

BMI Unicondylar Knee System

Product Catalog



Biotech GmbH
Hauptstraße 113.
56598 Rheinbrohl Germany
Tel : +49 2635 92221-0
Email : office-de@biotech-medical.net
www.biotech-medical.com



BIOTECH

REF:
VB-004-PROSP-PC-07-EN-00

Revision
2
Publication date :
01.04.2022.

©1011

"Movement is Life"

BMI Minimal invasive Unicompartamental Knee prosthesis

The system was developed with the aim to create an exact duplicate of the individual patient's natural joint movements and the stability of the joint. The femoral component is wide enough to cap the resurfaced condyles, be of a size that reproduces the AP dimension of the femoral condyles, and adequately distributes the weight bearing forces and resists subsidence. The tibial component is more than 6 mm in thickness to resist wear. The femoral component in situ together with the tibial component can adequately restore the normal joint line and correct the alignment towards, but not beyond the neutral mechanical axis. The joint line level can be restored, and therefore distal femoral resection should equal the thickness of the femoral component. These features are all obtainable with the Biotech BMI unicompartamental knee system, and are in full accordance with the rationale for this type of knee arthroplasty.

Lasting Fixation

The Biotech BMI unicompartamental knee system is manufactured from cobalt-chromium, with optional titanium and polyethylene for the tibial parts. The special surface treatment of both femoral and tibial components creates a strong bond between cement and implant. The special pegs for both the femoral and tibial components increase the surface of fixation, and grossly enhance rotational stability of the implant.

Single set of Instruments

The instrument ensures precise bony preparation of both femoral and tibial side, with accurate determination of the lower extremity axis. It is a very important, and well-received bonus among surgeons and patients that the prosthesis can be implanted with minimally invasive surgical technique, that ensures minimal damage to the extensor mechanism and soft tissues of the knee, and guarantees speedy postoperative recovery. Patient may leave the hospital within 24 hours after operation.

Modularity

The Biotech BMI unicompartamental knee system allows independent sizing, meeting the specific anatomical demands of the individual patient. The choice of the system polyethylene tibial component or metal tibial tray component with insert, together with the minimal invasive surgical technique, combined with the opportunity to perform trial reductions all insure the modularity to choose the best combination for the patient's needs.

“Movement is Life”

Sources:

1. Barnes C.L. et al: Unicompartamental knee replacement. In *The Knee*, ed. WN Scott. 1994 CV Mosby, St. Louis. 1097-1103.
2. Blindelglass D.F: et al: Patellar tilt and subluxation in total knee arthroplasty: Relationship to pain, fixation and design. *Clinical Orthopaedics*. 1993; 286: 103-109.
3. Bliss D.G. et al: Infected total knee arthroplasties. *Clinical Orthopaedics* 1985;199:207-214.
4. Campbell W.: The classic. Interposition of vitallium plates in arthroplasties of the knee. *Clinical Orthopaedics*. 1970.120.4-6.
5. Charnley J: *Low friction arthroplasty of the hip. Theory and practice*. Springer V. Berlin-Heidelberg-New York, 1979.
6. Freeman M.A.R. et al: British contribution to knee arthroplasty. *Clinical Orthopaedics*. 1986.210.69-79.
7. Insall J.N. et al: Total condylar knee replacement: preliminary report. *Clinical Orthopaedics*. 1976:120:149-154.
8. Jonhson DP et al: The outcome of infected arthroplasty of the knee. *J Bone Joint Surg* 1986:69-B: 289-291.
9. Kjaersgaard-Andersen P. et al: Total condylar knee arthroplasty in osteoarthritis. A four to six year follow-up evaluation of 103 cases. *Clinical Orthopaedics* 1989; 238: 167-173.
10. Konig A. et al: Long-term results in total knee arthroplasty *Orthopäde*. 2003;32 (6):516-26.
11. Parvizi J. et al: Thirty-day mortality after total knee arthroplasty. *J Bone Joint Surg* 2001;83-A:1157-61.
12. Pennington D.W. et al: Unicompartamental knee arthroplasty in patients sixty years of age or younger. *J Bone Joint Surg* 2003;85-A:1968-73.
13. Ranawat C.S. et al: Duo-condylar knee arthroplasty. Hospital for Special Surgery design. *Clinical Orthopaedics*. 1976.120.76-82.
14. Rand J.A. et al: Current concepts review. The patello-femoral joint in total knee arthroplasty. *J Bone Joint Surg*.1994.76-A: 612-619.
15. Rand J.A. et al: Reimplantation for the salvage of an infected total knee arthroplasty. *J Bone Joint Surg*. 1983;65-A:1081-1086.
16. Riley D. et al: The evolution of total knee arthroplasty. *Clinical Orthopaedics* 1976:120:7-10
17. Rissanen P. et al: Cost and cost-effectiveness in hip and knee replacements: a prospective study. *International Journal of Technology and Assessment in Health Care*. 1997;13:575.
18. Rissanen P. et al: Health and quality of life before and after hip or knee arthroplasty. *Journal of Arthroplasty* 1995;10:169.
19. Skinner J. et al: Racial, ethnic, and geographic disparities in rates of knee arthroplasty among Medicare patients. *New England Journal of Medicine*. 2003;49 (14): 1379-80
20. Walker R.H. et al: Management of infected total knee arthroplasties. *Clinical Orthopaedics*. 1984;186:81-89.

“Movement is Life”

**BMI Unicompartmental
Femoral component CoCr
DIN EN ISO 5832-4**


061-1313-0045		45 mm RM/LL
061-1314-0045		45 mm LM/RL
061-1313-0048		48 mm RM/LL
061-1314-0048		48 mm LM/RL
061-1313-0054		54 mm RM/LL
061-1314-0054		54 mm LM/RL
061-1313-0060		60 mm RM/LL
061-1314-0060		60 mm LM/RL

**BMI Unicompartmental
"All poly" tibial component
UHMWPE DIN EN ISO 5834-2 ***

061-2502-3265		STD x 6,5 mm, left
061-2502-3275		STD x 7,5 mm, left
061-2502-3285		STD x 8,5 mm, left
061-2502-3295		STD x 9,5 mm, left
061-2502-3205		STD x 10,5 mm, left

061-2502-3765		LG x 6,5 mm, left
061-2502-3775		LG x 7,5 mm, left
061-2502-3785		LG x 8,5 mm, left
061-2502-3795		LG x 9,5 mm, left
061-2502-3705		LG x 10,5 mm, left

061-2502-4265		XL x 6,5 mm, left
061-2502-4275		XL x 7,5 mm, left
061-2502-4285		XL x 8,5 mm, left
061-2502-4295		XL x 9,5 mm, left
061-2502-4205		XL x 10,5 mm, left

061-2503-3265		STD x 6,5 mm, right
061-2503-3275		STD x 7,5 mm, right
061-2503-3285		STD x 8,5 mm, right
061-2503-3295		STD x 9,5 mm, right
061-2503-3205		STD x 10,5 mm, right

061-2503-3765		LG x 6,5 mm, right
061-2503-3775		LG x 7,5 mm, right
061-2503-3785		LG x 8,5 mm, right
061-2503-3795		LG x 9,5 mm, right
061-2503-3705		LG x 10,5 mm, right

061-2503-4265		XL x 6,5 mm, right
061-2503-4275		XL x 7,5 mm, right
061-2503-4285		XL x 8,5 mm, right
061-2503-4295		XL x 9,5 mm, right
061-2503-4205		XL x 10,5 mm, right

**BMI Unicompartmental Tibial tray
TiAl6V4 - DIN EN ISO 5832-3**

061-3313-3000		STD RM/LL
061-3314-3000		STD LM/RL
061-3313-4000		LG RM/LL
061-3314-4000		LG LM/RL
061-3313-5000		XL RM/LL
061-3314-5000		XL LM/RL


**BMI Unicompartmental Tibial insert
UHMWPE - DIN EN ISO 5834-2**

061-3503-3008		STD RM/LL 8mm
061-3503-3010		STD RM/LL 10mm
061-3503-3012		STD RM/LL 12mm
061-3504-3008		STD LM/RL 8mm
061-3504-3010		STD LM/RL 10mm
061-3504-3012		STD LM/RL 12mm

061-3503-4008		LG RM/LL 8mm
061-3503-4010		LG RM/LL 10mm
061-3503-4012		LG RM/LL 12mm
061-3504-4008		LG LM/RL 8mm
061-3504-4010		LG LM/RL 10mm
061-3504-4012		LG LM/RL 12mm

061-3503-5008		XL RM/LL 8mm
061-3503-5010		XL RM/LL 10mm
061-3503-5012		XL RM/LL 12mm
061-3504-5008		XL LM/RL 8mm
061-3504-5010		XL LM/RL 10mm
061-3504-5012		XL LM/RL 12mm

**BMI Unicompartmental
"All poly" tibial component
UHMWPE DIN EN ISO 5834-2**

061-2500-3265		32 x 6,5 mm
061-2500-3275		32 x 7,5 mm
061-2500-3285		32 x 8,5 mm
061-2500-3295		32 x 9,5 mm
061-2500-3765		37 x 6,5 mm
061-2500-3775		37 x 7,5 mm
061-2500-3785		37 x 8,5 mm
061-2500-3795		37 x 9,5 mm
061-2500-4265		42 x 6,5 mm
061-2500-4275		42 x 7,5 mm
061-2500-4285		42 x 8,5 mm
061-2500-4295		42 x 9,5 mm

* - optional



BIOTECH

"Movement is Life"

Biotech GmbH
Hauptstraße 113.
56598 Rheinbrohl Germany
Tel : +49 2635 92221-0
Email : office-de@biotech-medical.net
www.biotech-medical.com

REF:
VB-004-PROSP-PC-07-EN-00

Revision
2
Publication date :
01.04.2022.

©1011