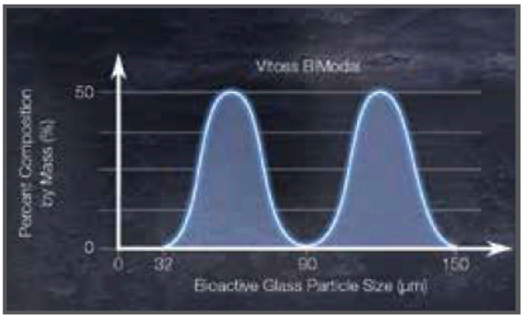
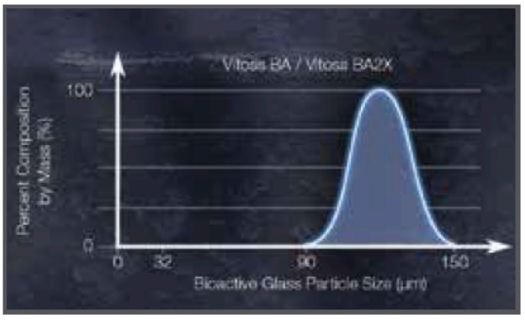
Vitoss
BiModal

Enhance bioactivity through bimodal technology development

Features

- An ultraporous, open inter-connected structure which guides the 3-dimensional regeneration of bone[32]
- Bimodal bioactive glass particles which promote the deposition of calcium phosphate on the implant surface and increased cellular calcium deposition [50, 51]
- A broader range of particle size distribution leading to an increased surface area of bioactive glass and both an immediate burst and sustained release of Ca^{2+}, Na^{+}, Si^{+} ions.[52]





Greater initial burst*

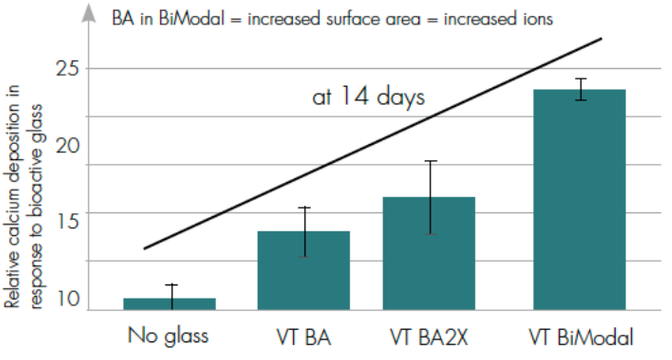
The 32-90μm bioactive glass particles kick start the Ca^{2+}, Na^{+} and Si^{+} ion release. Bioactive glass leads to a gel-like surface layer that mineralizes and promotes the deposition of calcium phosphate on the implant surface favorable for osteoblast attachment and bone formation.[44, 52]

Sustained release**

In-vitro and animal studies have shown that upon contact with bodily fluid, bioactive glass particles:

- Release ions into the immediate environment[44]
- Induce deposition of calcium phosphate on the implant[50]
- Create a surface favorable for osteoblast attachment and bone formation[44]

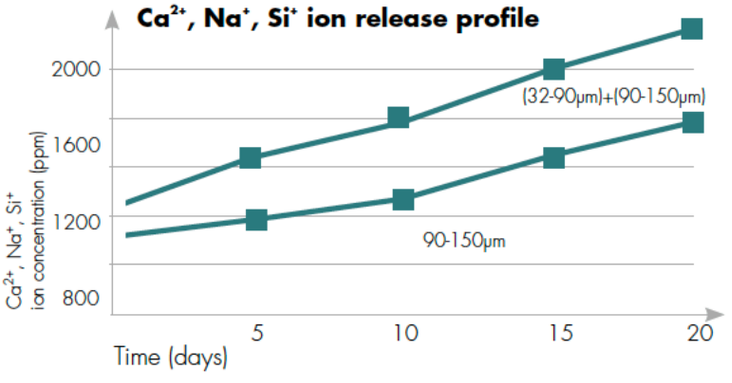
Relative cellular calcium deposition between Vitoss Products [51]



Vitoss BiModal

Reference number	Description
2102-1901	Bioactive Foam Pack, 1.2cc
2102-1902	Bioactive Foam Pack, 2.5cc
2102-1905	Bioactive Foam Pack, 5cc
2102-1910	Bioactive Foam Pack, 10cc
2102-1800	Bioactive Foam Strip 25 x 100 x 4mm, 10cc
2102-1805	Bioactive Foam Strip 25 x 50 x 4mm, 5cc
2102-1810	Bioactive Foam Strip 25 x 50 x 8mm, 10cc
2102-1820	Bioactive Foam Strip 25 x 100 x 8mm, 20cc

Ca^{2+}, Na^{+}, Si^{+} ion release profile



* As shown in in-vitro studies
** The response of bioactive forms of Vitoss has not been assessed in any animal study or clinical investigation and the results from laboratory testing may not be predictive of human clinical experience.