

**IMPLADENT LTD**  
REGENERATIVE SOLUTIONS

# **OSTEOGEN® PLUG**

**ONE STEP BONE GRAFTING SOLUTION  
FOR SOCKET PRESERVATION  
WITHOUT THE NEED FOR A MEMBRANE**



**OSTEOGEN® NON-CERAMIC  
BIOACTIVE RESORBABLE  
CALCIUM APATITE  
BONE GRAFT**

**TYPE I BOVINE  
ACHILLES TENDON  
COLLAGEN**

800-526-9343

Shop Online at [www.impladentltd.com](http://www.impladentltd.com)

# KEY BENEFITS

The OsteoGen® Bone Grafting Plug is the easiest and most affordable way to clinically deliver bone graft for ridge maintenance and socket preservation.

The idea is simple - we take a collagen plug and fill it with our OsteoGen® non-ceramic bone graft crystals to create the OsteoGen® Bone Grafting Plug.

The result is a bone graft combined with a collagen plug for ease of clinical delivery – all at the introductory special price of only \$50 per extraction without the need for a membrane.

The OsteoGen® Bone Grafting Plug combines our OsteoGen® Bioactive Resorbable Calcium Apatite with a bovine achilles tendon collagen matrix to create a structure that mimics the organic and inorganic components of physiologic bone.

OsteoGen® is a bioactive and resorbable calcium apatite based bone graft that is physicochemically and crystallographically similar to human bone.<sup>1</sup>

The OsteoGen® non-ceramic production process yields a resorbable bone graft with a unique Ca:P ratio that is NOT a  $\beta$ -TCP and NOT a non-resorbable dense ceramic HA, nor is it a biphasic mixture of the two.

The Bovine Achilles Tendon collagen carries the bone graft for easy and efficient delivery to the site, eliminating the hassle and time spent mixing and packing particulate bone grafts while also eliminating the potential for graft wash out.

The Type I collagen acts as a wound dressing not only to stabilize the clot, but also to absorb and deliver blood flow to the slowly resorbing graft, a feature critical for the initiation of bone formation and early angiogenesis.

The collagen found in the OsteoGen® Plug provides a scaffold for keratinized tissue to develop over the grafted site.

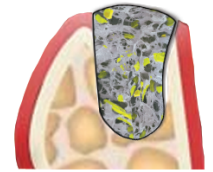
The OsteoGen® Bone Grafting Plug will show radiolucent on the day of placement and then radiopaque in 3-5 months when it has been replaced with host bone and ready for implant placement.

# STEPS TO SUCCESS

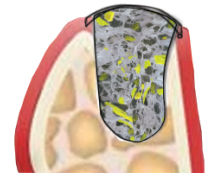
**Extract tooth & thoroughly debride site to induce the Regional Acceleratory Phenomenon<sup>2</sup>**



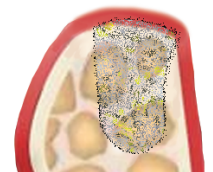
**Insert OsteoGen® Plug to deliver bone graft and absorb blood flow. This will stabilize the clot & initiate early bone formation and angiogenesis**



**Approximate tissue and Crisscross suture over top to keep OsteoGen® Bone Grafting Plug in place. There is no need to use a membrane to cover**



**While the OsteoGen® Plug resorbs, the OsteoGen® bone graft crystals offer a slowly resorbing bioactive scaffold for bone formation while the collagen provides a scaffold for developing tissue**



**The OsteoGen® crystals resorb over 3-5 months (patient specific) and will turn from radiolucent to radiopaque, which indicates sufficient bone formation**

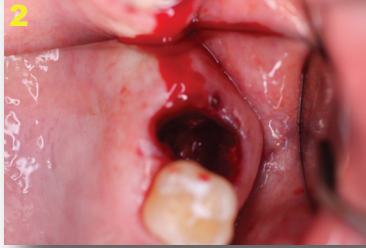


# CLINICAL APPLICATION

Tooth #15, set to be extracted



The surgical site was initially debrided to induce bleeding and establish the Regional Acceleratory Phenomenon



Insert Large or Slim sized OsteoGen® Bone Grafting Plugs and allow blood to absorb



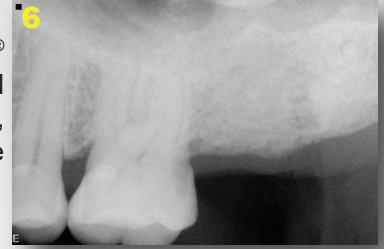
Two Slim OsteoGen® Plugs are in place. Suture over top of socket to contain. No membrane is required



OsteoGen® is a low density bone graft and the OsteoGen® Plugs will show radiolucent on the day of placement



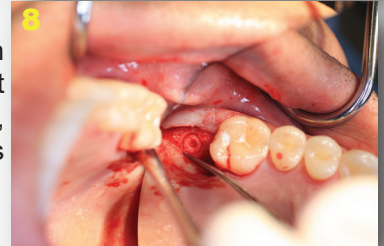
As the OsteoGen® crystals are resorbed and replaced by host bone, the site will become radiopaque



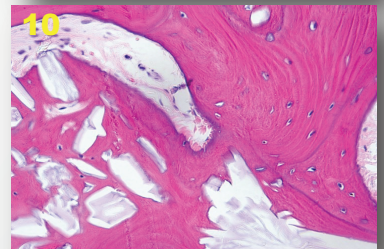
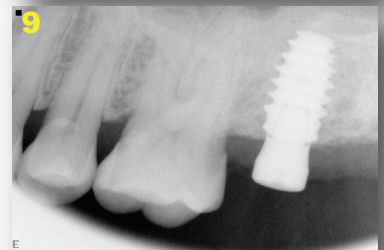
The collagen promotes keratinized soft tissue coverage over the graft



Solid bone is seen upon reentry prior to implant placement. In this image, a core sample was retrieved



Implant is placed. Note the histology showing mature osteocytes in lamellar bone formation. Some of the larger OsteoGen® crystals and clusters are slowly resorbing. Bioactivity is demonstrated by the high bone to crystal contact absent of any fibrous tissue encapsulation<sup>3-4</sup>



Clinical images courtesy of German Murias DDS, ABO/ID

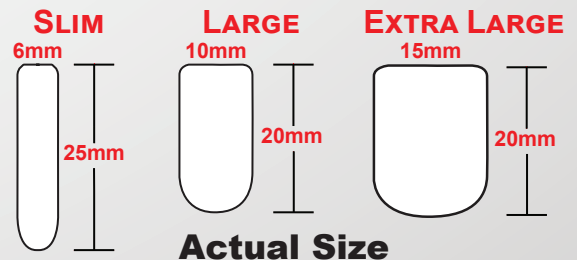
## OSTEOGEN® PLUG AVAILABILITY

The OsteoGen® Bone Grafting Plugs are available in three sizes:

**Large: 10mm diameter x 20mm Length**

**Slim: 6mm diameter x 25mm Length**

**Extra Large: 15mm diameter x 20mm Length**



**Pricing starts at less than \$50 per Plug**  
**Available in Boxes of 5 or 10**



**+** **IMPLADENT LTD**  
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1. Valen (2002) 2. Frost (1983) 3. Spivak (1990) 4. Ricci (1992)