STAR™
Total Ankle Replacement

37+ Years
of clinical experience

30,000+ Patients
implanted worldwide

Proven Effectiveness
in prospective outcomes studies\textsuperscript{1,2}
Before STAR...
Surgeons Had Limited Options

Fusion
- Locks ankle joint at fixed position
- May be associated with prolonged ‘non-weight bearing’ healing time (2-4 months)³
- 10% non-union rates⁴
- Studies show 91% patients develop adjacent joint arthritis post ankle fusion⁵

First Generation Total Ankle Implants
- 2-Piece Implant
- Fixed Bearing
- Cemented

Howmedica Newton II
STAR: First 3-Piece Mobile Bearing Ankle Implant Introduced to US Market

Implant Features and Benefits

- **225** Different Patient Matched Configurations

- **9** Poly size options

- Best published long-term metal component survivorship in U.S. and Canada

- Only implant approved for Cementless Use
STAR Total Ankle Replacement

FDA Approves Gold Standard Equivalent

Companies Introduce 2-Piece Products without Clinical Data

<table>
<thead>
<tr>
<th></th>
<th>STAR</th>
<th>Agility (no longer available)</th>
<th>InBone</th>
<th>InBone II</th>
<th>Infinity</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5 Years</td>
<td>96%</td>
<td>94%, 96%</td>
<td>89%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>10 Years</td>
<td>90%</td>
<td>85%</td>
<td>89%</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>&gt;13 Years</td>
<td>94.4%</td>
<td>63%</td>
<td>–</td>
<td>–</td>
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</tr>
</tbody>
</table>

Independent studies as of August 2015
Research Endorses STAR Performance

**Fixed vs. Mobile Bearing Implant**

While rotating across the axial plane, Mobile Bearing allows for reduced point contact stress comparative to Fixed Bearing.\(^\text{18}\)

**Point Contact Stresses Fixed vs. Mobile Bearing Implant**\(^\text{20}\)

*Average contact pressures shown were estimated using finite element analyses of Fixed Bearing (Agility) and Mobile Bearing (Mobility) total ankle replacements at the toe-off phase of gait.*

<table>
<thead>
<tr>
<th></th>
<th>Fixed Bearing</th>
<th>Mobile Bearing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Pressure</td>
<td>16.9</td>
<td>5.8</td>
</tr>
</tbody>
</table>

**Comparing STAR vs. Prophecy Cutting Guides**

<table>
<thead>
<tr>
<th></th>
<th>STAR</th>
<th>Prophecy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Accuracy</td>
<td>3(^*\text{16})</td>
<td>3(^*\text{17})</td>
</tr>
<tr>
<td>Additional Cost to Achieve This Result</td>
<td>$0</td>
<td>Contact Manufacturer</td>
</tr>
</tbody>
</table>

*Average contact pressures shown were estimated using finite element analyses of Fixed Bearing (Agility) and Mobile Bearing (Mobility) total ankle replacements at the toe-off phase of gait.*
Implant with Confidence

**Guidance**
Ask STAR faculty for advice about a case

**Observations**
Visit STAR faculty to observe a case

**Proctorships**
STAR faculty comes to your case

**Technical Specialists**
Stryker specialist attends early and complex cases
- Combined case experience 6,000+ TARs

**Local Training**
- STAR Certification Courses

**Stryker Dedication**
- Regional specialists
- 500+ Foot & Ankle Sales Representatives
- Market Leader in Orthopaedics
**Proven**
Long-term clinical survivorship, FDA reviewed IDE studies, and over 30,000 patients worldwide.

**Flexible**
STAR’s modular components and positional forgiveness allow 225 patient matched configurations with a simplified surgical technique.

**Supported**
Our case support and educational programs coupled with Stryker’s resources provide you the assurance you need for today and tomorrow.
A surgeon must always rely on his or her own professional clinical judgment when deciding whether to use a particular product when treating a particular patient. Stryker does not dispense medical advice and recommends that surgeons be trained in the use of any particular product before using it in surgery. The information presented is intended to demonstrate the breadth of Stryker product offerings. A surgeon must always refer to the package insert, product label and/or instructions for use before using any Stryker product. Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets. Please contact your Stryker representative if you have questions about the availability of Stryker products in your area. Stryker Corporation or its divisions or other corporate affiliated entities own, use or have applied for the following trademarks or service marks: STAR, Stryker. All other trademarks are trademarks of their respective owners or holders.

References
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