid

Enables you to personalize your surgical plan to your patient’s unique anatomy and then execute that plan with precision, with the goal of reducing the risk of malposition and maximizing implant performance.

Personalization

Your patient has unique needs. Based on a pre-operative CT, our 3D virtual surgery tool enables you to visualize and optimize not only implant orientation, but also bone surface preparation and fixation.

PSI Shoulder Planner

1. Enables you to see and select implant size and positioning from any angle, in high fidelity 3D
2. Allows you to specify reaming angle and depth to help enhance bone preservation and implant stability
3. Equips you to optimize screw length and trajectory to help maximize bi-cortical engagement
Precision

There are a lot of variables in the operating room. A complete set of PSI Instrument Guides allows you to replicate your pre-operative plan with confidence.

PSI Instrument Guides:

- PSI Pin Guide offers a 2-pin solution to assist in precise implant position, version and inclination
- PSI Ream Guide informs reaming angle and depth to enable preservation of cortical support bone
- PSI Roll Guide details the planned implant rotation orientation and screw entry points
- PSI Screw Guide provides the drill direction to help achieve your planned screw length and placement

Accuracy of Baseplate Version & Inclination

<table>
<thead>
<tr>
<th>≤5°</th>
<th>&gt;10°</th>
</tr>
</thead>
<tbody>
<tr>
<td>69%</td>
<td>29%</td>
</tr>
<tr>
<td>29%</td>
<td>0%</td>
</tr>
<tr>
<td>14%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Accuracy of Screw Trajectory

<table>
<thead>
<tr>
<th>≤7°</th>
<th>&gt;7°</th>
</tr>
</thead>
<tbody>
<tr>
<td>88%</td>
<td>22%</td>
</tr>
<tr>
<td>22%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Performance

In Reverse Shoulder Arthroplasty, positioning and fixation on the glenoid side are critical to implant longevity.

- Reduced variability in implant inclination and version\(^1\)\(^-\)\(^2\) allows you to optimize joint biomechanics
- Optimized screw length and trajectory enables maximization of initial mechanical fixation\(^3\)\(^-\)\(^4\)
- Enhanced long term stability by the Trabecular Metal, which supports biological in-growth and vascularization\(^5\)\(^-\)\(^8\)

Post Operative CT scan example showing superior screw placement achieved relative to planned position using Zimmer PSI.
PSI Glenoid Bone Model

A physical model of your patient’s unique glenoid provides multiple visual checkpoints for intra-operative confirmation of adherence to your pre-operative plan.

- Provides visual reference to confirm complete glenoid exposure
- Offers tactile reference to confirm PSI Pin Guide fits as planned
- Provides positioning confirmation for the two reference pins, which set up the rest of the procedure
REFERENCES:


NOTE:

1. Zimmer PSI Shoulder is compatible with both the Trabecular Metal Reverse Shoulder system and the Anatomic Inverse / Reverse shoulder system when used in conjunction with the Trabecular Metal Reverse Glenoid Baseplate.
2. Aggregate analysis of cadaver studies (1) included 29 shoulders using Patient Specific Instrumentation. The Shoulder Planner was used in all cases. The accuracy is defined as the absolute difference in angle between pre-operative planning and post-operative CT measurements.