

ClariVy™ OsteoVy™ PK

Cervical IBF System



Versatile Sizing

Footprints: 12x10, 14x11, 16x14

Heights: 4-11mm

Lordosis: 0° and 7°

Better Bony Ongrowth

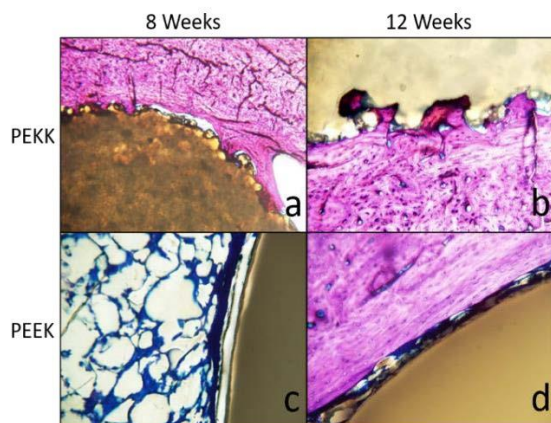
Bone Attachment



OsteoVy™ PEKK implants demonstrated¹ bone ingrowth, no radiographic interference, no fibrotic tissue membrane formation, significant increase in bony apposition over time, and significantly higher push-out strength compared to standard PEEK. The PEKK implant displayed bone growth characteristics comparable to Ti-coated PEEK.

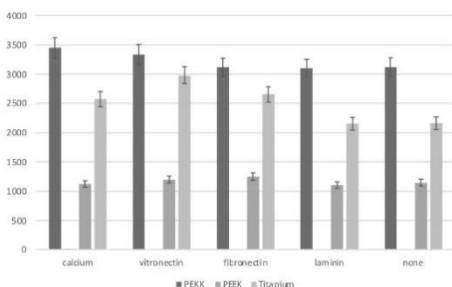


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Enhanced Osseointegration

The *in vivo* bone response to OsteoVy™ PEKK compared to machined PEEK in a rabbit femoral model at 8 and 12 weeks demonstrated² bone growing onto the surface of a PEKK rod implant and into the peaks and pits of the rough surface. However, fibrous tissue (blue) was noted surrounding a PEEK rod implant



Hydrophilicity

OsteoVy™ PEKK material has demonstrated⁵ extraordinary vertical fluid conduction through the rough outer surface.

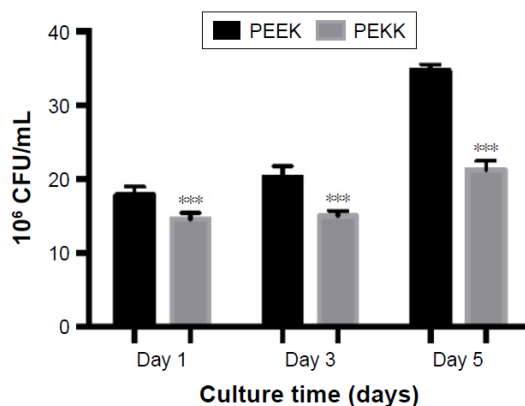


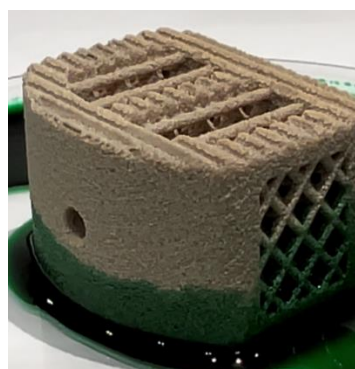
Figure 3 Staphylococcus epidermidis on different samples after 1 day, 3 days, and 5 days

Anti-Microbial Properties

Results of *in vitro* study³ indicated decreased adhesion and growth of *P. aeruginosa* and *S. epidermidis* on nanorough PEKK surface compared with conventional PEEK surfaces.

Improved Bone Density

OsteoVy™ PEKK material demonstrated⁴ greater osteoblast adhesion and calcium deposition on the implant surface compared to PEEK and Titanium.



1 Cheng, B., Jaffee, S., Averick, S., Swink, I., Horvath, S., & Zhukauskas, R. (2020). A comparative study of three biomaterials in an ovine bone defect model. *The Spine Journal*, 20(3), 457-464

2 OPM Internal Study with Yale University – 2014. Data on file at OPM. (Note: OsteoFab PEKK is another brand name for OsteoVy™ PEKK)

3 Wang, M., Bhardwaj, G., & Webster, T. (2017). Antibacterial properties of PEKK for orthopedic applications. *International Journal Of Nanomedicine*, Volume 12, 6471-6476

4 OsteoFab® Surface Properties: Bacteria Inhibition and Osteoblast Functions. Presented by Thomas Webster, Ph.D., Northeastern University October 19, 2020.

5 OPM Internal Study with Yale University – 2014. Data on file at OPM. (Note: OsteoFab PEKK is another brand name for OsteoVy™ PEKK)

