

# Cytrans<sup>®</sup> Granules

Resorbable, Synthetic Bone Graft Material

Rebuild the foundation  
of your patient's smile

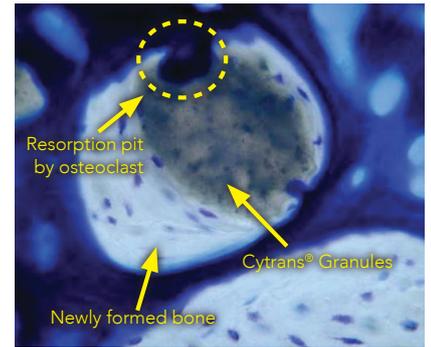


Since 1921  
100 years of Quality in Dental



# Rebuild the foundation of your patient's smile

Cytrans® Granules is a synthetic bone graft material having a similar composition with inorganic component of human bone. Cytrans® Granules has a unique balance of bone formation and bone replacement which helps to keep the volume of regenerated bone for a more predictable outcome. Cytrans® Granules is free from animal derived materials so the patients do not need to be worried about disease transmission, such as BSE.



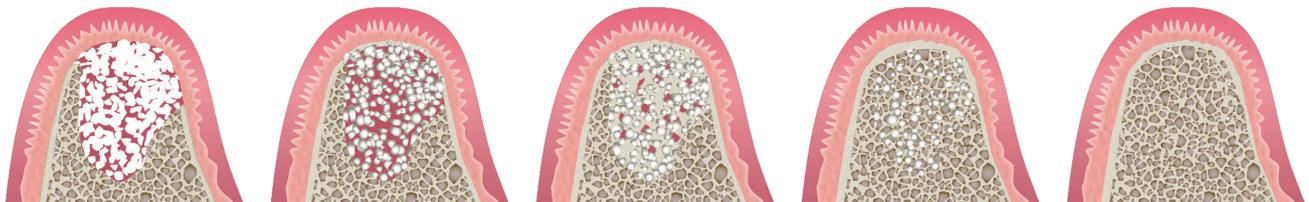
Source: Prof. Ishikawa, Kyushu University, Japan

## Similar composition to natural bone

Cytrans® Granules are composed of carbonate apatite, which is same as the inorganic component of human bone. Cytrans® Granules are chemically synthesized, without using animal derived materials; thus, eliminating the risk of animal-derived infections, such as prion disease transmission.



## Unique balance of

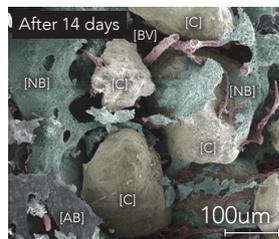


### Early bone formation

Thanks to the excellent osteoconductivity of carbonated apatite, early bone formation could be expected around Cytrans® Granules.

- [AB] Autologous bone
- [C] Cytrans® Granules
- [BV] Blood vessel
- [NB] Newly formed bone

SEM image of Cytrans® Granules implanted to canine tooth socket.



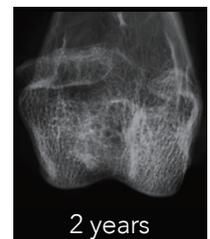
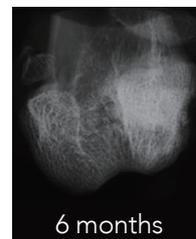
Source: Prof. Matsuo, Kanagawa Dental University, Japan

### Gradual replacement

Resorption property of carbonate apatite will allow the gradual replacement with host bone. Cytrans® Granules will be replaced by keeping the function as a scaffold.



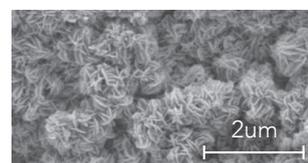
Resorption of Cytrans® Granules implanted to rabbit femoral defect.



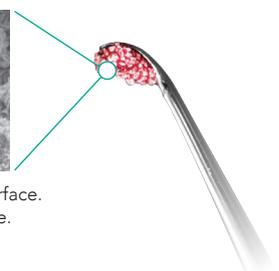
Source: Prof. Ishikawa, Kyushu University, Japan

## Optimal surface for easy handling

Unlike other calcium phosphate materials, Cytrans® Granules are fabricated without sintering by maintaining a rough surface similar to that of natural bone. This rough surface makes Cytrans® Granules hydrophilic, allowing them to be mixed with blood or saline for easy delivery.



SEM image of Cytrans® Granules surface. Source: GC R&D, Japan, Data on file.



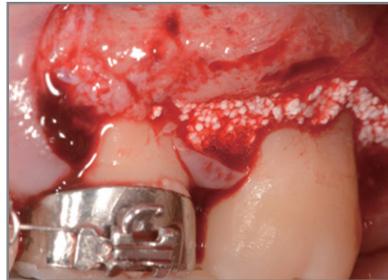
# Clinical Cases of Cytrans® Granules

## Periodontal Defect – Furcation Involvement

Courtesy of Dr. Akiyoshi Funato, Japan



Defects at the distal root of 35, the furcation of 36, and the mesial root of 37.



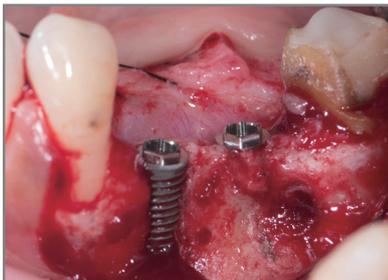
Grafting with Cytrans® Granules (M size) soaked in REGROTH.



Periodontal poking 6 months after operation.

## GBR with Immediate Implant Placement

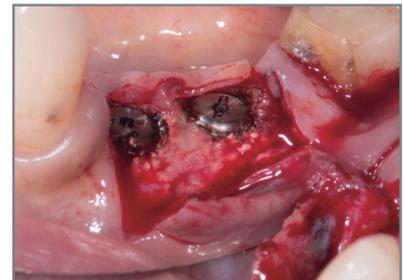
Courtesy of Dr. Yoshifumi Matsumoto, Japan



Implant placed with exposed threads to the buccal side of 44.



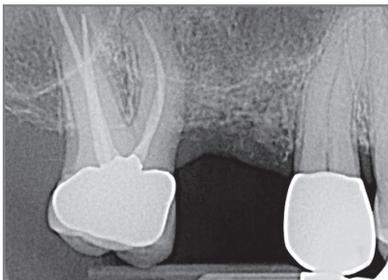
Grafting with Cytrans®, covered with membrane fixed by titanium pins.



6 months after GBR, the bone is sufficiently firm.

## Sinus Floor Elevation

Courtesy of Dr. Paul Rosen, Yardley, PA./ New York City



Pretreatment radiograph of the maxillary right first molar site. There is 4mm of bone beneath the sinus.



Clinical view of the implant site upon flap reflection. There is good width for an implant to be placed.



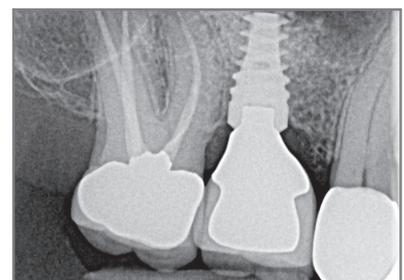
Osteotomy has been prepared for an internal sinus lift to be performed.



Sinus membrane has been elevated using Cytrans® Granules graft material.



Clinical view 7 months following surgery of completed crown.



Radiograph of restored dental implant demonstrates that 6mm of sinus floor elevation was achieved using Cytrans® Granules. This allowed for a 5mm wide by 10mm long implant to be placed at time of surgery.

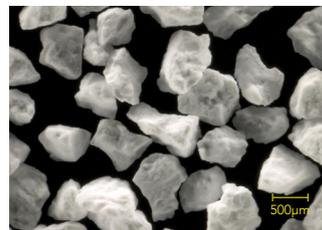
# Cytrans<sup>®</sup> Granules

## Ordering information

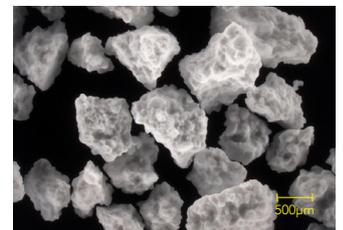
SKU	Size	Amount
10007516	S Size	0.25 g
10007518	S Size	0.5 g
10007517	M Size	0.25 g
10007519	M Size	0.5 g
10007520	M Size	2.0 g
10041295	L Size	0.5 g
10041296	L Size	2.0 g



S size (0.3-0.6mm)



M size (0.6-1.0mm)



L size (1.0-2.0mm)

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