



The BioBase™ Data Registry is a multicenter, observational, quality-assessment repository sponsored by Innovasis as a part of our commitment to quality and patient outcomes. It allows surgeons to collect patient outcomes and fusion data in a secure, HIPAA-compliant database that can be accessed on a real time basis.

Data that Benefits Surgeons & Patients

- Web-based portal, HIPAA-compliant, de-identified data
- Core Lab assessment of fusion rates at 6 weeks and 3, 6, 12, and 24 months post op.
- Track outcomes against aggregate peer data
- Analyze patient satisfaction and patient reported outcomes

Demographics

- Age, Sex, BMI, etc.
- Diagnosis
- Comorbidities
- Treatment
- Employment status
- Complications

Radiographic Assessment by an Independent Core Lab

- Absence of lucencies around device
- Absence of graft subsidence or migration
- Segmental ROM
- Absence of translational AP-motion or instability

Patient Reported Outcome Measures

- Oswestry Disability Index (ODI), Neck Disability Index (NDI)
- Visual Analogue Scale (VAS)
- EQ5D-3L™
- Patient Satisfaction
- Preop, surgery and postop CRFs





Site & Registry Support

Innovasis staff is available to assist with registry set-up, software training, and database support. A radiographic core lab, Raylytic, provides imaging assessment and database support. To learn more about participation in **BioBase**, please contact us. marketing@innovasis.com | (801) 261-2236

► BENEFITS OF HA^{nano} Surface®

HA^{nano} Surface® is a 20 nanometer thin implant surface modification⁶ composed of crystalline hydroxyapatite (HA) particles that through shape, composition, and structure mimic human bone tissue. HA^{nano} Surface is used clinically and has proven to significantly accelerate and enhance osseointegration of implants.⁷

HA^{nano} Surface is a registered trademark of Promimic AB, Mölndal, Sweden



NANO-SIZED CRYSTALLINE

Significantly accelerate and enhance integration of implants using nano-sized crystalline hydroxyapatite particles¹



HYDROPHILIC

Hydrophilic properties improve adsorption of blood and extracellular fluids, promoting an osteoconductive integration process.



BONY ONGROWTH

Enables newly-formed bone to grow directly into the micrometer topography (roughness) of the implant surface

► BENEFITS OF HA PEEK

Hydroxyapatite PEEK (HA PEEK) is a composite material of 80% PEEK and 20% hydroxyapatite integration. With zero coatings or laminate, structural and mechanical properties of PEEK combined with the osteoconductive properties of HA makes it an ideal material for interbody fusion.

PEEK-OPTIMA™ HA Enhanced is a trademark of Invivio Ltd



RADIOLUCENT IMAGING

PEEK-OPTIMA™ HA Enhanced is radiolucent for easy monitoring of the healing site with X-rays, CT or MRI.



OSTEOCONDUCTIVE SURFACE

Fully integrated with hydroxyapatite on all surfaces for earlier bone ongrowth and greater new bone formation.^{2,3}



BONE-LIKE STRUCTURE

With a modulus closer to bone⁴ PEEK-OPTIMA™ HA Enhanced reduces stress shielding at a higher rate than titanium⁵

REFERENCES:

- ¹ in laboratory studies using animals
- ² Study evaluated the bone ongrowth of PEEK-OPTIMA and PEEK-OPTIMA HA Enhanced in a bone defect model in sheep. Data on file at Invivio. This has not been correlated with human clinical experience.
- ³ Study evaluated the in vivo response to PEEK-OPTIMA Natural, PEEK-OPTIMA HA Enhanced an allograft in a cervical spine fusion model in sheep. Data on file at Invivio. This has not been correlated with human clinical experience.
- ⁴ J. Henkel, M.A. Woodruff, D.R. Epari, R. Steck, V. Glatt, I. C. Dickinson, P. F. M. Choong, M. A. Schuetz, D. W. Hutmacher. Bone Regeneration Based on Tissue Engineering Conceptions - A 21st Century Perspective. Bone Research (2013) 1, 216-248.
- ⁵ Comparison of the Strength and Stiffness of Polymers with Titanium based on typical values.
- ⁶ Osseointegration of human dental implants
- Meirelles L (2008), 'The effect of Chemical and Nanotopographical Modification on the early stages of osseointegration'
- Jimbo R (2011), 'Histological and three-dimensional evaluation of osseointegration'
- Jimbo R (2012), 'Nano hydroxyapatite-coated implants improve bone nanomechanical properties'.