

# OSTEOBALLAST® MT

FILLABLE RESORBABLE MESH POUCH & ACCESSORIES SALES BROCHURE

## DESIGN RATIONALE

OsteoBallast® MT is a customizable graft for posterolateral fusions. Fill the resorbable mesh pouch with autograft and tailor the length and fill volume specifically for patient anatomy and desired handling or pliability. The mesh pouch allows for cellular infiltration while restricting graft migration.





### GRAFT CONTAINMENT SHOWN TO IMPROVE FUSION IN PRECLINICAL MODELS

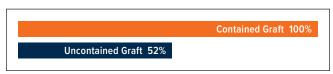
Bone graft displacement due to mechanical disturbance during irrigation or from dislodging by paraspinal muscles during closure is a clinical problem in Posterolateral Fusion [Barrow Neurological Institute, Bohl 2018].<sup>1</sup>

### Potential unintended consequences of migration and/or displacement include:

- · Non-union
- · Unwanted bone graft in epidural space or neural foramina
- · Reduction in volume of graft that contributes to arthrodesis
- Fusion at unintended levels

Contained grafts offer a simple procedural solution for Posterolateral Fusion (PLF), providing higher fusion rates, more robust quality of fusion and quantity of bone mass.<sup>1-5</sup>

#### Graft containment = higher fusion rates



Fusion results for contained autograft vs. uncontained in rabbit PLF  $\mathsf{model}^2$ 



Fusion results for contained autograft vs. uncontained in rat PLF model<sup>3</sup>

### Graft containment = larger fusion mass

- More robust quality of fusion and quantity of bone mass at 6 months post-op in 5 PLF patients<sup>1</sup>
- Significant increase in fusion mass volume in rabbit and rat PLF models<sup>3-5</sup>

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## **CUSTOMIZE AND CONTAIN**

Use the supplied spatula and filling tube to create a patient specific graft that restricts migration, maintains position, and is easily placed in the posterolateral spine.



## **CUSTOMIZED GRAFT**

- · Fill with autograft
- Pack to desired cc volume
- · Tailor to preferred handling
- Trim to desired length based on patient needs

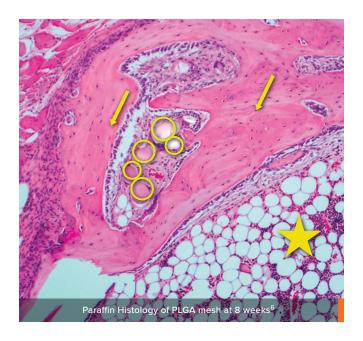


### **RESORBABLE MESH**

- Acts as a physical barrier to restrict the migration of graft material
- Mesh pore size allows for unimpeded cellular infiltration
- Biocompatible PLGA material
- Resorbs in approximately 8 weeks

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## RESORPTION OF THE OSTEOBALLAST® MESH POUCH

The resorbable PLGA, poly (lactic-co-glycolic acid), mesh effectively delivers graft to the site, restricts migration, and does not inhibit bone formation. In rabbit PLF fusion model<sup>6</sup>:

- PLGA is surrounded by new bone and marrow
- PLGA did not illicit a negative inflammatory response
- PLGA nearly 100% resorbed



Marrow



New bone



**PLGA** 

#### OsteoBallast MT Ordering Information

Part #	Description
56100000	OsteoBallast MT, 150 x 11mm (1 pack)
56110000	OsteoBallast MT, 150 x 11mm (2 pack)

<sup>1</sup>Bohl M.A., Xu D.S., Daniels L., et al. The Barrow Innovation Center case series: early clinical experience with novel, low-cost techniques for bone graft containment in the posterolateral fusion bed. World Neurosurgery 2018;116:285-95.

<sup>2</sup>Bawa M., Schimizzi A.L., Leek B., et al. Paraspinal muscle vasculature contributes to posterolateral spinal fusion. Spine 2006; 31:891-896.

<sup>3</sup>Shin D., Yang B.M., Tae G., et al. Enhanced spinal fusion using a biodegradable porous mesh container in a rat posterolateral spinal fusion model. Spine Journal. 2014; 14:408-15.

<sup>4</sup>Rao R.D., Bagaria V., Gourab K., et al. Autograft containment in posterolateral spine fusion. T Spine J. 2008; 8:563-69.

<sup>5</sup>Poynton A.R., Zheng F., Tomin E., et al. Resorbable posterolateral graft containment in a rabbit spinal fusion model. J Neurosurg 2002; 97:460-63.

<sup>6</sup>Walsh W., Jalota S., Oliver R., et al. Preclinical evaluation of a resorbable mesh device containing demineralized bone matrix particles in a rabbit posterolateral fusion model. ©2017 SeaSpine Orthopedics Corporation.



Part #	Description
56800060	45 x 11mm
56800095	45 x 17.5mm
56800115	85 x 11mm
56800180	85 x 17.5mm
56800160	115 x 11mm



For more information or to place an order, please contact: TEL 866.942.8698 | FAX 877.558.6227 customerservice@seaspine.com | seaspine.com IsoTis OrthoBiologics, Inc.

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