

BIOACTIVE GLASS WITH DBM PUTTY

BioV[®] BP



A Synergistic Combination of Bioactive Glass
& Demineralized Bone Matrix



A GLOBAL EXTREMITY COMPANY

BIOACTIVE GLASS WITH DBM PUTTY

BioV® BP

BioV® Bioactive Matrix is a novel bone graft substitute expressly designed to optimize surgical handling, graft stability and osteoproducity.



Bioactive Glass is an osteoconductive and osteopromotive material that guides new bone formation

- Forms an exceedingly strong interfacial bond between the graft and adjacent boney tissue within minutes¹
- Triggers the mechanisms that cause differentiation and proliferation of osteoblasts²
- Boosts the activity of critical growth factors needed for bone formation³
- Accelerates the process of osteogenesis⁴
- Additionally, in vitro studies demonstrate that ionic release (Ca++) and local pH changes inherent to bioactive glass create an unfavorable environment for growth of certain microbes⁵. Bioactive Glass characteristics are based on in vivo and animal data



Demineralized allograft bone is an osteoconductive scaffold with osteoinductive potential to facilitate new bone formation

- Each lot of DBM is evaluated for osteoinductive (OI) potential using an in vivo athymic rat model
- Processed to achieve a sterility assurance level (SAL) of 10⁻⁶
- Surface roughness of DBM particles allow for the migration and proliferation of osteogenic cells⁷
- Demineralization process exposes natural morphogenic proteins in the bone matrix, making them available for osteogenesis⁸



Performance - A novel and patented process that integrates the osteoinductive and osteoconductive elements of the product

- Rapidly reconstitutes and is easily prepared
- Product is moldable, extrudable and can be packed into osseous defects
- Resists migration during irrigation allowing the active components to stay in place

Ordering Info

CATALOG NO DESCRIPTION / SIZE
 BGP 001-01... BioV® Bioactive Glass with DBM Putty **1cc**
 BGP 001-02... BioV® Bioactive Glass with DBM Putty **2cc**

CATALOG NO DESCRIPTION / SIZE
 BGP 001-05... BioV® Bioactive Glass with DBM Putty **5cc**
 BGP 001-10... BioV® Bioactive Glass with DBM Putty **10cc**



Preparation

1. Fill the transfer syringe with sterile fluid.

PACKAGE SIZE	FLUID
1cc	1.0cc
2cc	1.5cc
5cc	3.5cc
10cc	7.0cc



2. Attach transfer syringe to female luer port on the product syringe and hold the assembly vertically with the product syringe on top. Inject the sterile fluid into the product syringe.



3. Once the fluid is transferred compress the plunger of the product syringe until all of the air is removed and the powder is wetted. Wait 2 minutes for the fluid to be completely absorbed into the powder.



4. Remove the fluid transfer syringe and the valve from the product syringe.



5. Extrude the product directly into bony voids or gaps, or into moist gloves.



6. Mold and handle putty as desired. BioV® Bioactive Matrix handles best when used within 12 minutes of reconstitution.

References: 1. Onishi H, Kushitani S, Yasukawa E, Iwaki H, Hench LL, Wilson J, Tsuji E, Sugihara T [1997] Particulate bioglass compared with hydroxyapatite as a bone graft substitute. Clin Orthop Relat Res 334:316-325 2. Hench, L.L., Splinter, R.J., and Allen, W.C., Bonding Mechanisms at the Interface of Ceramic Prosthetic Materials. Journal of Biomedical Materials Research, 1971; 2(1): 117-141. 3. Mulliken JB, Glowacki J, Kaban LB, Folkman J, Murray JE [1981] Use of demineralized allogeneic bone implants for the correction of maxillofacial deformities. Ann Surg 194(3):366-372 4. Mulliken JB, Kaban LB, Glowacki J [1984] Induced osteogenesis—the biological principle and clinical applications. J Surg Res 37(6):487-496 5. Hench, L.L., Splinter, R.J., and Allen, W.C., Bonding Mechanisms at the Interface of Ceramic Prosthetic Materials. Journal of Biomedical Materials Research, 1971; 2(1): 117-141. 6. Berven S, Tay BK, Kleinstueck FS, Bradford DS [2001] Clinical applications of bone graft substitutes in spine surgery: consideration of mineralized and demineralized preparations and growth factor supplementation. Eur Spine J 10(Suppl 2):S169-S177. doi:10.1007/s005860100270 7. Kirk T, J. [2012] Osteoconductivity and osteoinductivity of Bio V DBM. Cell Tissue Bank DOI 10.1007/s10561-012-9297-1 8. Mulliken JB, Kaban LB, Glowacki J [1984] Induced osteogenesis—the biological principle and clinical applications. J Surg Res 37(6):487-496 9. Kirk T, J. [2012] Osteoconductivity and osteoinductivity of Bio V DBM. Cell Tissue Bank DOI 10.1007/s10561-012-9297-1.

All content contained herein is furnished for informational purposes only. In2Bones does not recommend a particular surgical product or procedure suitable for all patients. Each surgeon must evaluate the appropriateness of a device and corresponding techniques based on medical training, clinical judgment and surgical experience. The proper surgical technique and/or procedure are the responsibility of the medical professional. Indications, contraindications, warnings, and precautions are listed in implant package insert and should be reviewed carefully by the physician and operating room personnel prior to any proposed procedure. Availability of these products might vary from a given country or region to another as a result of specific local regulatory approval or clearance requirements for sale in such country or region.

CAUTION: Federal law (USA) restricts this device to sale and use by, or on the order of a physician.



A GLOBAL EXTREMITY COMPANY

Corporate Headquarters

In2Bones Global, Inc. • Memphis, TN • USA
 844. 602. 6637 • Info@i2b-USA.com

International Office

In2Bones SAS • Lyon • France
 +33 (0)4 72 29 26 26

FOLLOW US....



In2Bones.com

BioV, the In2Bones name and logo are trademarks of In2Bones or its affiliates. In2Bones USA Memphis TN, 38119 USA / In2Bones SAS, 69130 Ecully, France © 2018 In2Bones USA, Memphis, TN • All rights reserved • BVBP0817 Rev. C, 0719