POLARSTEM Tips and Tricks

Proper broach seating

- To ensure that all of the HA coating on the stem is covered by bone, the POLARSTEM broach should be sunk to the resection line as indicated on the templates (Figure 1).
- The “HA” line on the broach (Figure 2) corresponds to the top of the HA coating on the stem.

Figure 1
The resection line and the HA line meet at the medial calcar.

Figure 2
The HA line is indicated on the broach as well.

Figure 3
This photo shows a broach properly seated in the bone.

Please refer to the surgical technique and labeling for additional information.
**Stem implantation**

- Place final stem in by hand. Typically, the stem will sit 5mm above the resection line (Figure 4) before final impaction.
- Use the impactor (75023369/21000644) for final stem seating (Figure 5).

![Figure 4](image1.png)  ![Figure 5](image2.png)

**Neck angle**

- The POLARSTEM™ neck angle changes when moving from a standard to a lateral offset which affects the patient's leg length by approximately 2.5mm.
- If a surgeon is trialing with a standard neck trial and decides intraoperatively to move to a lateral offset, suggest that he also move up one neck length option (ex: from a +0 to a +4) as well in order to restore proper leg length.

**Press-fit (thickness of coating) – 230 microns (0.23mm)**

- 180 microns of ti-plasma spray
- 50 microns of HA

**Instrumentation**

- The broach pattern has compaction teeth anterior and posterior and bone cutting teeth medial and lateral.
- Broach handle options: straight, single offset and dual offset. The single offset (75007308) comes standard in each set.

<table>
<thead>
<tr>
<th>Stem Comparison</th>
<th>ANTHOLOGY®</th>
<th>POLARSTEM®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neck lengths</td>
<td>Neck lengths grow progressively as stem grows</td>
<td>Neck length remains constant for sizes 1-10. See chart on page 14 of surgical technique.</td>
</tr>
<tr>
<td>Stem growth</td>
<td>Medial and lateral growth 1.5mm</td>
<td>Lateral growth 1.3mm</td>
</tr>
<tr>
<td>Stem length</td>
<td>100mm – 122mm</td>
<td>107mm – 149mm</td>
</tr>
<tr>
<td>Most implanted size</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Stem size comparison</td>
<td>2-3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>2</td>
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<tr>
<td></td>
<td>6</td>
<td>3</td>
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<tr>
<td></td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Coating</td>
<td>ROUGHCOAT® proximally ROUGHCOAT + HA proximally</td>
<td>Ti-Plasma spray + HA</td>
</tr>
<tr>
<td>Press-fit (level of coating)</td>
<td>0.125mm or 125 microns per side</td>
<td>0.23mm or 230 microns per side</td>
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<tr>
<td>Broaches</td>
<td>Bone cutting: lateral, anterior, posterior Compaction: medial curve</td>
<td>Bone cutting: medial, lateral Compaction: anterior, posterior</td>
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For detailed product information, including indications for use, contraindications, effects, precautions and warnings, please consult the product's Instructions for Use (IFU) prior to use.

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