The evidence is in... Rediscover Normal Outcomes

Smoother Recovery

Improved Function

Higher Patient Satisfaction

Supporting healthcare professionals
Room for improvement?

>50% report some degree of limitation to their functional activities.\(^8\)

20% of total knee replacement patients report unmet levels of satisfaction.\(^24\)

After total knee arthroplasty (TKA), patients may report their knee feeling ‘artificial’ with functional limitations.\(^10\)

The abnormal kinematics associated with conventional TKA may be contributing to these poor outcomes:\(^{11}\)

- Decreased satisfaction with daily activities\(^3\)
- Abnormal gait patterns\(^23\)
- Decreased stability\(^25\)
- Decreased confidence\(^9\)

From design concept to reality, new evidence shows when compared to conventional TKA, JOURNEY II TKA can give your patients:

- Smoother Recovery\(^1\)
- Improved Function\(^2,6\)
- Higher Patient Satisfaction\(^1,2,6,7\)
Rediscover normal through design

**Shape**
Replication of anatomic asymmetric femoral and tibial profiles

- Prominent posterior medial lip designed to provide stability in mid-flexion
- Convex lateral surface designed to promote native rollback
- Medial concavity designed to promote anatomic medial pivot

**Position**
Restoration of native anterior/posterior (A/P) starting position and the anatomic 3° varus joint line

- Patella Tendon Angle
- No Femoral Overhang
- Mechanical axis
- Bone resection
- 3° physiological joint line

**Motion**
Replication of native femoral rollback and axial rotation

- Normal
- JOURNEY II TKA
Smoother recovery

- Significantly lower risk of hospital readmission¹
- Significantly reduced length of hospital stay and associated costs¹
- Significant and clinically relevant improvements in flexion at 6 weeks post-operative²

Compared with conventional TKA, patients with JOURNEY® II TKA were:¹²

- 41% less likely to be discharged to a skilled nursing facility (p<0.0001)
- 35% more likely to be discharged to home (p=0.0008)
- 51% less likely to be readmitted to hospital within 30 days (p=0.0037)

Significantly reduced:¹

- Mean length of hospital stay (p<0.0001)
- Mean patient hospital costs (↓ $1,690, p<0.0001)
Recent evidence shows JOURNEY™ II TKA demonstrates improvements in KSS scores compared to conventional TKA at 6 weeks and 1 year.\(^2\)

In a multi-center case series, JOURNEY II TKA demonstrated a mean range of motion of \(131^\circ\) at 2 years post-op.\(^{12}\)

Results from a multi-center study of 209 JOURNEY II TKAs showed:

At 6 months post-TKA, over 90% of patients returned to work\(^{12}\)

\[-\]

\(|\text{KSS} |\text{JOURNEY II TKA} |\text{Conventional TKA} |
\begin{array}{c|c|c}
\hline
\text{Pre-operative} & 6 & 8 \\
\hline
\text{6 weeks post-op} & 11 & 5 \\
\hline
\text{1 year post-op} & 8 & 11 \\
\hline
\end{array}\]

\[\text{p}<0.001\]

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\([-\]
Improved function

- Kinematic patterns comparable to a native knee and Unicompartmental Knee Arthroplasty (UKA)\textsuperscript{13,14}
- Significantly higher maximal flexion at one year compared to conventional TKA\textsuperscript{2,4-5}
- Significant improvements in KSS compared to conventional TKA\textsuperscript{2,6}

The fact that many patients are unable to return to prior level of function is likely attributable to differences in kinematics between the normal knee and a conventional TKA.\textsuperscript{11}

JOURNEY II TKA helps restore normal-like kinematic patterns\textsuperscript{13-15} contributing to an improved functional outcome.

Compared with conventional TKA, JOURNEY II TKA has shown significantly higher maximal flexion at one year\textsuperscript{2,4-5}.

Significant improvements in Knee Society Scores (KSS) compared to conventional TKA\textsuperscript{2,6}.

JOURNEY II TKA provides ML stability\textsuperscript{6} which allows for a normal-like medial pivot movement of the knee. This may positively impact patient satisfaction.
JOURNEY™ II TKA has demonstrated normal-like kinematic patterns.\textsuperscript{14}

In a recent study comparing JOURNEY II TKA (n=64) with Oxford UKA (n=50) and asymptomatic control knees (n=50), the results showed:\textsuperscript{13} JOURNEY II TKA is likely to reproduce native anterior and posterior cruciate function and native knee rollback.

![Diagram of knee kinematics](image)

Figure. Medial and lateral anterior-posterior positions exhibited in JOURNEY II TKA and normal knee subjects during a deep knee bend (mm) (+Anterior, -Posterior)

Together, these results suggest the dual cam-post design and asymmetric articular geometries of JOURNEY II TKA replicate ACL and PCL function of motion to deliver normal kinematic patterns.\textsuperscript{13,14}
Multiple studies have shown JOURNEY™ II TKA to have significantly higher maximal flexion and improvements in KSS at one-year compared with conventional TKA. 2, 4-6

Postoperative range of motion is one of the most important factors influencing patient satisfaction after TKA, with limited flexion negatively impacting activities of daily living. 17

**Mean KSS score at 1 year post-TKA**

<table>
<thead>
<tr>
<th>KSS</th>
<th>JOURNEY II TKA</th>
<th>Conventional PS TKA</th>
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</thead>
<tbody>
<tr>
<td>80</td>
<td></td>
<td></td>
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<td>82</td>
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<td>90</td>
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<td>92</td>
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</tbody>
</table>

**P<0.001**

**Change in ROM from Baseline**

<table>
<thead>
<tr>
<th>Time</th>
<th>Conventional</th>
<th>JOURNEY II TKA</th>
<th>P&lt;0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 months</td>
<td>-4.4</td>
<td>11.4</td>
<td></td>
</tr>
<tr>
<td>6 months</td>
<td>-1.8</td>
<td>5.8</td>
<td></td>
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<tr>
<td>12 months</td>
<td>4.0</td>
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</tbody>
</table>

**Significant improvements over time in patient reported functional activity component of KSS**

<table>
<thead>
<tr>
<th>Time</th>
<th>Patient-reported functional activity score</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 months</td>
<td>75.4</td>
</tr>
<tr>
<td>12 months</td>
<td>79.6</td>
</tr>
<tr>
<td>24 months</td>
<td>81.5</td>
</tr>
</tbody>
</table>

**Maximal flexion at 1 year compared with conventional TKA**

- **JOURNEY II TKA**
- **Conventional TKA**

*No significant differences in baseline ROM between the 2 groups
†No baseline ROM stated
• Improvements in WOMAC and KSS are associated with higher patient satisfaction\textsuperscript{18,19}
• Patients less likely to be readmitted to hospital within 30 days\textsuperscript{1}
• Satisfaction levels comparable to patients undergoing total hip arthroplasty (THA)\textsuperscript{7}

“Patients reporting their artificial joint as ‘natural’ as opposed to ‘artificial’ are more likely to report higher rates of satisfaction and have higher outcome scores.”\textsuperscript{20}

Compared to conventional TKA, JOURNEY II TKA has reported significant improvements in WOMAC and KSS scores compared to conventional TKA (p<0.05).\textsuperscript{6}

Significant improvements in patient satisfaction from 6 months post-op to 24 months.\textsuperscript{12}
A recent study confirmed that patient satisfaction following TKA remains significantly lower when compared with THA\textsuperscript{20}.

Conversely, a recent study of JOURNEY II TKA patients showed similar outcomes and satisfaction when compared with clinically similar THA patients\textsuperscript{7}.

Why JOURNEY™ II TKA?

The design features of JOURNEY II TKA have been shown to deliver improved flexion\textsuperscript{2-6}, more normal-like kinematic patterns\textsuperscript{13,14} and significant improvement in patient satisfaction\textsuperscript{1,2,6,7} compared to conventional TKA.

• in overall satisfaction at 3 months or 1-year
• in patient quality of life measures at 3 months or 1 year*

*Time to return to work, time to return to activities of daily living or time to return to sport
Favorable estimated rates of revision compared with PS cemented knees in Australian Orthopaedic Association National Joint Replacement Registry (AOANJRR)\textsuperscript{21}

An international, multi-centre (7 US sites, 3 European sites) retrospective study of 2,059 JOURNEY\textsuperscript{°} II TKAs showed:

Favourable 5-year revision rate compared to cemented PS knees in the AOANJRR.\textsuperscript{21}

\begin{table}
\centering
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline
                       & 0 years & 1 year & 2 years & 3 years & 4 years & 5 years \\
\hline
JOURNEY II TKA         & 0       & 1.5     & 2.6     & 3.1     & 3.5     & 3.6     \\
AOANJRR (PS)           & 0       & 1.2     & 2.2     & 3.1     & 3.6     & 4.1     \\
\hline
\end{tabular}
\end{table}

Statistically significantly improved survivorship for patients under 55\textsuperscript{21}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{Cumulative_probability_of_revision.png}
\end{figure}

\textbf{JOURNEY II BCS with OXINIUM\textsuperscript{°}}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{JOURNEY II BCS.png}
\end{figure}
JOURNEY™ II TKA delivers:

**Smother Recovery**
- Significantly lower risk of hospital readmission1
- Significantly reduced length of hospital stay and associated costs1
- Significant and clinically relevant improvements in flexion at 6 weeks post-operative2

**Improved Function**
- Kinematic patterns comparable to a native knee and UKA13,34
- Significantly higher maximal flexion at one year compared to conventional TKA2,4,5
- Significant improvements in KSS compared to conventional TKA2,6

**Higher Patient Satisfaction**
- Improvements in WOMAC and KSS are associated with higher patient satisfaction18,19
- Patients less likely to be readmitted to hospital within 30 days1
- Satisfaction levels comparable to patients undergoing THA7

References