your surgical expertise, our peripheral nerve injury solutions

revolutionizing the science of nerve repair™
Peripheral nerve repair surgeons and health care providers understand the importance of innovative technologies that improve outcomes and positively impact patient lives.

The nerve repair space is constantly changing and Axogen is leading the science of restoring functionality to damaged nerves. We are passionate about helping restore quality of life to patients by providing innovative, clinically proven, and economically effective solutions.

Only Axogen offers a comprehensive suite of clinically proven solutions for your nerve repair needs – ranging from injured nerves in-continuity, to gaps over 70 mm, and non-reconstructable nerve ends. Depending on the injury, our technologies may be used alone or in conjunction with one another to produce the optimal outcome. Our technologies provide an option for surgeons to reconstruct injured nerves without the comorbidities associated with an additional surgical site.

Axogen is the only company solely dedicated to peripheral nerve repair and has been a pioneer in regenerative medicine. Together we can continue revolutionizing the science of nerve repair.

The ONLY off-the-shelf biologically active processed human nerve allograft intended for the surgical repair of peripheral nerve discontinuities.

**key advantages**

- Structural support for cellular migration and regenerating axons
  - Preserves the 3-dimensional (3D) micro-architecture of native human nerve
  - Organized, linear, and continuous scaffold across the length of the graft

- Clinically proven, off-the-shelf solution
  - 82% meaningful recovery in sensory, mixed, and motor nerve gaps in multi-center study

- Proprietary cleansing, decellularizing, and sterilizing process
  - Preserves the extracellular matrix (ECM) of human nerve while removing inhibitors to axon regeneration
  - Extensive testing to ensure the quality of the graft and guarantee identity, purity, potency, and safety
  - Decellularization and sterilization methods ensure a safe product without the need for immunosuppression

- Intra-operative versatility
  - Available in a variety of lengths and diameters to meet a range of anatomical needs
  - Handles, sutures, and flexes at joints similar to native nerve

- #1 choice for hand surgeons in digital nerve gaps of 2 cm

- #1 meaningful recovery throughout the body

- 95% meaningful recovery after neuroma excision and reconstruction

- Options for 5 mm to 70 mm

- **avance** nerve graft

- **avance** nerve graft + **axoguard** nerve connector

- **avance** nerve graft + **axoguard** nerve protector

The **avance** nerve graft is intended for the surgical repair of peripheral nerve discontinuities.
Semi-translucent coaptation aid designed for Connector-Assisted Repair® (CAR) of transected nerves up to 5 mm.

**key advantages**

- **CAR alleviates tension and inflammation at the critical zone of regeneration**
  - Disperses tension across repair site
  - Moves suture inflammation away from coaptation
  - CAR is a clinically proven alternative to direct suture repair
  - Reduces the risk of forced fascicular mismatch
  - Aids alignment of nerve ends
  - Reduces the potential for axonal sprouting

- **Vascularizes and remodels**
  - Small intestine submucosa (SIS) incorporates into the patient’s own tissue, creating a physical barrier to surrounding soft tissue
  - Supports natural wound healing

- **Intra-operative versatility**
  - Available in a variety of lengths and diameters to meet a range of anatomical needs
  - Reinforces the coaptation site of direct, graft, or cable graft repairs
  - Off-the-shelf option, stored at room temperature with a minimum 18-month shelf life

**Porcine SIS material**
- Offers excellent flexibility and is semi-translucent compared to opaque competitive collagen products
- #1 market leader

**50% increased likelihood of pain at the coaptation site when primary suture is used versus CAR with various conduits**

The ONLY small intestine submucosa (SIS) implant designed to protect injured and compressed nerves up to 40 mm.

**key advantages**

- **Protects and separates**
  - Separates and protects the nerve from the surrounding tissues during the healing process
  - Provides a protective barrier to axonal escape
  - Allows for nerve gliding
  - Minimizes the potential for soft tissue attachment and nerve entrapment by protecting the nerve

- **Vascularizes and remodels**
  - Small intestine submucosa (SIS) incorporates into the patient’s own tissue, creating a physical barrier to surrounding structures
  - Supports natural wound healing

- **Intra-operative versatility**
  - Available in a variety of lengths and diameters to meet a range of anatomical needs
  - Off-the-shelf option, stored at room temperature with a minimum 18-month shelf life

**Option for no transection or repaired nerve**

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  - Remodels and vascularizes to minimize potential for adhesions
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**Option for 5 mm to 70 mm+**

- **axoguard® nerve protector**
- **axoguard® nerve protector**

**Option for 0 mm to 5 mm**

- **axoguard® nerve connector**
- **axoguard® nerve connector**

- **autograft**
- **autograft**

- **avance® nerve graft**
- **avance® nerve graft**

- **avance® nerve graft + axoguard® nerve connector**
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**IQVIA data**

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**key advantages**

**Protects and isolates**
- Reduces the development of painful neuromas
- Provides a barrier from neurotrophic factors and mechanical stimulation

**Vascularizes and remodels**
- Material gradually incorporates into patient's own tissue, creating a physical barrier to surrounding soft tissue

**Intra-operative versatility**
- Ideal for anatomic areas with limited or no musculature
- Alternative to historical techniques, such as burying in muscle or bone

**Ideal handling**
- End tab facilitates anchoring the device to surrounding tissue, away from the surgical incision and mechanical stimulation
- Available in a variety of diameters

**Ideal for no distal target**
- Proprietary bifurcation provides adequate space to exhaust nerve outgrowth

**option for no transection**
- Bifurcation option for no distal target
- Proprietary SIS matrix designed to reduce the development of symptomatic or painful neuromas

References:


**avive® soft tissue membrane**

**Smart processing**
- Minimally processed to preserve the natural properties of umbilical cord amniotic membrane

**Intra-operative versatility**
- Can be used in conjunction with any other Axogen product, including all gap sizes and cases with no transection

**Ideal handling**
- Conforms and stays in place at the application site and is easily repositioned if needed
- May be secured or simply laid on injured tissue for flexibility of use

**option for no transection**
- Bifurcation option for no distal target
- A minimally processed human umbilical cord membrane used as a resorbable covering to separate tissue layers

References:

Axoguard Nerve Connector

**INDICATIONS FOR USE:** Axoguard Nerve Connector is indicated for the repair of peripheral nerve discontinuities where gap closure can be achieved by flexion of the extremity. The device is supplied sterile and is intended for one-time use.

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

**Axoguard Nerve Protector**

**INDICATIONS FOR USE:** Axoguard Nerve Protector is indicated for the repair of peripheral nerve injuries where there is no gap. The device is supplied sterile and is intended for one-time use.

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

**Axoguard Nerve Cap**

**INDICATIONS FOR USE:** Axoguard Nerve Cap is indicated to protect a peripheral nerve end and to separate the nerve from surrounding environment to reduce the development of symptomatic or painful neuroma.

**CONTRAINDICATIONS:** This device is derived from porcine source and should not be used for patients with known sensitivity to porcine material. Axoguard Nerve Cap is contraindicated for use in any patient in whom soft tissue implants are contraindicated.

**NOTE:** This device is not intended for use in vascular applications.

**Disclaimer:** Not all products are available internationally.