

inferior alveolar nerve (IAN) reconstruction



mandibular resection

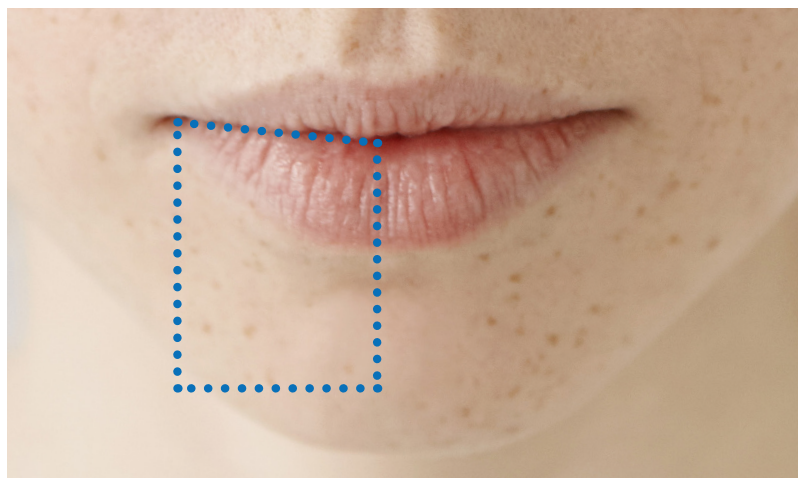


restoring quality of life after mandibular resection

During segmental mandibular resection, hard and soft tissue, including nerve tissue, is resected, often leading to loss of neurosensory function and diminished quality of life.¹ The goal of modern medicine and surgery is to restore form and function to patients with minimal morbidity and maximal successful outcomes.²

area affected by loss of sensation

Loss of inferior alveolar nerve (IAN) function can negatively impact speech, retention of saliva, kissing and lead to diminished psychological well-being.³⁻⁵



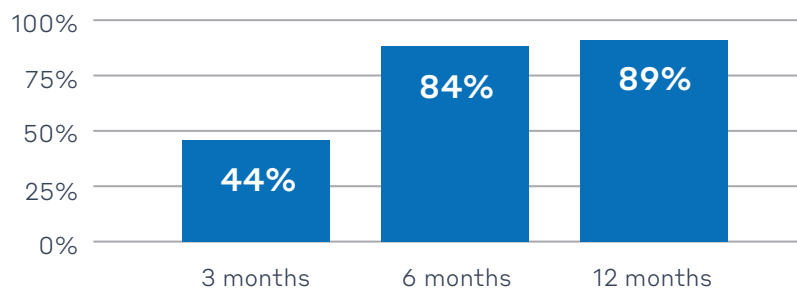
sensation as part of the reconstruction

Contemporary management of ablative jaw defects includes not only hard and soft tissue reconstruction, but also restoration of neurosensory function. Nerve allografts have proved successful for functional neurosensory recovery in this complex surgical procedure.²

AAOMS ParCare Guidelines

Consideration should be given toward neural reconstruction following ablative jaw procedures that result in nerve continuity defects, using interpositional autogenous or allogeneic nerve grafting.⁶

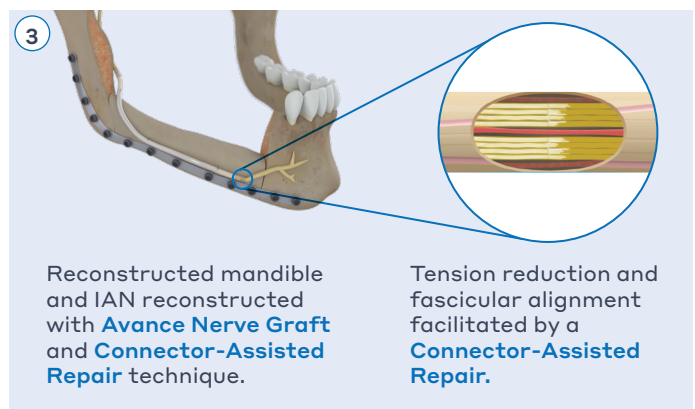
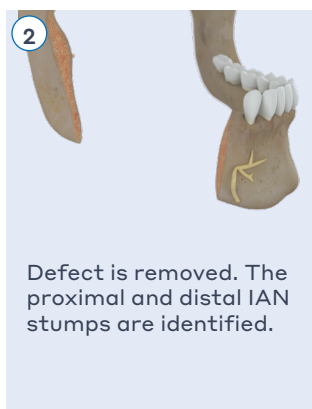
functional recovery over time⁴



The proportions of study patients achieving functional sensory recovery (grades S3, S3+ and S4).

avance[®] nerve graft was developed to bridge nerve gaps

When a nerve gap is created upon tumor excision, Avance Nerve Graft can be used to bridge a gap up to 7 cm with Connector-Assisted Repair[®]. A Connector-Assisted Repair at the proximal and distal coaptations using a semi-translucent porcine SIS Axoguard Nerve Connector[®] may enable easier coaptation, reduce tension, and improve fascicular alignment. The construct can be wrapped with an Axoguard Nerve Protector[®] to provide a physical barrier between the nerve and the surrounding bone, hardware and tissue.^{1,4,7}



meet the patients



Veronica

Avance Nerve Graft
and Axoguard Nerve
Connector recipient

A benign tumor was found on the right side of Veronica's jaw that encompassed her IAN. Following removal of the myxoma and mandibular resection, her IAN was reconstructed with Avance Nerve Graft and Axoguard Nerve Connectors. Veronica has since achieved functional sensory recovery and is back to school. She recently tested for her second-degree black belt.



Pablo

Avance Nerve Graft
and Axoguard Nerve
Connector recipient

Pablo underwent a bilateral reconstruction of his mandible stemming from a large ameloblastoma: a benign tumor. The IAN was resected with the tumor. He received bilateral IAN reconstructions using Avance Nerve Grafts and Axoguard Nerve Connectors. Pablo has since achieved functional sensory recovery and is back to face-to-face meetings with clients and enjoying his family's social life.

ordering information



 **avance®**
nerve graft



 **axoguard**
nerve connector®



 **axoguard**
nerve protector®



Product name

Code

Dimensions

Approximate size

Avance Nerve Graft

311270

3–4 mm × 70 mm

Axoguard Nerve Connector

AGX415

4 mm × 15 mm

Axoguard Nerve Protector

AGO540

5 mm × 40 mm

Note: Typical sizes for IAN reconstruction. Additional sizes available upon request.

references

1. Miloro M, Markiewicz M. Virtual surgical planning for inferior alveolar nerve reconstruction. *J Oral Maxillofac Surg.* 2017;75:2442-2448.
2. Salomon D, et al. Outcomes of immediate allograft reconstruction of long span defects of the inferior alveolar nerve. *J Oral Maxillofac Surg.* 2016;0278-2391/16/30251-8.
3. Zuniga J. Sensory outcomes after reconstruction of lingual and inferior alveolar nerve discontinuities using processed nerve allograft—a case series. *J Oral Maxillofac Surg.* 2015;73:734-744.
4. Zuniga J, et al. A case-and-control, multisite, positive controlled, prospective study of the safety and effectiveness of immediate inferior alveolar nerve processed nerve allograft reconstruction with ablation of the mandible for benign pathology. *J Oral Maxillofac Surg.* 2017;75(12):2669-2681.
5. Çakır M, et al. Effects of inferior alveolar nerve neurosensory deficits on quality of life. *Niger J Clin Pract.* 2018;21:206-211.
6. Parameters of care: AAOMS clinical practice guidelines for oral and maxillofacial surgery (AAOMS ParCare). 6th ed. 2017:e207. 7. Ducic I, Yoon J. Reconstructive options for inferior alveolar and lingual nerve injuries after dental and oral surgery. *Annals of Plastic Surgery.* 2019;82(6):653-660.

indications and trademark disclaimers

Avance Nerve Graft

REGULATORY CLASSIFICATION: Avance Nerve Graft is a human tissue for transplantation. Avance Nerve Graft is processed and distributed in accordance with U.S. FDA requirements for human cellular and tissue-based products (HCT/P) under 21 CFR Part 1271 regulations, U.S. State regulations and the guidelines of the American Association of Tissue Banks (AATB). Additionally, international regulations are followed as appropriate. This graft is to be dispensed only by or on the order of a licensed physician.

INDICATIONS FOR USE: Avance Nerve Graft is a 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.

Axogen Corporation

Phone 888.Axogen1 (888.296.4361)
Fax 386.462.6801
customer@axogeninc.com
www.axogeninc.com

© 2021 Axogen Corporation.

The stylized "a" logo is a trademark of Axogen Corporation. Axoguard Nerve Connector and Axoguard Nerve Protector are manufactured in the United States by Cook Biotech Incorporated, West Lafayette, Indiana. MKTG-0095 R01

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.

revolutionizing the science of nerve repair™

