A detailed anatomical illustration of the human circulatory system. It shows the heart on the left, with the aorta originating from the top left ventricle. The aorta then descends vertically, branching into the common carotid arteries and the common iliac arteries. The illustration is set against a background of overlapping light green and white diagonal stripes.

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Aorta + Innovation + Vision

1Q 2025 Earnings Presentation

May 5, 2025

FORWARD-LOOKING STATEMENTS

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 beliefs and expectations about our future revenue, year over year growth and growth drivers, earnings, adjusted EBITDA, currency impacts, and other financial measures and related information; our anticipated capital needs and capital structure; expected timing for regulatory approvals; beliefs about our competitive advantages and market opportunities; expected product mix; expected geographies and timeframes for commercializing our products; and the expected impact of the November 2024 cybersecurity incident, including our expected timeline for returning to normal levels of inventory and backlog.

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; market opportunities and commercialization; and the November 2024 cybersecurity incident. These risks and uncertainties include the risk factors detailed in documents that we file with or furnish to Securities and Exchange Commission filings, including our Form 10-K for the year ended December 31, 2024 as well as our May 5, 2025 earnings press release. Artivion does not undertake to update its forward-looking statements, whether as a result of new information, future events, or otherwise.

NON-GAAP FINANCIAL MEASURES

To supplement financial measures prepared in accordance with generally accepted accounting principles in the United States ("GAAP"), we use non-GAAP financial measures, including non-GAAP revenue, constant currency revenue growth rates, non-GAAP net income and diluted EPS, EBITDA, adjusted EBITDA, non-GAAP general, administrative, and marketing expenses, and free cash flows. Investors should consider this non-GAAP information in addition to, and not as a substitute for, financial measures prepared in accordance with US GAAP. In addition, this non-GAAP financial information may not be the same as similar measures presented by other companies.

Our non-GAAP measures are calculated by, among other things, adjusting for certain expenses and the impact of changes in foreign currency exchange rates. The Company expects to incur similar types of expenses and currency exchange impacts in the future, and this non-GAAP financial information should not be viewed as a statement or indication that these types of expenses will not recur. Company management encourages investors to review the Company's consolidated financial statements and publicly filed reports in their entirety, including the reconciliation of GAAP to non-GAAP financial measures included in the financial tables at the end of this presentation and in our May 5, 2025 earnings release.

We also present expectations on a non-GAAP basis about future revenue growth and growth rates, free cash flow, net debt leverage, and adjusted EBITDA. These measures exclude potential charges or gains that may be recorded during the fiscal year, relating to, among other things, non-cash compensation; business development, integration, and severance income or expense; loss on extinguishment of debt; and foreign currency revaluations. The Company does not attempt to provide reconciliations of forward-looking non-GAAP measures to the comparable GAAP measures because the impact and timing of these adjustments, including potential charges or gains, are inherently uncertain and difficult to predict and are unavailable without unreasonable efforts. In addition, the Company believes such reconciliations would imply a degree of precision and certainty that could be confusing to investors. Such items could have a material impact on GAAP measures of the Company's financial performance. Our estimated revenue growth as adjusted for the illustrative impact of foreign currency translation reflects an expected negative year-over-year impact of approximately 2%, based on current exchange rates.

TABLE OF CONTENTS

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Key Messages	5
Q1 2025 Financial Highlights	6
Product Revenue Growth	7
Geographic Revenue Growth	8
NEXUS TRIOMPHE US IDE Trial	9-10
AMDS PERSEVERE US IDE Study	11
On-X vs Bioprosthetic Valve Data	12
Full Year 2025 Financial Guidance	13-14
Appendix	15-20

Key Messages

Strong performance in Product revenues, clearance of cyber-related backlog ahead of expectations

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Stent grafts

19% y/y cc revenue growth fueled by differentiated portfolio of products

On-X

11% y/y cc revenue growth driven by market share gains following aortic valve low INR label and recent positive post-approval data

BioGlue

9% y/y cc revenue growth driven by growth in all major markets

On-X supply & Tissue Processing backlog clearances ahead of expectations following November 2024 cyber incident

Q1 impacted to lesser degree than originally anticipated

On-X supply fully returned to normal levels

Tissue Processing backlog ~30% cleared; expected to be fully cleared by end of Q3 2025

Endospan presented 30-day data from NEXUS TRIOMPHE trial at AATS 2025 showing the trial met its protocol-defined primary endpoints

Data demonstrated a 63% reduction in major adverse event rate compared to the reference performance goal

PMA approval expected in the second half of 2026

Submitted third of the four required modules of PMA for AMDS™ Hybrid Prosthesis; U.S. FDA completed review of AMDS manufacturing module

PMA approval expected mid-2026

AMDS currently available in the U.S. following receipt of HDE in late 2024 and maintain expectation for AMDS sales to grow sequentially each quarter in 2025

Raised midpoint of FY25 revenue & reiterated adj. EBITDA guidance

Raised midpoint of FY25 reported revenue to be in the range of \$423 to \$435 million representing 11% to 14% year-over-year growth, compared to previous guidance of \$420 to \$435 million.

FX assumptions remain unchanged given ongoing volatility; do not expect material impact from enacted and contemplated other tariffs on results

Continue to expect FY25 adjusted EBITDA to be in the range of \$84 to \$91 million, growing 18% to 28% over FY24, and 200 bps of EBITDA margin expansion at the mid-point

Q1 2025 FINANCIAL HIGHLIGHTS

(in millions except EPS)

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GAAP

	Q1 2025	Q1 2024	% Y/Y Δ
Revenue	\$99.0M	\$97.4M	1.6%
Gross Margin	64.2%	64.6%	(0.6%)
Diluted EPS	(\$0.01)	\$0.18	--
Net (loss) income	(\$0.5M)	\$7.5M	(106.7%)
Cash from operations	(\$17.0M)	(\$5.5M)	(208.6%)

Non-GAAP

	Q1 2025	Q1 2024	% Y/Y Δ
Revenue	\$99.0M	\$95.5M	3.7%
Gross Margin	64.5%	64.6%	(0.2%)
Diluted EPS	\$0.06	\$0.06	--
Adjusted EBITDA	\$17.5	\$17.3	1.4%
Free Cash Flow	(\$20.6M)	(\$9.1M)	(126.2%)

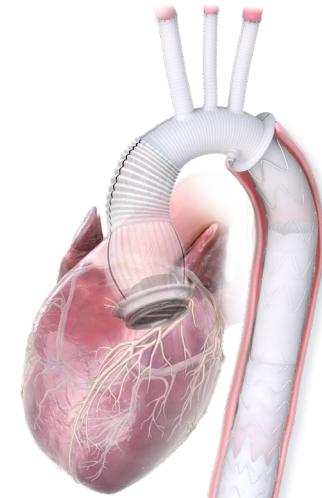
Full GAAP to non-GAAP reconciliation in Appendix

Percentage change utilizes actual numbers

Q1 2025 Year-Over-Year Revenue Growth

Product Portfolio

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Preservation Services



GAAP Growth **(23%)**

Constant Currency Growth **(23%)**

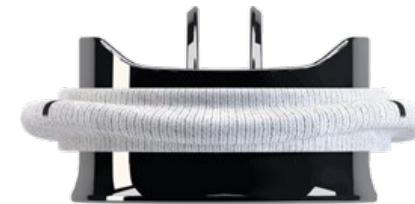
Surgical Sealant



7%

9%

On-X



10%

11%

Aortic Stent Grafts



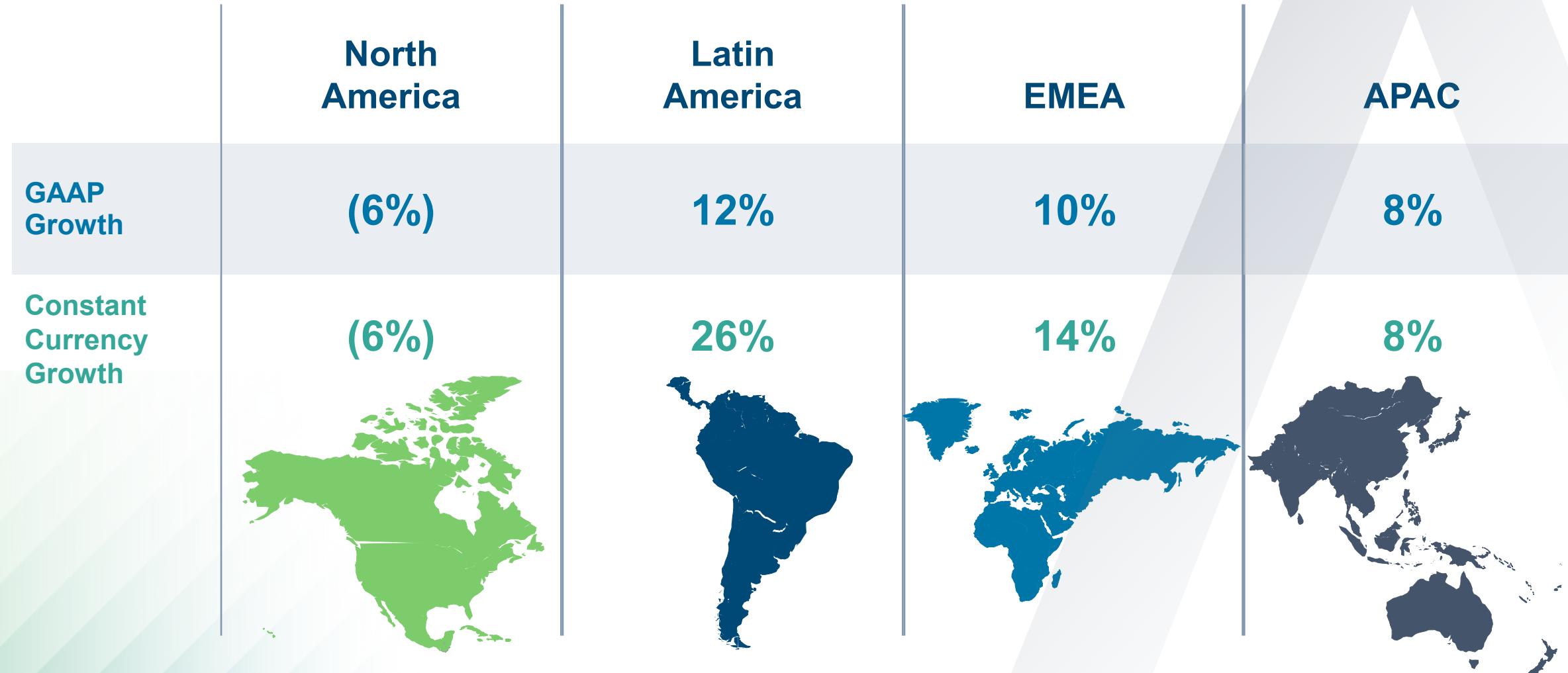
14%

19%

Q1 2025 Year-Over-Year Revenue Growth

Across Geographies

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Endospan NEXUS® TRIOMPHE US IDE Trial

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30-day data demonstrate 63% reduction in major adverse event (MAE) rate compared to the reference performance goal

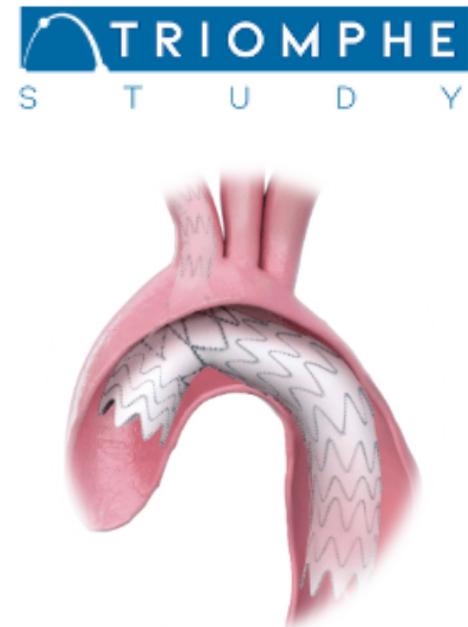
Presented at
AATS 2025

30-DAY DATA¹

	TRIOMPHE (n=54)	Performance Goal	p Value
MAEs ² >=1	13.0%	35.0%	p<0.001
Technical Failure	1.9%	30.0%	p<0.001

KEY TAKEAWAYS

- First FDA investigational device exemption (IDE) trial for endovascular treatment of chronic dissections in the aortic arch; focused on patients at high risk for open surgery
- 30-day data show statistically significant improvement in clinical outcomes and device technical performance compared with performance goals set forth in the FDA-approved IDE
- Stroke and renal failure rates particularly favorable compared to published data for alternative endovascular treatments
- PMA anticipated to be filed after completion of 1-year follow up



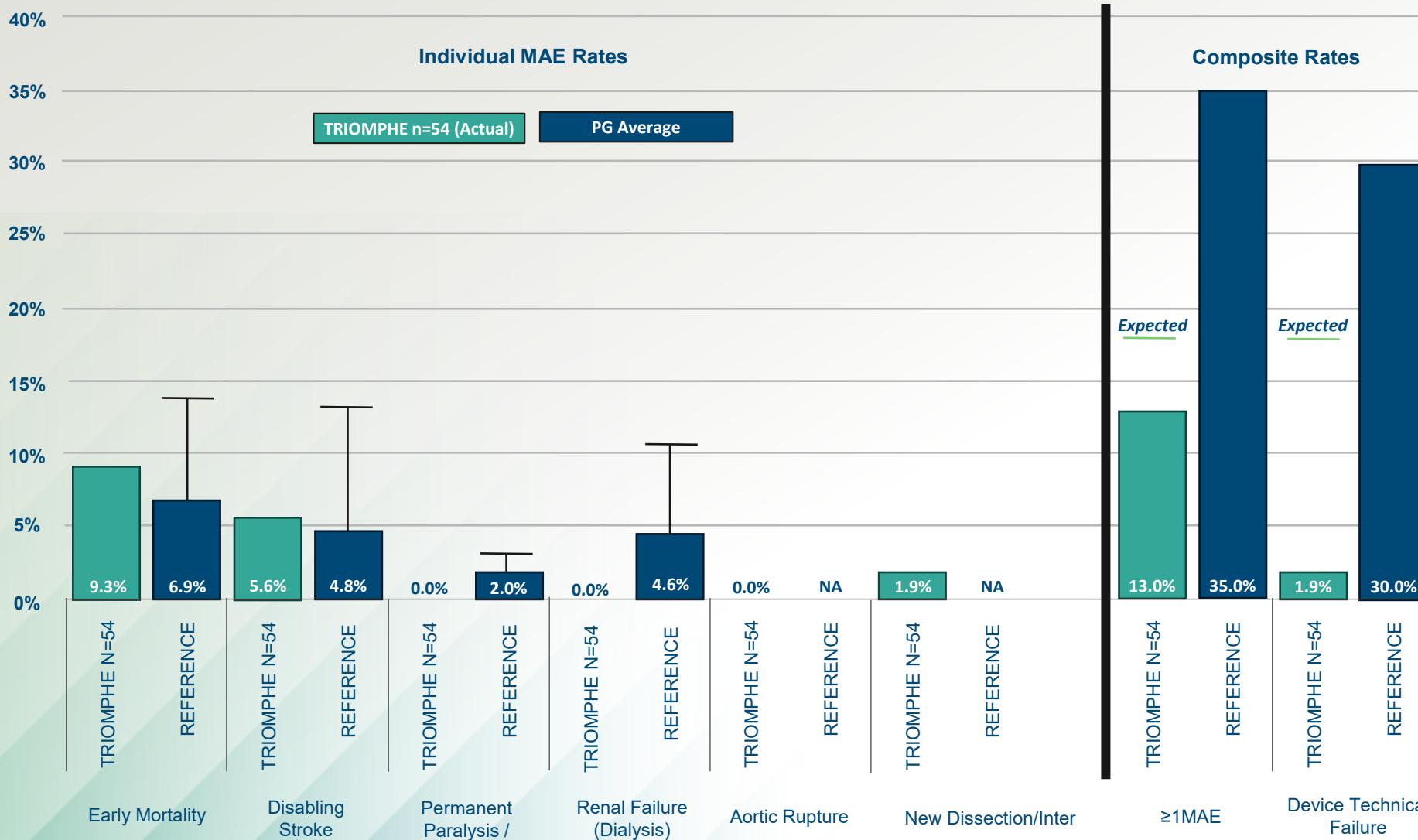
PROJECT STATUS (FORECAST COMPLETIONS)

Enrollment	4Q24
Follow Up	4Q25
Approval	2H26

NEXUS® TRIOMPHE US IDE Trial Primary Endpoints

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30-day primary endpoints



TRIOMPHE Protocol Hypothesis:

Device Technical Failure:

$H_0: P_t \geq 0.30$ vs. $H_1: P_t < 0.30$

Results:

1.9% (1/54), p-value <0.001
95% CI: 0.05, 9.89

Clinical Failure:

$H_0: P_t \geq 0.35$ vs. $H_1: P_t < 0.35$

Results:

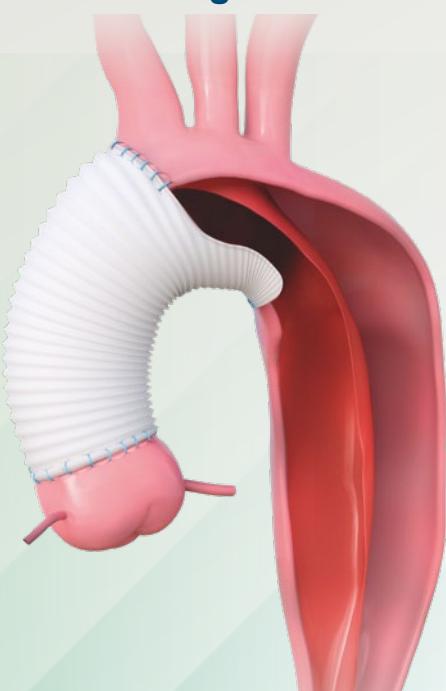
13.0% (7/54), p-value <0.001
95% CI: 5.37, 24.90

1. References for PG: Bashir et al. *Aorta* 2014; Brat et al. *JCTS*, 2015; Chakos et al. *Ann Cardiothorac Surg* 2018; DeRango et al. *J Vasc Surg* 2015; Hiraoka et al. *JTCVS*, 2017; Iba et al. *JTCVS* 2013; Joo et al. *JTCVS* 2018; Thomas et al. *JTCVS*, 2012
2. Line for TRIOMPHE Expected rate is included in graph and estimates how Nexus was expected to perform
3. MAE includes: Early Mortality, Disabling Stroke, Permanent Paralysis/Paraplegia, Renal Failure (Permanent Dialysis), Aortic Rupture

AMDS™ PERSEVERE US IDE Study Primary Endpoints ARTIVION™

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

Through Hospital Discharge Data



ACUTE DEBAKEY TYPE I (ADTI) WITH MALPERFUSION

Hemiarch Reference Cohort Avg.¹ (n=790)

58.0%

>=1 MAE

34.6%

All-Cause Mortality

26.9%

9.7%

20.9%

New Disabling Stroke

10.8%

24.1%

Renal Failure Requiring Dialysis

19.4%

10.5%

Myocardial Infarction

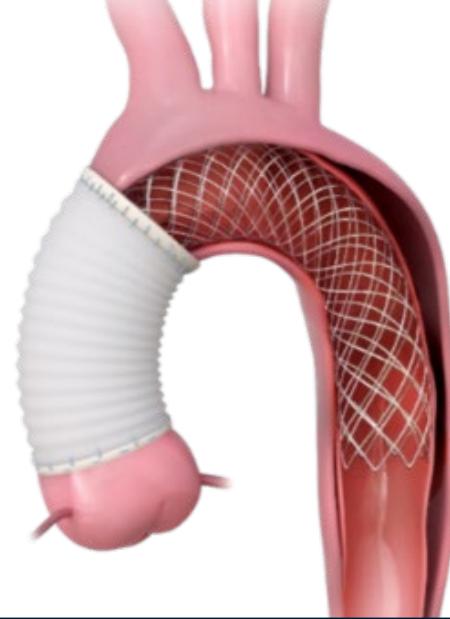
0.0%

45.0%

Distal Anastomotic New Entry

0.0%

Full 30-Day Data



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

30-day data demonstrate AMDS induced positive aortic remodeling in over 80% of patients³

1. Zindovic I, 2019. Pacini D, 2013. Girdauskas E, 2009. Geirsson A, 2007. and Bossone E, 2002.

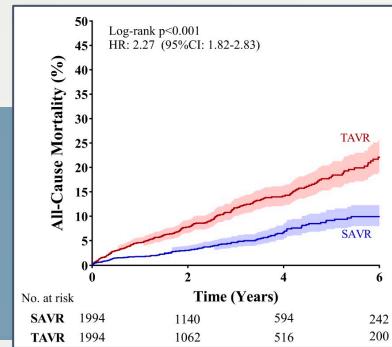
2. Szeto WY, Fukuhara S, Fleischman F, Sultan I, Brinkman W, Arnaoutakis G, Takayama H, Eudailey K, Brinster D, Jassar A, DeRose J, Brown C, Farrington W, Moon MC. A novel hybrid prosthesis for open repair of acute DeBakey type I dissection with malperfusion: Early results from the PERSEVERE trial. *J Thorac Cardiovasc Surg*. 2024 Aug 6:S0022-5223(24)00677-9.

3. Szeto WY et al: One-Year Results of a Novel Aortic Arch Hybrid Prosthesis for Open Repair of Acute DeBakey Type I Dissection with Malperfusion in the PERSEVERE Study; Late Breaking Abstract presentation at STS 2025, January 24.

ON-X IS UNIQUELY POSITIONED FOR THE YOUNGER AVR PATIENT, BACKED BY CONTEMPORARY CLINICAL EVIDENCE

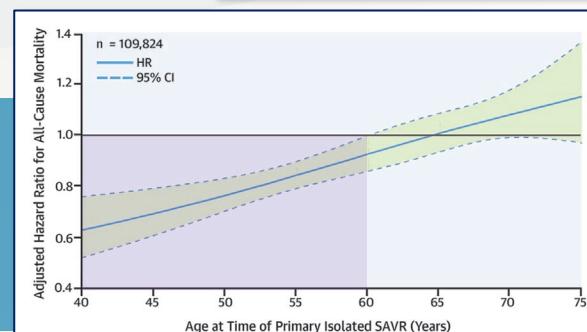
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SAVR > TAVR
in patients younger than 65 years



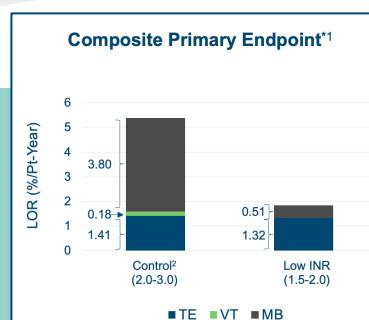
TAVR was associated with a 2.3-fold increased hazard (+130%) of 6-year mortality when compared to SAVR in patients <65.¹

Mechanical AVR > Bioprosthetic AVR
in patients 60 years and younger opens
new \$100M market opportunity



10-year all-cause mortality favors mechanical valves in patients ≤60 (independently risk-adjusted)² when compared to bioprosthetic valves for AVR.

On-X > Other Mechanical Valves
with differentiated, validated clinical benefit³



At a lower INR (1.5-2.0), On-X Aortic demonstrated an 87% decrease in major bleeding with no increase in thromboembolism and zero valve thrombosis when compared to standard anticoagulation therapy (INR 2.0-3.0).³

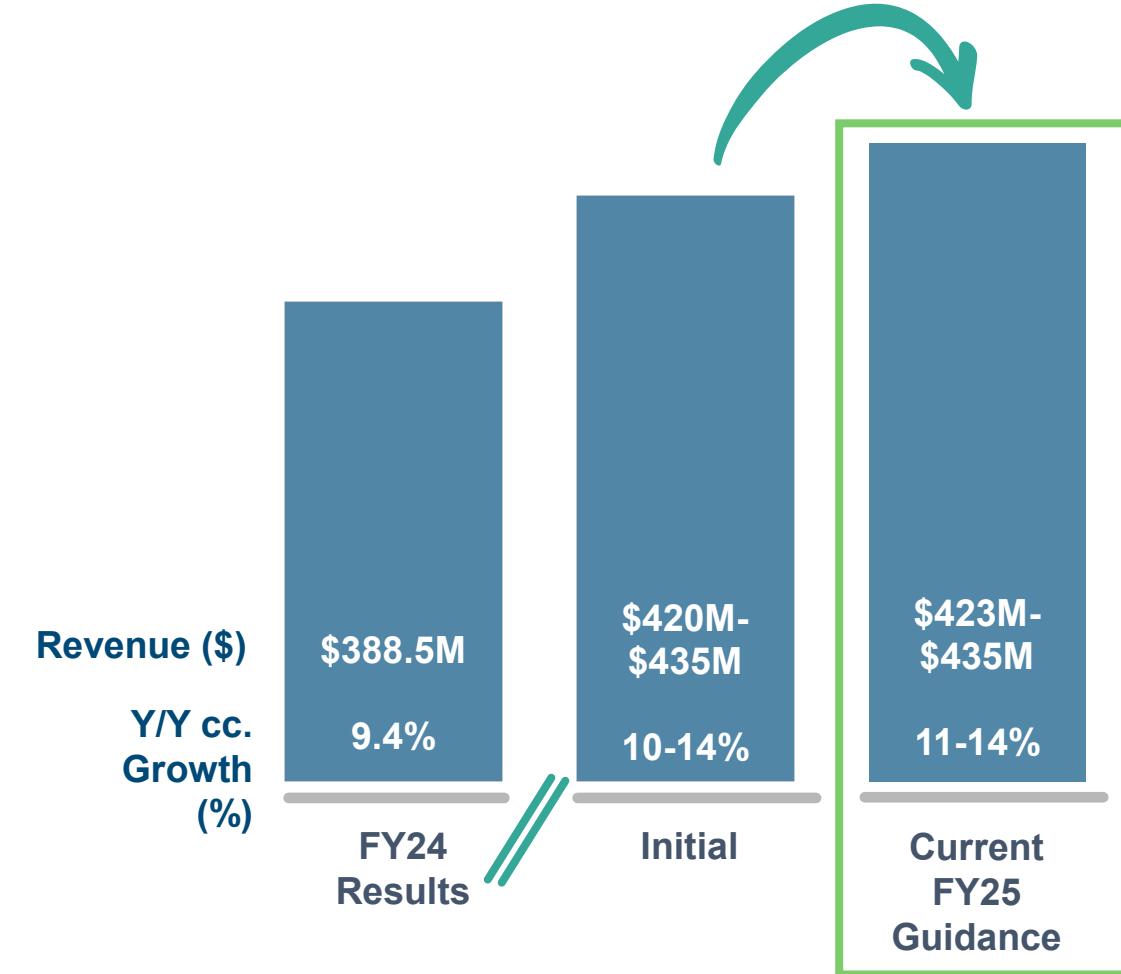
1. Alabadi S, Bowdish ME, Sallam A, Tam DY, Hassan I, Kumaresan A, Alzahrani AH, Iribarne A, Egorova N, Chikwe J, Transcatheter versus Surgical Aortic Valve Replacement in Patients Younger than 65 Years in the US, *The Journal of Thoracic and Cardiovascular Surgery* (2025), doi: <https://doi.org/10.1016/j.jtcvs.2024.12.025>.

2. 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>.

3. 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.

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
- + **Launch of AMDS** following receipt of
Humanitarian Device Exemption by the FDA



REVENUE GROWTH AND OPERATING LEVERAGE TO DRIVE ADJUSTED EBITDA EXPANSION

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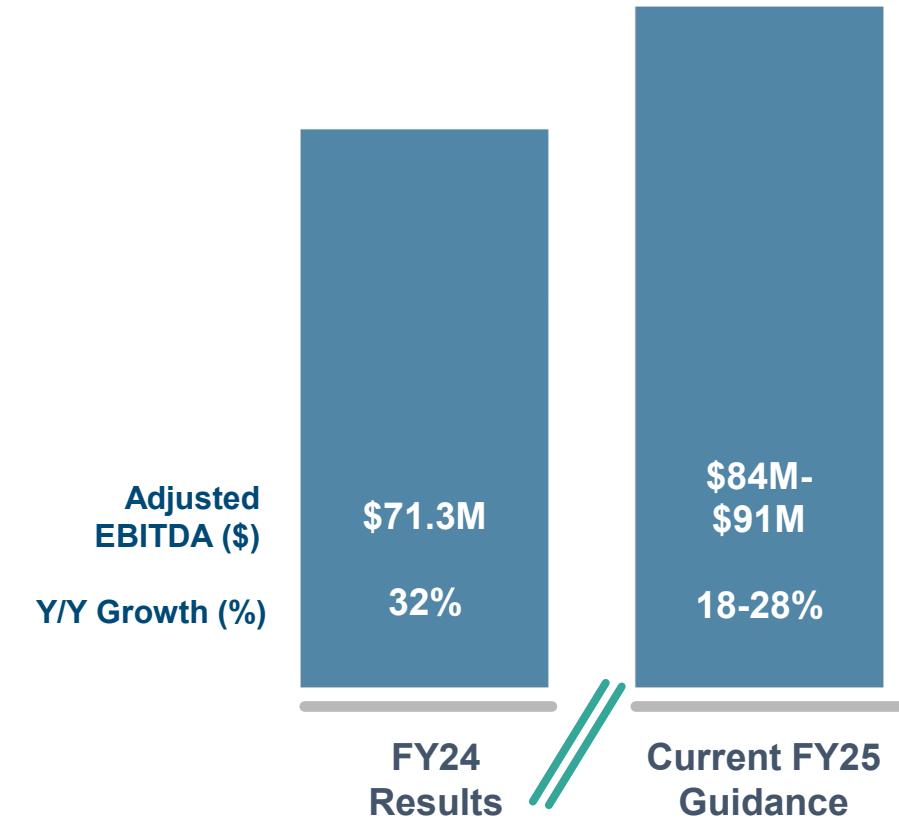
FULL YEAR 2025 ADJUSTED EBITDA EXPECTATIONS

DRIVERS

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

Revenue growth and adjusted EBITDA margin expansion drives incremental cash flow

Expect to be free cash flow positive for FY25



Appendix

Q1 2025 GAAP to Non-GAAP Financial Reconciliation

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Revenue

	Revenues for the Three Months Ended March 31,				Percent Change From Prior Year	
	2025		2024			
	US GAAP	US GAAP	Exchange Rate Effect	Constant Currency		
Products:						
Aortic stent grafts	\$ 36,602	\$ 32,103	\$ (1,308)	\$ 30,795	19%	
On-X	21,574	19,681	(272)	19,409	11%	
Surgical sealants	18,106	16,981	(317)	16,664	9%	
Other	2,516	2,349	(4)	2,345	7%	
Total products	78,798	71,114	(1,901)	69,213	14%	
Preservation services	20,180	26,317	(67)	26,250	-23%	
Total	\$ 98,978	\$ 97,431	\$ (1,968)	\$ 95,463	4%	
North America	47,793	50,928	(152)	50,776	-6%	
Europe, the Middle East, and Africa	37,045	33,588	(1,210)	32,378	14%	
Asia Pacific	8,214	7,609	—	7,609	8%	
Latin America	5,926	5,306	(606)	4,700	26%	
Total	\$ 98,978	\$ 97,431	\$ (1,968)	\$ 95,463	4%	

* The data in this table has been intentionally rounded and, therefore may not sum

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Q1 2025 GAAP to Non-GAAP Financial Reconciliations

Reconciliation of diluted loss per common share, GAAP to adjusted diluted income per common share, non GAAP

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	Three Months Ended March 31,	
	2025	2024
<i>Reconciliation of diluted (loss) income per common share, GAAP to adjusted diluted income per common share, non-GAAP:</i>		
Diluted (loss) income per common share, GAAP:	\$ (0.01)	\$ 0.18
Adjustments:		
Amortization expense	0.08	0.09
Business development, integration, and severance income	(0.07)	(0.41)
Non-cash interest expense	0.01	0.01
Cybersecurity incident	0.11	—
Loss on extinguishment of debt	—	0.09
Tax effect of non-GAAP adjustments	(0.03)	0.05
Effect of 25% tax rate	(0.03)	0.05
Adjusted diluted income per common share, non-GAAP	\$ 0.06	\$ 0.06
<i>Reconciliation of diluted weighted-average common shares outstanding GAAP to diluted weighted-average common shares outstanding, non-GAAP:</i>		
Diluted weighted-average common shares outstanding, GAAP:	42,232	47,886
Adjustments:		
Effect of dilutive stock options and awards	1,306	—
Effect of convertible senior notes	—	(5,707)
Diluted weighted-average common shares outstanding, non-GAAP	43,538	42,179

* The data in this table has been intentionally rounded and, therefore may not sum

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Q1 2025 GAAP to Non-GAAP Financial Reconciliations

Reconciliation of net loss, GAAP and EBITDA, non-GAAP to adjusted EBITDA, non-GAAP

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	Three Months Ended March 31,	
	2025	2024
<i>Reconciliation of net (loss) income, GAAP and EBITDA, non-GAAP to adjusted EBITDA, non-GAAP:</i>		
Net (loss) income, GAAP	\$ (505)	\$ 7,533
Adjustments:		
Interest expense	7,663	7,826
Interest income	(144)	(374)
Income tax (benefit) expense	(1,790)	5,248
Depreciation and amortization expense	5,446	5,909
EBITDA, non-GAAP	10,670	26,142
Non-cash compensation	8,045	3,478
Business development, integration, and severance income	(3,057)	(17,387)
Cybersecurity incident	4,746	—
Loss on extinguishment of debt	—	3,669
(Gain) loss on foreign currency revaluation	(2,856)	1,410
Adjusted EBITDA, non-GAAP	\$ 17,548	\$ 17,312

* The data in this table has been intentionally rounded and, therefore may not sum

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Q1 2025 GAAP to Non-GAAP Financial Reconciliations

Reconciliation of cash flows from operating activities, GAAP to free cash flows, non-GAAP

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	Three Months Ended March 31,	
	2025	2024
<i>Reconciliation of cash flows from operating activities, GAAP to free cash flows, non-GAAP:</i>		
Net cash flows provided by operating activities	(16,953)	(5,493)
Capital expenditures	(3,638)	(3,611)
Free cash flows, non-GAAP	\$ (20,591)	\$ (9,104)

* The data in this table has been intentionally rounded and, therefore may not sum

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Thank You