

**avance**<sup>®</sup>  
(acellular nerve allograft-arwx)

Repair peripheral nerves with an FDA-approved bioactive graft that provides structure and biochemical cues to support nerve regeneration.

## Avance<sup>®</sup> is:



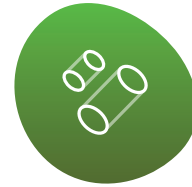
### A biologic scaffold

Provides an extracellular roadmap and bioactive laminin to support nerve regeneration.



### Clinically proven

Demonstrated improvement in static two-point discrimination (s2PD) following nerve repair.\*



### Size-matched

Available in multiple lengths and diameters to best match the native nerve diameter, provide gap length coverage and more precisely match the native nerve's fascicular structure.

## Proprietary processing

### Organized structural architecture

Avance undergoes a proprietary process to ensure an optimal structural architecture for nerve regeneration. Cellular remnants and growth-inhibiting molecules are cleared while maintaining both the structure and bioactive laminin necessary to support axon regeneration.

### Rigorous assays to verify quality

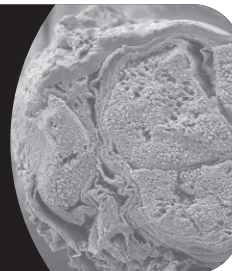
Axogen verifies the identity, purity, and potency of each Avance lot. Through extensive testing and proprietary assays, we verify the quality and consistency of the nerve structure as well as its laminin bioactivity through histology and *in vitro* assays.

## Why laminin?

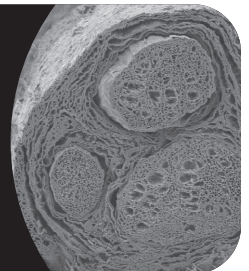
Bioactive laminin is a potent promoter of neurite growth.<sup>1</sup> It plays an integral role in axon regeneration, as it contains the integrin binding sites that allow the axonal growth cone to elongate and make its way through the endoneurial tube to its distal target.<sup>1-2</sup>

*Laminin has been shown in both in vitro assays and animal studies to be bioactive. The exact mechanism of action is unknown.*

Unprocessed nerve (SEM<sup>†</sup>)



Processed nerve (SEM<sup>†</sup>)



\*As measured by s2PD at 12 months in RECON (N=220) which evaluated the repair of sensory nerve discontinuities ≤25mm. The reported LS mean (95% CI) for Avance and Nerve Cuff were 9.1mm (8.11, 10.04) and 9.4mm (8.50, 10.30) respectively.

<sup>†</sup>Scanning electron microscope.

## IMPORTANT SAFETY INFORMATION

### Warnings and Precautions

- Procedural Complications: Monitor for procedural complications, including pain, hyperesthesia, infection, implant site swelling, adhesions, hypertrophic scar formation, impaired motor or sensory function, bleeding, and neuroma formation, and manage accordingly.

**axogen**<sup>®</sup>

Please see additional Important Safety Information on back and accompanying Full Prescribing Information.

## Ordering and sizing

Avance is offered in multiple diameters and lengths to best match the native nerve diameter and provide gap length coverage.

| Code   | Dimensions*    | Code   | Dimensions*    |
|--------|----------------|--------|----------------|
| 111215 | 1–2 mm x 15 mm | 111250 | 1–2 mm x 50 mm |
| 211215 | 2–3 mm x 15 mm | 211250 | 2–3 mm x 50 mm |
| 311215 | 3–4 mm x 15 mm | 311250 | 3–4 mm x 50 mm |
| 411215 | 4–5 mm x 15 mm | 411250 | 4–5 mm x 50 mm |
| 111230 | 1–2 mm x 30 mm | 111270 | 1–2 mm x 70 mm |
| 211230 | 2–3 mm x 30 mm | 211270 | 2–3 mm x 70 mm |
| 311230 | 3–4 mm x 30 mm | 311270 | 3–4 mm x 70 mm |
| 411230 | 4–5 mm x 30 mm | 411270 | 4–5 mm x 70 mm |

\*Dimensions (diameter x length)

### References

1. Plantman S, et al. Integrin-laminin interactions controlling neurite outgrowth from adult DRG neurons *in vitro*. *Mol Cell Neurosci*. 2008;39(1):50–62. doi:10.1016/j.mcn.2008.05.015
2. Danen EHJ. Integrins: An Overview of Structural and Functional Aspects. In: Madame Curie Bioscience Database [Internet]. Austin (TX): Landes Bioscience; 2000–2013. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK6259/>

### IMPORTANT SAFETY INFORMATION

#### Warnings and Precautions (continued)

- **Transmission of Infectious Diseases:** Because AVANCE is made from human donor tissue, it may carry a risk of transmitting infectious agents, e.g., viruses, the variant Creutzfeldt-Jakob disease (vCJD) agent, and theoretically, the Creutzfeldt-Jakob disease (CJD) agent. All infections thought to be transmitted by AVANCE should be reported to Axogen Corporation at 1-888-296-4361.

#### Adverse Reactions

The most common adverse reactions ( $\geq 2\%$ ) were procedural pain (4%) and hyperesthesia (3%). A serious adverse reaction (wound dehiscence) occurred in 1 patient.

#### Indications

AVANCE® is an acellular nerve scaffold indicated for the treatment of adult and pediatric patients aged one month and older with:

- Sensory nerve discontinuity ( $\leq 25$  mm)
- Sensory nerve discontinuity ( $> 25$  mm); Approved under accelerated approval based on static two-point discrimination (s2PD) at 12 months in sensory nerve gaps  $\leq 25$  mm, which reasonably predicts clinical benefit. Continued approval may be contingent upon confirmatory clinical trial results.
- Mixed and motor nerve discontinuity; Approved under accelerated approval based on s2PD outcomes in sensory nerves; continued approval may be contingent upon confirmatory clinical trial results



Please see accompanying Full Prescribing Information for AVANCE.