



**PRESERVON**® Allograft Bio-Implant Preservation Technology

Preserve Time. Preserve Quality.

## The Future of Allograft Bio-Implant Preservation

PRESERVON is a proprietary and patented glycerol-based preservation technology that allows allograft bio-implants to be stored in a fully hydrated state at ambient temperature. This eliminates the need to freeze or freeze-dry allograft bio-implants, doing away with lengthy thawing and rehydration times.

**PRESERVON. PRESERVE TIME.**

• STRENGTH

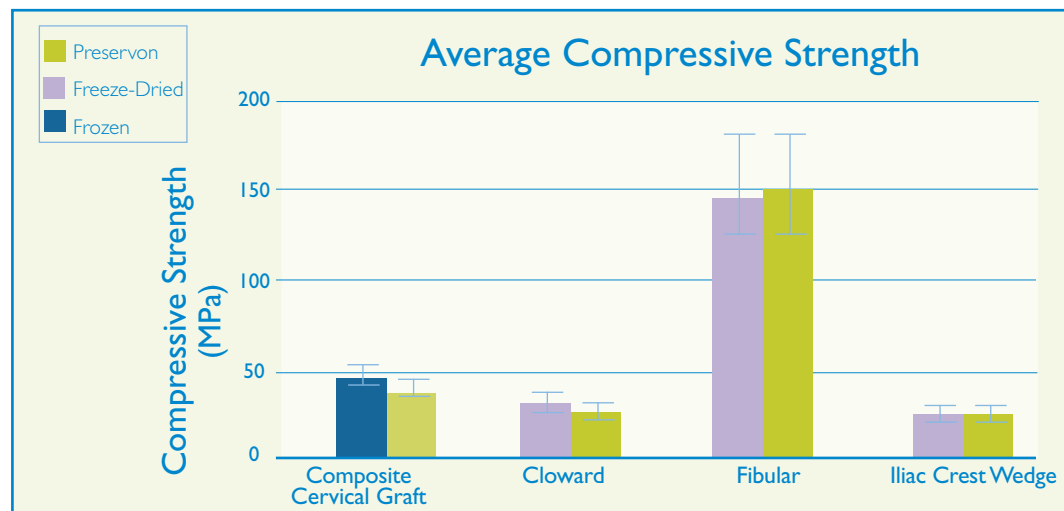
• SAFETY

### Compelling Data

Testing conducted both by LifeNet Health and independent sources, including biomechanical, biocompatibility and osteoconductivity analyses, have found the safety and performance of Preservon-treated and frozen or freeze-dried preserved allograft bio-implants to be comparable.<sup>1</sup>

### Biomechanical Strength.

To determine the biomechanical properties of various Preservon-treated allograft bio-implants, compressive strength was evaluated and compared to freeze-dried and frozen bio-implants.

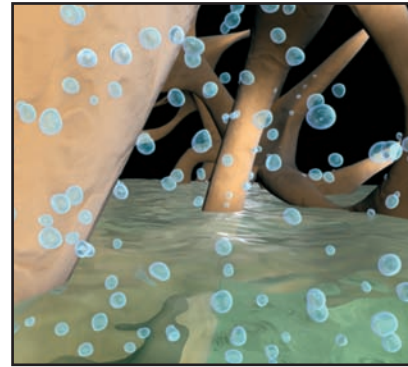


No significant differences are found in compressive strengths of allograft types tested between **PRESERVON** and frozen or freeze-dried bio-implants.<sup>1</sup>

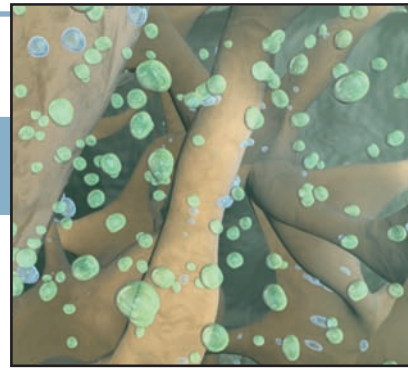
1. Independent sources include the Virginia Commonwealth University Medical Center and the American Association of Mechanical Engineers. Data on file at LifeNet Health, Virginia Beach, VA.

**How does it work?**

Glycerol, the active ingredient in Preservon, acts as a humectant, maintaining the moisture within the allograft, while providing a bacteriostatic environment. These properties allow ambient temperature storage of the allograft without decay. Widely used as a food additive, glycerol since 1991 has been used as a carrier in commercially available osteobiologics products such as Optium DBM® to enhance handling characteristics.



Preservon-treated allograft bio-implants are immersed into a glycerol-based solution and excess glycerol is centrifuged from the bone matrix.

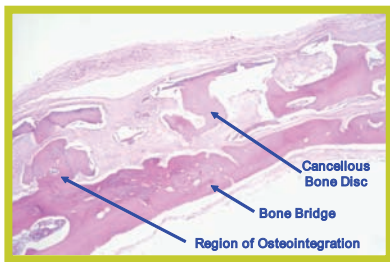


Glycerol molecules in the Preservon solution replace free-standing water content of the bone matrix, while collagen fibers retain water molecules.

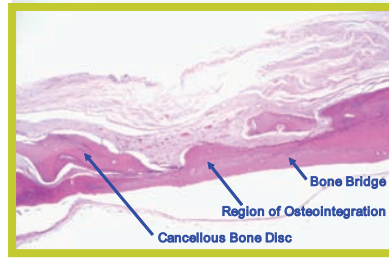
# TIME, PRESERVE PRODUCT PERFORMANCE

**Osteoconductive Performance.**

A rat calvarial defect model was utilized to assess the osteoconductivity of Preservon-treated allograft bio-implants versus conventional preservation methods.



**Freeze-Dried Cancellous Bone Disc (control)**  
40 x magnification; 6 weeks post-implantation

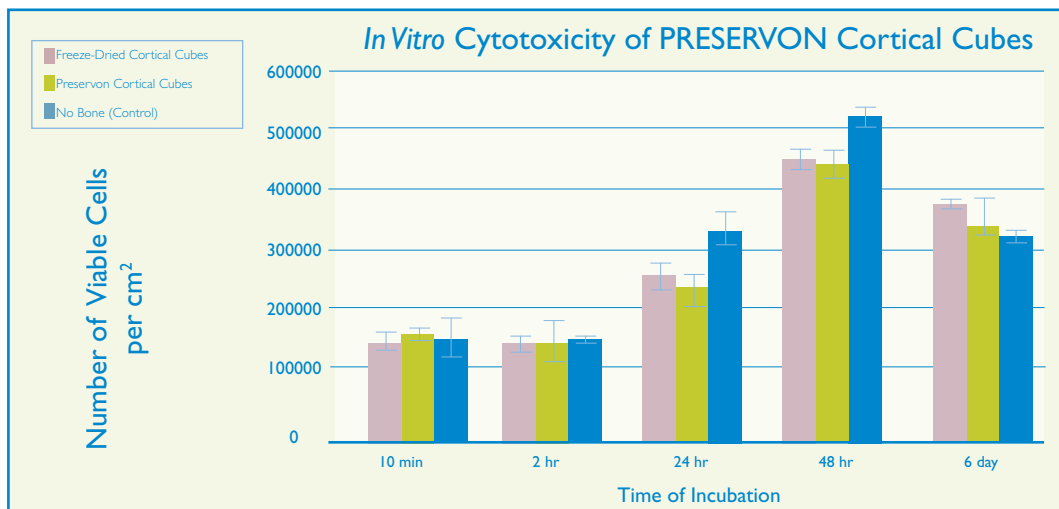


**Preservon-treated Cancellous Bone Disc**  
40 x magnification; 6 weeks post-implantation

No differences in osteoconductivity are found between **PRESERVON** – treated allograft bio-implants and conventionally preserved allograft bio-implants.<sup>1</sup>

**Preserved Safety.**

To confirm the safety and non-toxic response of Preservon-treated allograft bio-implants, several biocompatibility tests were performed.



No significant biocompatibility differences are observed between **PRESERVON** and conventional preservation methods.<sup>1</sup>

# Why Choose PRESERVON® Allograft Bio-Implants?

It's more efficient and convenient than conventional preservation methods allow. Frozen or freeze-dried allografts can require up to 60 minutes to thaw or re-hydrate, compared to as little as 30 seconds for Preservon-treated allograft bio-implants, while maintaining product integrity.

## What are the benefits to my patients, hospitals and me?

<b>Convenient ambient temperature storage and no rehydration</b>	<b>Saves valuable OR time</b>
<b>Eliminates possibility of brittle product associated with freeze-drying<sup>1</sup></b>	<b>Preserves product integrity</b>
<b>Maintains osteoconductive properties and compressive strength<sup>1</sup></b>	<b>Uncompromised performance</b>
<b>No inflammatory response<sup>1</sup></b>	<b>Uncompromised safety</b>

Please contact your LifeNet Health representative for more information about our comprehensive offering of allograft bio-implants products and services or call 888-847-7831.

1. Independent sources include the Virginia Commonwealth University Medical Center and the American Association of Mechanical Engineers. Data on file at LifeNet Health, Virginia Beach, VA.

**ALLOWASH XG® Tissue Sterilization**

Renders allograft bio-implants sterile without compromising their biomechanical or biochemical properties.

**PRESERVON® Allograft Bio-implant Preservation**

Allows allograft bio-implants to be stored fully hydrated at ambient temperature.

**MATRACELL™ Allograft Decellularization**

Safely removes donor cells and DNA without sacrificing the biomechanical strength of the allograft bio-implant.

**PAD® Allograft Demineralization**

Precisely manages demineralization to optimize osteoinductivity.

LifeNet Health, a non-profit global leader in regenerative medicine, is the world's largest provider of bio-implants and organs for transplantation whose mission is saving lives and restoring health by advancing the field of tissue engineering. Please contact your LifeNet Health representative for more information about our comprehensive offering of allograft products and services.



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**[www.AccessLifeNetHealth.org](http://www.AccessLifeNetHealth.org)**

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