EARLY RESULTS CONFIRM
Clinical and Economic Value of the ATTUNE® Knee System

Comprehensive Evidence Generation

The ATTUNE® Knee System represents the largest research and development project in the history of DePuy Synthes, backed by a comprehensive evidence generation program that encompasses clinical and patient reported outcomes as well as health economics studies.

Positive Early Registry Results

The latest results from the 2017 Australian Orthopaedic Association National Joint Replacement Registry (AOANJRR) and National Joint Registry for England, Wales, Northern Ireland and the Isle of Man (NJR) confirmed early favorable results for the ATTUNE Knee.

AOANJRR

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Survivorship at three years</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATTUNE Cruciate Retaining Knee</td>
<td>97.9%</td>
</tr>
<tr>
<td>ATTUNE Posterior Stabilized Knee</td>
<td>98.9%</td>
</tr>
</tbody>
</table>

NJR

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Survivorship at four years</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATTUNE Posterior Stabilized Knee</td>
<td>98.1%</td>
</tr>
</tbody>
</table>

The CR ATTUNE Knee performs in line with the overall class of cemented, minimally stabilized total knee arthroplasty (TKA) at three years which has an estimated cumulative percent revision of 2.2%(2.1, 2.3). The PS ATTUNE Knee compares favorably with the overall class of posterior stabilized cemented TKA at three years which has an estimated cumulative percent revision of 2.9% (2.8, 3.0).

The independent analysis of 14,936 ATTUNE Knee implantations, showed that the cumulative revision rate for the ATTUNE Knee is 1.9% at four years (98.1% implant survivorship at four years), which is in line with the overall class of total knee replacement. The 5 year estimated cumulative rate of revision for the ATTUNE Knee is currently based on a sample size of 64 patients, with two late revisions influencing this estimate.

Value-Based Healthcare: From Hospital to Home

39% lower odds of patient discharge to a skilled nursing facility when implanted with an ATTUNE Knee, compared to patients who received a TKA with a Triathlon® Knee, according to the results of a large U.S. hospital administrative database review.

Going home following TKA vs. being discharged to a skilled nursing facility may potentially impact patient satisfaction and reduce health care costs.

Improvements in Patient Reported Outcomes

One year results from two worldwide studies showed improved patient reported outcomes with the ATTUNE Knee compared to other leading knee systems.

- Confidence in knee performance
- Improved patellofemoral outcomes
- Activities of daily living
- Quality of life

Innovative ATTUNE Knee Features Help Address Unmet Needs

60+ patents in the U.S. granted for key inventions related to the ATTUNE Knee Implants and Instruments.

ATTUNE GRADIUS® Curve

Geometry of the curve is designed to address the unnatural sliding of the femur on the tibia, to provide smooth motion and stability during everyday activities.

GLIDERIGHT® Articulation

Four independent studies demonstrated improved patello-femoral outcomes, including reduced incidence of symptomatic crepitus when compared to the well performing SIGMA® Knee. In addition, a fifth study concluded the biomechanics of the PS RP ATTUNE Knee with medialized anatomic patella more closely resembles the biomechanics of the natural knee than the PS RP ATTUNE Knee medialized dome patella.

www.ATTUNEvidence.com

Data Period 1 September 1999 – 31 December 2016

prosthesis combinations with more than 400 procedures reported per combination.

The cumulative percent revision of the 144 prosthesis combinations used in primary total knee replacement. The 'Other' group is the proportion of all possible combinations, they represent 96.4% of all primary total knee replacement. In 2015, 119 femoral and tibial combinations were used. This is eight less than in 2015.

Table KT22  Cumulative Percent Revision of Minimally Stabilised Primary Total Knee Replacement by Fixation (Primary Diagnosis OA)

<table>
<thead>
<tr>
<th>Fixation</th>
<th>N Revised</th>
<th>N Total</th>
<th>1 Yr</th>
<th>3 Yr</th>
<th>5 Yr</th>
<th>10 Yr</th>
<th>15 Yr</th>
<th>16 Yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cemented</td>
<td>4712</td>
<td>157680</td>
<td>0.8 (0.8, 0.9)</td>
<td>2.2 (2.1, 2.3)</td>
<td>2.9 (2.9, 3.0)</td>
<td>4.5 (4.3, 4.6)</td>
<td>6.5 (6.2, 6.9)</td>
<td>6.9 (6.5, 7.3)</td>
</tr>
<tr>
<td>Cementless</td>
<td>4795</td>
<td>103625</td>
<td>1.2 (1.1, 1.3)</td>
<td>3.2 (3.0, 3.3)</td>
<td>4.2 (4.1, 4.4)</td>
<td>6.1 (5.9, 6.3)</td>
<td>8.5 (8.1, 8.9)</td>
<td>9.5 (8.9, 10.3)</td>
</tr>
<tr>
<td>Hybrid</td>
<td>3804</td>
<td>118721</td>
<td>0.8 (0.8, 0.9)</td>
<td>2.3 (2.2, 2.4)</td>
<td>3.1 (3.0, 3.2)</td>
<td>4.4 (4.4, 4.7)</td>
<td>6.4 (6.1, 6.7)</td>
<td>7.0 (6.4, 7.4)</td>
</tr>
</tbody>
</table>

TOTAL 13131 379026

Note: Excluding cementless Genesis Oxinium and Profix Oxinium femoral prostheses

Table KT23  Cumulative Percent Revision of Posterior Stabilised Primary Total Knee Replacement by Fixation (Primary Diagnosis OA)

<table>
<thead>
<tr>
<th>Fixation</th>
<th>N Revised</th>
<th>N Total</th>
<th>1 Yr</th>
<th>3 Yr</th>
<th>5 Yr</th>
<th>10 Yr</th>
<th>15 Yr</th>
<th>16 Yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cemented</td>
<td>4774</td>
<td>124375</td>
<td>1.1 (1.1, 1.2)</td>
<td>2.9 (2.8, 3.0)</td>
<td>3.9 (3.8, 4.1)</td>
<td>5.9 (5.8, 6.1)</td>
<td>7.8 (7.3, 8.3)</td>
<td>8.0 (7.3, 8.8)</td>
</tr>
<tr>
<td>Cementless</td>
<td>537</td>
<td>6947</td>
<td>1.9 (1.8, 2.2)</td>
<td>4.3 (3.5, 4.5)</td>
<td>5.0 (4.5, 5.6)</td>
<td>6.3 (5.6, 7.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hybrid</td>
<td>675</td>
<td>11548</td>
<td>1.6 (1.4, 1.8)</td>
<td>4.2 (3.8, 4.6)</td>
<td>5.5 (5.1, 6.0)</td>
<td>7.3 (6.7, 7.9)</td>
<td>10.3 (9.8, 11.8)</td>
<td>10.9 (9.5, 12.8)</td>
</tr>
</tbody>
</table>

TOTAL 5766 142780


4 Hamilton WG, Breenkel I, Clatworthy M, Dwyer K, Himden S, Lesko J, Kantor S. Early Patient Reported Outcomes With New Primary vs. Contemporary Total Knee Arthroplasty: A Comparison of Two, Worldwide, Multi-Center Prospective Studies. 2017. American Academy of Orthopaedic Surgeons Annual Meeting, Poster Number 106, San Diego, CA. Study comparators included the SIGMA Knee (89%), Triathlon™ (7%), NexGen® (3%), and Other (1%).


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