

SECTION XI - DEVICES CURRENTLY OR PREVIOUSLY AVAILABLE

The table that follows lists the names, manufacturer, and design features of mobile bearing knees mentioned in published literature or otherwise known to OSMA members contributing to this petition.

Of the devices listed, the following are available in the U.S. All are manufactured by J&J DePuy, Warsaw, IN.

- Low Contact Stress (LCS) Rotating Platform
- P.F.C. Sigma Rotating Platform
- P.F.C. Sigma Stabilized Rotating Platform
- Low Contact Stress (LCS) Meniscal Bearing
- Low Contact Stress (LCS) Unicompartmental Knee

All other devices listed are available in various countries, but not in the U.S. Most have originated in Europe. They represent a wide variety of design approaches developed in that region, where mobile bearing knees have a somewhat less demanding Regulatory route to the market. The large number of devices available indicates the depth of interest in the mobile bearing knee philosophy.

The table lists forty-six different knee designs, grouped as follows.

- Rotating platform (rotating only): 18
- Multidirectional platform: 15
- Multidirectional and/or rotating platform: 7
- Meniscal Bearing: 3
- Unicompartmental 3

In summary, there are approximately forty-six different mobile bearing knees that are currently, or have previously, been on the market. Five of these are available in the U.S.

ROTATING PLATFORM (ROTATING ONLY)

Implant	Manufacturer	Bearing Type	Description
Academia	F.H. Orthopedics, Heimsbrun, France	Rotating platform (rotating only)	Rotating-only platform, gait-congruent, cone-in-cone constraint, PCL-sacrificing, third medial femoral condyle concept
Cinetique	Medacta, Castel San Pietro, Switzerland	Rotating platform (rotating only)	Rotating-only platform, gait-congruent, cone-in-cone constraint, PCL-sacrificing
Foundation Mobile Knee	Sanortho, Orthez, France	Rotating platform (rotating only)	Rotating-only platform, gait-congruent, cone-in-cone constraint, PCL-sacrificing
G.K.S.	Premedica, Como, Italy	Rotating platform (rotating only)	Rotating-only platform, gait-congruent, cone-in-cone constraint, PCL-sacrificing
HLS Noeteos	Tornier, Saint-Ismier, France	Rotating platform (rotating only)	Rotating-only platform, gait-congruent, PCL-sacrificing, third medial femoral condyle concept
HLS Rotatoire	Tornier, Saint-Ismier, France	Rotating platform (rotating only)	Rotating only platform, tibial tray post constraint, plus anterior banana shape M/L track, posterior stabilized; third medial femoral condyle concept
Link Tack	Waldemar Link, Hamburg, Germany	Rotating platform (rotating only)	Rotating only platform, fully-congruent, curved tracks constraint, PCL-retaining
Low Contact Stress (LCS) Rotating Platform	J&J DePuy, Warsaw, IN	Rotating platform (rotating only)	Rotating-only platform, gait-congruent, cone-in-cone constraint, PCL-sacrificing
LPS Flex Mobile	Zimmer, Warsaw, IN	Rotating platform (rotating only)	Rotating-only platform, gait-congruent, tibial tray post constraint, PCL-sacrificing
New Wawe	Groupe Lepine, Lyon, France	Rotating platform (rotating only)	PS Rotating only, gait-congruent, PCL-sacrificing, third medial femoral condyle concept
P.F.C. Sigma Rotating Platform	J&J DePuy, Warsaw, IN	Rotating platform (rotating only)	Rotating-only platform, gait-congruent, cone-in-cone constraint, PCL-sacrificing
P.F.C. Sigma Stabilized Rotating Platform	J&J DePuy, Warsaw, IN	Rotating platform (rotating only)	Rotating-only platform, gait-congruent, cone-in-cone constraint, posteriorly stabilized
R.O.C.C.	Biomet, Warsaw, IN	Rotating platform (rotating only)	Rotating-only platform, gait-congruent, cone-in-cone constraint, PCL-sacrificing
Score	Amplitude, Neyron, France	Rotating platform (rotating only)	Rotating-only platform, gait-congruent, cone-in-cone constraint, third medial condyle concept, PCL-sacrificing
Scorpio + PCS Mobile Bearing Knee	Stryker Howmedica Osteonics, Allendale, NJ	Rotating platform (rotating only)	Rotating-only platform, functionally-congruent, tibial tray post constraint, PCL-sacrificing
Scorpio + PS Mobile Bearing Knee	Stryker Howmedica Osteonics, Allendale, NJ	Rotating platform (rotating only)	Rotating-only platform, functionally-congruent, tibial tray post constraint, PCL-stabilizing
T.C.S.B	EndoPlus, Switzerland	Rotating platform (rotating only)	Rotating-only platform, gait-congruent, cone-in-cone constraint, PCL-sacrificing
Two Radii Area Contact (TRAC)	Biomet, Warsaw, IN	Rotating platform (rotating only)	Rotating-only platform, fully-congruent, cone-in-cone guided motion saddle constraint, two separate areas of articular contact via inner and outer tracks, posteriorly stabilized

MULTIDIRECTIONAL PLATFORM

Implant	Manufacturer	Bearing Type	Description
Accord (Johnson-Elloy) Total Knee Replacement (TKR)	Thackeray, UK	Multidirectional platform	Multidirectional (with smaller tibial peg), or rotation only (with larger tibial peg), gait-congruent, tibial peg constraint (optional), PCL-sacrificing
Baccarra	La Biomecanique Intégrée, Clamart, France	Multidirectional platform	Multidirectional platform, gait-congruent, tibial tray post constraint, PCL-retaining
Duracon ISA	Stryker Howmedica Osteonics, Allendale, NJ	Multidirectional platform	Multidirectional platform, gait-congruent, tibial tray post constraint, PCL-retaining
E.motion	Aesculap, Tuttlingen, Germany	Multidirectional platform	Multidirectional platform, gait-congruent, A/P Translation, PCL-retaining
Innex	CenterPulse, (ex Sulzer Medica), Münsingen, Switzerland	Multidirectional platform	Multidirectional platform, gait-congruent, A/P Translation, PCL-retaining
Interax ISA	Stryker Howmedica Osteonics, Allendale, NJ	Multidirectional platform	Multidirectional platform, gait-congruent, tibial tray post constraint, PCL-retaining
Kinemax	Stryker Howmedica Osteonics, Allendale, NJ	Multidirectional platform	Multidirectional platform, gait-congruent, tibial tray post constraint, PCL-retaining (same insert as the Interax ISA)
Kinemax Plus	Stryker Howmedica Osteonics, Allendale, NJ	Multidirectional platform	Multidirectional platform, semi-congruent (as per the fixed bearing knee), tibial tray post constraint, PCL-retaining
Low Contact Stress (LCS) Antero-posterior Glide	J&J DePuy, Warsaw, IN	Multidirectional platform	Multidirectional platform, gait-congruent, cone-in-cone with AP slide rail constraint, PCL-retaining, no restraint to AP glide
Self Aligning Knee (SAL)	Sulzer, Austin, TX	Multidirectional platform	Multidirectional platform, fully-congruent, tibial tray post constraint, PCL-retaining
MBK	Zimmer, Warsaw, IN	Multidirectional platform	Multidirectional platform, fully-congruent, tibial tray post constraint with subluxation stops, PCL-retaining or sacrificing, fixed bearing intraoperative options
Motus	Stryker Howmedica Osteonics, Allendale, NJ	Multidirectional platform (unconstrained)	Multidirectional platform, gait-congruent, unconstrained, PCL-retaining
Platinum (Active) Knee	Australian Surgical Design Manufacturers (ASDM)	Multidirectional platform	Multidirectional platform, gait-congruent, unconstrained, PCL-retaining
Rotaglide	Corin, Gloucestershire, UK	Multidirectional platform	Multidirectional platform, fully-congruent, tibial tray post constraint with subluxation stops, PCL-retaining; fixed bearing intraoperative options with Plus model
Scorpio+ CR Mobile Bearing Knee	Stryker Howmedica Osteonics, Allendale, NJ	Multidirectional platform	Multidirectional platform, functionally-congruent, tibial tray post constraint, PCL-retaining

MULTIDIRECTIONAL AND/OR ROTATING PLATFORM

Implant	Manufacturer	Bearing Type	Description
Genesis II Mobile Bearing Knee	Smith & Nephew, Memphis, TN	Multidirectional platform and rotating platform	Multidirectional (without insertion of peg) or rotating platform (with insertion of peg), gait-congruent, tibial tray post constraint, PCL-retaining or sacrificing fixed bearing intraoperative options
G2S	F.I.I., Saint-Etienne, France	Multidirectional platform or rotating platform	Multidirectional platform (without insertion of peg) or rotating platform (with insertion of peg); post and slot constraint, PCL-retaining or sacrificing
Profix Mobile Bearing Knee System	Smith & Nephew Memphis, TN	Multidirectional platform and rotating platform	Multidirectional platform (without insertion of peg) or rotating platform (with insertion of peg); post and slot constraint, PCL-retaining or sacrificing
Surf	Serf, Decines, France	Multidirectional platform or rotating platform	Multidirectional platform (without insertion of peg) or rotating platform (with insertion of peg); post and slot constraint, PCL-retaining or sacrificing
Tri Condylar Congruence Concept (Tri CCC)	Dedienne Sante, Mauguio, France	Multidirectional platform or rotating platform	Multidirectional and rotating platform. Two different inserts to get multidirectional or RP only; fully-congruent, third medial femoral condyle concept, PCL-sacrificing
TRK	Wright Cremascoli Ortho, (WCO), Toulon, France	Multidirectional platform and rotating platform	Multidirectional and rotating platform, gait-congruent, tibial tray post constraint
913	Wright Cremascoli Ortho (WCO), Toulon, France	Multidirectional platform and rotating platform	Rotating only and multidirectional platform, gait-congruent, tibial tray post constraint, PCL-retaining and posterior stabilized

MENISCAL BEARING

Low Contact Stress (LCS) Meniscal Bearing	J&J DePuy, Warsaw, IN	Meniscal bearing	Meniscal bearing, gait-congruent, curved tracks constraint, PCL-retaining
Minns	Corin, Gloucestershire, UK	Meniscal bearing	Meniscal bearing, fully congruent, straight track constraint, PCL retaining/sacrificing
Oxford TMR	Biomet, Bridgend, UK	Multidirectional platform	Meniscal bearing, fully congruent, relies on ACL and PCK for constraint, ACL and PCL retaining

UNICOMPARTMENTAL

Low Contact Stress Uni	J&J DePuy, Warsaw, IN	Unicompartmental	Meniscal bearing, fully-congruent, curved track constraint, ACL and PCL retaining
Oxford Unicompartmental	Biomet, Bridgend, UK	Unicompartmental	Meniscal-bearing, fully-congruent, no constraint, ACL and PCL retaining
Preservation Uni	J&J DePuy, Warsaw, IN	Unicompartmental	Meniscal bearing, fully-congruent, curved track constraint, ACL and PCL retaining