#### **UNITED STATES** SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

#### Form 8-K

**Current Report** Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): January 9, 2023

#### **AXOGEN, INC.**

(Exact Name of Registrant as Specified in Charter)

Minnesota (State or Other Jurisdiction of Incorporation or Organization)

001-36046 (Commission File Number)

41-1301878 (I.R.S. Employer Identification No.)

13631 Progress Boulevard, Suite 400 Alachua, Florida (Address of principal executive offices)

32615 (Zip Code)

(386) 462-6800

(Registrant's telephone number, including area code)

N/A

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

Π Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Ο Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Ο Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Ο Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of exchange on which registered
Common Stock, \$0.01 par value	AXGN	The Nasdaq Stock Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company []

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

#### Item 2.02 Results of Operations and Financial Condition

On January 9, 2023, Axogen, Inc. (the "Company") issued a press release announcing its estimated fourth quarter and full year 2022 revenue. A copy of the press release is furnished as Exhibit 99.1.

The information furnished pursuant to Item 2.02 of this Current Report on Form 8-K, including Exhibit 99.1 hereto, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liability of such section, nor shall it be incorporated by reference into future filings by the Company under the Securities Act of 1933, as amended (the "Securities Act"), or under the Exchange Act, unless the Company expressly sets forth in such future filing that such information is to be considered "filed" or incorporated by reference therein.

#### Item 7.01 Regulation FD Disclosure.

On January 9, 2023, the Company also posted an updated corporate presentation to its website at https://ir.axogeninc.com/news-events. The Company may use the investor presentation from time to time in conversation with analysts, investors and others. A copy of the investor update is furnished as Exhibit 99.2.

The information in this Item 7.01, including Exhibit 99.2, is being furnished and shall not be deemed to be "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section and shall not be deemed incorporated by reference into any filing under the Securities Act or Exchange Act, except as shall be expressly set forth by specific reference in such filing.

#### Item 9.01. Financial Statements and Exhibits

#### (d) Exhibits

Exhibit No.	Description
99.1	Axogen Inc. Press Release, dated January 9, 2023
99.2	Axogen Inc. Corporate Presentation, dated January 9, 2023
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

#### SIGNATURES

Pursuant to the requirements of the Exchange Act, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

AXOGEN, INC.

Dated: January 9, 2023

By: Bradley L. Ottinger

Bradley L. Ottinger General Counsel and Chief Compliance Officer



### Axogen Reports Preliminary Unaudited Revenue for Fourth Quarter and Full-Year 2022

ALACHUA and TAMPA, FL – January 9, 2023 – Axogen, Inc. (NASDAQ: AXGN), a global leader in developing and marketing innovative surgical solutions for peripheral nerve injuries, today announced preliminary unaudited fourth quarter and full-year 2022 revenue.

### Preliminary Unaudited Fourth Quarter and Year-End Performance and Business Highlights

- Fourth quarter revenue is expected to be approximately \$36.1 million, a 16% increase compared to fourth-quarter 2021 excluding the impact of Avive revenue in 2021.\*
- Full-year 2022 revenue is expected to be approximately \$138.5 million, a 12% increase compared to 2021 excluding the impact of Avive revenue in 2021.\*
- Ended the fourth quarter with 115 direct sales representatives compared to 111 at the end of the third quarter and 115 as of December 31, 2021.
- Core Accounts totaled 332, an increase of 1% sequentially, and 18% over an adjusted\* prior year level of 282. Revenue from Core Accounts continued to represent approximately 60% of total revenue.
- Active Accounts totaled 968, up 2% sequentially, and 3% over an adjusted\* prior year level of 941. Revenue from the top 10% of Active Accounts represents approximately 35% of total revenue.
- In 2022 we surpassed 75,000 Avance® Nerve Graft implants since launch.
- The preliminary unaudited balance of all cash and cash equivalents and investments on December 31, 2022, is anticipated to be approximately \$55.0 million, as compared to a balance of \$59.4 million on September 30, 2022. The net change includes capital expenditures of approximately \$5.3 million related to the construction of the company's new processing facility in Dayton, OH, and approximately \$0.9 million net operating cash flow.
- On January 5, 2023, we announced the independent publication of comparative nerve gap repair meta-analysis of peer-reviewed studies of allograft, autograft, and conduits including over 1,500 nerve repairs across 35 studies which we believe provides the strongest clinical and economic evidence to-date of the performance of Avance Nerve Graft across all gap lengths and nerve types.

"We are pleased with our performance in the quarter, capping off a solid year of execution as hospitals navigate on-going staffing and broader economic challenges," commented Karen Zaderej, chairman, CEO, and president of Axogen, Inc. "The recently published nerve meta-analysis along with the previous release of RECON top line results continue to demonstrate the strength of our clinical portfolio

which we believe is foundational to surgeon adoption and growth. We look forward to 2023 as we transition to our new processing facility in Dayton, OH in the first half of 2023, submit the BLA for Avance Nerve Graft in the second half of the year and we continue to innovate and change the standard of care for patients with nerve injuries."

#### Updated 2022 Financial Guidance

Management now expects 2022 revenue to be approximately \$138.5 million and continues to expect full-year 2022 gross margin above 80%. Management will address the Company's full-year 2023 outlook on its fourth quarter 2022 earnings call on March 14, 2023.

#### Presentation and investor meetings scheduled this week

Karen Zaderej will present at the JP Morgan 41st Annual Healthcare Conference in San Francisco Thursday, January 12, 2023 at 9:45 a.m. PST (12:45 p.m. EST). The presentation will be webcast live and accessible through the Investors page at <u>www.axogeninc.com</u>.

Members of the Axogen senior management team will also participate in the Solebury Trout Management Access Event January 9-11, 2023 in San Francisco.

The results disclosed in this press release are preliminary and unaudited. The Company expects to report full, audited results for the fourth quarter and year ended December 31, 2022 on March 14, 2023. The company's updated corporate presentation is available through the investors page on <a href="http://www.axogeninc.com">www.axogeninc.com</a>.

\* The Company voluntarily suspended market availability of Avive<sup>®</sup> Soft Tissue Membrane on June 1, 2021. Fourth quarter 2021 revenue includes \$0.5 million from the reversal of a sales return reserve for Avive recorded in the second quarter of 2021. Avive Soft Tissue Membrane revenue totaled approximately \$4.1 million for the full year 2021. See table below for reconciliation of revenue as reported to revenue excluding the impact of Avive. For a reconciliation of adjusted Core and Active Account numbers, please see our Corporate Presentation on the investors page on www.axogeninc.com.

	For the three months ended			For the full year ended		
Estimated Revenue	2022	2021	growth	2022	2021	growth
As reported	\$36.1	\$31.5	14%	\$138.5	\$127.3	9%
Avive	\$0.0	\$0.5		\$0.0	\$4.1	
Excluding Avive	\$36.1	\$31.0	16%	\$138.5	\$123.2	12%

#### About Axogen

Axogen (AXGN) is the leading company focused specifically on the science, development, and

passionate about helping to restore peripheral nerve function and quality of life to patients with physical damage or transection to peripheral nerves by providing innovative, clinically proven, and economically effective repair solutions for surgeons and health care providers. Peripheral nerves provide the pathways for both motor and sensory signals throughout the body. Every day, people suffer traumatic injuries or undergo surgical procedures that impact the function of their peripheral nerves. Physical damage to a peripheral nerve, or the inability to properly reconnect peripheral nerves, can result in the loss of muscle or organ function, the loss of sensory feeling, or the initiation of pain.

Axogen's platform for peripheral nerve repair features a comprehensive portfolio of products, including Avance<sup>®</sup> Nerve Graft, a biologically active off-the-shelf processed human nerve allograft for bridging severed peripheral nerves without the comorbidities associated with a second surgical site; Axoguard Nerve Connector<sup>®</sup>, a porcine submucosa extracellular matrix (ECM) coaptation aid for tensionless repair of severed peripheral nerves; Axoguard Nerve Protector<sup>®</sup>, a porcine submucosa ECM product used to wrap and protect damaged peripheral nerves and reinforce the nerve reconstruction while preventing soft tissue attachments; and Axoguard Nerve Cap<sup>®</sup>, a porcine submucosa ECM product used to protect a peripheral nerve end and separate the nerve from the surrounding environment to reduce the development of symptomatic or painful neuroma. The Axogen portfolio of products is available in the United States, Canada, Germany, the United Kingdom, Spain, South Korea, and several other countries.

#### **Cautionary Statements Concerning Forward-Looking Statements**

This press release contains "forward-looking" statements as defined in the Private Securities Litigation Reform Act of 1995. These statements are based on management's current expectations or predictions of future conditions, events, or results based on various assumptions and management's estimates of trends and economic factors in the markets in which we are active, as well as our business plans. Words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates," "projects," "forecasts," "continue," "may," "should," "will," "goals," and variations of such words and similar expressions are intended to identify such forward-looking statements. Forward-looking statements include (1) our preliminary, unaudited fourth quarter and full year 2022 financial results, (2) timing of our transitioning to our new processing facility in Dayton, OH in the first half of 2023, and (3) timing of our submission of our BLA for Avance Nerve Graft in the second half of the year. Actual results or events could differ materially from those described in any forward-looking statements as a result of various factors, including, without limitation, statements related to the impact of COVID-19 on our business, including but not limited to global supply chain issues, hospital staffing challenges and its impact on our business, recessionary pressures, inflation, interest rate increases, market awareness and adoption of our products, anticipated capital requirements, including the potential of future financings, data validation, expected clinical study enrollment, timing and outcomes, our visibility at and sponsorship of conferences and our educational events, regulatory process and approvals, legislative, regulatory, political, geopolitical, and economic developments, as well as those risk factors described under Part I, Item 1A., "Risk Factors," of our Annual Report on Form 10-K for the most recently ended fiscal year. Forward-looking statements are not a guarantee of future performance, and actual results may differ materially from those projected. The forward-looking statements are representative only as of the date they are made and, except as required by applicable law, we assume no responsibility to publicly

update or revise any forward-looking statements.

Contact: Axogen, Inc. Ed Joyce, Director, Investor Relations ejoyce@axogeninc.com

# Corporate presentation

January 9, 2023

nasdaq: axgn





### Safe harbor statement

This presentation contains "forward-looking" statements as defined in the Private Securities Litigation Reform Act of 1995. These statements are based on management's current expectations or predictions of future conditions, events, or results based on various assumptions and management's estimates of trends and economic factors in the markets in which we are active, as well as our business plans. Words such as "expects," "anticipates," "intends," "plans," "believes." "seeks," "estimates," "projects," "forecasts," "continue," "may," "should," "will," "goals," and variations of such words and similar expressions are intended to identify such forward-looking statements. Forward-looking statements include (1) foundation for long-term sustainable growth, (2) TAM for the targeted nerve markets, (3) our preliminary, unaudited fourth quarter and full year 2022 financial results, (4) our preliminary topline results from Recon study, (5) timing of our submission of our BLA for Avance<sup>®</sup> Nerve Graft in the second half of the year, and (6) timing of our transitioning to our new processing facility in Dayton, OH in the first half of 2023. Actual results or events could differ materially from those described in any forwardlooking statements as a result of various factors, including,

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without limitation, statements related to the impact of COVID-19 on our business, including but not limited to global supply chain issues, hospital staffing challenges and its impact on our business, recessionary pressures, inflation, interest rate increases, market awareness and adoption of our products, anticipated capital requirements, including the potential of future financings, data validation, expected clinical study enrollment, timing and outcomes, our visibility at and sponsorship of conferences and our educational events, regulatory process and approvals, legislative, regulatory, political, geopolitical, and economic developments, as well as those risk factors described under Part I, Item 1A., "Risk Factors," of our Annual Report on Form 10-K for the most recently ended fiscal year. Forward-looking statements are not a guarantee of future performance, and actual results may differ materially from those projected. The forward-looking statements are representative only as of the date they are made and, except as required by applicable law, we assume no responsibility to publicly update or revise any forwardlooking statements.

# The Axogen platform for nerve repair



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# The function of nerves

Nerves are like wires



- Transfer signals across a network
- · If cut, data cannot be transferred
- · If crushed, short circuits and data corruption may occur

The peripheral nervous system is a vast network from every organ to and from the brain

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- Sensory
- Motor
- Autonomic



### 

### Nerves can be injured in three ways:

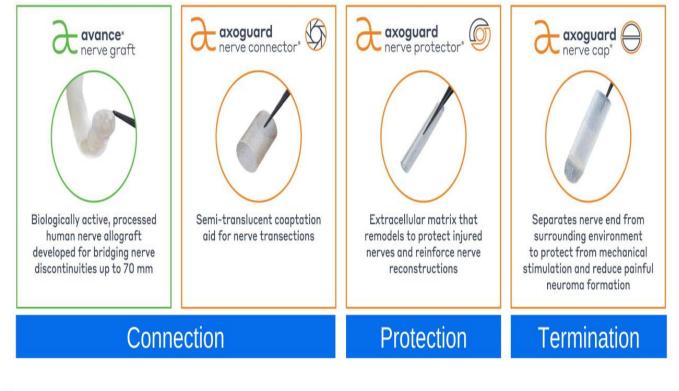
1. Transection

Traumatic nerve injuries e.g., motor vehicle accidents, power tool accidents, battlefield injuries, gunshot wounds, surgical injuries, neuroma-incontinuity

- 2. Compression Carpal, cubital, tarsal tunnel revisions, blunt trauma, previous surgeries
- 3. Stump Neuroma Amputations, mastectomies, previous surgeries

# A comprehensive platform for addressing nerve injuries

one company for all your surgical nerve repair solutions





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# Axogen is the preeminent nerve repair company with a foundation for long-term sustainable growth

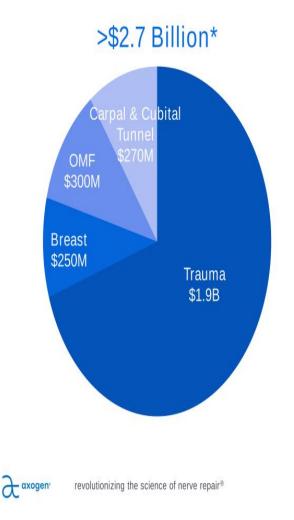
- Exclusively focused on peripheral nerve repair with a differentiated platform
- 10+ years of demonstrated clinical outcome consistency
- Featured in 215 peer-reviewed clinical publications
- Over 75,000 Avance® Nerve Grafts implanted
- Significant barriers to competitive entry

- FDA granted Avance Regenerative Medicine Advanced Therapy (RMAT) designation
- Commercial and surgeon education capabilities
- Solid balance sheet provides resources to execute business plan
- Experienced management team with strong track record of success



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# Targeted nerve markets (U.S.)



U.S. potential procedural estimates >900,000\*\*

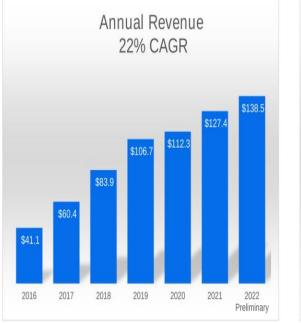
- Trauma: > 700,000
- Carpal Tunnel Revisions & Cubital Tunnel: 130,000
- Oral Maxillofacial (OMF): 56,000
- Breast Neurotization Procedures: 15,000

\*\$2.7B estimate does not include pain market

\*\*Referenced papers were used to derive specific assumptions in the procedure potential estimates. Papers used include both U.S. and OUS databases and studies. See Appendix for data sources.

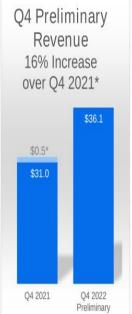
### Delivering strong, consistent revenue growth & gross margins

### U.S. \$ in millions



83.3% Gross Margin for the quarter ended September 30, 2022

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### Operational Highlights\*\*

- Q4 Preliminary revenue growth of 16% over Q4 2021.\*
- Full-year 2022 revenue is expected to be approximately \$138.5 million, a 12% increase compared to 2021.\*
- Total Core Accounts increased 1% sequentially to 332 and increased 18% over an adjusted prior year level of 282.\*
- Total Active Accounts of 968 increased 2% sequentially and increased 3% over an adjusted prior year level of 941.\*
- \* Axogen voluntarily suspended market availability of Avive® Soft Tissue Membrane on June 1, 2021. Fourth quarter 2021 revenue includes \$0.5 million from the reversal of a sales return reserve for Avive, recorded in the second quarter of 2021. Avive revenue totaled approximately \$4.1 million and \$5.5 million for the years ended 2021 and 2020 respectively. See slide 38 in this deck for reconciliation of active and core accounts.
- \*\* The results disclosed in this press release are preliminary and unaudited. The Company expects to report full, audited results for the fourth quarter and year ended December 31, 2022 on March 14, 2023.

## Guidance

2022 Annual Financial Guidance – Updated 1/9/2023

- Full-year 2022 revenue is expected to be approximately \$138.5 million, compared to guidance range of \$137.5 million to \$140 million.
  - Represents approximately 12% growth over 2021 revenue excluding the impact of \$4.1 million of Avive revenue in 2021.
- Full-year 2022 gross margin is expected to remain above 80%.



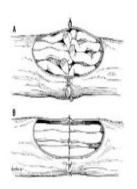
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## Traditional TRANSECTION repair options are suboptimal

### SUTURE

Direct suture repair of no-gap injuries

- · Common repair method
- May result in tension to the repair leading to ischemia
- Concentrates sutures at the coaptation site



### AUTOGRAFT

Traditional method despite several disadvantages

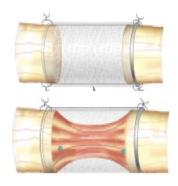
- Secondary surgery
- Loss of function and sensation at harvest site
- 27% complication rate including infection, wound healing and chronic pain <sup>19</sup>
- Limited availability of graft length and diameter



### SYNTHETIC CONDUITS

Convenient off the shelf option; limited efficacy & use

- Provides only gross direction for regrowth
- · Limited to small gaps
- 34%-57% failure rate >5mm gaps<sup>20, 21</sup>
- Semi-rigid and opaque material limits
   use and visualization
- Repair reliant on fibrin clot formation

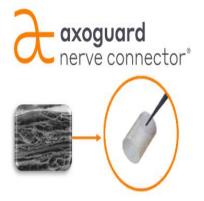




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# Axogen solutions for TRANSECTION repair





Processed human nerve allograft for bridging nerve gaps Clinically studied off-the-shelf alternative

- A biologically active nerve therapy with more than ten years of comprehensive clinical evidence
- 82-84% meaningful recovery in sensory, mixed and motor nerve gaps in multi-center study<sup>22</sup>
- Eliminates need for an additional surgical site and risks of donor nerve harvest<sup>22</sup>
- May reduce OR time

Structural support for regenerating axons

- Cleansed and decellularized extracellular matrix (ECM)
- Offers the benefits of human peripheral nerve micro-architecture and handling Revascularizes and remodels into patient's own tissue similar to autologous nerve<sup>23</sup>
   16 size options in a variety of lengths (up to 70mm) and diameters (up to 5mm)

Only minimally processed porcine ECM for connector-assisted coaptation Alternative to direct suture repair

• Reduces the risk of forced fascicular mismatch<sup>24, 25</sup>

Alleviates tension at critical zone of regeneration

- Disperses tension across repair site<sup>26</sup>
- Moves suture inflammation away from coaptation face<sup>27, 28</sup>

Remodels into vascularized patient tissue<sup>28, 29, 30, 31, 32</sup>

14 size options in lengths of 10mm and 15mm, and diameters up to 7mm



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### Traditional COMPRESSION repair options are suboptimal

### VEIN WRAPPING

Autologous vein

- Barrier to attachment to surrounding tissue
- Requires extra time and skill to perform spiral wrapping technique
- Second surgery site



### HYPOTHENAR FAT PAD

Autologous vascularized flap

- Barrier to attachment to surrounding tissue
- Only wraps part of the nerve circumference
- Increases procedure time

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### COLLAGEN WRAPS

Off-the-shelf

- · Semi-rigid material limits use
- Degrades over time and does not provide a lasting barrier to soft tissue attachment





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# Axogen solution for COMPRESSION repair



Minimally processed porcine extracellular matrix for wrapping and protecting injured peripheral nerve

Protects repair site from surrounding tissue

- Processing results in an implant that works with the body's natural healing process<sup>33</sup>
- Minimizes soft tissue attachments<sup>34</sup>

Allows nerve gliding

- Minimizes risk of entrapment<sup>34</sup>
- Creates a barrier between repair and surrounding tissue bed<sup>34</sup>
- ECM revascularizes and remodels into patient's own tissue<sup>29,35</sup>



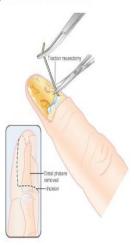
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# Traditional STUMP NEUROMA options are suboptimal

### TRACTION NEURECTOMY

Nerve placed in traction and cut to allow for retraction

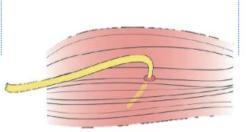
- Simply resecting the nerve results in subsequent neuroma formation and risk of secondary surgery
- Causes traction injury
- High risk of recurrence<sup>36</sup>



### **BURYING IN MUSCLE/BONE**

Traditional method of neurectomy and neuromyodesis

- Simply resecting the nerve results in subsequent neuroma formation and risk of secondary surgery
- Pain due to muscular contraction or localized pressure
- Larger surgical dissection
- Only 33-40% of patients were satisfied with treatment after burial into bone or muscle<sup>37, 38, 39</sup>



### INJECTIONS

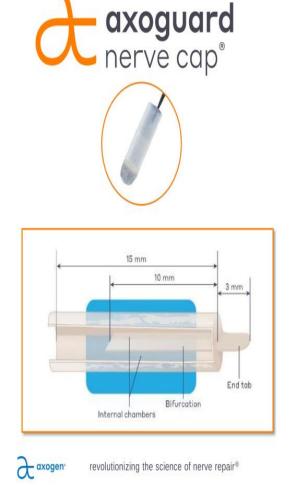
Pharmacologic intervention, typically alcohol or steroids<sup>40, 41, 42, 43, 44, 45</sup>

- Chemical injections are only successful 40% of the time <sup>43, 44</sup>
- Temporary solution that has a reduced benefit over time
- · May cause considerable side effects



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# Axogen solution for STUMP NEUROMA



Proprietary small intestine submucosa (SIS) matrix designed to separate the nerve end from the surrounding environment to protect it from mechanical stimulation and reduce painful neuroma formation.

Protects and isolates

- Reduces the development of symptomatic or painful neuroma formation
- Provides a barrier from neurotrophic factors and mechanical stimulation

SIS Material allows for vascularization and gradual remodeling (as shown in animal studies)<sup>46, 47</sup>

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
- Available in a variety of diameters

# Avance IP and regulatory barriers to competitive entry

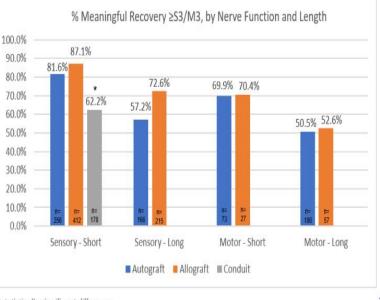
Avance nerve graft is processed and distributed in accordance with US FDA requirements for Human Cellular and	IP protection to 2	023 and beyond		
	Avance nerve graft Issued U.S. Patent	<b>``</b>		
Tissue-based Products (HCT/P)	6,972,168         9,690,973           7,402,319         9,996,722           7,732,200         10,311,22           7,851,447         10,441,66           8,758,794         10,783,33           8,986,733         10,813,66           9,402,868         11,147,55           9,572,911         11,156,55           9,597,429         11,513,00           11,523,66	<ul> <li>Discretion from FDA</li> <li>allowing continued sales</li> <li>under controls applicable to</li> <li>HCT/Ps with agreed</li> <li>transition plan to regulation</li> <li>as a Biological Product</li> <li>under a Biologic License</li> <li>Application (BLA) if</li> <li>approved. Axogen expects</li> <li>to file for the BLA in the</li> </ul>	Protection from potential bid years data exclusivity from Avance expected to be the reference product for the category of processed nerve allograft	
		competitive processed nerve allograft, we believe, would need to complete clinical testing and obtain BLA approval prior to clinical release.		

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# Independent Publication of Nerve Meta Analysis Provides the Strongest Clinical and Economic Evidence To-Date of the Performance of Avance® Nerve Graft Across All Gap Lengths and Nerve Types

"Lans et al., A systematic review and meta-analysis of nerve gap repair: Comparative effectiveness of allografts, autografts, and conduits" – Journal of Plastic and Reconstructive Surgery

- Analyzed 35 peer-reviewed studies with 711 allograft, 670 autograft, and 178 conduit repairs, over four decades.
- There were no statistical differences between allograft and autograft outcomes over all gap lengths for both sensory and motor nerve repairs.
- Allograft and autograft repairs delivered significantly better rates of meaningful sensory recovery in short gaps as compared to conduit repairs; 87.1% and 81.6% vs. 62.2%, respectively, p<0.05.</li>
- The cost analysis found that allograft does not represent an increased economic burden compared to autograft.



\*statistically significant difference



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**RECON**<sup>SM</sup>: A Multicenter, Prospective, Randomized, Subject & Evaluator Blinded Comparative Study of Nerve Cuffs & Avance Nerve Graft Evaluating Recovery Outcomes for the Repair of Nerve Discontinuities



Safety & efficacy noninferiority comparison of Avance vs conduit

Evaluated upper extremity digital nerve repair for nerve gaps 5-25mm



220 subjects from up to 25 U.S. centers stratified into gap lengths with two-thirds in the 5-14mm group and onethird in the 15-25mm group

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### RECON Study Demographics: Balanced across both groups

	Conduit	Avance	Overall
Subjects, n	108	112	220
Female (%)	28.7%	30.4%	29.5%
Male (%)	71.3%	69.6%	70.5%
Age, years			
Median	39.5	36.0	37.0
Min, Max	18,69	18, 68	18,69
Nerve Injury Gap Length, mm	12.9	13.4	13.1



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### **RECON Study Topline Results**

### **Primary Endpoint Achieved**

- This phase three pivotal study met its primary endpoint for the return of sensory function as measured by static two-point discrimination, and the safety profile was consistent with previously published data.
- The data will support the company's Biologics License Application (BLA) submission in the second half of 2023

Statistical superiority demonstrated at increasing gap lengths

- Avance demonstrated statistical superiority for return of sensory function (measured by static two-point discrimination) as compared to conduits in gaps greater than 12 mm (p-value 0.021).
- ✓ Avance demonstrated statistical superiority for time to recovery of static two-point discrimination as compared to conduits, returning normal sensation\* up to 3 months earlier in gaps greater than 10 mm (p-value 0.037).

The safety profile was consistent with previously published data

 Conduit repairs were observed to have an increased likelihood of persistent and unresolved nerve pain with an incidence of 9 (8%) conduit subjects as compared to 2 (2%) Avance subjects.



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\* Normal Sensation is defined by the Medical Research Council Classification (MRCC) score as S4 or return of static two-point discrimination outcomes of ≤ 6mm.

# Axogen Processing Center (APC)

- Expected transition to our new biologics processing center in the first half of 2023.
- Supports BLA requirements and long-term growth



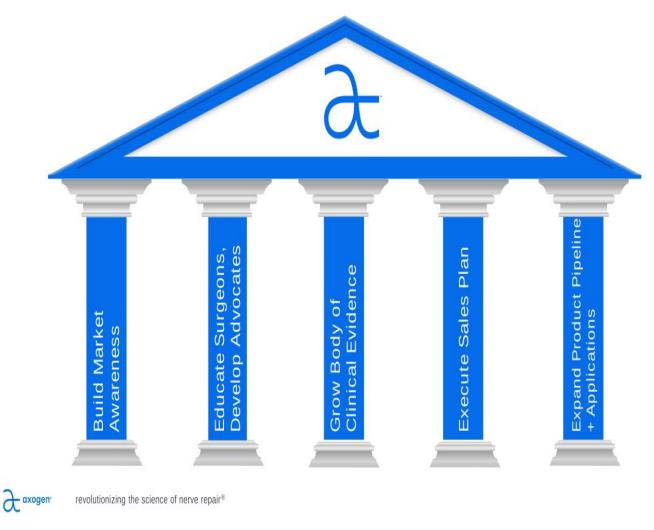


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### Market development strategy



# Focus on building awareness among clinicians and patients



- Continuing clinical conference participation both virtually and in-person as appropriate
- · Ongoing patient ambassador program
- · Garnering positive media attention
- · Growing social media presence

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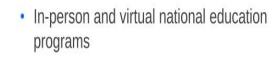
**Build Market** 

axogen'

Awareness



# Emphasis on education



- Customized multimodal learning programs to specific surgeon groups for advanced learning
- Ongoing interactive webinar series covering the principles of nerve repair
- Train more than three-quarters of all hand and micro-surgery fellows annually



77th annual meeting of the ASSH visit Axogen at booth # 815

"Late-Breaking, State-of-the-Art Nerve Reconstruction Data: The How and Why of Implementing this New Data Into Your Clinical Practice" Fridoy, September 30 + 7:00 - 8:00 am

Axogen Innovation Lab Taking you beyond the technology Journey inside the nerve and see how solence is improving peripheral nerve repoir







masterminds of nerve





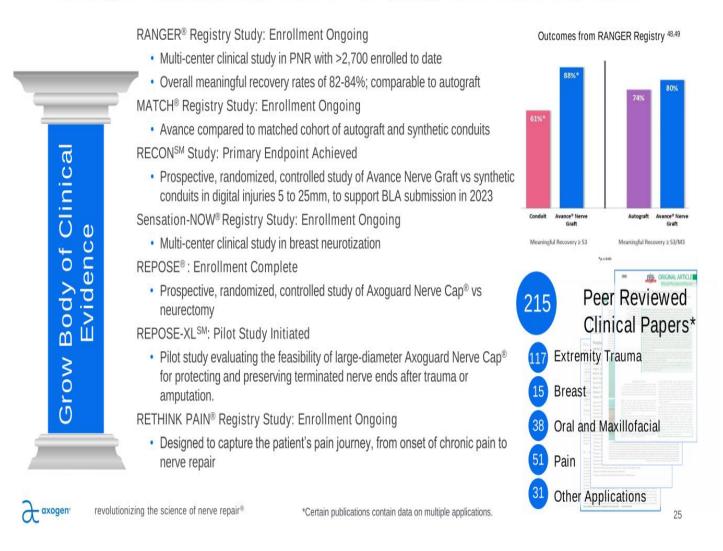
Develop Advocates

Surgeons,

Educate

revolutionizing the science of nerve repair®

## Strong commitment to developing clinical evidence



## Focused sales execution, increasing market penetration

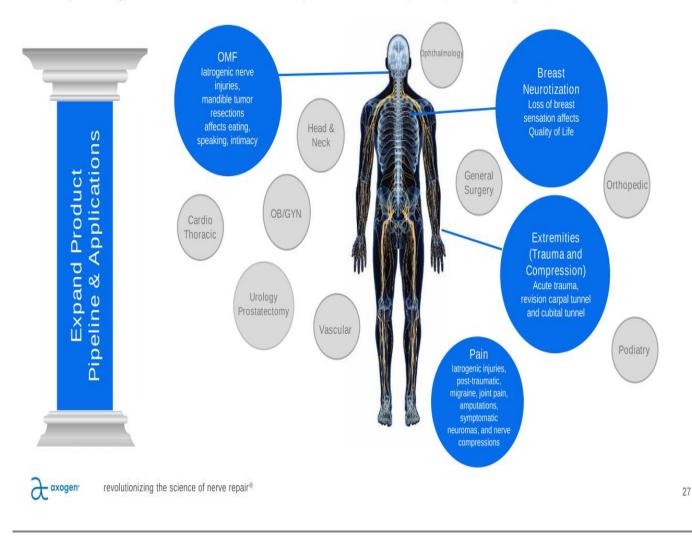


### Broad sales reach

- U.S. direct sales team
  - o 115 direct sales professionals at end of Q4 2022
- Supplemented by independent agencies
- Revenue from direct sales channel represented approximately 90% of total revenue

## Expand the opportunity in nerve repair

Expanding Core Business: Market Expansion & Development; Product Pipeline; International



## Balance sheet and capital structure

Balance Sheet Highlights	December 31, 2022 (Estimated)		
Cash, Cash Equivalents, and Investments	\$55.0 million		
Total Long-term Debt	\$50.0 million*		
Capital Structure (shares)	September 30, 2022		
Common Stock	42,272,223		
Common Stock Options, RSUs, PSUs	ons, RSUs, PSUs 6,998,426		
Common Stock and Common Stock Equivalents	and Common Stock Equivalents 49,270,649		

\* Total long-term debt includes debt proceeds under the terms of the agreement with Oberland Capital, inclusive of unamortized debt discount and deferred financing fees.



### a future we create

2021 environmental, social, and governance report



Committed to our patients, the communities we serve, and our pursuit of advancing the science of nerve repair in ethical and sustainable ways

### People Sustainability Business

Diversity, Equity, and Inclusion - Being the Company where exceptional people want to work

Cybersecurity – Data Privacy, Training, and Policies

**Compliance** - Quality Management System, Regulatory, and Good Manufacturing Practices

**Governance** - Framework for Ethics Codes and Accountability

Environment – Responsible, Sustainable Operations



### **Executive team**



Karen Zaderej Chairman, CEO, & President J&J (Ethicon)



Peter J. Mariani Executive Vice President and Chief Financial Officer Guidant, Lensar, Hansen



Brad Ottinger General Counsel, Chief Compliance Officer MicroPort Orthopedics



Maria Martinez Chief Human Resources Officer HSNi, Bausch + Lomb



Isabelle Billet Chief Strategy & Business Development Officer J&J, C.R. Bard, Cardinal



Angelo Scopelianos, Ph.D. Chief Research & Development Officer J&J



elianos, Erick DeVinney VP, Peripheral Nerve & Science and Clinical Innovation Angiotech, PRA Intl

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Mike Donovan VP, Operations Zimmer



Ivica Ducic, M.D., Ph.D. Medical Director Washington Nerve Institute



Doris Quackenbush Vice President of Sales Convatec

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# Axogen is the preeminent nerve repair company with a foundation for long-term sustainable growth

- Exclusively focused on peripheral nerve repair with a differentiated platform
- 10+ years of demonstrated clinical outcome consistency
- Featured in 215 peer-reviewed clinical publications
- Over 75,000 Avance® Nerve Grafts implanted
- Significant barriers to competitive entry

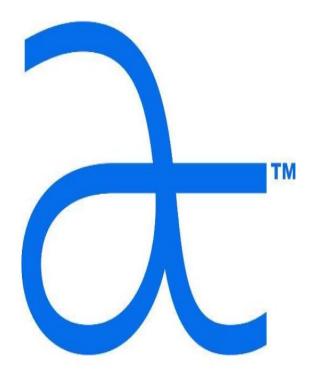
- FDA granted Avance Regenerative Medicine Advanced Therapy (RMAT) designation
- Commercial and surgeon education capabilities
- Solid balance sheet provides resources to execute business plan
- Experienced management team with strong track record of success



revolutionizing the science of nerve repair  $\ensuremath{^{\circledast}}$ 

## Appendix

- Key Clinical Data
- Historical Core and Active Accounts
- CMS outpatient and ASC reimbursement rates
- Total Addressable Market
- Axogen product portfolio and indications for use





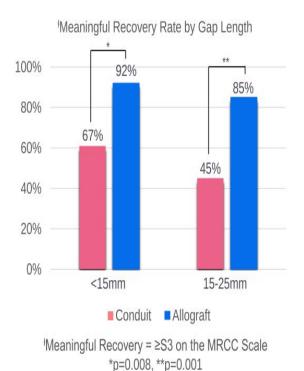
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# Avance Nerve Graft repairs found to be significantly better than conduit repairs

#### "Leversedge et al., A Multicenter Matched Cohort Study of Processed Nerve Allograft and Conduit in Digital Nerve Reconstruction" – Journal of Hand Surgery, September 2020<sup>48</sup>

- Peer-reviewed publication from the MATCH cohort of the RANGER Registry
- Includes outcomes from 110 subjects with 162 nerve injuries; 113 were repaired with Avance Nerve Graft and 49 were repaired with manufactured conduit
- Findings show overall meaningful recovery rate was 88% for Avance Nerve Graft and 61% for conduit (p=0.001) for gaps up to 25mm
- Average static two-point discrimination improved to 9.7mm for Avance Nerve Graft as compared to 12.2mm for conduit (p=0.018)
- Note: lower measurement is reflective of improved discrimination and a better outcome
- As gap length increased, Avance Nerve Graft outcome rates remained consistent while conduit rates declined significantly

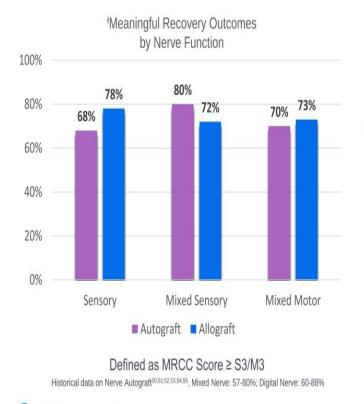




# Study finds Avance Nerve Graft (allograft) clinical outcomes recovery rates comparable to nerve autograft

### "Safa et al., A Propensity Matched Cohort Study on Outcomes from Processed Nerve Allograft and Nerve Autograft in Upper Extremity Nerve Repairs"<sup>49</sup>

(ASSH), Oct 2020



• Study of 156 nerve repairs found meaningful recovery rates for Avance Nerve Graft were comparable to

autograft for both sensory and motor function

Presented at American Society for Surgery of the Hand

According the science of nerve repair®

# Studies find Avance Nerve Graft performed comparably to nerve autograft for both clinical outcomes and facility procedure costs

#### "Styron et al., Nerve Repair Hospital Index Procedure Costs – Allograft vs. Autograft Repair Type"

Presented at the American Society for Surgery of the Hand (ASSH), October  $2020^{56}$ 

- Data from the 2018 Medicare Standard Analytic File<sup>57</sup>
- 340 claims reviewed for autograft and allograft, included inpatient and outpatient procedures
- Found hospital facility procedure cost for Avance Nerve Graft was comparable to that of traditional nerve autograft
- Did not evaluate the potential additional costs associated with managing the autograft donor site and subsequent morbidities

"Styron et al., Comparative Effectiveness Evaluating Allograft, Autograft and Conduit Nerve Repairs: A Systematic Review"

Presented at the American Association for Hand Surgery (AAHS), January  $2021^{58}$ 

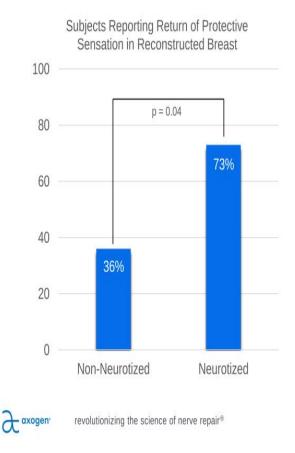
- Systematic review of recovery outcomes from over 35 clinical studies and 1,500 nerve repairs with autograft, allograft and conduit repairs
- Evaluated short and long gaps for both sensory and motor outcomes
- Autograft and allograft outcome rates were found to be statistically better than conduit repairs\*
- Autograft and allograft outcome rates were found to be similar, regardless of gap length or nerve function
- Cost comparison conducted with Medicare data on Hospital Index Procedure Costs for autograft and allograft were found to be similar

\*Conduits only had available data for short gap sensory nerve group



### First publication on breast neurotization outcomes with Avance Nerve Graft demonstrated greater return of protective sensation

"Momeni et al., Flap Neurotization in Breast Reconstruction with Nerve Allografts: 1-year Clinical Outcomes" – Plastic and Reconstructive Microsurgery Global Open, January 2021<sup>59</sup>



- Early outcomes from a single center study, as part of the Sensation-NOW registry
- 36 breast reconstructions that included:

22 breast reconstructions with Resensation®

- 14 standard non-neurotized breast reconstructions
- Return of Protective Sensation (p=0.04)

73% of the Resensation group

36% of the non-neurotized group

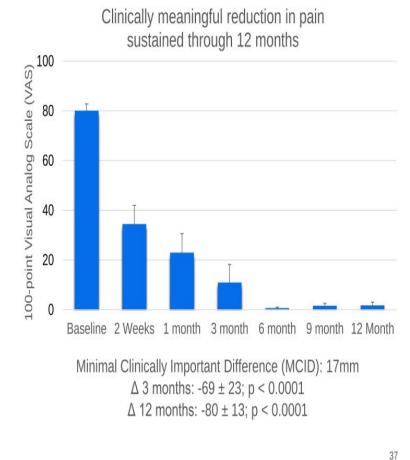
 Neurotization with Avance Nerve Graft resulted in greater return of sensation and return of sensation in more of the breast as compared to standard reconstruction without nerve repair.

# Axogen sponsored REPOSE<sup>SM</sup> pilot study analysis demonstrates clinically significant improvement for subjects with chronic neuropathic pain when using Axoguard Nerve Cap<sup>®</sup> following neurectomy<sup>60</sup>

15-subject, single arm pilot phase evaluating reduction in pain from baseline following surgical excision of the neuroma and placement of the Axoguard Nerve Cap

- Significant & clinically meaningful reduction
  in pain
- Significant and clinically meaningful improvements in Fatigue, Physical Function, Sleep Disturbance, Pain Interference, Pain Intensity, and Pain Behavior as measured by the validated PROMIS<sup>®</sup> measures
- Positive indicators for reduction in pain medication burden, including opioids
- No recurrence of neuroma



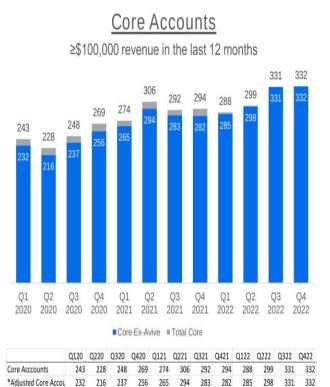


### **Historical Active and Core Accounts**



Active Accounts typically contribute ≈85% of total revenue Top 10% of Active Accounts typically contribute ≈35% of total revenue

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Core Accounts typically contribute ≈60% of total revenue

\* Axogen voluntarily suspended market availability of Avive<sup>®</sup> Soft Tissue Membrane on June 1, 2021. Active and Core Account metrics are Adjusted for past Avive revenue.

### 2023 CMS Final outpatient reimbursement rates - hospital and ASC

Although CMS rates<sup>1</sup> only apply to Medicare cases, which represents a small percentage of traumatic injuries, private payors are often influenced by the analysis and decisions made by CMS

CDT C		6 100	Hospital Outpatient (HOPD)			Ambulatory Surgery Center (ASC)		
CPT Code	Descriptor	C-APC	2022	2023	% Change	2022	2023	% Change
64912	Nerve allograft repair <sup>2</sup>	5432	\$ 5,824	\$6,179	6.10%	\$3,868	\$4,125	6.64%
64910	Conduit or vein allograft repair <sup>2</sup>	5432	\$ 5,824	\$6,179	6.10%	\$3,881	\$3,905	0.62%
64886	Autograft repair (head and neck >4cm) <sup>2</sup>	5432	\$ 5,824	\$6,179	6.10%	\$4,245	\$4,375	3.06%
64890	Autograft repair (hand and foot≤4cm) <sup>6</sup>	5432	\$ 5,824	\$6,179	6.10%	\$3,249	\$2,602	-19.91%
64891	Autograft repair (hand and foot>4cm) <sup>2</sup>	5432	\$ 5,824	\$6,179	6.10%	\$3,249	\$3,383	4.12%
64892	Autograft repair (arm and leg ≤4cm) <sup>2</sup>	5432	\$5,824	\$6,179	6.10%	\$3,718	\$3,383	- <mark>9.01</mark> %
64893	Autograft repair (arm and leg >4cm) <sup>3</sup>	5432	\$5,824	\$6,179	6.10%	\$2,496	\$3,383	35.54%
64897	Autograft repair (arm and leg ≤4cm multiple strands) <sup>3</sup>	5432	\$5,824	\$6,179	6.10%	\$2,496	\$3,660	46.63%
64885 and 64895-96,98	Autograft repair (all other nerve type) <sup>5</sup>	5432	\$5,824	\$6,179	6.10%	\$2,496	\$2,632	5.45%
	Direct Repair (other hand/foot, arm/leg, repair/transpose, facial, low back,) <sup>5</sup>	5432	\$5,824	\$6,179	6.10%	\$2,496	\$2,632	5.45%
64865	Direct Repair of facial nerve <sup>7</sup>	5432	\$5,824	\$6,179	6.10%	\$2,496	\$3,383	35.54%
64831, 61	Direct Repair (digital, brachial plexus/arm) <sup>4</sup>	5431	\$1,793	\$ 1,798	0.28%	\$825	\$854	3.52%
64858	Direct Repair (sciatic) <sup>2</sup>	5431	\$1,793	\$ 1,798	0.28%	\$1,465	\$1,481	1.09%

 Nerve allograft repair CPT 64912, conduit repair CPT 64910, autograft repairs hand/foot >4cm CPT 64891, arm/leg≤4cm CPT code 64892, and head/neck >4cm CPT 64886 remain in C-APC 5432 and direct repair sciatic CPT 64858 remains in C-APC 5431 and all continue to meet ASC device intensive criteria

3. Autograft repair arm and leg >4cm CPT 64893, Autograft repair arm/leg ≤4cm multiple strands CPT 64897, remains in C-APC 5432 and meets ASC device intensive criteria in 2023

4. Direct repair digital and brachial plexus/arm CPT codes 64831 and 64861 remain in C-APC 5431 and do not meet ASC device intensive criteria.

Autograft repair all other nerve type CPT 64885 and 64895-96,98 and Direct repair other hand/foot CPT 64834-36, leg CPT 64840, repair/transpose CPT 64856, arm/leg CPT 64857, low back CPT 64862-64 remain in C-APC 5432 and do not meet ASC device intensive criteria

. Autograft repair hand/foot ≤4cm CPT 64890 remains in C-APC 5432 no longer meets ASC device intensive criteria in 2023

axogen 7. Direct repair of facial nerve CPT 64865 meets ASC device intensive criteria in 2023

Note: Hospital inpatient rates for nerve repair align to DRGs 040, 041, 042 and range from \$11.5k to \$23.7k in the 2023 IPPS Proposed Rule

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### 2023 Center for Medicare and Medicaid Services (CMS): Final Physician Fee Schedule (PFS)

CPT Codes to	Descriptor	Physician Fee Schedule (PFS)			
		2022	2023	% Change	
64912	Nerve allograft repair	\$910	\$886	-2.7%	
64910	Conduit or vein allograft repair	\$790	\$753	-4.7%	
64885 to 64898*	Autograft repair	\$1,031 to \$1,462	\$1,038 to \$1,408	-3.7% to 0.8%	
64831 to 64861*	Direct Repair	\$712 to \$1,567	\$690 to \$1,522	-2.9% to -3.0%	

\*excludes add-on procedure codes



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January 8, 2023

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# Estimated \$2.7B value of market opportunity in existing applications

	Projected Incidence <sup>(a)</sup>	Weighted Average Procedure Value	Estimated Total Addressable Market
Trauma Transection injuries >5mm (b) Other trauma injuries (c)	700,000 100% 203,000 29% 497,000 71%	\$2,715 \$5,515 \$1,570	\$1,900M 100% \$1,120M 59% \$780M 41%
Carpal and Cubital Tunnel	130,000	\$2,100	\$270M
Oral and Maxillo-Facial (OMF)	56,000	\$5,400	\$300M
Breast Reconstruction Neurotization	24,500 flaps (15,000 patients)	\$10,200	\$250M
Totals	>900,000 (potential)		>\$2.7B

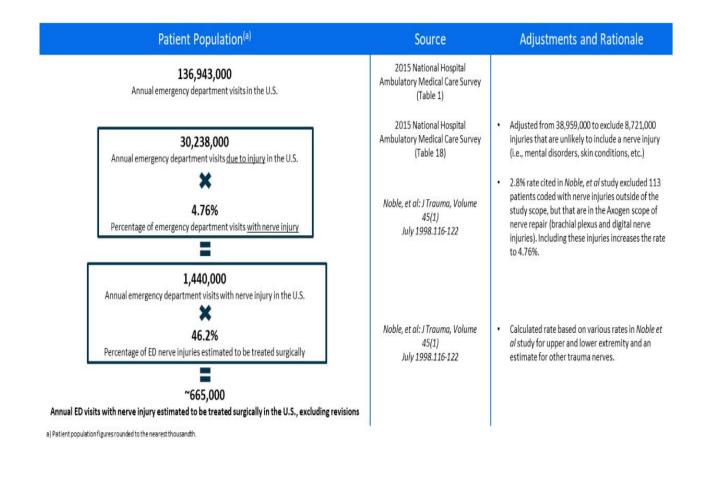
a) Estimated Annual incidence of PNI surgery are figures rounded to the nearest thousandth except for Breast Reconstruction Neurotization (rounded to nearest hundredth).

b) Transection injuries > 5mm assumes a factor of 1.22 nerve repairs per procedures, and utilization of the Axogen portfolio of products, based upon data observed in the RANGER® registry of the transmission of the Axogen portfolio of products, based upon data observed in the RANGER® registry

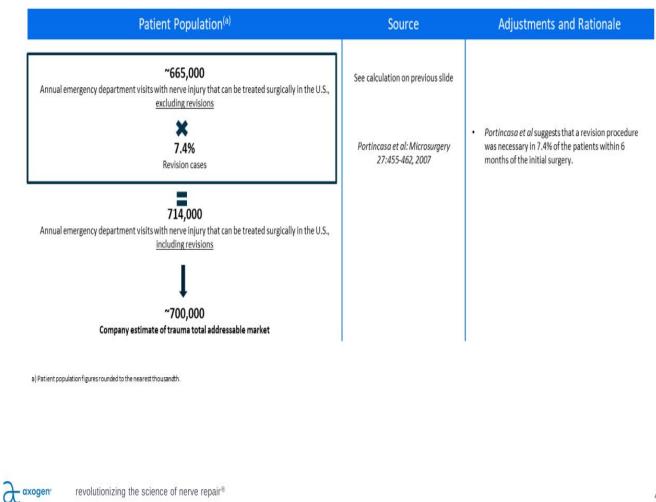
c) Other trauma injuries include transections < 5mm and crush injuries utilizing the Axoguard product line based upon literature and data observed in the RANGER<sup>#</sup> registry

æ axogen

## Estimated Trauma total addressable market



## Trauma total addressable market (continued)



### Axogen comprehensive portfolio of products

#### Avance® Nerve Graft

- Regulatory Classification: Avance Nerve Graft is processed and distributed in accordance with U.S. Food and Drug Administration (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.
- Indication 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.

#### Axoguard Nerve Connector®

- · Regulatory Classifications: Class II Medical Devices 510(k) cleared, CE Marked
- Indications for Use (EU and UK): The Axoguard Nerve Connector is indicated for the repair of peripheral nerve discontinuities with gaps up to 5 mm. The Axoguard Nerve Connector is supplied sterile and is intended for single use.
- Indications for Use (ROW): Axoguard Nerve Connector is intended for the repair of peripheral nerve discontinuities where gap closure can be achieved by flexion of the
  extremity. The Axoguard Nerve Connector is supplied sterile and is intended for single use.
- · Contraindications: This device is derived from a porcine source and should not be used for patients with known sensitivity to porcine material.

#### Axoguard Nerve Protector®

- · Regulatory Classifications: Class II Medical Devices 510(k) cleared, CE Marked
- Indication for Use: Axoguard Nerve Protector is indicated for the repair of peripheral nerve injuries in which there is no gap. The Axoguard Nerve Connector is supplied sterile and is intended for single use.
- · Contraindications: This device is derived from a porcine source and should not be used for patients with known sensitivity to porcine material.

#### Axoguard Nerve Cap®

- · Regulatory Classification: Class II Medical Device 510(k) cleared
- Indications for Use: Axoguard Nerve Cap is indicated to protect a peripheral nerve end and to separate the nerve from the surrounding environment to reduce the development of symptomatic or painful neuroma.
- Contraindications: Axoguard Nerve Cap is derived from a porcine source and should not be used for patients with known sensitivity to porcine derived materials. Axoguard Nerve Cap is contraindicated for use in any patient for 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. Axoguard Nerve Cap should not be implanted directly under the skin. Note: This device is not intended for use in vascular applications.







## Footnotes

Trauma Market Data

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