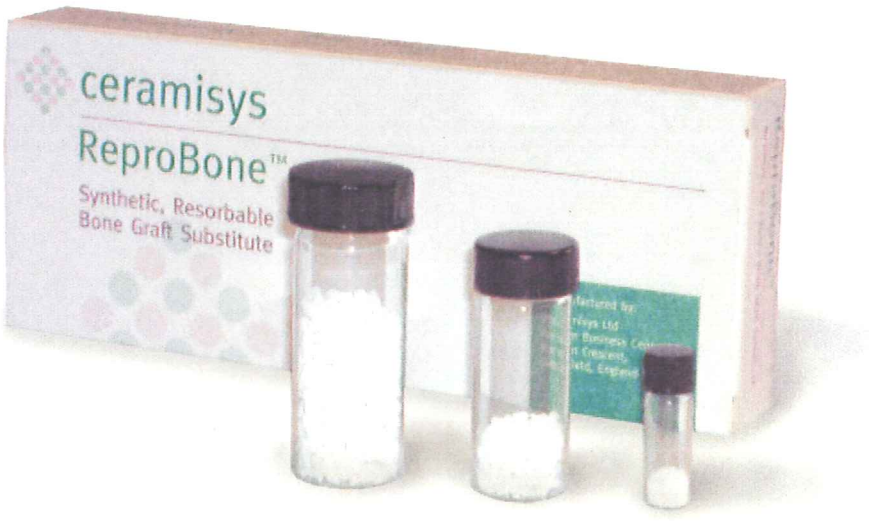
ceramisys



Bone Graft Substitutes

ReproBone™ – The new generation

Synthetic Innovative product that offers a sterile, reliable alternative to cancellous autograft or allograft.

Resorbable 60% HA, 40% ß-TCP composition is similar to the mineral component of human bone and undergoes complete resorption at a controlled rate.

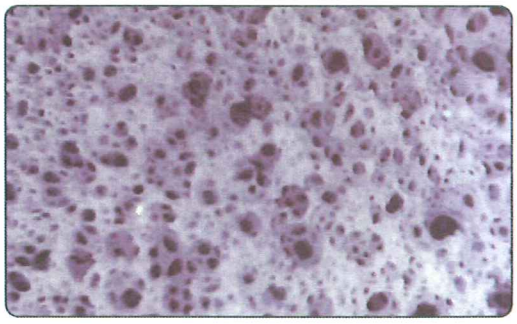
ReproBone™ Granules

Osteoconductive A fully interconnected structure similar to human cancellous bone provides an ideal environment for the ingrowth of new bone.

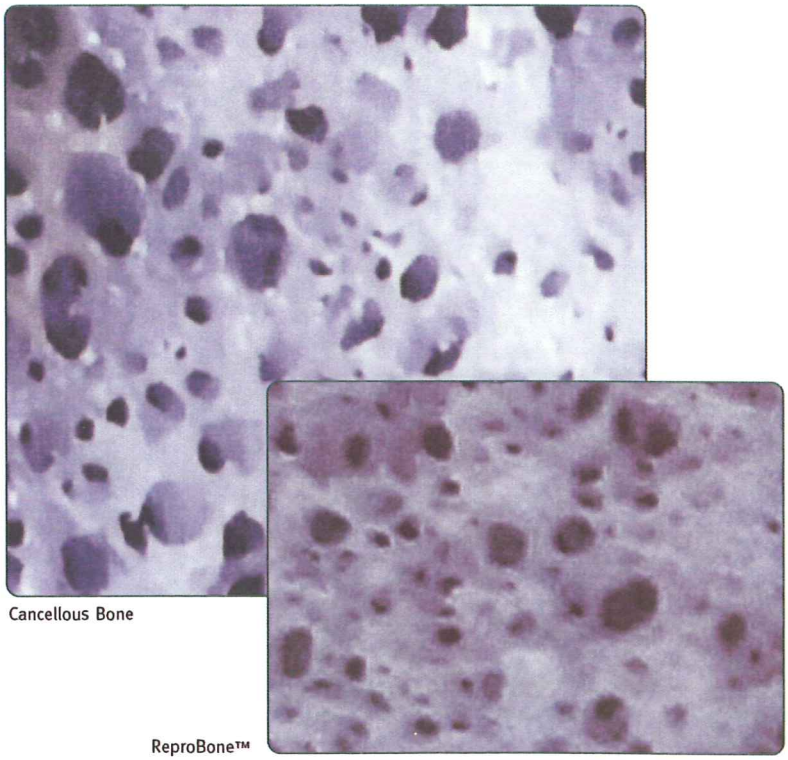
Ultra High Porosity Over 80% allows rapid bone ingrowth throughout the pores. The product provides support without significantly limiting natural bone density. Microporosity within the HA/TCP structure assists the transfer of essential nutrients.

ReproBone™ Granules

Safe and Reliable A gamma sterilised product, available in unlimited quantities. The biocompatibility and clinical efficacy of HA and ß-TCP as bone substitute materials is supported by over 3000 publications and over 500 clinical studies with 25 years of successful use.



ReproBone™ Cancellous Like Structure



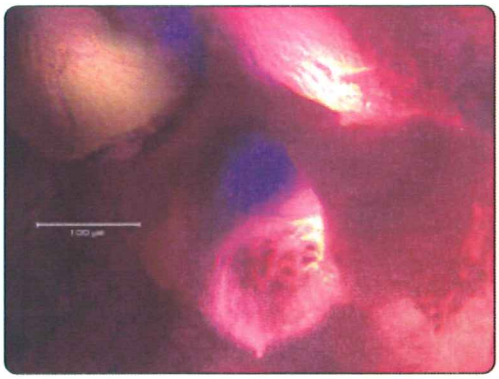
Cancellous Bone

ReproBone™

Composition	60% HA, 40% ß-TCP
Porosity	83%
Macroporosity	200 – 800um
Fully interconnected	Yes
Microporosity	1.0 – 10um

Application is easy. When mixed with blood, bone marrow aspirate or platelet concentrate, the granules form a cohesive mixture that is easily handled. ReproBone™ granules can be mixed with autograft as a bone graft extender e.g. for spinal fusion procedures and blocks can be easily cut and shaped to fit the defect.

Indications ReproBone™ blocks and granules are indicated for use as a bone graft substitute for the repair of non-load bearing osseous defects. Standard fixation techniques must be used in load bearing applications. ReproBone™ has been used successfully for fracture repair, non-unions, prosthesis revision surgery, spinal fusion, sinus lift and other dental and periodontal procedures.

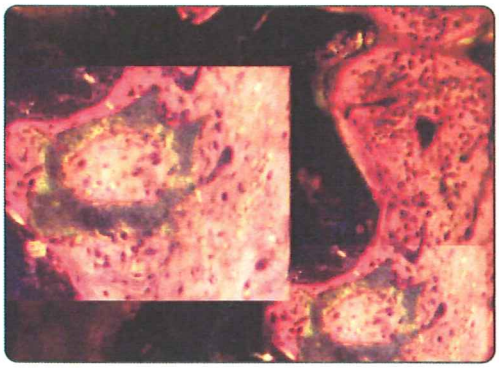


Osteoconduction with bone radiating through pores to the centre of the implant

Integration At 12 weeks complete integration with new bone, implant is now embedded within new bone forming bicontinuous matrix.

Clinical Performance

ReproBone™ has proven biocompatibility and osteoconductivity. Studies show that ReproBone™ implanted both in cancellous bone and cortical bone gives excellent osseointegration with rapid bone penetration through to the core of the implant.



Resorption Osteoclastic resorption and phagocytosis, releases calcium and phosphate ions locally, which in turn encourages osteoblastic activity and the deposition of new bone. At 12 weeks osteoclastic resorption can be clearly observed, the implant has a distinctly blurred outline with highly microporous surface. Bone remodelling continues until the implant is completely resorbed.

History

Over the last 20 years, hundreds of successful clinical studies have been performed on the ability of porous HA and TCP to provide an osteoconductive environment assisting in the regeneration of a bony defect. A biphastic HA/TCP composition with a highly interconnected structure provides the optimal osteoconductive environment that is resorbable in a controlled way.

Due to its similarity with human bone, no adverse reactions have ever been reported. The calcium and phosphate resorption products are beneficial in assisting local osteoblast activity at the site.

P.V. Hatton, M. Ehdi, C. Gillingham, I. Brook, Evaluation of the in-vitro biocompatibility of novel porous hydroxyadatite bone substitutes / scaffolds.
N. Passuti, S. Martin, G. Daculsi, S. Legeros, R.S. Raher Macroporous calcium phosphate ceramic for long bone surgery in humans & dogs: Clinical & histological Suudy J. Biomed. Mat. Rex.1990, Vol 24, 379-396
C. Schwartz, P. Liss, B. Jacquemaire, P. Lecestre Biphasic synthetic bone substitute use in orthopaedic & trauma surgery: clinical, radiological and histological results J. Mat Sci: Mat. in Med. issue: 1999 Vol 10. No. 12 821 - 825
P. Frayssinet, J.L. Trouillet. N. Rouquet, E. Azimus, A. Autofage Effects of the Chemical Composition of calcium phosphate ceramics on their osseointegration. Orthopaedics Int'l. Ed. 1993, Vol 1, No. 4.

Product Range and Ordering Information

ReproBone Granules
1.0 – 4.0mm

RBG2.5	2.5cc
RBG5	5cc
RBG10	10cc
RBG15	15cc
RBG20	20cc
RBG25	25cc
RBG30	30cc

ReproBone Granules
0.5 – 1.0mm

RBD025	0.25cc
RBD0.5	0.5cc
RBD1	1.0cc
RBD1.5	1.5cc
RBD2.0	2.0cc
RBD2.5	2.5cc

ReproBone Blocks
Available in a variety of sizes and shapes.
Please contact us for details.

Quality

Ceramisys employs a total Quality Management System and is BSI Registered to BS EN ISO 13485 with Full Quality Assurance. ReproBone carries the CE Mark (Class III)

BSI REGISTERED
FM 97418

For more information about ReproBone™or other Ceramisys products, please contact your local distributor

Distributed by:

J.B. Implants Services bv

Robijnborch 7
5241 LK Rosmalen
www.jb-implants.nl

T 073 52 20780
F 073 52 21245
E jblock@knoware.nl

ceramisys

Ceramisys Ltd Alison Business Centre, Alison Crescent, Sheffield S2 1AS, England
Tel: +44 (0)114 283 5981 Fax: +44 (0)114 265 9413
Email: enquiries@ceramisys.com www.ceramisys.com