ORTHOPEDIC GRAFTS

VTS | PRICE LIST

VETERINARY TRANSPLANT SERVICES, INC.

Growth Factor Enhanced Bone Graft

Growth factor enhancements improve and amplify the healing process. These grafts are both **osteoconductive** and **osteoinductive**. Use where enhanced bone healing is needed.

GEM Vet™ (up to 710 micron particle size) — Refrigerated

GEM Vet is a recombinant human platelet derived growth factor (rhPDGF-BB) Enhanced Bone Graft that harnesses the combined power of PDGF and allograft.

- ENHANCED graft combination for wound healing in both bone and soft tissue
- Accelerates healing and significantly enhances the formation of new bone
- Multiple growth factor signals in one product
- 1 yr shelf life; store in fridge

NEW!

KIT	GEMVET0.5	$285

0.5 cc Orthomix Ultra Fine with 0.5 cc rhPDGF

Fortigen™-P Augmented Bone Graft (up to 710 micron particle size) — Freeze-Dried

Fortigen is a novel version of Orthomix Ultra Fine with **engineered** surface-modifications similar to BMP-2.

- ENHANCED Osteoinductivity, levels similar to BMP-2
- Robust bone healing
- 5 yr shelf life; store at room temp

0.5 cc	FORTPFD0.5	$148
1 cc	FORTPFD1	$261
2.5 cc	FORTPFD2.5	$495

Osteoallograft®- 100% Natural Bone Allograft

Osteoallograft is 100% natural real bone graft consisting of **osteoinductive** Demineralized Bone Matrix (DBM) and **osteoconductive** Cancellous Chips. It is biocompatible and completely incorporates with the patient's own bone. Can be used in any species.

Orthomix Ultra Fine (up to 710 micron particle size) — Freeze-Dried

- Classic product of choice
- Ultra Fine particle size fits in the tiniest of spaces
- Provides greatest surface area for exposure of intrinsic growth factors
- 5 yr shelf life; store at room temp

CANINE:	0.5 cc	CBOUFFD0.5	$83
	1 cc	CBOUFFD1	$164
FELINE*:	0.5 cc	FBOUFFD0.5	$218
	1.0 cc	FBOUFFD1	$392

** Limited Availability*

Orthomix Fine (up to 2360 micron particle size) — Freeze-Dried / ❄ Frozen

- Classic product of choice
- Filling, bridging and/or reconstruction of bony defects
- See back page for shelf life

		Freeze-Dried		❄ Frozen	
CANINE:	1 cc	CBOFFD1	$164	CBOFFZ1	$120
	2 cc	CBOFFD2	$246	CBOFFZ2	$190
	3 cc	CBOFFD3	$370	CBOFFZ3	$263
	4 cc	-		CBOFFZ4	$325
	5 cc	-		CBOFFZ5	$385
FELINE:	NOW AVAILABLE IN ULTRA FINE; SEE ABOVE				

Demineralized Bone Matrix (DBM) (up to 1180 micron particle size) — ❄ Frozen

- Extending Autograft
- Osteoinductive and Natural, real bone
- Use anywhere bone graft is indicated
- See back page for frozen shelf life

CANINE:	1 cc	CBDBMFZ1	$120
	3 cc	CBDBMFZ3	$263

Injectable Bone Putty

Fusion Xpress is a combination of Orthomix, biphasic β-Tricalcium Phosphate (β-TCP) and Hydroxyapatite (HA) in a resorbable carrier.

Fusion Xpress™

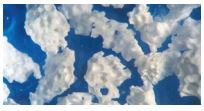
- Putty withstands irrigation; graft stays in place
- Convenient delivery, especially in difficult to reach areas
- Fully resorbable and biocompatible
- 2 yr shelf life; store at room temp

0.5 cc	FXBP0.5cc	$54
1 cc	FXBP1cc	$82
2.5 cc	FXBP2.5cc	$138

Pure Synthetic Bone Graft

Synergy is an advanced biosynthetic bone graft made of β-Tricalcium Phosphate (β -TCP) and Hydroxyapatite (HA), both occurring naturally in bone.

Synergy™- Ortho



- Effective Biosynthetic Bone Graft
- Affordable
- Osteoconductive scaffold
- Economically extend any graft
- 5 yr shelf life; store at room temp

Peel Pack Vials	5 cc (5 x 1 cc doses)	SO5x1cc	$125

MOST VTS GRAFTS CAN BE USED IN ALL SPECIES. SEE BACK PAGE FOR MORE DETAILS.

Osteoallograft®- 100% Natural Bone Allograft

Osteoallograft is 100% natural real bone graft consisting of **osteoinductive** Demineralized Bone Matrix (DBM) and **osteoconductive** Cancellous Chips.
It is biocompatible and completely incorporates with the patient's own bone. Can be used in any species.

Periomix® (up to 710 micron particle size) — Freeze-Dried

- Classic product of choice
- Ultra Fine particle size fits in the tiniest of spaces
- Provides greatest surface area for exposure of intrinsic growth factors
- 5 yr shelf life; store at room temp

CANINE:	0.3 cc	CBPFD0.3	**$50**
	0.5 cc	CBPFD0.5	**$83**
	3 cc	CBPFD3.0	**$370**
FELINE*:	0.2 cc	FBPFD0.2	**$84**
EQUINE*:	6.0 cc	EBPFD6.0	**$375**

** Limited Availability*

Injectable Bone Putty

Fusion Xpress injectable bone putty is a combination of Orthomix, biphasic β-Tricalcium Phosphate (β-TCP) and Hydroxyapatite (HA) in a resorbable carrier that withstands irrigation.

Fusion Xpress™

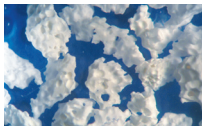
- Putty withstands irrigation; graft stays in place
- Convenient delivery, especially in difficult to reach areas
- Fully resorbable and biocompatible
- 2 yr shelf life; store at room temp

0.5 cc	FXBP0.5cc	**$54**
1 cc	FXBP1cc	**$82**
2.5 cc	FXBP2.5cc	**$138**

Pure Synthetic Bone Graft

Synergy is an advanced biosynthetic bone graft made of β-Tricalcium Phosphate (β -TCP) and Hydroxyapatite (HA), both occurring naturally in bone.

Synergy™ - Dental



- Effective Biosynthetic Bone Graft
- Affordable
- Osteoconductive scaffold
- Economically extend any graft
- 5 yr shelf life; store at room temp

Mini-vials	4 cc	(8 x 0.5 cc doses; $16/dose)	SD8x0.5cc	**$128**
Pro-vials	15 cc	(3 x 5 cc doses)	SD3x5cc	**$281**
Trial Packs	1.0 cc	(2 x 0.5 cc)	SDtrial2x0.5cc	**$39**

>> See also Growth Factor Enhanced products for complex craniomaxillofacial or dental cases <<

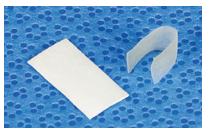
>> See also Pressfit™ and Cancellous Block sections for ideal, solid void fillers for oro-nasal fistula repair and growth factor scaffolds <<

MEMBRANES *(ideal for Orthopedic, Neurosurgical and Dental procedures)*

Membranes

Membranes are biological materials used for Guided Tissue Regeneration. Fully biocompatible and resorbable. No removal necessary.

Ossiflex™ Bone Membranes — Freeze-Dried

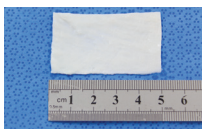


- Thin, flexible, demineralized bone sheets
- Avoids premature epitheleal/fibroblast growth into areas of bone healing
- Easy to cut and bend to fit
- Can tack into place with mattress sutures
- 100% real bone
- 5 yr shelf life; store at room temp

Size 1	1.0 x 1.0 cm	EB or CBOXFD1	**$42**
Size 2	1.0 x 1.5 cm	EB or CBOXFD2	**$67**
Size 3	1.5 x 2.0 cm	EB or CBOXFD3	**$129**
Size 3L	1.5 x 4.0 cm	EB or CBOXFD3L	**$245**
Size 4*	2.0 x 3.0 cm	EB or CBOXFD4	**$285**
Size 5*	3.0 x 3.5 cm	EBOXFD5	**$368**

** Limited Availability*

Fascia — Freeze-Dried



Fascia can be used wherever biological patch or barrier material is needed (*e.g.*, dura, pericardium, hernia repair, GTR).

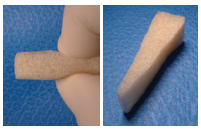
- Biological patch or barrier material (dura, pericaridum, *etc.*)
- Natural collagen scaffold that allows for integration with host tissues
- Protects and supports delicate tissues to facilitate healing
- Easy to use; thin and flexible
- 5 yr shelf life; store at room temp

2.0 x 3.0 cm sheet (~6 cm^2)	CBFLFD2X3	**$142**
3.0 x 5.0 cm sheet (~15 cm^2)	CBFLFD3X5	**$245**

Pressfit™ Blocks & Wedges

Demineralized, fully compressible cancellous bone. Natural collagen for an ideal filler and/or carrier matrix. Can be used in any species.

Pressfit™ Blocks & Osteotomy Wedges — Freeze-Dried



Compressible Bone Collagen

Pressfit™ Blocks & Wedges; used for:
- Carrier sponge for cells & biologics, like BMPs
- Natural scaffold
- Cyst or other void filling
- Occluding ONF's
- Osteotomies
- Canine (CB) or equine (EB) source
- 5 yr shelf life; store at room temp

Small Block	0.6 x 0.6 x 2.0 cm	CB or EBBCANFDDMN-sm	**$58**
Medium Block	1.0 x 1.0 x 3.0 cm	CB or EBBCANFDDMN-med	**$163**
Medium Wedge	0.5 x 0.8 at top x 2.5 cm long	CB or EBWCANFDDMN-med	**$74**
Large Wedge	0.9 x 1.2 at top x 3.0 cm long	CB or EBWCANFDDMN-lg	**$118**

** All measurements are minimum dimensions*
** If your case has specific dimensional requirements please call VTS.*

Cancellous Blocks & Dowels

Mineralized cancellous bone for spinal fusion, or void filling. Rigid graft can be shaped with saw or rongeur. Can be used in any species.

Cancellous Blocks & Dowels — Surface-Demineralized, Freeze-Dried

Blocks made of dense cancellous bone; used for:
- Filling ONFs that have retained tooth
- Void filling
- Bridging gaps
- Anchoring implants
- Opposing tooth drift
- Filling voids & extraction sites
- Incomplete ossification of humeral condyle (IOHC) repair
- See back page for shelf life

CANINE:	Mini-Block*	0.5 x 0.5 x 0.8 cm (±0.2 per dim.)	CBBCANFDMN	**$45**
	Small Block*	1.0 x 1.0 x 1.5 cm (±0.5 per dim.)	CBBCANFDSM	**$165**
EQUINE:	Standard Block*	1.0 x 2.0 x 3.0 cm (±0.2 per dim.)	EBBCANFD	**$395**

❄ Frozen

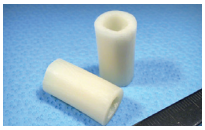
CANINE:	Small Block*	1.0 x 1.0 x 1.5 cm (±0.5 per dim.)	CBBCANFZ	**$160**
	Large Block*	1.0 x 1.5 x 2.5 cm (±0.5 per dim.)	CBBCANFZLG	**$290**

** If your case has specific dimensional requirements please call VTS.*

Segments & Struts

Cortical bone graft for intercalary implantation. Surfaced demineralized to promote fusion to host bone. Can be used in any species.

Cortical Segments — Surface-Demineralized, ❄ Frozen



Segments made of cortical bone, used for:
- Spinal fusions
- Mandibular Resection Repair
- Bridging bone
- Lengthening bone
- See back page for frozen shelf life

Femur, tibia or radius ring sections ~ 1.4 – 2.4 cm diameter

Short (Bergman Blocks)	~1.3 - 2.2 cm length	CBSHSEGFZSH	**$290**
Medium	~2.3 - 3.4 cm length	CBSHSEGFZM	**$310**
Long	~3.5 - 5.0 cm length	CBSHSEGFZLG	**$340**

(for even longer lengths of cortical bone shafts see: Shaft Sections)

Cortical Struts — (FD) Freeze-Dried / Surface-Demineralized, ❄ Frozen

Struts made of cortical bone, used for:
- Buttressing
- Augmenting bone stock
- Stabilization
- See back page for frozen shelf life

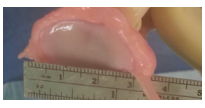
* Mini:	~0.2 x 0.2 cm x 2.0 cm	CBSTRFDMN	**$45**	(FD)
Small:	~0.5 - 1.0 cm x 3.0 - 6.0 cm	CBSTRFZ	**$175**	(FZ)
Large:	~1.5 - 2.0 cm x 5.0 - 8.0 cm	CBSTRFZLG	**$230**	(FZ)

** Intramedullary stabilizing pin for tiny breed long bone fractures*

Whole Bones, Shaft Sections & Osteochondral Allografts

Full-length diaphyseal bones, shaft sections, and customizable osteochondral allografts.

Whole Bone & Shaft Sections — (FD) Freeze-Dried / (FZ) ❄ Frozen



Used for:
- Limb sparing
- Segment replacement

To facilitate matching of grafts for particular patients, we have direct measurements of AP and Lateral widths at mid-shaft and overall length. Please call to discuss sizing details.

- See back page for frozen shelf life

Whole Long Bone	Radius, shaft & both physes	CBSHWHFZ	**$985**	(FZ)
Shaft Section	Diaphyseal shaft sections, a minimum of 5.0 cm length, various diameters			
	Radius, Ulna, Humerus, Femur, Tibia	CBSHSCNFZ	**$745**	(FZ)
	Metatarsal / Metacarpal	CBSHMETFD	**$395**	(FD)
		CBSHMETFZ	**$324**	(FZ)
Osteochondral Graft	*Customized for your patient*	CBOCFR	**$1500**	(FRESH)

Antibiotic Soak Kit

Designed to make it easy to aseptically load bone graft with antibiotics of your choice.

Antibiotic Soak Kit

- Bone graft can elute antibiotics into a site over time.
- Easy to use kit for exposing bone graft to antibiotics prior to surgery.
- See References & How-To Video in the Product Information section at **www.vtsonline.com**
- 2 yr shelf life; store at room temp

KIT-1 **$40**

SOFT TISSUE & OCULAR GRAFTS

VTS | PRICE LIST

VETERINARY TRANSPLANT SERVICES, INC.

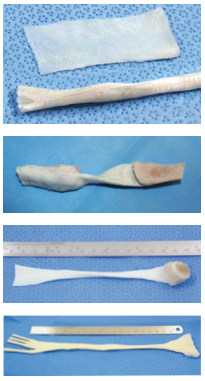
Soft Tissue Grafts

Indications: **Fascia:** Fascia can be used wherever biological patch or barrier material is needed *(e.g., dura, pericardium, & hernia repair, GTR).*

Tendons: Repairing partially or fully ruptured tendons *(e.g., Common Calcaneal (Achilles) tear/rupture).*

Fascia & Tendons (SHELF LIFE SEE BELOW)

(FD) Freeze-Dried / (FZ) Frozen



Fascia	2.0 x 3.0 cm sheet (~6 cm^2)	CBFLFD2X3	**$142** (FD)
	3.0 x 5.0 cm sheet (~15 cm^2)	CBFLFD3X5	**$245** (FD)
Flexor/Extensor Tendon	Deep digital flexor, flexor digitorum longus, miscellaneous extensors, *et al.* ~0.3 - 0.9 cm wide x 10 - 20 cm long (long tendons with round cross section)	CBTENFZ	**$328** (FZ)
Patella Tendon	Bone-tendon-bone graft ~0.5 - 1.7 cm wide x ~2.5 - 5.0 cm long between bone blocks	CBTPFZ	**$328** (FZ)
Achilles Tendon	Common calcaneal tendon with calcaneal bone block ~0.4 - 1.5 cm wide x 7.0 - 12.0+ cm long	CBTAFZ	**$328** (FZ)
Superficial Digital Flexor	Tendon includes flexors proximal & distal to calcaneous without calcaneal bone block ~0.4 - 1.2 cm wide x 6.0 - 12.0 cm long plus ~6 - 10 cm flexor length	CBTSFZ	**$328** (FZ)

Ocular Grafts

If you wish to be notified whenever a fresh corneal graft becomes available, please let us know.

Fresh or Frozen Ocular Grafts (CANINE OR FELINE)

Fresh | ❄ Frozen

Cornea (CANINE)		COCORFR	**$278**	COCORFZ	**$192**
Cornea (FELINE)		FOCORFR	**$391**	FOCORFZ	**$256**
Scleral Patch	4.0 x 6.0 mm minimum size			COSCLFZ	**$80**

Shelf Life: **Fresh Graft** - 14 days / **Frozen Graft** - see frozen shelf life section below

HOW TO ORDER VTS PRODUCTS

VTS | VETERINARY TRANSPLANT SERVICES, INC.

BY PHONE
Call 800.558.5223 or 253.520.0771

ONLINE
Visit our website: **www.vtsonline.com**
Easy reordering, view order history, online payment option, etc... Try our new **Quick Order** page.

SHIPPING

Ground (FedEx or US Mail)	Freeze-Dried Only	**$15.00**
2-Day*	Freeze-Dried or Refrigerated	**$30.00 / $45.00**
Overnight*	Freeze-Dried, Refrigerated or Frozen	**$45.00 / $60.00 / $75.00**
Overnight Combo Box*	Freeze-Dried plus Frozen or Refrigerated	**$85.00 in one box**
First, Saturday, International		**CONTACT US**

* Make it a **PRIORITY MORNING DELIVERY** for an additional $10.00

Shipments are insured and traceable. ***Frozen grafts must be shipped overnight on dry ice and refrigerated grafts must be shipped either 2-Day or Overnight on gel blocks.*** *If shipments are frozen or refrigerated, you must notify VTS if the package has not arrived by 3:00 pm on the scheduled delivery day, so we may assist in trying to ensure grafts do not thaw before delivery.*

An invoice will be included with the package or, if you request, the invoice can be sent directly to your billing office.

SHELF LIFE

Freeze-Dried Grafts
Can be stored at room temperature for **5 years**.

Synergy
Can be stored at room temperature for **5 years**.

Fusion Xpress™
Can be stored at room temperature for **2 years**.

Refrigerated Grafts
Can be stored in a refrigerator for **1 year**.

Frozen Grafts ❄
If stored at -20°C (as in a standard household freezer), they should be used within **6 months** of receipt.

If stored at -40°C or colder, grafts can be stored for **5 years**.

⁂ See website for more information on using VTS bone grafts in different species.
Osteochondral and corneal grafts are species specific. All other VTS grafts can be used in any species.

All products manufactured in the USA by Veterinary Transplant Services, Inc.