BONTREE®

Product Information

Products	Powder type		Granule type		Block type	Putty type
Volume / Weight	0.3cc	0.15g	0.3cc	0.15g	Block Size 4.4 x 4.4 x 5.0mm	Under R & D
	0.5cc	0.25g	0.5cc	0.25g		
	0.6cc	0.3g	0.6cc	0.3g		
	1.0cc	0.5g	1.0cc	0.5g		
	2.0cc	1.0g	2.0cc	1.0g		
	6.0cc	3.0g	6.0cc	3.0g		
Particle Size	0.1mm ~ 1.0mm		1.0mm ~ 2.0mm			

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HUDENS BIO

BONTREE®

World's First and Only Commercialized
Synthetic Bone Graft Product with OCP

HUDENS BIO

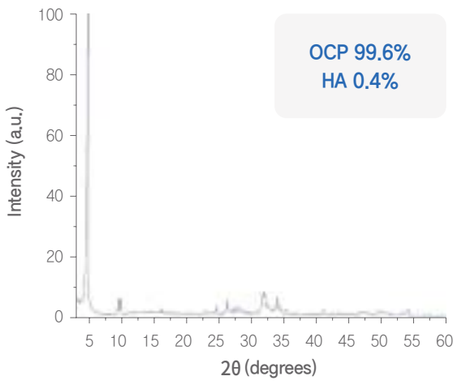
Innovative, Effective, and Safer

BONTREE®

BONTREE® Delivers Positive Results

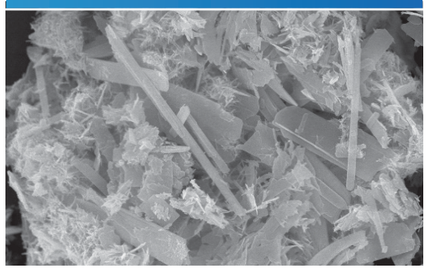
What is OCP?

OCP is one of the calcium phosphate compounds and is a precursor to apatite (HA), a mineral component in human bones.
The chemical formula is $Ca_8H_2(PO_4)_6{\cdot}5H_2O$, which is a biodegradable calcium phosphate mineral containing eight Ca ions.

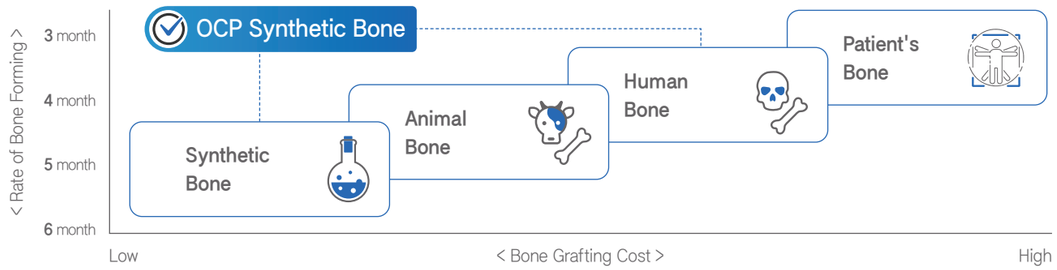


OCP 99.6%
HA 0.4%

Synthetic OCP mineral particles



OCP is a precursor of bone mineral (apatite) and is thermodynamically unstable, so it is easily converted into the apatite phase in the human body. This phenomenon dramatically improves bone regeneration when BONTREE® is implanted.



Key Features

High content of OCP mineral	BONTREE® is the ONLY synthetic bone graft product that contains a large amount of OCP, a precursor of bone mineral apatite (HA).
Excellent Safety	Because BONTREE® is a 100% synthetic product, it is free from concerns of infectious disease infection or immune response.
Fast New Bone Formation	Since BONTREE® contains OCP with high biocompatibility, it delivers outstanding osteoconductivity and bone regeneration results, compared to other synthetic bone grafts. From our preclinical comparison studies, it was proven that the initial new bone formation of BONTREE® is 2~3 times higher than conventional bone graft materials.
High Resorption/Porosity	Excellent biodegradability and pore properties provide space for new bone in-growth easily. Also, because of the rapid bone regeneration ability, the space is quickly filled with new bones. According to our comparative study results, BONTREE® showed the lowest bone graft residual amount, compared to other synthetic and xenograft bones.
Good Manipulation and Easy Use	Due to its high hydrophilicity and porosity, it is easy to mix with liquid in clinical trials, has good manipulation ability to easily create the desired shape, and has excellent ability to maintain its shape even after the procedure.

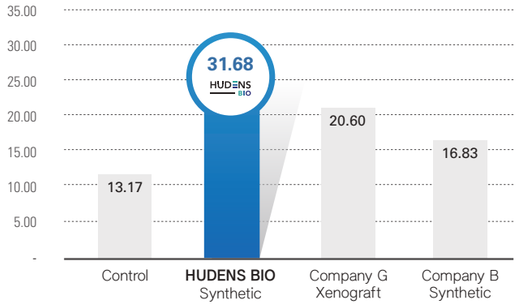
First Step to a Successful Implant Surgery

Preclinical Study Results

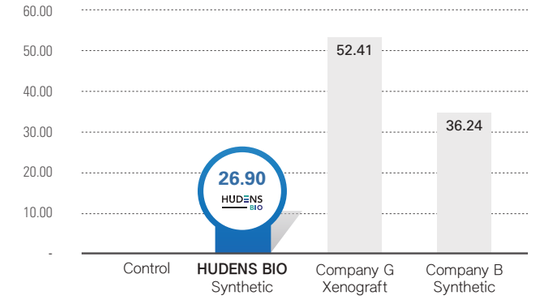
As a result of preclinical comparison tests, BONTREE® showed the most superior new bone formation ability, as well as good bioresorption and osteoconductivity, compared to other xenograft and synthetic bone products.

Preclinical Results (New Bone Formation and Residual Grafted Bone Rate)

Average value of new bone generated inside cortical bone after 4 weeks

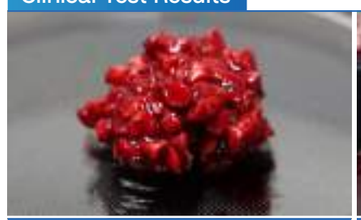


Average value of residual bone graft material after 12 weeks



In preclinical comparison studies, BONTREE® showed 2 ~ 3 times higher new bone formation ability and revealed the least amount of residual bone graft, with its rapid biodegradation property.

Clinical Test Results



Excellent manipulation ability with blood

Mandible Operation bone grafting with BONTREE® Powder type

Sinus Lift Surgery bone grafting with BONTREE® Granule type