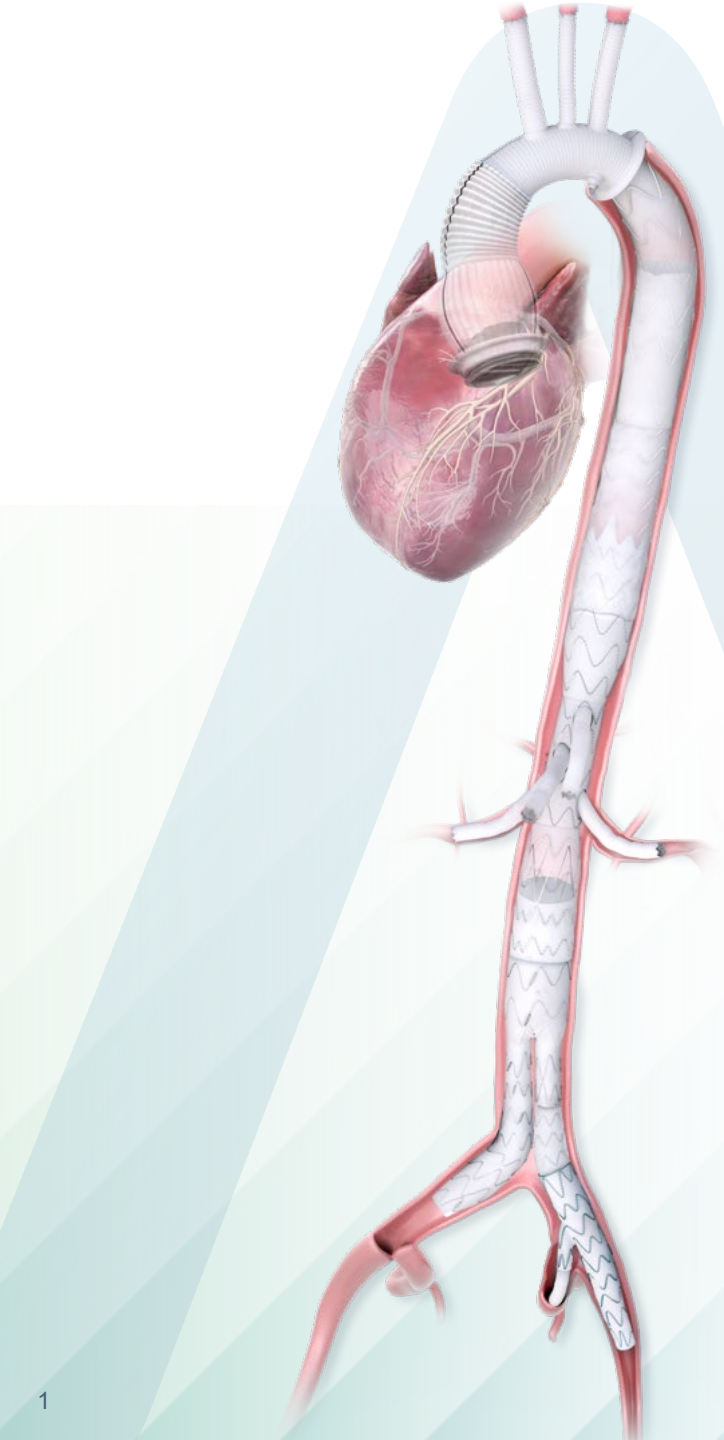


ARTIVION™

Aorta + Innovation + Vision

Corporate Overview

August 2026

FORWARD-LOOKING STATEMENT

Statements made in this presentation that look forward in time or that express management's beliefs, expectations, or forecasts are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements reflect the views of management at the time such statements are made. These statements include our belief that we can continue to drive sustained double digit revenue growth and EBIDTA growth at twice the rate of revenue growth, as a result of our base business, our high growth On-X and stent graft businesses and our leverageable global infrastructure; our estimates of the size of the total addressable markets and growth profiles for our preservation services (human tissue), mechanical heart valves, stents and surgical sealants; our beliefs about our competitive advantages and market opportunities; our estimates of the size of the total addressable markets and growth rates for E-vita OPEN NEO, AMDS, NEXUS, E-nside, Artivex and E-tegra; our estimates relating to the conduct of and timelines for enrollment of our ongoing and planned clinical trials and regulatory approvals, including ARTIZEN and for ARCEVO and TAAA Systems; our beliefs that our products will result in improved patient outcomes; our expectations regarding future constant currency revenue growth in 2026 compared to 2025; our estimates and related expectations regarding increased incremental cash flow by revenue growth and gross margin and adjusted EBITDA margin expansion; and our belief and expectations about our future revenue, year over year growth and growth drivers, earnings, adjusted EBITDA and other financial measures and related information.

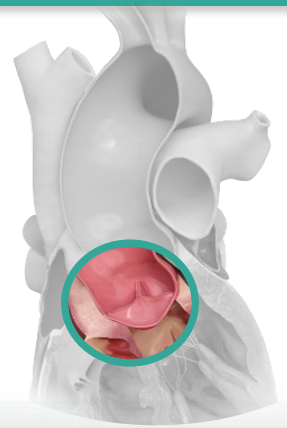
These forward-looking statements are subject to a number of risks, uncertainties, estimates and assumptions that may cause actual results to differ materially from current expectations, including but not limited to the risks and uncertainties relating to our international operations; regulatory developments; clinical trials and regulatory approvals; anticipated benefits of our credit facility and other agreements; and market opportunities and commercialization. These risks and uncertainties include the risk factors detailed in documents that we file with or furnish to the Securities and Exchange Commission, including our Form 10-K for the year ended December 31, 2025 and our Form 10-Q for the quarter ended June 30,2026, as well at our earnings press release filed August 6, 2026. Artivion does not undertake to update its forward-looking statements, whether as a result of new information, future events, or otherwise.

AN AORTIC DISEASE-FOCUSED COMPANY

~$444 MILLION FY25 REVENUE; ~$90 MILLION FY25 EBITDA

ARTIVION

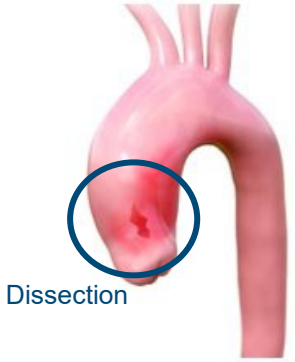
AORTIC VALVE STENOSIS <65 YRS

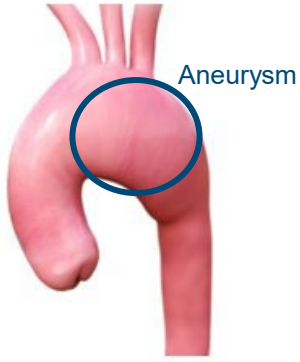


ALLOGRAFT VALVES

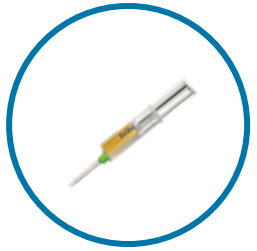
MECHANICAL VALVES

AORTIC DISSECTION & ANEURYSMS





STENT GRAFTS



SURGICAL SEALANT

EXPERIENCED LEADERS

ARTIVION

Decades of combined experience and leadership in the medical device industry

Pat Mackin
Chairman, President & CEO

Previously with
Medtronic

Lance Berry
EVP, COO & CFO

WRIGHT

John Davis
Chief Commercial Officer

CorMatrix Abbott
Medtronic

Jean Holloway
SVP, GC, CCO & CS

BD BARD Boston Scientific
Medtronic

Simona Zannetti
SVP, Clinical Research & Chief Medical Officer

Medtronic

Drew Green
SVP, Regulatory Affairs and Quality

CorMatrix FDA

Jason Asper
SVP & Chief Strategy and Digital Officer

BAIN & COMPANY
WRIGHT

Robert Thomson
VP, Research & Development

GORE

OPPORTUNITY OVERVIEW

ARTIVION

Leveraging the Most Comprehensive Aortic-Focused Portfolio in Healthcare for Durable Revenue Growth and EBITDA Margin Expansion

Highly Differentiated Aorta Focused Products

Technology leader in Aortic Valve replacements for patients <65 & Aortic arch repair – supported by long term clinical data & real-world adoption

Expert Global Sales Force in Focused End Markets

Specialized teams with deep aortic disease expertise covering U.S., EMEA, & APAC

Limited Competition with High Barriers to Entry

Decade-long development and human clinical trial programs + PMA review cycle create high barriers to entry

Deep Product Pipeline

Pathway to new, ~$100M+ U.S. market opportunities every 2 to 3 years for next 10 years

Non-Elective Procedures with Sufficient Reimbursement

Life-saving procedures covered by existing DRGs with sufficient reimbursement levels

Significant EBITDA Margin Expansion Opportunity

- ✓ Gross margin expansion through product mix
- ✓ Leveragable global sales force
- ✓ Scaled global footprint (~1,800 Employees Worldwide)

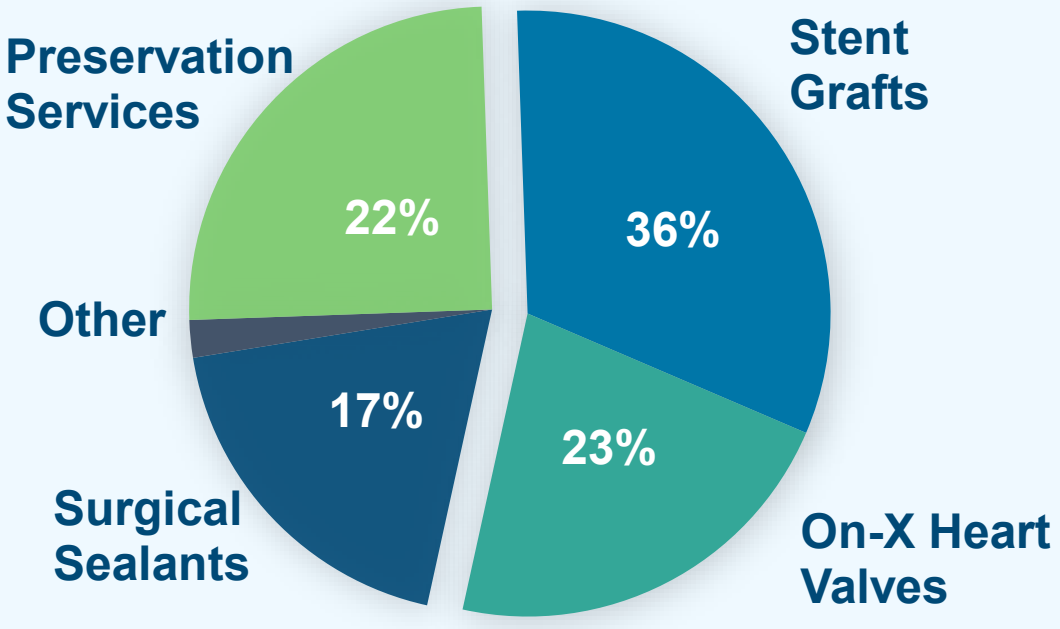
Profitable Business with Growth Upside to be Driven by Multipronged R&D Pipeline of High Margin Products

DRIVING SUSTAINED DOUBLE-DIGIT REVENUE GROWTH & 2x+ EBITDA GROWTH

ARTIVION

Highly Differentiated, Highly Defendable Base Business + **High Growth, High Margin Businesses** + **Gross Margin Expansion + SG&A Leverage** = **Double Digit Revenue Growth**

2x+ EBITDA Growth



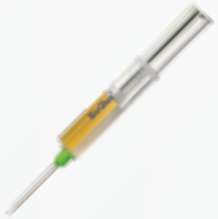
Data for Full Year Ended December 31, 2025

- ✓ Gross margin expansion through mix
- ✓ ~200 direct sales employees globally
- ✓ Global G&A Infrastructure

HIGHLY DIFFERENTIATED, HIGHLY DEFENDABLE BASE BUSINESS

ARTIVION

Strong Positions in Segments with Limited Competition and No Anticipated New Entrants

		Differentiation	2025 Revenue	Global TAM	Market Position/ Share	# Major Competitors	Growth Profile
	**Preservation Services** (CryoValve® SG)	**Only** Decellularized Pulmonary Valve	**$96M**	**$150M**	**#1 / 65%**	**2***	**Mid Single Digit**
	**Surgical Sealant** (BioGlue)	**Only** Cardiac Sealant with Acute Type A Dissection Indication	**$77M**	**$260M**	**#2 / 28%**	**3**	**Mid Single Digit**

*Human Tissue

ON-X AORTIC HEART VALVE
POST APPROVAL STUDY (PAS) VS. PROACT IDE

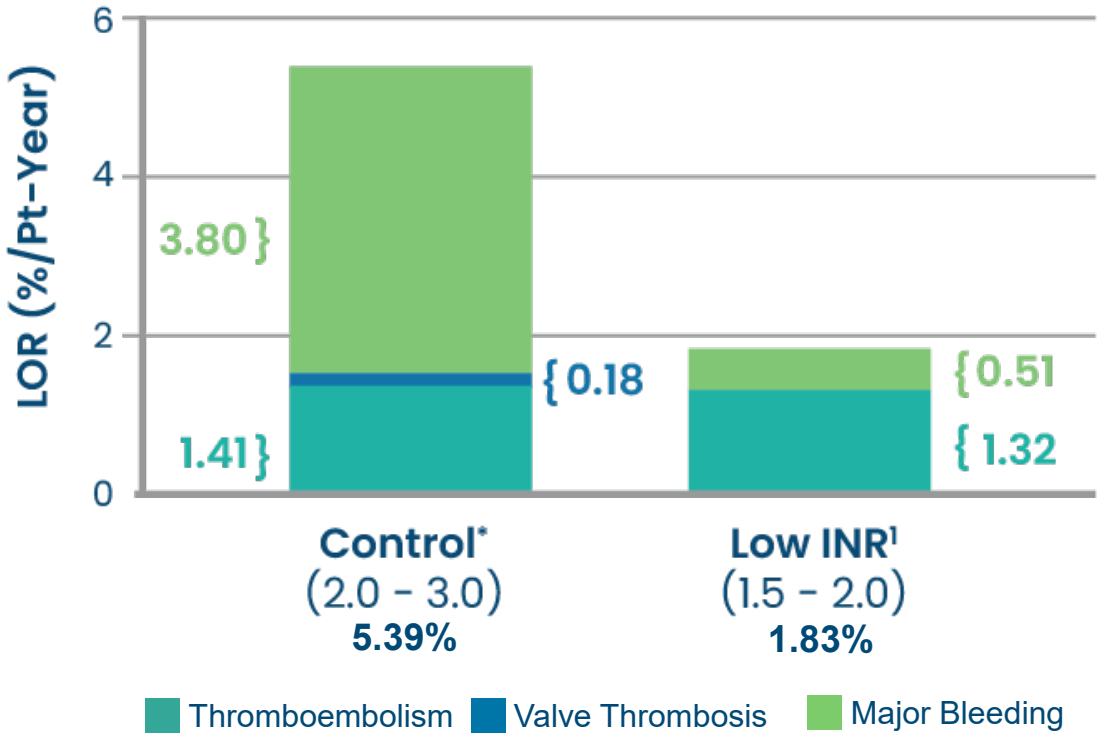
ARTIVION

5-year real-world results demonstrate even better patient outcomes than predicted by the On-X aortic heart valve PROACT IDE study

Only Mechanical Heart Valve Maintained at a Low INR of 1.5 to 2.0

	Post Approval Study (5 Years)[1]	PROACT IDE Study[2]
Reduction in Major Events**	66%	23%
Reduction in Major Bleeding	87%	60%
INR Monitoring Method (% Clinic / % Home)	84% / 16%	0% / 100%

COMPOSITE PRIMARY ENDPOINT
5.39% vs 1.83%, p<0.0001; N=229



**Composite of Thromboembolism, Valve Thrombosis, and Major Bleeding

1. Gerdisch, et al. for the On-X Aortic Post-Approval Study Investigators. (2024, April 27-30) Low-Dose Warfarin with a Novel Mechanical Aortic Valve: Interim Registry Results at 5-Year Follow-up. [Presentation]. AATS. Toronto, Canada. 2. Puskas J, et. al. (2014). Reduced anticoagulation after mechanical aortic valve replacement: Interim results from the Prospective Randomized On-X® Valve Anticoagulation Clinical Trial randomized Food and Drug Administration investigational device exemption trial. J Thorac Cardiovasc Surg, 147(4), 1201-11. *Artivion data on file, weighted average of control groups from FDA Premarket Approval P000037 S030 and IDE trial G050208.

On-X: HIGH GROWTH, HIGH MARGIN, WITH MARKET UPSIDE

ARTIVION

New Recently Published Data Across Three Leading Journals to Drive Potential $100 million Upside to Addressable U.S. Mechanical Heart Valve Market

5-year PAS Data Presented in April 2024[1]

- ✓ Demonstrated 87% Reduction in Major Bleeding
- ✓ Validated On-X as Only Mechanical Heart Valve Safely Maintained at a Low INR of 1.5 to 2.0

October 2025 Article in *The Annals of Thoracic Surgery*[2]

Independent study of over 100K patients showed:

- ✓ Higher 10-year freedom from mortality or reoperation in patients ≤65 years with mechanical AVR (87%) vs with bioprosthetic AVR (69%)

January 2025 Article in *JACC: Journal of The American College of Cardiology*[3]

Independent study of over 100K patients showed:

- ✓ Statistically significant mortality benefit of mechanical vs bioprosthetic AVR at 10yrs in patients ≤60 years

1. Gerdisch MW, et al. Low-Dose Warfarin with a Novel Mechanical Aortic Valve: Interim Registry Results at 5-Year Follow-Up, J Thorac Cardiovasc Surg (2024), doi: https://doi.org/10.1016/j.jtcvs.2024.04.017. 2. Artivion data on file, weighted average of control groups from FDA Premarket Approval P000037 S030 and IDE trial G050208.

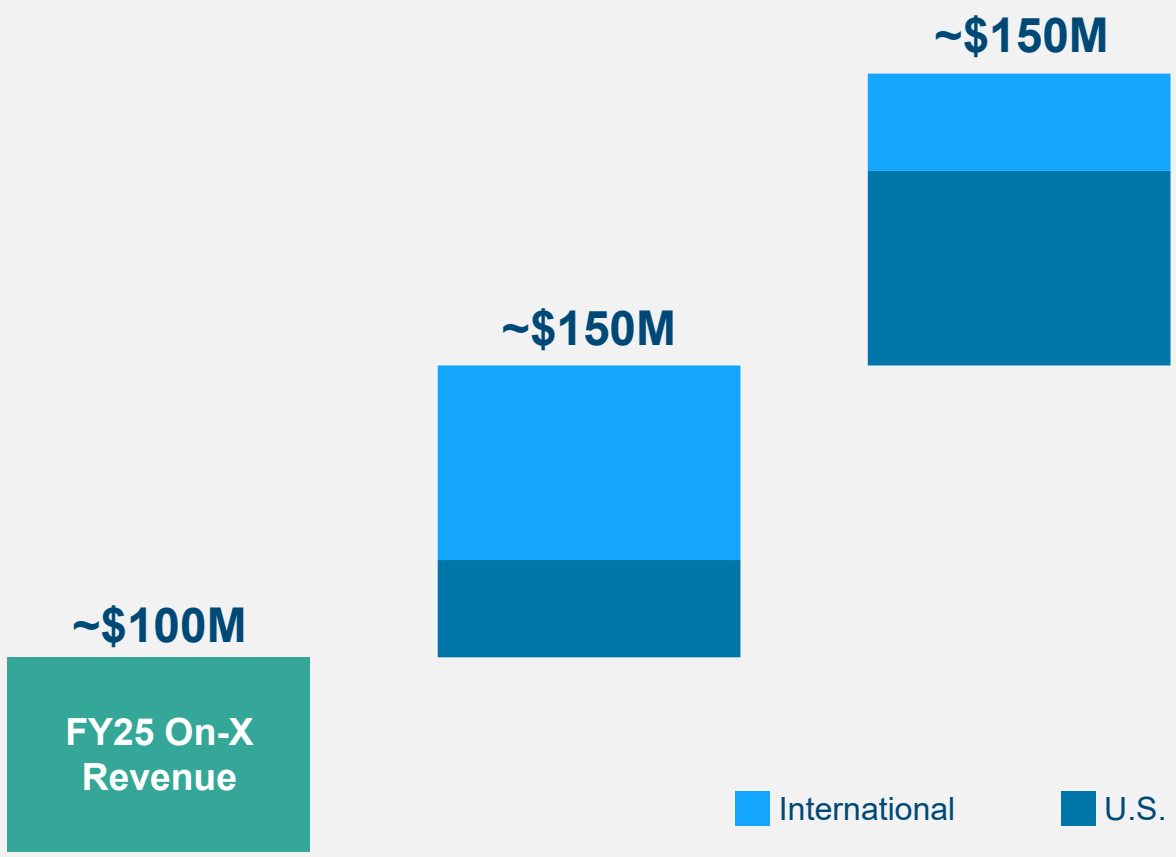
2. Kaneko T, et al. Reoperation in Bioprosthetic vs Mechanical Aortic Valve Replacement in The Society of Thoracic Surgeons Database. The Annals of Thoracic Surgery (2025) doi: https://doi.org/10.1016/j.athoracsur.2025.09.047.

3. Bowdish ME, Mehaffey JH, Chang S-C, O'Gara P, Mack MJ, Goldstone A, Chikwe J, Gillinov AM, Wu C, Fontana G, Bavaria J, Malaisrie C, Kaneko T, Sultan I, von Ballmoos MW, Harrington K, Jacobs J, Thourani V, Szeto W, Sabik J, Habib R, Badhwar V, Bioprosthetic vs. Mechanical Aortic Valve Replacement in Patients 40-75 Years. *Journal of American College of Cardiology (2025) doi: https://doi.org/10.1016/j.jacc.2025.01.013.*

On-X: SIGNIFICANT MARKET OPPORTUNITY FOR PROFITABLE, CASH GENERATING PRODUCT LINE

ARTIVION

Current On-X Business	Remaining **Mechanical Valve** Market Opportunity	**BPV <**65 Market Expansion Opportunity	Total Global On-X Market Opportunity



- ✓ **Only** mechanical heart valve indicated for **Low INR** of 1.5–2.0[1]
- ✓ **87% reduction in bleeding** with less anticoagulation; No increase in thromboembolism or valve thrombosis[1]
- ✓ **Optimal hemodynamics** vs. mechanical and bioprosthetic valves at ≥1 Year[2-7]

21%
GROWTH Y/Y in FY25

1. Gerdisch, et al. for the On-X Aortic Post-Approval Study Investigators. (2024, April 27-30) Low-Dose Warfarin with a Novel Mechanical Aortic Valve: Interim Registry Results at 5-Year Follow-up. [Presentation]. AATS. Toronto, Canada. 2. Puskas J, et. al. (2014). Reduced anticoagulation after mechanical aortic valve replacement: Interim results from the Prospective Randomized On-X® Valve Anticoagulation Clinical Trial randomized Food and Drug Administration investigational device exemption trial. J Thorac Cardiovasc Surg, 147(4), 1201-11. *Artivion data on file, weighted average of control groups from FDA Premarket Approval P000037 S030 and IDE trial G050208.

2-7. 2. On-X Prosthetic Heart Valve Instructions for Use (01012277E); 3. St. Jude Medical Physician's Manual Mechanical Heart Valve; 4. CarboMedics Prosthetic Heart Valve Instructions for Use; 5. Medtronic Open Pivot Heart Valve Instructions for Use.; 6. Edwards Life Sciences Carpentier-Edwards PERIMOUNT Magna Ease Pericardial Aortic Bioprosthesis Model 3300TFX Instructions for Use; 7. Medtronic Mosaic Porcine Bioprosthesis with Cinch Advanced Implant System Instructions for Use.

HIGH GROWTH STENT GRAFT BUSINESS

ARTIVION

- ✓ **Focused on More Complex, Less Competitive Segments**
- ✓ **Artivion Stent Graft Growth: 18% 3-year CAGR[1]**

Advanced Stent Graft Segment

MARKET GROWTH RATE: MID-TEENS

Frozen Elephant Trunk (E-vita™ Open Neo)
$250M Global TAM

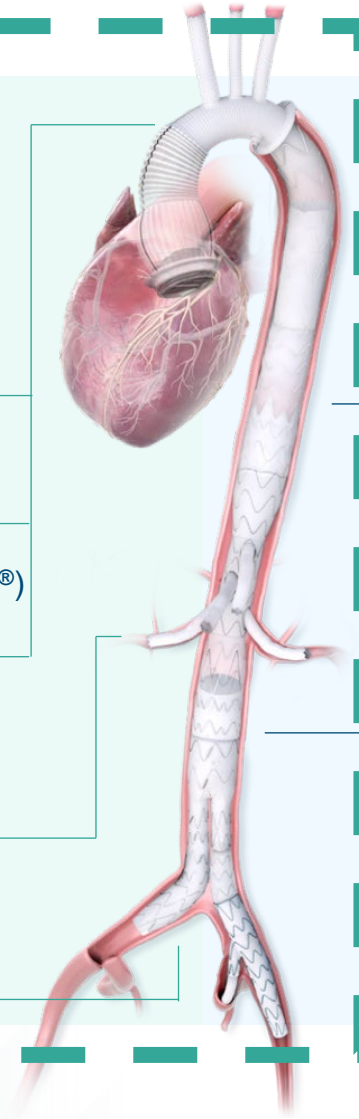
Acute Type A Dissection (AMDS™)
$540M Global TAM

Endovascular Arch Branched System (NEXUS®)
$600M Global TAM

Thoracoabdominal (E-nside™ / Extra Design)
$480M Global TAM

Iliac (E-liac™)
$140M Global TAM

$2B TAM



Mature Stent Graft Segment

MARKET GROWTH RATE: MID-SINGLE DIGITS

Thoracic (Artivex™)
$700M Global TAM

Abdominal (E-tegra)
$1.3B Global TAM

Crowded Competitive Market

$2B TAM

Note: Market sizes are approximate
[1]3-year constant currency CAGR; full years 2023-2025

U.S. COMPLEX AORTIC ARCH MARKET PORTFOLIO

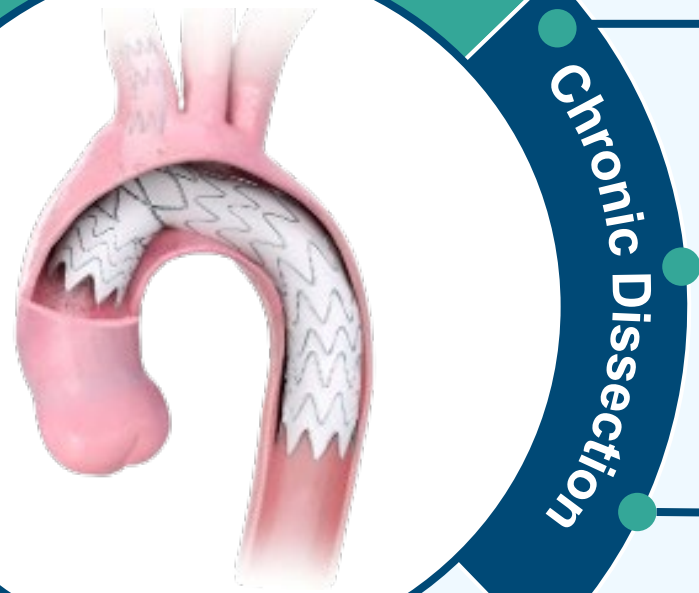
ARTIVION

Innovation Leader in Space with Acceptable Reimbursement; New MS-DRG Code 209, effective October 1, 2025

Arcevo LSA
Pivotal Trial Enrolling

AMDS
PMA Approved

NEXUS Ascending
PMA Pipeline



NEXUS ONE
PMA Approved;
Recently Acquired

NEXUS DUO / TRE
PMA Pipeline

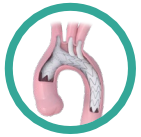
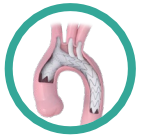
NEXUS LSA
PMA Pipeline

~19K Procedures Annually, $40K ASP

$750M U.S. Market Opportunity

AORTIC ARCH FOCUSED R&D PIPELINE

Step Function Revenue/EBITDA Growth Catalysts via Multipronged PMA Pipeline of High Margin Products

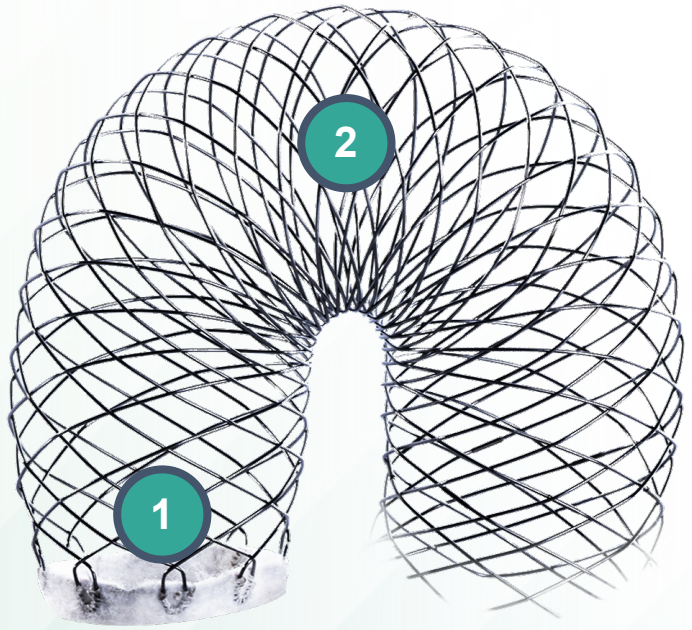
	Regulatory Path	2025	2026	2027	2028	2029	2030	2031	2032+
Hybrid Dissection Prosthesis **AMDS** 	US PMA Approved in June 2026								
Endovascular Arch Branch **NEXUS ONE** 	US PMA Approved in April 2026								
Hybrid Frozen Elephant Trunk **ARCEVO LSA** 	US PMA								
Endovascular Arch Branch **NEXUS DUO / TRE & PONTIS ARCH** 	US PMA								
Endovascular Arch **NEXUS LSA** 	US PMA								
Endovascular Arch **NEXUS ASCENDING** 	US PMA								

$750M U.S. Market Opportunity

EARLY U.S. LAUNCH OF AMDS™ HYBRID PROSTHESIS

ARTIVION

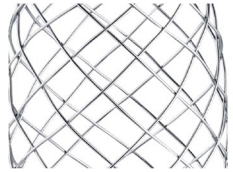
- ✓ High growth, high margin business with limited competitive alternatives
- ✓ PMA approved in June 2026
- ✓ Strong reordering patterns reflect positive user experience supported by growing body of evidence
- ✓ New MS-DRG Code 209, effective October 1, 2025



$150 Million Addressable U.S. Market Opportunity

1 

PTFE felt cuff: strengthens the aortic tissue in preparation to perform the conventional polyester graft to aorta anastomosis

2 

Uncovered nitinol wire braided stent: stabilizes aortic wall and promotes remodeling

Singular Clinical Value, Sufficient Reimbursement, High Margin Contribution to Bottom Line

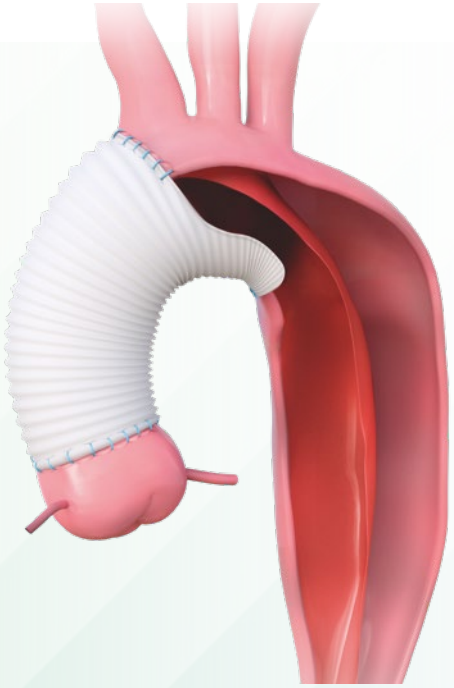
AMDS™ PERSEVERE US IDE STUDY

ARTIVION

Full IDE data demonstrates AMDS use significantly lowers 30-day Major Adverse Events (MAEs) compared to hemiarch control

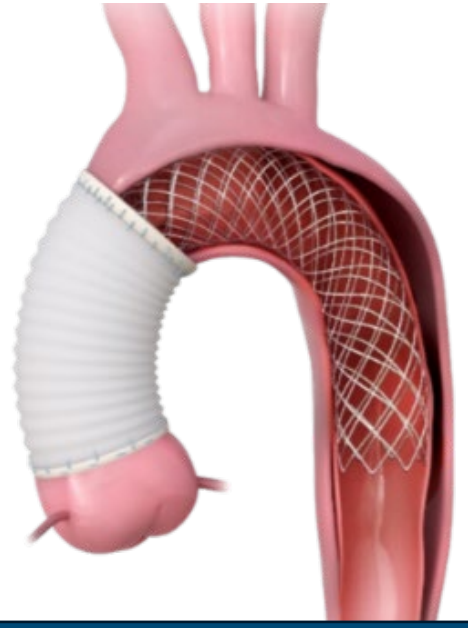
ACUTE DEBAKEY TYPE I (ADTI) WITH MALPERFUSION

Through Hospital Discharge Data



Hemiarch Reference Cohort Avg.[1] (n=790)		PERSEVERE[2] (n=93)
58.0%	>=1 MAE	26.9%
34.6%	All-Cause Mortality	9.7%
20.9%	New Disabling Stroke	10.8%
24.1%	Renal Failure Requiring Dialysis	19.4%
10.5%	Myocardial Infarction	0.0%
45.0%	Distal Anastomotic New Entry	0.0%

Full 30-Day Data



Total patients with ≧ 1MAE
PERSEVERE: 27%
Goal: < 40%

30-day data demonstrate AMDS induced positive aortic remodeling in over 80% of patients[3]

1. Zindovic I, 2019. Pacini D, 2013. Girdauskas E, 2009. Geirsson A, 2007. and Bossone E, 2002.
2. *Szeto WY, Fukuhara S, Fleischman F, Sultan I, Brinkman W, Arnaoutakis G, Takayama H, Eudailey K, Brinster D, Jassar A, DeRose J, Brown C, Farrington W, Moon MC. A novel hybrid prosthesis for open repair of acute DeBakey type I dissection with malperfusion: Early results from the PERSEVERE trial. J Thorac Cardiovasc Surg. 2024 Aug 6:S0022-5223(24)00677-9.*
3. *Adjudicated data as* presented at AATS April 2024, manuscript pending publication

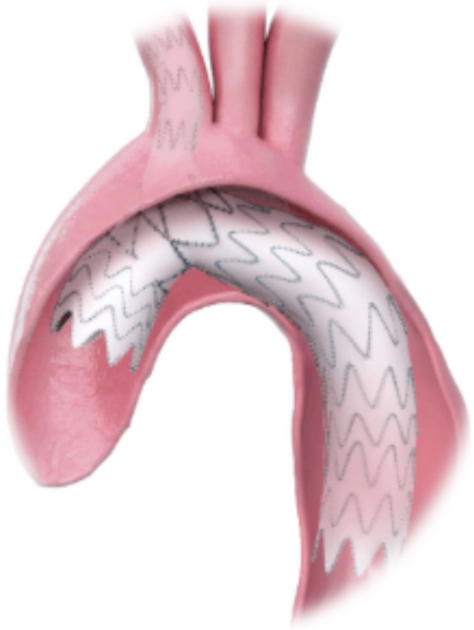
TRIOMPHE IDE TRIAL DEMONSTRATES SAFETY & EFFECTIVENESS

ARTIVION

FDA Approved for the endovascular treatment of chronic dissections involving the aortic arch who are high risk for open surgical repair

N=60	30-DAY (Co-Primary Endpoints)	Performance Goal	p Value	1-YEAR
Clinical Failure[1]	15.0%	35.0%	p<0.001	28.3%
Technical Failure[1]	5.0%	30.0%	p<0.001	8.3%

PMA Approved in April 2026



1-YEAR DATA DEMONSTRATE HIGH PATIENT SURVIVAL WITH LOW MORBIDITY[1]

93% patient survival from lesion-related mortality

90% free from disabling stroke

95% of patients free from reinterventions due to Type I and III endoleaks adjudicated by the core lab

KEY TAKEAWAYS

- Nexus was designed specifically to address the indicated population's unmet clinical need by enabling a fully endovascular repair of aortic arch pathology, sealing in Zone 0, with a modular branched device.[2]
- The stroke rate observed in TRIOMPHE is consistent with outcomes reported for high-risk aortic arch interventions, supporting the safety of the device in this challenging anatomical setting.[3]
- Only approved ascending device with proximal and distal capture[4]

Source:
1. U.S. Food and Drug Administration. (2026). NEXUS Aortic Arch Stent Graft System: Summary of safety and effectiveness data (SSED) (P250033). https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpma/pma.cfm?id=P250033
2. PMA M004, TRIOMPHE results, Section 9.4.1, text as written.
3. PMA: CIP009, 16 Oct 2024, Page 171 of 235 Att L of M004 and TRIOMPHE results, Section 9.4.6.
4. Planer, D., Elbaz-Greener, G., Mangialardi, N., Lindsay, T., D'Onofrio, A., Schelzig, H., ... & Lachat, M. (2023). NEXUS arch: a multicenter study evaluating the initial experience with a novel aortic arch stent graft system. Annals of Surgery, 277(2), e460-e466.

ARTIZEN PIVOTAL IDE STUDY

ARTIVION

Prospective, Non-randomized, Non-blinded, Double-arm, Multicenter (US & EU ≈ 30 Sites)

PRIMARY PATIENT GROUP

- **117 patients:** Chronic dissection or Aneurysm
- **Primary endpoint:** Freedom from major adverse events (MAEs) within 1-year post-index procedure: all-cause mortality, new permanent disabling stroke, new permanent paraplegia and/or paraparesis, unanticipated aortic reoperation in the treated segment, LSA occlusion

SECONDARY PATIENT GROUP

- **15 patients:** Acute or subacute dissection
- **Descriptive statistics:** No pre-defined endpoint

REFERENCE COHORT

- Historical controls freedom from MAE rate of 59%
- Positive outcome is freedom from MAE composite ≥74%

STUDY STATUS

1ST Enrollment	Nov 2025
Enrollment	~ 2025-2027 ***(30 enrolled as of August 2026)***
Follow Up	~ 2027-2028
Approval	~ 2029

NEW LONG-TERM STUDY SHOWS EXCELLENT SURVIVAL & DURABILITY WITH THE ROSS PROCEDURE

Published in JACC: Journal of The American College of Cardiology in June 2026

STUDY DESIGN

- **455 consecutive adult Ross procedures** at a single high-volume Ross center from 2011–2019; 95% (n=434) decellularized homografts
- Median follow-up: 9.0 years (98% complete clinical and echo follow-up)
- Mean age 47 years (50% >50 years)

EARLY OUTCOMES

- **Operative mortality: 0.4%**
- Low rates of stroke, permanent pacemaker implantation, and major perioperative complications and no patient-prosthesis mismatch

LONG-TERM OUTCOMES (12 YEARS)

- **Survival comparable to the age- and sex-matched general population**
- Autograft reintervention: 1.1%
- Pulmonary homograft reintervention: 1.9%
- Any cardiac reintervention: 3.5%

Actuarial Survival After the Ross Procedure vs General Population

Survival	5 years	10 years	12 years
Entire cohort	97.4 ± 2.0%	96.8 ± 2.2%	96.8 ± 2.2%

Blue = Ross cohort; black = matched general population.

Exceptional Clinical Outcomes with SynerGraft Pulmonary Valves Illustrate Supply, Not Demand, is Primary Gating Factor to Growth

El-Hamamsy, I, Chauvette, V, Bouhout, I. et al. Contemporary Outcomes of the Ross Procedure in Adults: Implications for Current Clinical Practice. *JACC*. 2026 Jun, 87 (24) 3400–3410. https://doi.org/10.1016/j.jacc.2026.03.173

DIFFERENTIATED BUSINESS MODEL WITH HIGHLY LEVERAGEABLE GLOBAL INFRASTRUCTURE

Significant EBITDA Margin Expansion Opportunity

Gross Margin Expansion

Highly Accretive Product Pipeline

Increased U.S. Mix Benefit from AMDS HDE Approval and On-X Market Expansion

Expected Revenue Growth

Scalable Global Sales Force

~200 Global Direct Sales Employees

Focused on Cardiac/Vascular Surgeons Treating Aortic Disease

Minimal Case Support Required

Demonstrated Leverage:
12% 3-year CC Revenue CAGR vs **5%** Direct Sales Employee Headcount CAGR as of 4Q25

Reinvesting in R&D

Consistent investment of ~7-8% of sales

Strong Balance Sheet Enables Self-Funding of Best-in-Class Pipeline to Unlock Incremental Market Opportunities

Leverageable Global G&A Infrastructure

Public Company Since 1993

~1,800 Employees Worldwide

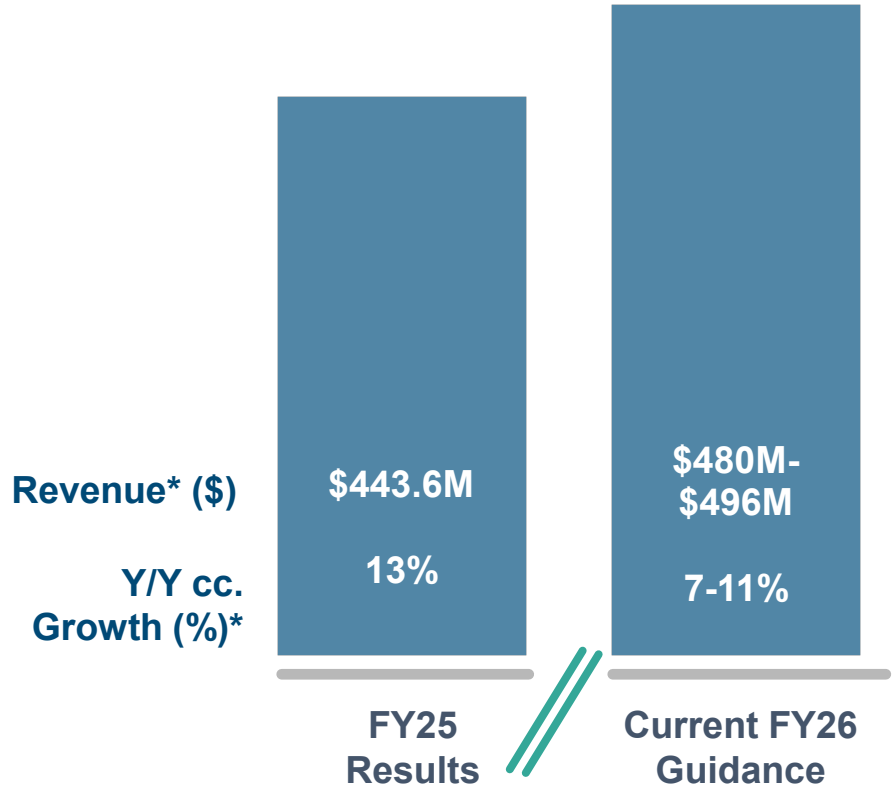
FULL YEAR 2026 REVENUE GUIDANCE

GROWTH DRIVERS

+ **Continued strength in existing products** On-X and aortic stents

+ **Positive new data** supporting the benefits of AMDS and On-X aortic valves

+ **Continued adoption of AMDS** following receipt FDA PMA



*FY25 revenue adjusted for the impact of estimated Italian payback obligations recorded in the fourth quarter of 2025 for fiscal years 2019 through 2025

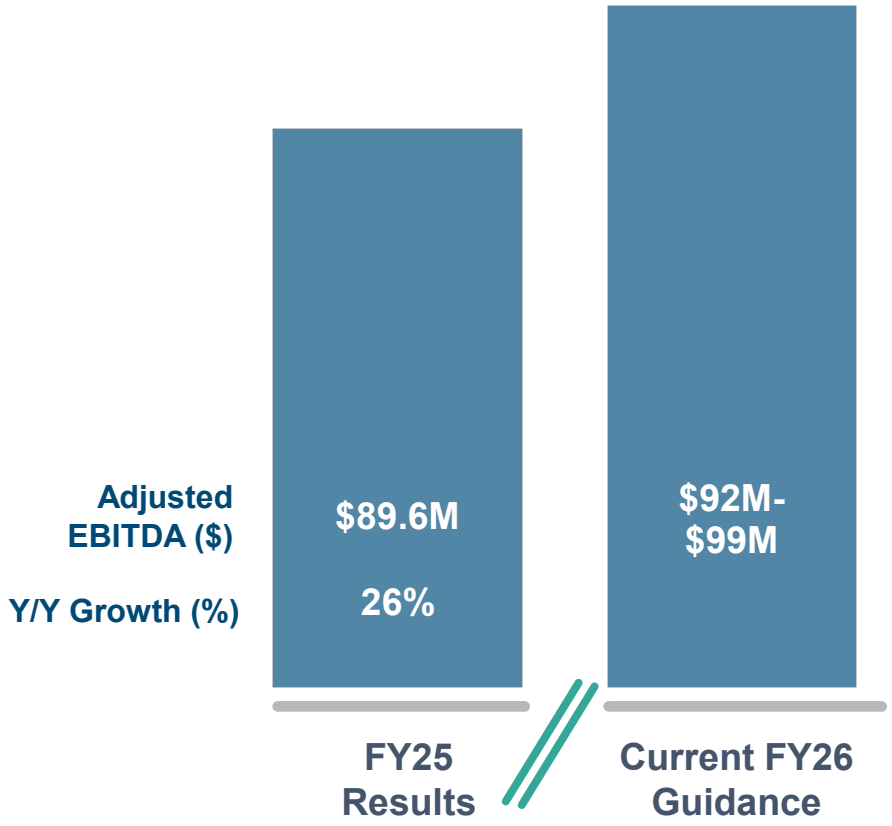
REVENUE GROWTH AND OPERATING LEVERAGE TO DRIVE ADJUSTED EBITDA EXPANSION

FULL YEAR 2026 ADJUSTED EBITDA EXPECTATIONS*

DRIVERS

Expect continued operating leverage to be driven by gross margin expansion, global sales force and G&A infrastructure

*Now includes previously articulated ~$8 million of Endospan-related expenses expected to be incurred through FY26



INVESTMENT HIGHLIGHTS

- ✓ Category-defining products & expanding aortic market leadership
- ✓ Global infrastructure with substantial leverage opportunity
- ✓ Concentrated end markets with expert sales organization
- ✓ Base business driving consistent and sustainable free cash flow
- ✓ High-margin, low-competition R&D pipeline with multiple catalysts driving favorable mix shift

Sustainable Revenue Growth + Operating Leverage & Higher Gross Margins =

2x EBITDA Growth + Consistent, Scaling Free Cash Flow Conversion