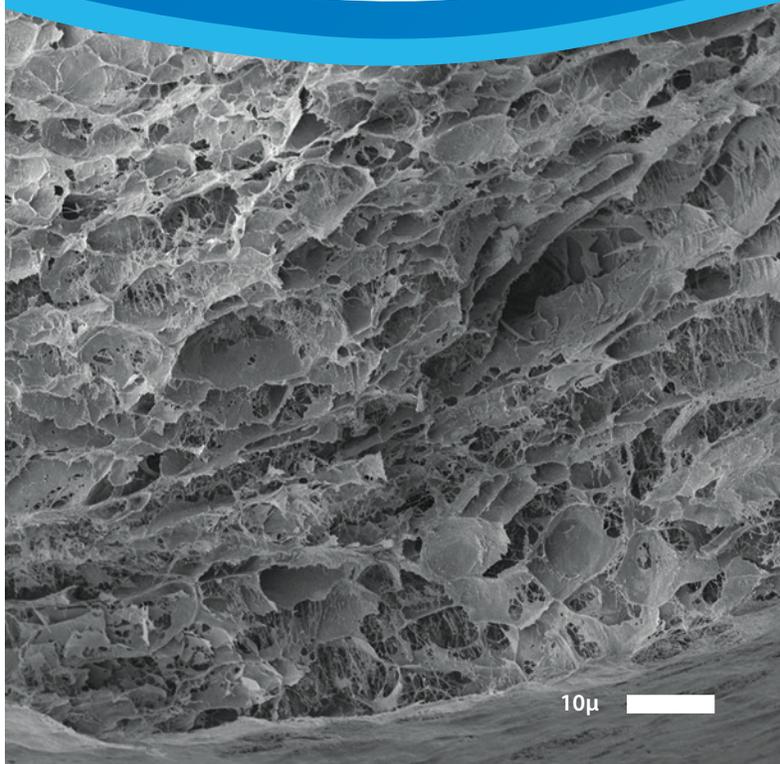
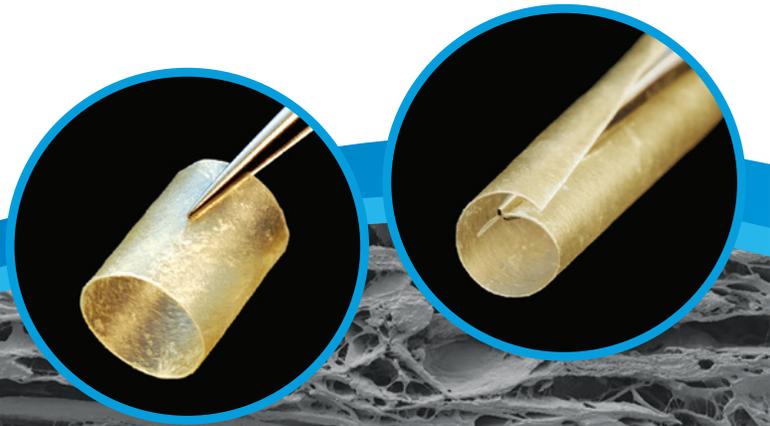


Still using reconstituted collagen? Processing matters.

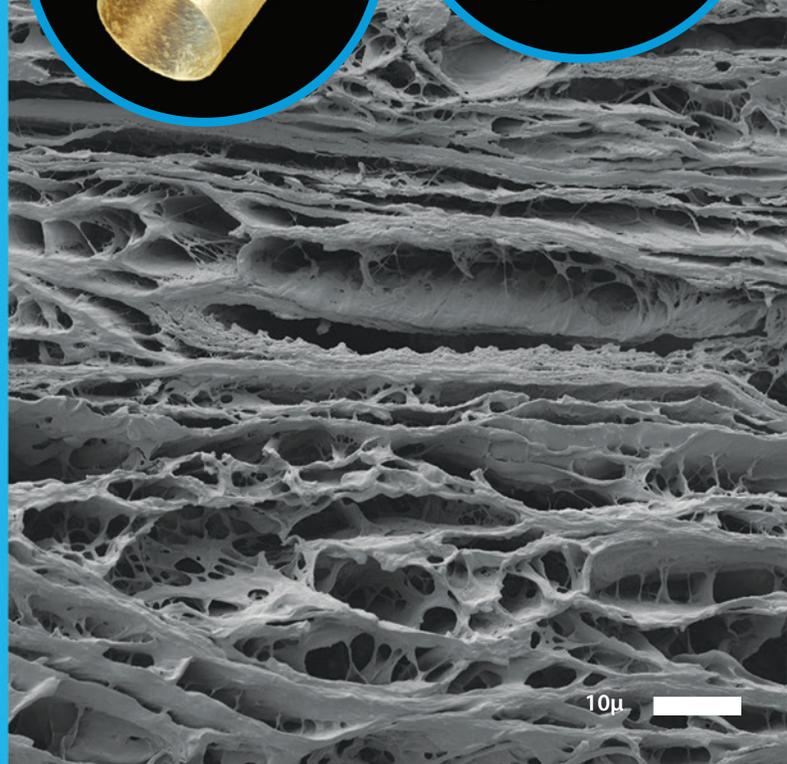
AxoGuard®
NerveConnector



AxoGuard®
NerveProtector



Scanning electron microscopic image of denatured, reconstituted collagen (NeuraGen®) at 500x magnification.



Porcine small intestine submucosa (AxoGuard®) at 500x magnification. Note the open, porous structure of the AxoGuard® matrix.

It's time to rethink nerve repair.

AxoGuard® Nerve Connector is a minimally processed, extracellular matrix designed as a coaptation aid for tensionless repair of transected or severed peripheral nerves.

AxoGuard® Nerve Protector is a minimally processed, intact extracellular matrix designed to wrap and protect injured peripheral nerves.



Rethink nerve repair.

Use minimally processed AxoGuard® Nerve Connector and Protector.

Processing matters. In nerve repair, minimal processing can...

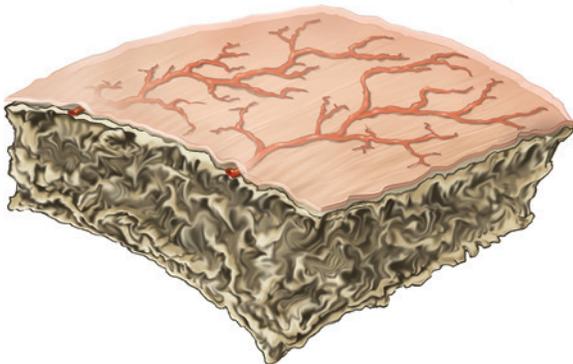
- Preserve the native architecture of the extracellular matrix.
- Retain the components that support optimal nerve repair.^{1,2}
- Result in an implant that works with the body's natural healing process.³

...support healing

Repair with Reconstituted Collagen Implant

Reconstituting denatured collagen:

- Induces cross-linking which alters the structure of the extracellular matrix and may interfere with healing.^{1,3,4}
- Eliminates non-collagenous components essential to nerve regeneration.^{1,5}
- May lead to a failed remodeling response resulting in chronic inflammation and implant resorption.⁴



Graphic depiction of reconstituted collagen nerve tube post-implantation. Note vascularity limited to overlying soft tissue layer.⁸

Repair with AxoGuard®

AxoGuard® Nerve Connector and Protector processing:

- Preserves the extracellular matrix to support the natural healing response.^{1,2,3}
- Retains non-collagenous components that support host tissue response.^{6,7}

AxoGuard® Nerve Connector and Protector provide an environment for supporting natural tissue repair.



Graphic depiction of AxoGuard® source material, porcine small intestine submucosa (SIS) post-implantation. Note presence of vascularity throughout the implant.^{1,9}

TO ORDER, CONTACT YOUR AXOGEN REPRESENTATIVE OR AXOGEN CUSTOMER CARE

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CustomerCare@AxoGenInc.com
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INDICATION FOR USE

United States: AxoGuard® Nerve Connector is intended for the repair of peripheral nerve discontinuities where gap closure can be achieved by flexion of the extremity. AxoGuard® Nerve Protector is indicated for the repair of peripheral nerve injuries in which there is no gap or where a gap closure is achieved by flexion of the extremity. These devices are supplied sterile and are intended for single use. Indication for Use may vary in countries outside the United States. Please see Package Insert for specific Indications in the country of use.

CONTRAINDICATIONS

This device is derived from a porcine source and should not be used for patients with known sensitivity to porcine material.

- 1 Nihsen ES, et al. Bioactivity of small intestinal submucosa and oxidized regenerated cellulose/collagen. *Adv Skin Wound Care*. 2008;21(10):479-486.
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- 3 Hodde J, et al. Vascular endothelial growth factor in porcine-derived extracellular matrix. *Endothelium*. 2004;8(1):11-24.
- 4 Badylak SF, et al. Macrophage phenotype as a determinant of biologic scaffold remodeling. *Tissue Eng*. 2008;14(11):1835-1842.
- 5 Hodde J, et al. Effects of sterilization on an extracellular matrix scaffold: Part II. Bioactivity and matrix interaction. *J Mater Sci: Mater Med*. 2007;18:545-550.
- 6 Mir H, et al. Assessment of nerve regeneration after entubulation with a novel extracellular matrix-based conduit. Poster presentation at American Society of Plastic Surgeons 2011.
- 7 Li F, et al. Low-molecular-weight peptides derived from extracellular matrix as chemoattractants for primary endothelial cells. *Endothelium*. 2004;11:199-206.
- 8 Liadaki E, et al. Removal of collagen nerve conduits (NeuraGen) after unsuccessful implantation: Focus on histological findings. *J Reconstr Microsurg* 2013. doi:10.1055/s-0033-1348033.
- 9 Data on file, AxoGen, Inc.

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