

## Instructions for Use



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### DESCRIPTION

Axoguard HA+ Nerve Protector is a surgical implant that provides non-constricting protection for non-transected peripheral nerve injuries. Axoguard HA+ Nerve Protector is designed to be an interface between the nerve and the surrounding tissue. Axoguard HA+ Nerve Protector is comprised of an extracellular matrix (ECM) and is fully remodeled during the healing process. When hydrated, Axoguard HA+ Nerve Protector is easy to handle, soft, pliable, nonfriable, and porous. The lubricant coating on Axoguard HA+ Nerve Protector is composed of sodium hyaluronate and sodium alginate. When hydrated, the lubricant coating reduces friction between the nerve and the surrounding tissue. Axoguard HA+ Nerve Protector is flexible to accommodate movement of the joint and associated tendons and has sufficient mechanical strength to hold sutures. Axoguard HA+ Nerve Protector is provided sterile, for single use only, and in a variety of sizes to meet the surgeon's needs.

### INDICATIONS FOR USE

Axoguard HA+ Nerve Protector is indicated for the management of peripheral nerve injuries where there is no gap.

**[Rx ONLY]** This symbol means the following:

**CAUTION: Federal (U.S.A.) law restricts this device to sale by or on the order of a physician.**

This product is intended for use by trained medical professionals.

### CONTRAINDICATIONS

Axoguard HA+ Nerve Protector base membrane is derived from a porcine source and the lubricant coating is composed of sodium hyaluronate and sodium alginate. The Axoguard HA+ Nerve Protector should not be used for patients with known sensitivity to porcine, alginate, or hyaluronate materials.

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

### PRECAUTIONS

- This device is designed for single use only. Attempts to reprocess, resterilize, and/or reuse may lead to device failure and/or transmission of disease.
- **Do not resterilize device.**
- Discard all open and unused portions of the device.
- Device is sterile provided the package is dry, unopened, and undamaged. Do not use device if the package seal is damaged or open.
- Discard device if mishandling has caused possible damage or contamination, or if the device is past its expiration date.
- Do not suture device prior to rehydration.

### POTENTIAL COMPLICATIONS

Possible complications can occur with any surgical nerve procedure including pain, infection, decreased or increased nerve sensitivity, and complications associated with use of anesthesia.

If any of the following conditions occur and cannot be resolved, careful removal of the device should be considered:

- Acute or chronic inflammation (initial application of surgical materials may be associated with transient, mild, localized inflammation)
- Allergic reaction
- Infection

### STORAGE

Axoguard HA+ Nerve Protector should be stored in a clean, dry location at room temperature. Do not store in direct sunlight due to risk of heat.

### STERILIZATION

This device has been sterilized with ethylene oxide.

### SUGGESTED INSTRUCTIONS FOR USE

*NOTE: Always handle Axoguard HA+ Nerve Protector using aseptic technique. Minimize contact with latex gloves because of potential patient allergy.*

1. Follow standard operating procedures for exposure and mobilization of the nerve. Determine the nerve diameter in millimeters (mm) using a suitable measuring instrument.
  - a. Select an Axoguard HA+ Nerve Protector device of sufficient dimensions to account for normal edema following traumatic nerve injury and tourniquet removal.
  - b. As placed the Axoguard HA+ device is to be oversized to allow for the normal edema discussed above; specifically, the device should be 1-2 mm larger in diameter than the nerve.
2. Open the outer carton and remove the foil pouch. Using standard aseptic technique, open the outer pouch and pass the inner pouch to the sterile field.

3. Within the sterile field, open the inner pouch and, if necessary, trim the Axoguard HA+ Nerve Protector device to the appropriate dimensions for covering the intended portion of the nerve. The Axoguard HA+ Nerve Protector may be trimmed after hydration, if desired.
4. Hydrate Axoguard HA+ Nerve Protector in a sterile container with room temperature sterile saline or sterile Lactated Ringer's solution for 10 seconds or until the desired handling characteristics are achieved, but not more than 20 minutes.
5. Position Axoguard HA+ Nerve Protector around the nerve (Figure 1A). If desired, add sterile saline or Lactated Ringer's solution to improve conformability to the nerve. Secure the device as necessary. Examples of securing include running or interrupted sutures (Figure 1B) along the length of the device, or surgical microclips.

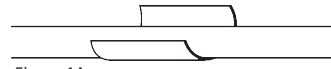


Figure 1A

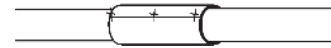


Figure 1B

*Example procedure for wrapping Axoguard HA+ Nerve Protector device*

6. Discard any unused portions of Axoguard HA+ Nerve Protector according to institutional guidelines for biological waste. Do not resterilize.

### HOW SUPPLIED

Axoguard HA+ Nerve Protector is provided in a dual, inner, and outer sterile pouch. The pouch is heat-sealed to provide a sterile barrier and has a peelable seal. Contents of the package are guaranteed sterile unless the package is opened or damaged. Axoguard HA+ Nerve Protector and packaging do not contain natural rubber latex. *Do not use if the Axoguard HA+ Nerve Protector peel pouch appears to be open or damaged.*



















### INQUIRIES

For additional information, to place an order, or to report adverse events, contact: Axogen Customer Care: 888.Axogen1 (888.296.4361), or Email: customer care@axogeninc.com

### RETURNED GOODS POLICY

Authorization from Axogen Customer Care must be obtained prior to returning device. Sterile product must be returned in unopened, undamaged cartons, packed to prevent damage.

### SYMBOLS USED ON LABELING

	Sterilized using ethylene oxide		Manufacturer
	Temperature limit		Medical device
	Consult instructions for use		MR safe
	Do not re-use		Batch code
	Use-by date		Catalogue number
	Keep dry		Country of manufacture
	Contains biological material of animal origin		Keep away from sunlight
	Single sterile barrier with protective packaging inside		Do not use if package is damaged and consult instructions for use
	Do not resterilize		Unique device identifier

Manufactured for:



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Patent [www.axogeninc.com/patents](http://www.axogeninc.com/patents)

Made in the USA

† Axogen Corp. owns registrations for, or other trademark rights in the "a" mark; AXOGEN; AXOGUARD; AXOGUARD HA+ NERVE PROTECTOR; and AXOGEN, REVOLUTIONIZING THE SCIENCE OF NERVE REPAIR in various countries throughout the world.