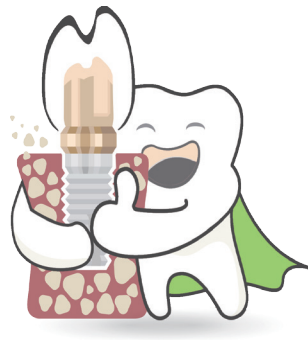


Korea Tooth Bank

TOOTH BONE GRAFT SYSTEM



Happy Tooth Storage
Korea Tooth Bank
www.koreatoothbank.com



What is the Tooth Bone Graft System?

It is an advanced dental system using 'Tooth Bone Graft' materials made out of extracted tooth. It ensures fast and safe alveolar bone augmentation, promoting good and predictable prognosis.



Order and contact information

SOCIUS (M) SDN. BHD. Reg No: 200701017844 (775855-X)
No. 16, Jalan Sungai Burung W32/W, Bukit Rimau, 40460 Shah Alam, Selangor Darul Ehsan, MALAYSIA.
Tel: +603-5121 3166 www.socius.com.my

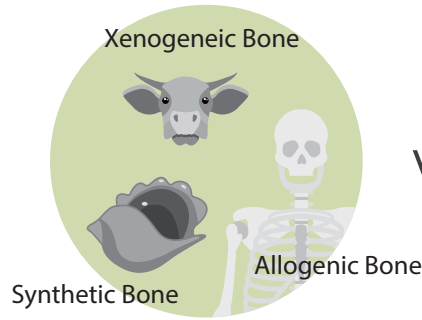
Advantages of using Tooth Bone Graft system

3R

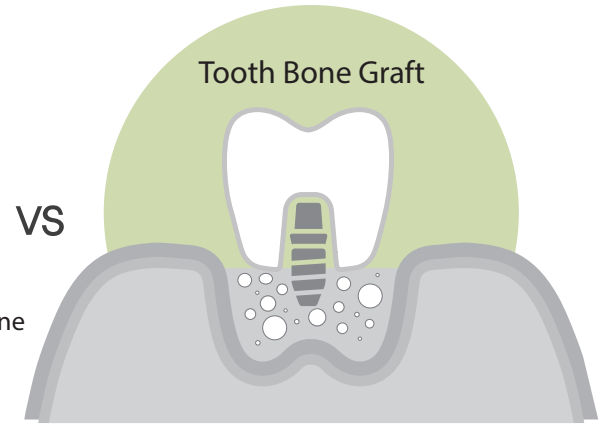
Remodeling

Reliable

Recovery



Infection Risk,
Unclearness,
Low Replacement



No Infection Risk
Safe and Strong,
High Replacement

3S

Simple

Safe

Strong

Tooth Bone Graft material has both inorganic and organic components.

The inorganic components are composed of Hydroxyapatite (HA), Tricalcium Phosphate (TCP), Amorphous Calcium Phosphate (ACP), Octacalcium Phosphate (OCP), which are similar to the minerals of human bone tissues.

The organic components are composed of collagen fibers, primarily type I collagen, and these fibers are essential for calcification and bone remodeling. The remaining organic components consist of Human Bone Morphogenetic Protein (h-BMP) and the osteoinductive proteins.

Hu- BT. Powder

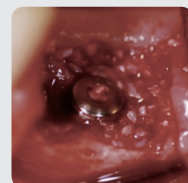
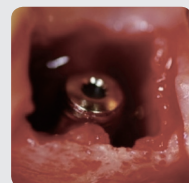
Model	Volume
Hu-BT.P30	0.3cc

For simple GBR

Advantage : Processed using crown and dentin

Biocompatible, osteoconductive and osteoinductive materials

Contains natural inorganic materials (HA, TCP, ACP, OCP)



Before Grafting

Immediately After Grafting

After 4 months

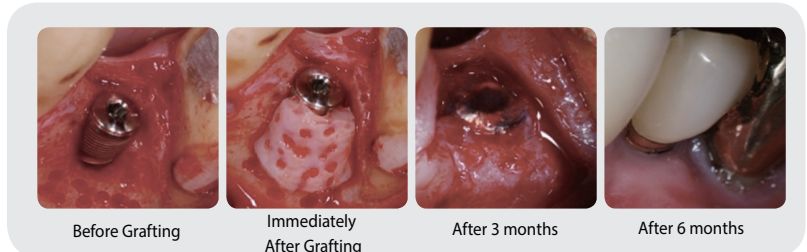
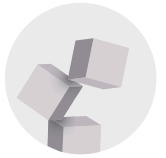
Model

Hu- BT. Block

Hu-BT.Form

For vertical/ horizontal augmentation of alveolar bone

- Advantage : Highly manipulable
- No bone screw needed
- Biocompatible, flexible
- Rich in h-BMP
- Can be shaped/ molded by Dean scissors or periodontal knife



Model

Volume

Hu- BT. Moldable

Hu-BT.M30 0.3cc

For alveolar bone defects and sinus augmentation

Application : Powder is mixed with distilled water or saline (powder/water ratio = 2/1) Mix 2 - 3 minutes like alginate

Advantage : Effective for increasing the volume and viscosity by 1.3 - 1.5 times

Bone graft without membrane or Platelet Rich Plasma (PRP)

Easy to fit into the defects



Model

Volume

Hu- BT. BMP. Powder/Block

Hu-BT.B30 0.3cc

For severe osteonecrosis, inflammation and rapid treatment in soft tissue

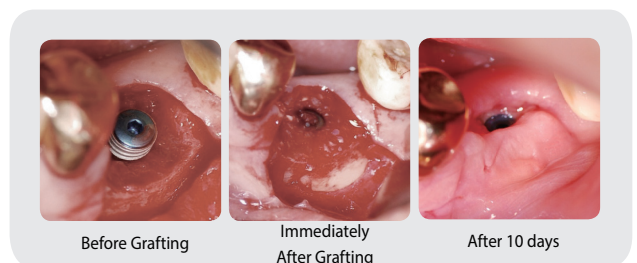
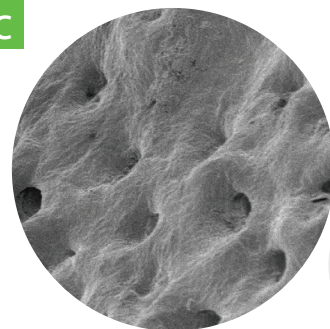
Advantage : Rapid new bone formation by activating osteoblast and fibroblast

Reducing healing period

Reducing early stage of inflammation

Solid bone formation

Rapid regeneration of soft tissue post- surgery



Korea Tooth Bank Research

1. Young-Kyun Kim, Su-Gwun Kim, Ju-Hee Byeon, et al. 'Development of a Novel Bone Grafting Material using Autogenous Teeth', Oral Surgery Oral Medicine Oral Pathology Oral Radiology, 2010
2. Young-Kyun Kim, Su-Gwun Kim, Ji-Su Oh, Seung-Chan Jin, et al. 'Analysis of the Inorganic Component of Autogenous Tooth Bone Graft Material', Journal of Nanoscience and Nanotechnology, 2011
3. Shingo Hara, Masaharu Mitsugi, Takahiro Kanno, et al. 'Bone Transport and Bone Graft Using Auto-Tooth Bone for Alveolar Cleft Repair', 2013
4. Su-Gwan Kim, Pil-Young Yun, In-Sung Yeo, et al. 'Autogenous Teeth Used for Bone Grafting: A Comparison with Traditional Grafting Materials', Oral Surgery Oral Medicine Oral Pathology Oral Radiology, 2014
5. Young-Kyun Kim, In-Woong Um, Woo-Jin Cho, et al. 'Applications of Moldable Autogenous Tooth Bone Graft (M-AutoBT) Mixed with Hydroxypropylmethyl Cellulose for Sinus Lifting', Journal of Hard Tissue Biology, 24[4] 391- 396, 2015
6. Kyung-In Jeong, Junho Lee, In-Woong Um, et al. 'Alveolar Cleft Restoration Using Autogenous Tooth Bone Graft Material for Implant Placement: A Case Report', Journal of Oral Implantology, Aug;41(4):487-90, 2015
7. Yongsoo Kim, Tae Kwang Kim, Dae Ho Leem, 'Clinical Study of a Flap Advancement Technique Without Vertical Incision for Guided Bone Regeneration', The International Journal of Oral & Maxillofacial Implants; 30:1113-1118, 2016
8. Kang-Mi Pang, In-Woong Um, Young-Kyun Kim, et al. 'Autogenous Demineralized Dentin Matrix from Extracted Tooth for the Augmentation of Alveolar Bone Defect: A Prospective Randomized Clinical Trial in Comparison with Anorganic Bovine Bone', Clinical Oral Implants Research, Jun 8. doi: 10.1111/clr.12885, 2016
9. Young-Kyun Kim, Jong-Ho Lee, In-Woong Um, et al. 'Guided Bone Regeneration using Demineralized Dentin Matrix: Long-term Follow-Up', Journal of Oral and Maxillofacial Surgery;74:515.e1-515e9, 2016
10. In-Woong Um, Joo-Cheol Park, Ji-Yoon Kim, et al. 'Experimental Study of Pulp Capping Using Xenogenic Demineralized Dentin Paste', Journal of Hard Tissue Biology, 25[3] 321- 328, 2016
11. Masaru Murata, Masaharu Mitsugi, In-Woong Um, et al. 'Retrospective Clinical Study of Allogenic Demineralized Dentin Matrix for Alveolar Bone Repair', Journal of Hard Tissue Biology, 2017
12. Hyo-Jung Lee, Ji-Soo Hong, Young-Kyun Kim, In-Woong Um, Jae-Il Lee, et al. 'Osteogenic Potential of Demineralized Dentin Matrix as Bone Graft Material', Journal of Hard Tissue Biology 26[2] (2017) 223-230
13. In-Woong Um, Sang-Ho Jun, Pil-Young Yun, Young-Kyun Kim, et al. 'Histological Comparison of Autogenous and Allogenic Demineralized Dentin Matrix Loaded with Recombinant Human Bone Morphogenetic Protein-2 for Alveolar Bone Repair: A Preliminary Report', Journal of Hard Tissue Biology 26[4] (2017) 417-424
14. Young-Kyun Kim, Sang-Yun Kim, Jeong-Kui Ku, In-Woong Um et al. 'Evaluation of the Healing Potential of Demineralized Dentin Matrix Fixed with Recombinant Human Bone Morphogenetic Protein-2 in Bone Grafts', Materials 2017, 10, 1049; doi:10.3390/ma10091049
15. Sang-Ho Jun, In-Woong Um et al. 'Volumetric, Radiographic, and Histologic Analyses of Demineralized Dentin Matrix Combined with Recombinant Human Bone Morphogenetic Protein-2 for Ridge Preservation: A Prospective Randomized Controlled Trial in Comparison with Xenograft', Appl. Sci. 2018, 8, 1288; doi:10.3390/app8081288
16. Sang Hyun Jo, Young-Kyun Kim, Yong-Hoon Choi et al. 'Histological Evaluation of the Healing Process of Various Bone Graft Materials after Engraftment into the Human Body', Materials 2018, 11, 714; doi:10.3390/ma11050714
17. In-Woong Um, Young-Kyun Kim, Sang-Ho Jun, Moon-Young Kim, Nianhui Cui, 'Demineralized Dentin Matrix as a Carrier of Recombinant Human Bone Morphogenetic Proteins: in Vivo Study', Journal of Hard Tissue Biology 27[3] (2018) 219- 226
18. In-Woong Um, Young-Kyun Kim, Joo-Cheol Park, Jong-Ho Lee, et al. 'Clinical Application of Autogenous Demineralized Dentin Matrix Loaded with Recombinant Human Bone Morphogenetic-2 for Socket Preservation: A Case Series', Clin Implant Dent Relat Res. 2018;1-7
19. In-Woong Um, Sungweon Choi, Youngkyun Kim, Kangmi Pang, et al. 'Measurement of Hepatitis B Virus DNA in Fresh Versus Processed Dentin from Chronically Infected Patients', J Transl Med (2018) 16:351
20. Jeong-Kui Ku, Bong-Ju Kim, Joo-Young Park, Jong-Ho Lee, Pil-Young Yun, Yu-Mi Kim, In-Woong Um, et al. 'Effects of Gamma Irradiation on The Measurement of Hepatitis B Virus DNA in Dentin Harvested from Chronically Infected Patients', Ann Transl Med 2020;8(6):314
21. In-Woong Um, et al. 'Allogenic Demineralized Dentin Matrix Graft for Guided Bone Regeneration in Dental Implants', Appl. Sci. 2020,10, 4661
22. In-Woong Um, et al. 'Histological Review of Demineralized Dentin Matrix as a Carrier of rhBMP-2', TISSUE ENGINEERING: Part B 2020;26(3):284-293
23. Jeong-Kui Ku, et al. 'Review of Allogenic Dentin Graft for Maxillofacial Bone Defects', TISSUE ENGINEERING: Part C 2021;27(8):472-480
24. In-Woong Um, et al. 'Allogenic Dentin Graft: A Review on Its Osteoinductivity and Antigenicity', Materials 2021, 14,1713.
25. Jeong-Kui Ku, et al. 'Dentin-Derived-Barrier Membrane in Guided Bone Regeneration: A Case Report', Materials 2021, 14,2166.
26. In-Woong Um, et al. 'Effect of Gamma Irradiation on the Osteoinductivity of Demineralized Dentin Matrix for Allografts: A Preliminary Study', J. Funct. Biomater. 2022, 13, 14
27. Jeong-Kui Ku et al. 'Allogenic Demineralized Dentin Matrix as rhBMP-2 Carrier: A Retrospective Clinical Study', The international Journal of Oral & Maxillofacial Implant Volume 37, Number 6, 2022
28. Yesel Kim, Jeong-Kui Ku, In-Woong Um, Hyun Seok, Dae Ho Leem et al. 'Impact of Autogenous Demineralized Dentin Matrix on Mandibular Second Molar after Third Molar Extraction: Retrospective Study', J.Funct. Biomater. 2023, 14, 4