

BIOMEDICAL | EST. 1996

# Regeneration Products Catalog

osteogenics.com

### Welcome to Osteogenics Biomedical

We are Osteogenics Biomedical, makers of Cytoplast<sup>™</sup>. Established in 1996 with a goal to create a more predictable alternative to Gore-Tex® membranes, we have grown to be a leader in barrier membrane and PTFE suture technologies in the United States. After 20 years of product development focused on surgical predictability, we are expanding globally. We encourage you to try Cytoplast<sup>™</sup> regenerative products to see why thousands of surgeons rely on us. We guarantee your satisfaction – or your money back. *To find the distributor nearest you, go to www.osteogenics.com/GlobalNetwork.* 

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### • New Items Available





Zcore™

Porcine Xenograft Particulate

### Zcore<sup>™</sup> Porcine Xenograft Particulate

.25 mm - 1.0 mm Particle Size

ZS050	0.5 cc
ZS100	1.0 cc
ZS200	2.0 cc
ZS400	4.0 cc

### Zcore<sup>™</sup> Porcine Xenograft Particulate

1.0 mm - 2.0 mm Particle Size

ZL100	1.0 cc
ZL200	2.0 cc

### Zcore<sup>™</sup> Porcine Xenograft Particulate in Syringe

.25 mm - 1.0 mm Particle Size

ZY025	0.25 cc
ZY050	0.5 cc







### Features & Benefits of Zcore™

Zcore<sup>™</sup> is an osteoconductive, porous, anorganic bone mineral with a carbonate apatite structure derived from porcine cancellous bone.

### Interconnecting pores

Interconnecting macroscopic and microscopic porous structure supports the formation and ingrowth of new bone

### 88% to 95% void space

88% to 95% Void Space: hyper-porosity of porcine cancellous matrix and intra-particle space facilitated by rough particle morphology reduce bulk density of the graft, allowing greater empty space for new bone growth\*

### Porcine cancellous bone

Derived from porcine cancellous bone, eliminating risk of BSE transmission

### Processed using minimal heat

Heat treated to an optimal temperature that ensures a degree of crystallinity<sup>1</sup> consistent with native bone mineral to allow for remodeling of the healing bone

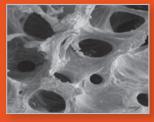
\*0.25 mm – 1.0 mm particle size = 88% void space, 1.0 mm – 2.0 mm = 95% void space

1. Li ST, Chen HC, Yuen D. Isolation and Characterization of a Porous Carbonate Apatite From Porcine Cancellous Bone. Science, Technology, Innovation, Aug. 2014: 1–13.

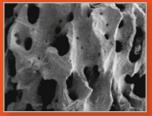




SEM of Processed Human Bone Magnification x50



SEM of Zcore™ Porcine Xenograft Particulate Magnification x50





# Cytoplast<sup>™</sup> RTM Collagen

Type I bovine collagen membrane

shown actual size.





15 mm x 20 mm RTM1520 (2 membranes per box)

20 mm x 30 mm RTM2030 (2 membranes per box)



**30 mm x 40 mm** *RTM3040 (2 membranes per box)* 

## Features & Benefits

# Manufactured from highly purified type I bovine achilles tendon

Safe for the patient

### 26 – 38 week resorption time

Long predictable resorption time limits the risk of particle loss due to premature resorption

### High tensile strength

You can suture or tack the membrane in place without tearing

Cell occlusive Prevents epithelial down growth

### **Optimized flexibility**

Stiff enough for easy placement, yet easily drapes over ridge



Multi-layer construction allows tissue integration into outer layer, while preventing direct passage of bacteria and epithelial cells.

"...I am impressed with its *handling*, but most importantly, I am impressed with its *results*."

Jerald Rosenberg, DMD; Periodontist

### Zmatrix™

Porcine peritoneum collagen membrane



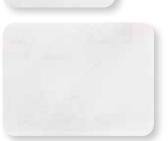
A perfectly soft consistency that drapes without the usual selfadherence experienced with other natural collagen membranes

shown actual size.

15 mm x 20 mm ZM1520

20 mm x 30 mm ZM2030

30 mm x 40 mm <sub>ZM3040</sub>



Features

### Extracellular Components

Processed to preserve extracellular components including laminin, fibronectin, elastin, and glycosaminoglycans\*

### Easy to Handle

Designed to drape without adhering to itself

### Elastic

Natural peritoneum collagen structure allows for elasticity

### Natural, Native Collagen Membrane

Zmatrix<sup>™</sup> is a natural, native collagen membrane; cross-linking chemicals and agents are unnecessary. Proprietary processing technology allows preservation of collagen as well as extracellular components including laminin, fibronectin, elastin, and glycosaminoglycans.\*

\*Hoganson DM, Owens GE, O'Doherty EM, Bowley CM, Goldman SM, Harilal DO, Neville CM, Kronengold RT, Vacanti JP. Preserved extracellular matrix components and retained biological activity in decellularized porcine mesothelium. Biomaterials. 2010, 27: 6934–6940. Porcine pericardium collagen membrane | Substantially resorbed in 26 weeks

shown actual size.

10 mm x 10 mm VIT1010



**Vitala®** 



15 mm x 20 mm VIT1520

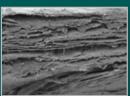


13 mm x 25 mm VIT1325



20 mm x 30 mm VIT2030

30 mm x 40 mm VIT3040





1000x magnification

Excellent tensile strength

Supple and flexible

### Features & Benefits

### Natural

Manufactured using a proprietary protocol designed to maintain the natural, microporous, 3-layered architecture of the tissue without the need for cross-linking chemicals and agents

### Durable

Designed to resist tearing during placement, Vitala<sup>®</sup> is naturally strong

### Adaptable

The natural collagen structure provides a unique combination of supple handling and ideal defect adaptability. Because both sides are smooth, either side may be placed against the defect

# Cytoplast™ TXT-200 & TXT-200 Singles

Micro-textured, high-density PTFE membrane

Most popular membrane for socket grafting **TXT-200 Singles** 12 mm x 24 mm TXT1224-1 (1 membrane per box)

TXT1224 (10 membranes per box)

shown actual size.



**TXT-200** 25 mm x 30 mm TXT2530-1 (1 membrane per box)

TXT2530 (4 membranes per box)



### Non-Resorbable

Won't resorb prematurely - you dictate healing time

### 100% Dense (non-expanded) PTFE

Impervious to bacteria (pore size less than 0.3 µm) Data on file

### Purposely leave the membrane exposed

Preservation of the soft tissue architecture and keratinized mucosa

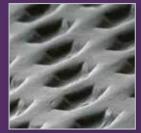
# Soft tissue attaches, but doesn't grow through the membrane

Exposed membrane allows for non-surgical removal; no anesthesia required

### Hexagonal dimples increase surface area

Designed to increase membrane stabilization

The patented Regentex™ surface helps stabilize the membrane and the soft tissue flap. Hexagonal surface dimples provide a textured surface that increases the area available for cellular attachment without increasing porosity. U.S. Patent # 5,957,690



"I always know, *in advance*, the results of my bone grafting when I use Cytoplast™ TXT-200 as a membrane. Why bother with other membranes?"

Mark Cohen, DDS; Periodontist

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# Cytoplast<sup>™</sup> Titanium-Reinforced

Titanium-reinforced, high-density PTFE membrane

	<b>Ti-250</b> (250 µm thick)	<b>Ti-150</b> (150 µm thick)		Versatile Rectangular Shapes
				These configurations can be trimmed to fit a variety of defects. Shown actual size.
<b>ANL</b> 12 mm x 24 mm	Ti250ANL-1	Ti150ANL-1	(1 membrane per box)	
Designed for narrow single-tooth extraction sites, especially where one bony wall is missing	Ti250ANL-2	Ti150ANL-2	(2 membranes per box)	
ANL30	Ti250ANL30-1		(1 membrane per box)	
<b>12 mm x 30 mm</b> Designed for narrow single-tooth extraction sites, especially where one bony wall is missing	Ti250ANL30-2		(2 membranes per box)	
<b>PS</b> 20 mm x 25 mm Designed for large extraction sites and limited ridge augmentation	Ti250PS-1 Ti250PS-2	Ti 1 50PS-1 Ti 1 50PS-2	(1 membrane per box) (2 membranes per box)	X
<b>PL</b> 25 mm x 30 mm	Ti250PL-1	Ti150PL-1	(1 membrane per box)	
Designed for large bony defects, including ridge augmentation	Ti250PL-2	Ti150PL-2	(2 membranes per box)	



\*Ti-150 membranes are 40% thinner than Ti-250 membranes, providing clinicians another handling option in Cytoplast™ Titanium-Reinforced Membranes.

	<b>Ti-250</b> (250 µm thick)	<b>Ti-150</b> (150 µm thick)		Versatile Rectangular Shapes
				These configurations can be trimmed to fit a variety of defects. Shown actual size.
<b>XL</b> 30 mm x 40 mm	Ti250XL-1	Ti150XL-1	(1 membrane per box)	
Designed for very large bony defects, including ridge augmentation	TI250XL-2	Ti1 50XL-2	(2 membranes per box)	
<b>XLK</b> 30 mm x 40 mm	Ti250XLK-1	Ti150XLK-1	(1 membrane per box)	
Designed for very large bony defects, including ridge augmentation	TI250XLK-2	Ti150XLK-2	(2 membranes per box)	AK I
<b>K2</b>	Ti250K2-1	Ti150K2-1	(1 membrane per box)	
40 mm x 50 mm Designed for the largest bony defects, including ridge augmentation	Ti250K2-2	Ti150K2-2	(2 membranes per box)	

# Cytoplast<sup>™</sup> Titanium-Reinforced

Titanium-reinforced, high-density PTFE membrane

	<b>Ti-250</b> (250 µm thick)	<b>Ti-150</b> (150 µm thick)		Interproximal Shapes
AS 14 mm x 24 mm Designed for single-tooth extrac- tion sites, especially where one or more bony walls are missing	Ti250AS-1 Ti250AS-2	Ti150AS-1 Ti150AS-2	(1 membranes per box) (2 membranes per box)	These configurations are designed to fit between existing teeth. Dimensional measurements shown in mm Width measurements noted at widest point and narrowest point. Shown actual size. $\frac{14}{10}$
ATC 24 mm x 38 mm Designed for large extraction sites, including ridge augmentation	Ti250ATC-1 Ti250ATC-2	Ті1 50АТС-1 Ті1 50АТС-2	(1 membranes per box) (2 membranes per box)	14 14 38
<b>PTC</b> 38 mm x 38 mm Designed for large bony defects, including ridge augmentation	T1250PTC-1 T1250PTC-2	Ті1 50РТС-1 Ті1 50РТС-2	(1 membranes per box) (2 membranes per box)	38 27
PD 38 mm x 38 mm Designed for large bony defects, including distal extension of the posterior ridge	Ti250PD-1 Ti250PD-2	Ti 1 50PD-1 Ti 1 50PD-2	(1 membranes per box) (2 membranes per box)	38 37 38 31 38 38 38 38 38 38 38 38 38

# **Cytoplast<sup>TM</sup> Titanium-Reinforced** Titanium-reinforced, high-density PTFE membrane

	<b>Ti-250</b> (250 µm thick)	<b>Ti-150</b> (150 µm thick)		Shapes with Fixation Points
				These configurations are designed with fixation points outside of the defect area.
				Dimensional measurements shown in mm Width measurements noted at widest point and narrowest point. Shown actual size.
<b>BL</b> 17 mm x 25 mm	Ti250BL-1	Ti150BL-1	(1 membranes per box)	25
Designed for large buccal defects	Ti250BL-2	Ti150BL-2	(2 membranes per box)	
				17 ,20
PST	Ti250PST-1	Ti150PST-1	(1 membranes per box)	
<b>36 mm x 25 mm</b> Designed for large extraction sites and limited ridge augmenta- tion in the anterior maxilla	Ti250PST-2	Ti150PST-2	(2 membranes per box)	25
				36
<b>PLT</b> 41 mm x 30 mm	Ti250PLT-1	Ti150PLT-1	(1 membranes per box)	25
Designed for large bony defects, including ridge augmentation in the anterior maxilla	Ti250PLT-2	Ti150PLT-2	(2 membranes per box)	30

	<b>Ti-250</b> (250 µm thick)	<b>Ti-150</b> (150 µm thick)		Perio Shapes
				These configurations are designed for grafting perio defects.
				Shown actual size.
<b>AP</b> 13 mm x 19 mm	Ti250AP-1	Ti150AP-1	(1 membranes per box)	
Designed for periodontal defects in the anterior	Ti250AP-2	Ti150AP-2	(2 membranes per box)	
<b>PP</b> 13 mm x 18 mm	Ti250PP-1	Ti1 50PP-1	(1 membranes per box)	
Designed for periodontal defects in the posterior	Ti250PP-2	Ti150PP-2	(2 membranes per box)	



# Versatile Rectangular Shapes

These configurations can be trimmed to fit a variety of defects.

Shown actual size.

RPM250PS









RPM250PL

RPM250XL

RPM250XLK

RPM250XLKM

PS

20 mm x 25 mm Designed for large extraction sites and limited ridge augmentation

### · PL

25 mm x 30 mm Designed for large bony defects, including ridge augmentation

### ·XL

30 mm x 40 mm Designed for very large bony defects, including ridge augmentation

### · XLK

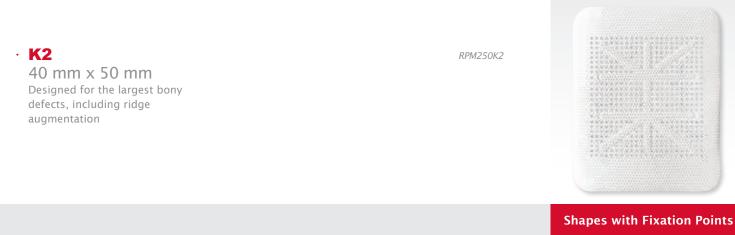
30 mm x 40 mm Designed for very large bony defects, including ridge augmentation

### · XLKM (mandible)

30 mm x 40 mm Designed for very large bony defects, including mandibular ridge augmentation NOTE: Non-perforated region is designed for lingual aspect

RPM's unique circular macroporous design allows for direct contact between the bone graft and periosteum, allowing naturally occurring revascularization and infiltration of cells into the bone graft.

### Versatile Rectangular Shapes



These configurations are designed with fixation points outside of the defect area.

Dimensional measurements shown in mm Width measurements noted at widest point and narrowest point. Shown actual size.



· BL

17 mm x 25 mm Designed for large buccal defects

### · PST

36 mm x 25 mm Designed for large extraction sites and limited ridge augmentation in the anterior maxilla

### · PLT

41 mm x 30 mm Designed for large bony defects, including ridge augmentation in the anterior maxilla RPM250BL

RPM250PLT

RPM250PST



### **Interproximal Shapes**

These configurations are designed to fit between existing teeth.

Dimensional measurements shown in mm Width measurements noted at widest point and narrowest point. Shown actual size.



. **ATC** 

24 mm x 38 mm Designed for large extraction sites, including ridge augmentation

### · ATCM (mandible)

24 mm x 38 mm Designed for large extraction sites, including mandibular ridge augmentation NOTE: Non-perforated region is designed for lingual aspect

### · PTC

38 mm x 38 mm Designed for large bony defects, including ridge augmentation

### · **PTCM** (mandible)

38 mm x 38 mm Designed for large bony defects, including mandibular ridge augmentation *NOTE: NOTE: Non-perforated region is designed for lingual aspect*  RPM250ATCM

RPM250ATC

RPM250PTC

RPM250PTCM

### **RPM<sup>TM</sup>** Reinforced PTFE mesh

# NEW

**Interproximal Shapes** 

# RPM250PDML These configurations are designed to fit between existing teeth. RPM250PDML 38 RPM250PDML 38

· PD

38 mm x 38 mm Designed for large bony defects, including distal extension of the posterior ridge

### · **PDMR** (mandible right)

38 mm x 38 mm Designed for large bony defects, including distal extension of the right posterior mandibular ridge NOTE: Non-perforated region is designed for lingual aspect

### **PDML** (mandible left)

• 38 mm x 38 mm Designed for large bony defects, including distal extension of the left posterior mandibular ridge *NOTE: Non-perforated region is designed for lingual aspect* 

> **Circular Macropores** allow direct contact between bone graft and periosteum, allowing naturally occurring revascularization and infiltration of cells into the bone graft

> > **Titanium Frame** maintains space essential for horizontal and vertical ridge augmentation

**PTFE Mesh** easily conforms to tissue contours

# Cytoplast<sup>™</sup> PTFE Suture

The soft monofilament suture

### 300 Series Stainless Steel Needles

All Cytoplast<sup>™</sup> PTFE Sutures now have 300 series stainless steel needles, the gold standard material for suture needles. Tests comparing the new needles to previous needles show a substantial increase in needle strength, initial needle sharpness, and sustained needle sharpness. Tests show that the new 300 series needles are less likely to bend, require less force to penetrate, and maintain sharpness longer. Additionally, CS0618RC and CS06PREM now have longer (121% and 41%, respectively) and geometrically finer precision cutting edges. Data on file

Cytopla	ast™ undyed 19 mm precision RC 2/0 USP	CS0418	
Cytopla	ast™ undyed 16 mm precision RC 3/0 USP	CS0518	
Cytopla	ast™ undyed 19 mm precision RC 3/0 USP	CS051819	
Cytopla	ast™ undyed 16 mm RC black needle 3/0 USP	CS0518BK	
Cytopla	ast™ undyed 19 mm RC black needle 3/0 USP	CS051819BK	
Cytopla	ast™ undyed 13 mm TP 4/0 USP	CS0618PERIO	
Cytopla	ast™ undyed 13 mm precision RC 4/0 USP	CS0618PREM	
Cytopla	ast™ undyed 16 mm precision RC 4/0 USP	CS0618RC	
• Cytopla	ast™ undyed 13 mm precision RC 5/0 USP	CS071813	
• Cytopla	ast™ undyed 16 mm precision RC 5/0 USP	CS071816	



RC 3/8 Circle Reverse Cutting
TP 1/2 Circle Round-Bodied



100% Medical Grade PTFE Biologically inert

Monofilament Doesn't wick bacteria

Soft (not stiff) Comfortable for patients

Little to no package memory Excellent handling, knots securely

Non-resorbable Keeps the surgical site reliably closed

# **Pro-Fix™ Membrane Fixation**

Precision Fixation System

Pro-fix<sup>™</sup> Membrane Fixation Screws are designed as an attractive alternative to using tacks for membrane stabilization. Easy pickup, solid stability of the screw during transfer to the surgical site, and easy placement make membrane fixation fast and easy. Tray and organizer dial are designed to store all Pro-fix<sup>™</sup> components including up to 100 membrane fixation, tenting, and bone fixation screws

Blades are designed to work universally with all Pro-fix™ membrane fixation, tenting, and bone fixation screws

### Membrane Fixation Kit

PFMK20

- (1) Autoclavable Tecapro™ storage tray w/ screw organizer dial
- (1) Stainless steel driver handle
- (1) 76 mm cruciform driver blade
- (1) 56 mm cruciform driver blade
- (20) 1.5 x 3.0 mm self-drilling membrane fixation screws



### **Self-Drilling Membrane Fixation Screws**

1.5 mm x 3.0 mm 🚽 actual size

5 screws	PFMF-5
10 screws	PFMF-10
20 screws	PFMF-20



### **Individual Components**

Stainless Steel Driver Handle	PFDH
76 mm Cruciform Driver Blade	PFDB
56 mm Cruciform Driver Blade	PFDB56
Contra Angle Blade	PFDBCA
(24 mm long; 10 mm exposed distal length)	
Autoclavable Tecapro™ storage tray	PFT
1.2 mm diam. Latch Type Pilot Drill	PFPD



# **Pro-Fix<sup>™</sup> Tenting**

actual size

actual size

actual size

Precision Fixation System

### **Tenting Kit**

PFTK12

(1) Autoclavable Tecapro™ storage tray w/ screw organizer dial

- (1) Stainless steel driver handle
- (1) 76 mm cruciform driver blade
- (1) 56 mm cruciform driver blade

(4) 1.5 x 3.0 mm self-drilling tenting screws (7 mm total length: see below)
(4) 1.5 x 4.0 mm self-drilling tenting screws (8 mm total length: see below)
(4) 1.5 x 5.0 mm self-drilling tenting screws (9 mm total length: see below)
For individual Pro-Fix<sup>™</sup> driver and container components, see page 19.

Pro-fix<sup>™</sup> Tenting Screws are designed with a self-drilling tip, polished neck, and broader head to maintain space under resorbable and non-resorbable membranes in horizontal and vertical bone regeneration procedures.

### **Self-Drilling Tenting Screws**

### 1.5 mm x 3.0 mm

*3.0 mm polished neck + 4.0 mm threaded portion = 7 mm total length* 

1	screw	PFT3
5	screws	PFT3-5

### 1.5 mm x 4.0 mm

4.0 mm polished neck + 4.0 mm threaded portion = 8 mm total length

1	screw	PFT4
5	screws	PFT4-5

### 1.5 mm x 5.0 mm

5.0 mm polished neck + 4.0 mm threaded portion = 9 mm total length

1	screw	PFT5
5	screws	PFT5-5



1.5 mm x 8.0 mm		 actual size
l screw	PFT8	 uctuui size
1.5 mm x 10.0 mm		
1 screw	PFT10	 actual size



# **Pro-Fix™ Bone Fixation**

Precision Fixation System

### **Bone Fixation Kit**

PFBK12

(1) Autoclavable Tecapro<sup>™</sup> storage tray w/ screw organizer dial
(1) Stainless steel driver handle
(1) 76 mm cruciform driver blade
(1) 56 mm cruciform driver blade
(1) 1.2 mm diameter latch type pilot drill
(2) 1.5 x 8 mm bone fixation screws
(4) 1.5 x 10 mm bone fixation screws
(4) 1.5 x 12 mm bone fixation screws
(2) 1.5 x 14 mm bone fixation screws
For individual Pro-Fix<sup>™</sup> driver and container components, see page 19.

Pro-fix<sup>™</sup> Bone Fixation Screws are designed with finer pitched, self-tapping threads that give the screws greater clamping force while using less driver torque. The screws' threads are equipped with a cutting flute that allows for easier insertion into harder bone. The screws are placed into a 1.2 mm pre-drilled pilot hole.

### **Self-Tapping Bone Fixation Screws**

1.5 mm x 8 mm 1 screw 5 screws	PFB8 PFB8-5	actual size
1.5 mm x 10 mm 1 screw 5 screws	PFB10 PFB10-5	actual size
1.5 mm x 12 mm 1 screw 5 screws	PFB12 PFB12-5	actual size
1.5 mm x 14 mm 1 screw 5 screws	PFB14 PFB14-5	actual size

# **Selection of Applicable References**

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