S-VETOSS Bone Graft Comparison Chart

Type of Bone Graft	Autograft	Allograft/Xenograft (e.g.: DBM)	Glass Bioceramics	S-VETOSS (Calcium Phosphate Bioceramics)	*S-VETOSS + Patients Bone Marrow or Blood
Origin	Patient Bone	Other Animal	Synthetic Glass	Synthetic Calcium Phosphate	Synthetic Calcium Phosphate
Supply	Limited	Unlimited	Unlimited	Unlimited	Unlimited
Osteoconductivity	+/-	+/-	-	+	+
Osteoinductivity	+	+/-	+/-	+	++
Immediate Strength	-	+/-	+	+	+
Osteogenicity	+	-	-	-	+
Resorbability	+	- (limited)	-	+	+
Cost	$$	$$$	$	$	$
Benefits	Good biocompatibility, contain fresh autologous growth factors and living tissue.	Unlimited supply, Only DBM could have some growth factors.	Unlimited supply, synthetic, immediate strength	Ultra pure synthetic, unlimited supply, similar chemistry to natural bone, compressive strength, dual resorbtion rate, 5 years shelf life.	Ultra pure synthetic, unlimited supply, osteogenic, dual resorbtion rate, contains fresh autologous growth factors, cells, BMP, etc.., provides immediate strength.
Weakness	Limited supply, need second surgery, risk of morbidity, chronic pain, poor mechanics.	Dead bone, limited bone ingrowth, limited resorption, risk of infectious agents transmission and immunological sensitization. Inconsistent composition. Short shelf life.	Composition different from natural bone, limited resorption, no osteoconductivity.	Non-load bearing applications (same as all bone grafts).	Non-load bearing applications (same as all bone grafts).
Overall Rating	++	+	+	++	+++

*Mixed with patient's blood and/or bone marrow aspirate, S-VETOSS provides an additional biological boost to the bonehealing by acquiring autologous bone growth factors, stem cells, BMP, etc.