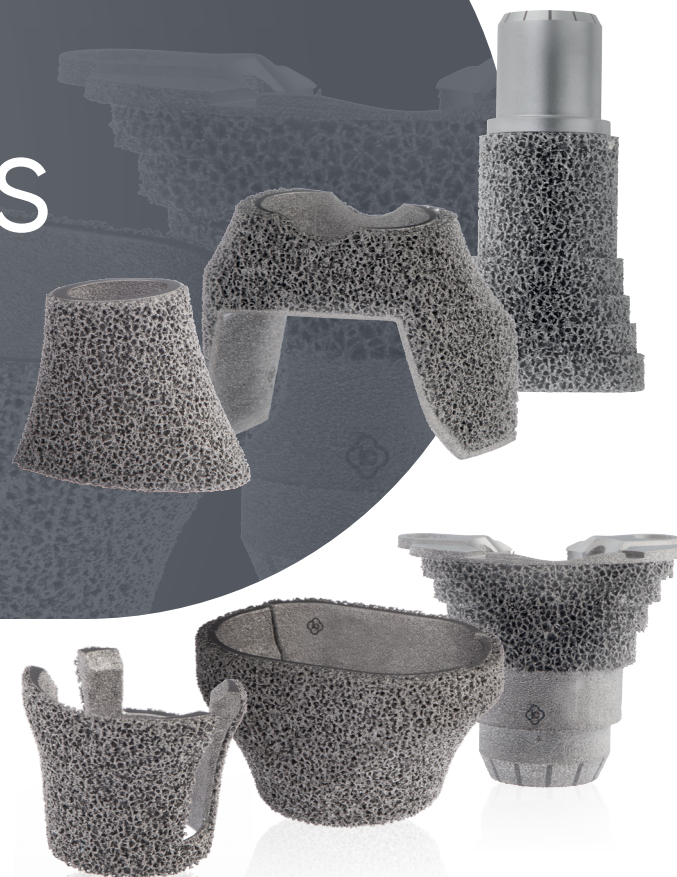


EPORE[®] defect fillers



EPORE[®]

EPORE[®] is an additively manufactured, highly porous structure made of titanium alloy (TiAl6V4). This material is particularly suitable because it is biologically inert, ductile and has a high corrosion resistance and durability.

EPORE[®] was developed to generate a high porosity with a low modulus of elasticity. It is very similar to bone structure and thus favors **the ingrowth of the implant into the bone.**



Mechanical properties

- porosity: $61 \pm 8 \%$
- rod thickness: $360 \pm 50 \mu\text{m}$
- spec. E modulus: $3.1 \pm 0.6 \text{ GPa}$



Optimal treatment

of bony defects through
various designs



Extensive compatibility

with the knee systems **ACS®** and
MUTARS® GenuX® MK



Cementless fixation

through press fit, highly porous
EPORE® structure, and bone-com-
pressive preparation

The **EPORE®** defect fillers are implants used for the reconstruction of the weight-bearing surface in large bone defects, especially in metaphyseal defects corresponding to the AORI classification -II- (a and b) and -III-.¹ By implementing the concept of zonal fixation, they provide a solid support surface for knee endoprotheses and enable the restoration of the natural joint line.²

EPORE® defect fillers show excellent osseointegration and demonstrate impressive short-term clinical outcomes.³

¹ Kohlhof, H., Randau, T., Kehrer, M. et al. Rekonstruktion tibialer metaphysärer Defekte im Revisionsfall mit metallischen Metaphysenkomponenten (GenuX® MK-System). Oper Orthop Traumatol 32, 284–297 (2020)

² Morgan-Jones R, Oussedik SIS, Graichen H, Haddad FS. Zonal fixation in revision total knee arthroplasty. Bone Joint J. 2015;97-B(2):147–149.

³ Thomas England, Joseph Pagkalos, Lee Jeys, Rajesh Botchu, Richard Carey Smith. Additive manufacturing of porous titanium metaphyseal components: Early osseointegration and implant stability in revision knee arthroplasty. Journal of Clinical Orthopaedics and Trauma, Volume 15: 60–64 (2021)

EPORE® metaphyseal components

EPORE® metaphyseal components are indicated for the treatment of central bone defects in the metaphysis. The stepped design results in a vertically directed force transmission and consequently leads to compressive loading of the bone.

EPORE® metaphyseal components provide a reliable foundation for both the rotational and axial stability of the knee endoprosthesis.



Cementless treatment

through mechanical connection
of the components



Comprehensive modularity

through freely adjustable offset
adapters and stems



Compressive loading

of the bone through a
stepped design



Offset

up to 6 mm and 360° freedom of rotation

EPORE® metaphyseal component femoral
for ACS® SC or MUTARS® GenuX® MK
available in four sizes

conical interlocking of the **EPORE®** metaphyseal component
femoral with the femoral component

compatible with cemented and cement-
less femoral components

**EPORE® metaphyseal
component tibial incl. spacer**
with 5 mm or 10 mm spacers
in various sizes

EPORE® metaphyseal component tibial
for ACS® MB SC and MUTARS® GenuX® MK
available in four sizes

EPORE® cones

Depending on the defect classification, different **EPORE®** Cones are available. The **EPORE®** Cones cortical enable the treatment of large decentralized bone defects and allow for the restoration of the joint line. For smaller central defects in the metaphyseal region without cortical damage, the **EPORE®** Cones metaphyseal are used. **EPORE®** Cones KRI and arthrodesis are designed to match the design of **MUTARS®** KRI and **MUTARS®** RS arthrodesis, respectively.



Optimal treatment

through freedom of positioning and defect-dependent



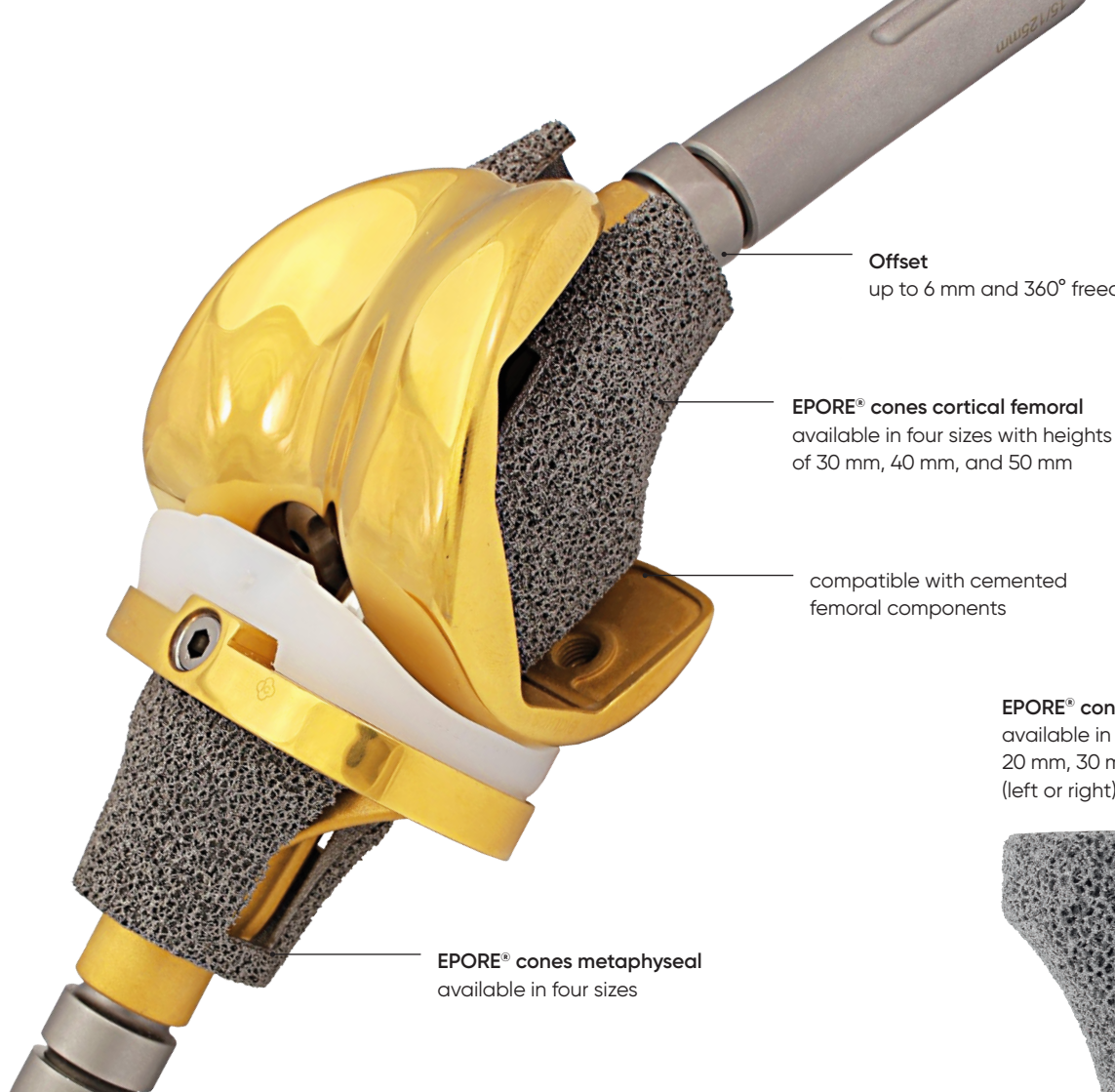
Comprehensive modularity

through freely adjustable offset adapters and stems



Even stress distribution

through rotationally symmetric stress distribution ("hoop stress") across the entire surface of the cone



Offset

up to 6 mm and 360° freedom of rotation

EPORE® cones cortical femoral

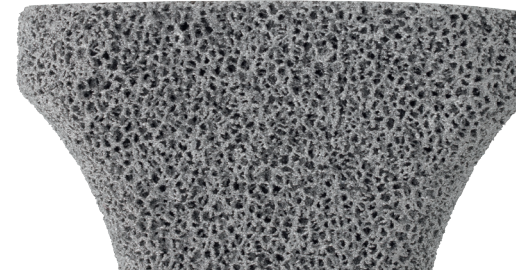
available in four sizes with heights of 30 mm, 40 mm, and 50 mm

compatible with cemented femoral components

EPORE® cones cortical tibial

available in four sizes with heights of 20 mm, 30 mm and 30 mm stepped (left or right)

EPORE® cones metaphyseal
available in four sizes



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