Allograft tissue processing plays a critical role on how the body utilizes the implant during the healing process.

The Avance® Process is the only process which cleanses human peripheral nerve tissue by removing cells, cellular debris, and chondroitin sulfate proteoglycans, while maintaining the natural extracellular matrix inherent to human nerve. This process results in an off-the-shelf graft, Avance® Nerve Graft, which provides clear pathways to support nerve regeneration.¹
Rethink nerve repair.

The Avance® Process...

- Maintains the 3-dimensional ECM scaffold
- Provides an open scaffold to support cell migration during nerve regeneration
- Clears pathways by removing cellular debris
- Removes inhibitors to regeneration, as seen in animal studies
- Preserves the handling characteristics of human nerve
- Implanted using the same technique as native nerve

Retained by Avance® Process

<table>
<thead>
<tr>
<th>Peripheral Nerve Component</th>
<th>Role in Nerve Repair</th>
<th>Before Processing</th>
<th>After Avance® Processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macrostructure</td>
<td>Provides intact epineurium and perineurium for handling and suturing</td>
<td>SEM of unprocessed nerve</td>
<td>SEM of Avance® Nerve Graft</td>
</tr>
<tr>
<td>Microstructure</td>
<td>Maintains endoneurium to structurally support axon regeneration</td>
<td>SEM of unprocessed nerve</td>
<td>SEM of Avance® Nerve Graft</td>
</tr>
<tr>
<td>Composition (collagen, laminin and fibronectin)</td>
<td>Plays an integral role in structural support</td>
<td>Laminin stain (laminin stains brown) of unprocessed nerve</td>
<td>Laminin stain (laminin stains brown) of Avance® Nerve Graft</td>
</tr>
</tbody>
</table>

Removed by Avance® Process

<table>
<thead>
<tr>
<th>Peripheral Nerve Component</th>
<th>Role in Nerve Repair</th>
<th>Before Processing</th>
<th>After Avance® Processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cells and Cellular Debris</td>
<td>Clears cellular debris from the nerve tissue which makes way for axon and Schwann cell migration. Removes allogenic Schwann cells resulting in a graft that does not require immunosuppression</td>
<td>H&amp;E stain (Eosin stains cell nuclei blue) of unprocessed nerve</td>
<td>H&amp;E stain (Eosin stains cell nuclei blue) of Avance® Nerve Graft</td>
</tr>
<tr>
<td>Chondroitin Sulfate Proteoglycans</td>
<td>In animal studies, removal of CSPGs (axonal growth inhibitors) from acellular nerve allograft was associated with an increased number of axons entering into the tissue, less aberrant axon growth and axonal migration over longer distances</td>
<td>CS56 stain (CSPG stains red) of unprocessed nerve</td>
<td>CS56 stain (CSPG stains red) of Avance® Nerve Graft</td>
</tr>
</tbody>
</table>

TO ORDER, CONTACT YOUR AXOGEN REPRESENTATIVE OR AXOGEN CUSTOMER CARE
Phone Toll Free 888.AxoGen1 (888.296.4361) or 386.462.6800
Fax 386.462.6801 CustomerCare@AxoGenInc.com www.AxoGenInc.com

©2013 AxoGen, Inc. | Avance® Nerve Graft and its logo are trademarks of AxoGen, Inc.

References

Indications for Use: Avance® Nerve Graft is processed nerve allograft (human) intended for the surgical repair of peripheral nerve discontinuities to support regeneration across the defect.

Contraindications: Avance® Nerve Graft is contraindicated for use in any patient in whom soft tissue implants are contraindicated. This includes any pathology that would limit the blood supply and compromise healing or evidence of a current infection.

Regulatory Classification: Avance® Nerve Graft is human tissue for transplantation. It is processed and distributed in accordance with US FDA requirements for Human Cell and Tissue-based Products (21 CFR Part 1271), State regulations and the guidelines of the American Association of Tissue Banks (AATB). This graft is to be dispensed only by or on the order of a licensed physician.