

Bongros®-HA BONE CHIP Indication

- Maxillary sinus elevation for implanting
- After implanting near exposed implant due to short of bone
- Veneer graft to expand width of alveolar
- Bone void part after extraction of tooth
- Prevent from alveolar contraction (alveolar ridge preservation) until implanting
- To fill the space (dead space) after auto bone graft
- Bone void part after removing of tumor and cystoma
- Bone void part after expanding length of bone
- Bone void part fraction of maxillary bone and alveolar



No.	Particle Size(mm)	Volume(Gram)
1	0.3~0.6	0.25
2		0.5
3		1.0



No.	Particle Size(mm)	Volume(Gram)
1	0.6~1.0	0.25
2		0.5
3		1.0



No.	Particle Size(mm)	Volume(Gram)
1	1.0~3.0	0.25
2		0.5
3		1.0



No.	Particle Size(mm)	Volume(CC)
1	3.0~6.0	5.0
2		10.0
3		20.0
4		30.0

Distributed by



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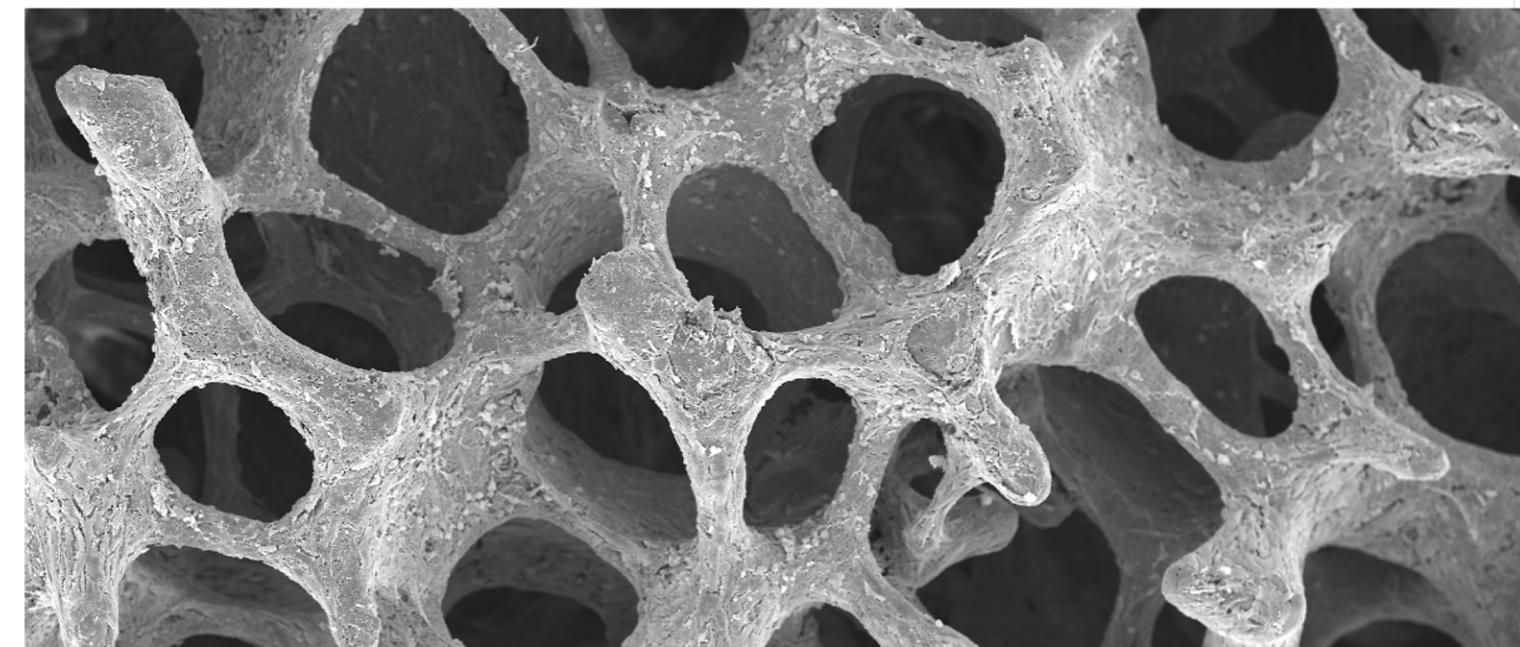
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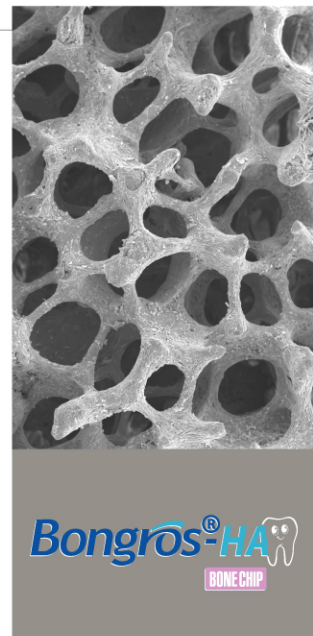
Bongros®-HA
BONE CHIP



Identical pore structure to Human Cancellous Bone
3 Dimensional interconnected pore structure
Optimized osteoconduction

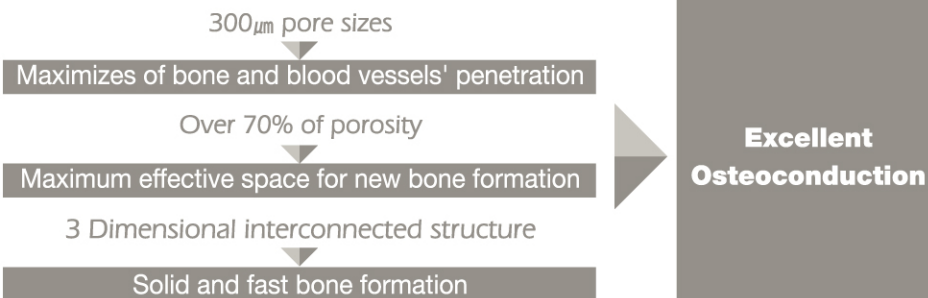


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Bongros®-HA BONE CHIP

Bongros®-HA BONE CHIP is identical to human bone's mineral in terms of physical and chemical [CAP (Carbon-apatite, $\text{Ca}_{10}(\text{PO}_4)_6\text{CO}_3$)]. It is the first Korean made synthetic bone. It's used for regeneration and replacement of defected bone. Bongros® -HA slowly and chemically unite to bone tissue and provides effective space in order to make new bone's ingrowth and maintain space till new bone tissue ingrowth is completed.



Advantages

1. Excellent bone formation

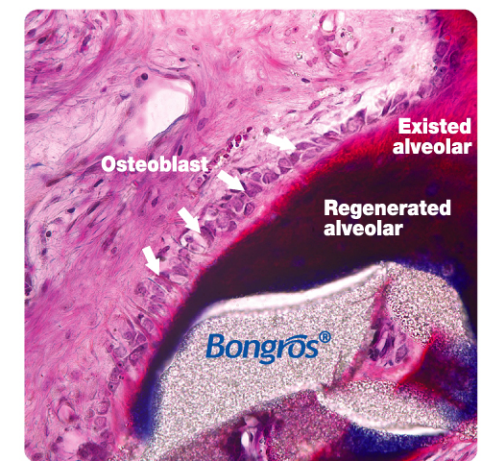
Bongros®-HA is a material for bone regeneration and replacement. It is formed with Hydroxyapatite ceramic which is identical to human bone's mineral in terms of physical and chemical. It's used for regeneration and replacement of defected bone. Bongros®-HA slowly and chemically unite to bone tissue of its own around and make new bone's ingrowth.

Bongros®-HA has an optimal porous structure (patented and porosity is 70-80%) and interconnected type of pore size (300µm) for bone growth.

2. Excellent Safety

We are Making according to ASTM F1185 (International Standard) and burn bone mineral at over 1,200°C and finish with gamma irradiation. Therefore synthetic bone is 100% safe from immune and inflammation reaction (hepatitis, tuberculosis, AIDS, SARS etc) unlikely to allograft bone.

Besides we have passed 13 different tests done by Clinical Research Institute Seoul National University Hospital where is appointed as GLP appointing Institute.



Osteoblast is actively producing new bone along with bone substitute

3. Maintains effective space

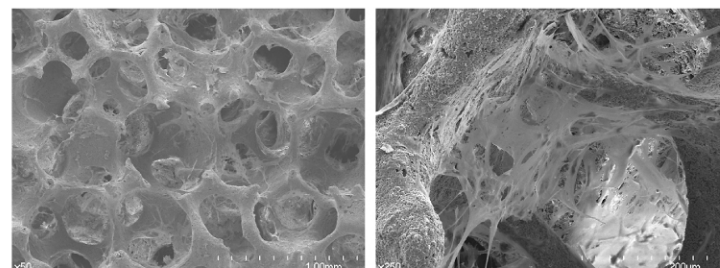
Bongros®-HA provides effective space in order to make new bone's ingrowth and maintain space till new bone tissue ingrowth is completed. Therefore Bongros® -HA differs from Allobone and xeno bone.

4. Easy to use

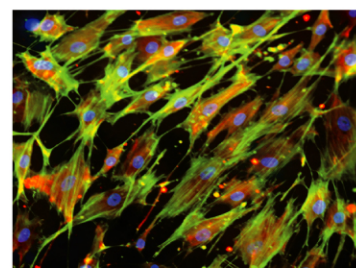
- It can be used immediately. Room temperature storage.
- No report all the data unlikely to Allobone.
- Provides mass production and stable in quality. (0.25g, 0.5g, 1.0g)



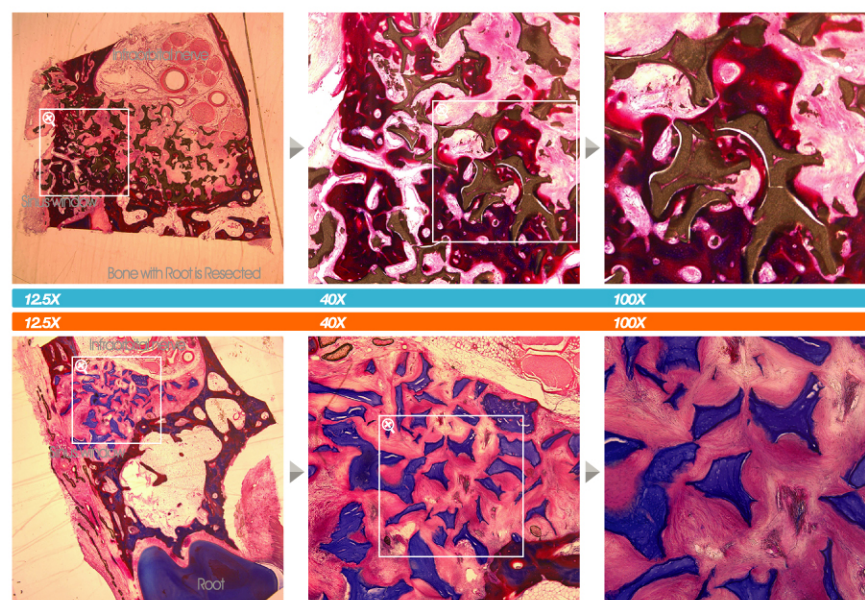
Bongros®-HA BONE CHIP Biocompatibility Internal Report (hMSC Cell culture test)



SEM picture shows proliferation of stem cell (hMSC) all over the pore



Most of cultured stem cell is differentiated to osteoblast (Orange color)



Maxilla bone grafting result

New bone formation observed at around grafted bone due to active osteoconduction from inner maxilla.

Result of bone grafting to interstices around the implant

Active Osteoconduction is detected from existed alveolar and new bone is formed around grafted bone.

Bone formation evaluation

No osteoconduction from inner maxilla and no bone formation at around grafted bone.

No osteoconduction is detected from existed alveolar, no new bone formation around grafted bone.

Bongros®-HA BONE CHIP preclinical test result

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