



NASDAQ: HBIO

Harvard Bioscience Investor Overview

May 2026

Forward-Looking Statements & Non-GAAP Financial Information

Forward Looking Statements

This document contains forward-looking statements within the meaning of the federal securities laws, including the Private Securities Litigation Reform Act of 1995. Forward-looking statements may be identified by the use of words such as “may,” “will,” “expect,” “plan,” “anticipate,” “estimate,” “intend” and similar expressions or statements that do not relate to historical matters. Forward-looking statements include, but are not limited to, information concerning expected future financial and operational performance including revenues, gross margins, adjusted EBITDA and EBITDA margin, cash and debt position, growth and the introduction of new products, and the strength of the Company’s market position and business model and anticipated macroeconomic conditions. Forward-looking statements are not guarantees of future performance and involve known and unknown uncertainties, risks, assumptions, and contingencies, many of which are outside the Company’s control. Risks and other factors that could cause the Company’s actual results to differ materially from those described its forward-looking statements include those described in the “Risk Factors” section of the Company’s most recently filed Annual Report on Form 10-K as well as in the Company’s other filings with the Securities and Exchange Commission. Forward-looking statements are based on the Company’s expectations and assumptions as of the date of this document. Except as required by law, the Company assumes no obligation to update forward-looking statements to reflect any change in expectations, even as new information becomes available.

Use of Non-GAAP Financial Information

This document contains non-GAAP financial information, including one or more of adjusted operating income (loss), adjusted operating margin, adjusted net income (loss), adjusted EBITDA, adjusted EBITDA margin, diluted adjusted earnings (loss) per share, and net debt. We believe that this non-GAAP financial information provides investors with an enhanced understanding of the underlying operations of our business. For the periods presented, these non-GAAP financial measures have excluded certain expenses and income resulting from items that we do not believe are representative of the underlying operations of the business. Items excluded include stock-based compensation, amortization of intangibles related to acquisitions, other operating expenses, goodwill impairment, interest and other expenses, net, loss on pension settlement, loss on equity securities, income taxes, and the tax impact of reconciling items. Management believes that this non-GAAP financial information is important in comparing current results with prior period results and is useful to investors and financial analysts in assessing the Company’s operating performance.

Historical non-GAAP financial information included herein is accompanied by a reconciliation to the nearest corresponding GAAP measure, which is included below.

With respect to non-GAAP forward-looking measures, we provide an outlook for adjusted EBITDA margin. Many of the items that we exclude from this forward-looking measure calculation may not be subject to the control of or may not be reliably predicted by management. These items could cause our non-GAAP forward looking measures to vary materially from measures reported under GAAP.

The non-GAAP financial information provided in this document should be considered in addition to, not as a substitute for, the financial information provided and presented in accordance with GAAP and may be different than other companies’ non-GAAP financial information.

Vision

*“Accelerating drug development
through human-relevant
translational tools”*

Harvard Bioscience By The Numbers

Harvard Bioscience builds tools that power translational research across drug discovery & preclinical development

\$87M

Revenue
FY25

Guiding 2-4% growth in FY26

58%

Adj. Gross Margin
FY25

Guiding 58-60% in FY26

\$8M

Adj. EBITDA
FY25

Guiding 6-10% growth in FY26

54%

Recurring Revenue
(path to 60%+)

#1 or #2

in 7 of 10 product
lines

10,000+

Customers

FY25 revenue more than 1.5x company enterprise value*



*Enterprise value as of 3/13/26

Recent Actions

✓ **New Executive Leadership:** Appointed John Duke CEO effective July 2025 & made Mark Frost permanent CFO in March of 2026

✓ **Expanded Board of Directors:** Appointed Rob Gagnon & Seth Benson effective July 2025, Stephen DeNelsky effective September 2025, BroadOak Partner Bill Snider effective December 2025

✓ **Focused Strategic Direction:** Announced focus on Translational Science products in February 2026

✓ **Debt Refinancing:** Extended debt maturity to 2029, reduced annual debt service generating \$3 million in annual cash savings, & enhanced financial flexibility to support long term growth objectives & BroadOak made \$7.5M investment in convertible notes

✓ **Strategic Consolidation:** Streamlining production footprint & improving manufacturing efficiency through phased closure of Holliston, MA plant – expected to deliver approximately \$3 million of adjusted EBITDA improvement in 2027 and \$4 million of improvement beginning in 2028

Debt Refinancing: \$40M Deal Structure

Term Loan	Amount	Interest Rate	Maturity	Amortization	Prepayment Penalty	Exit Fee	Conversions	BroadOak
A	\$10M	Per annum rate: greater of (i) 12.80% (first 2 years), then 12.50%; (ii) or prime rate + 5.25%	December 2029 Maturity may extend one year if adjusted EBITDA milestone is achieved	Commencing December 31, 2027, the Company is required to make quarterly principal amortization payments	Year 1: 3.00% Year 2: 2.00% Year 3: 1.00% Year 4+: 0%	10.00% exit fee on all prepaid or repaid amounts (including at maturity)	Can be converted to ABL providing lower interest rate, more flexibility, and reduction of Exit fee	BroadOak received warrants for 200K shares at \$5.00/share Right to nominate one board member while loans remain outstanding (BroadOak partner Bill Snider nominated)
B	\$22.5M			The Amortization Date may be extended by one year if adjusted EBITDA milestone is achieved	No prepayment premium on Term A Loan prepaid before March 31, 2027	Can be reduced by 50% on Term Loan B if Asset Based Loan (ABL) completed	N/A	
C	\$7.5M			N/A	Term C Loan may not be prepaid, except in the event of a repayment in full of all of the Term Loans or a change of control of the Company, in which case the Lenders may elect whether to convert their Term C Loans into Common Stock or to be repaid in full in cash.	No exit fee on Term C Loan that converts into Common Stock	Converts to common stock at \$10.00/share (Jan 2, 2026 – maturity) Auto-converts if share price exceeds \$15.00 for 30 consecutive trading days	

Reduced annual debt service generating \$3 million in annual cash savings

Project Viking: Strategic Manufacturing Consolidation



RELOCATION DETAILS

- Consolidating Holliston, MA manufacturing site over a 15-month period, with expected completion by the end of 1Q27.
- All U.S. production will be based in Minneapolis, MN.
- Certain products will be consolidated to facilities in Germany, Sweden, and the U.K., to align specific product lines with their designated center of excellence.
- The Company is building surplus inventory to ensure no customer disruption.



Investment Highlights: Strong Foundation Poised for Growth

Market Leadership with Structural Tailwinds

#1 preclinical telemetry franchise for 35+ years, & early organoid leadership

Blue-Chip Customer Base

Selling to diverse, blue-chip customer base on a global scale

Recurring Revenue, High Margins & Positive Cash Flow

Software, consumables, installed base drive visibility & margin expansion on products with high barrier to entry, generating increased cash for the Company

Differentiated New Product Innovation (NPI) Pipeline

MeshMEA™, SoHo™, Incub8™ extend leadership into high-growth adjacencies

New Management & BoD

Refocused management team with deep experience supported by technically deep employee base & refreshed board of directors

Strengthened Balance Sheet & Streamlined Operations

Refinancing & manufacturing consolidation unlock operating leverage

Key Strategic Pillars: The New Harvard Bioscience

Historically known as life sciences tools company, becoming pure play Translational Science Tools company

Lead the Translational Bridge	Scale High-Margin Innovation	Expand Recurring Revenue Mix	Operate with Discipline
Integrate in vivo telemetry with in vitro organoid platforms	Advance differentiated NPI in telemetry, electrophysiology, & organoids	Grow consumables, software, & services attached to installed base	Use preclinical cash flows to fund R&D, margin expansion, & bolt-ons



Positioning Company For Long-Term Growth

An Evolving Translational Science Market

Regulatory, scientific, & economic shift in drug development

- **Regulators usher in new tools:** FDA, EMA, & other global regulators are actively pushing the adoption of New Approach Methodologies (NAMs)
 - NAMs are human relevant technologies geared to reduce failure rates in drug discovery – currently, over 90% of drugs that pass animal trials fail in human trials
- **Scientific tailwinds:** NAMs have demonstrated a technical improvement in modeling biologic outcomes
 - The FDA is encouraging submission of NAMs data, in addition to animal data, for new drug applications, which creates an additional market for our products
- **Innovation continues:** Next-gen organoid & 3D systems rapidly advance

HBIO is uniquely positioned to lead during this transition

- **Decades-long pre-clinical tools leadership:** deep industry relationships with biopharma, CROs, regulators, & research institutions
- **Workflow coverage:** Products span across the translational science space from foundational tools to the latest NAM technologies (MeshMEA™)
- **Installed advantage:** Millions of products sold to thousands of customers around the globe & across the drug development ecosystem

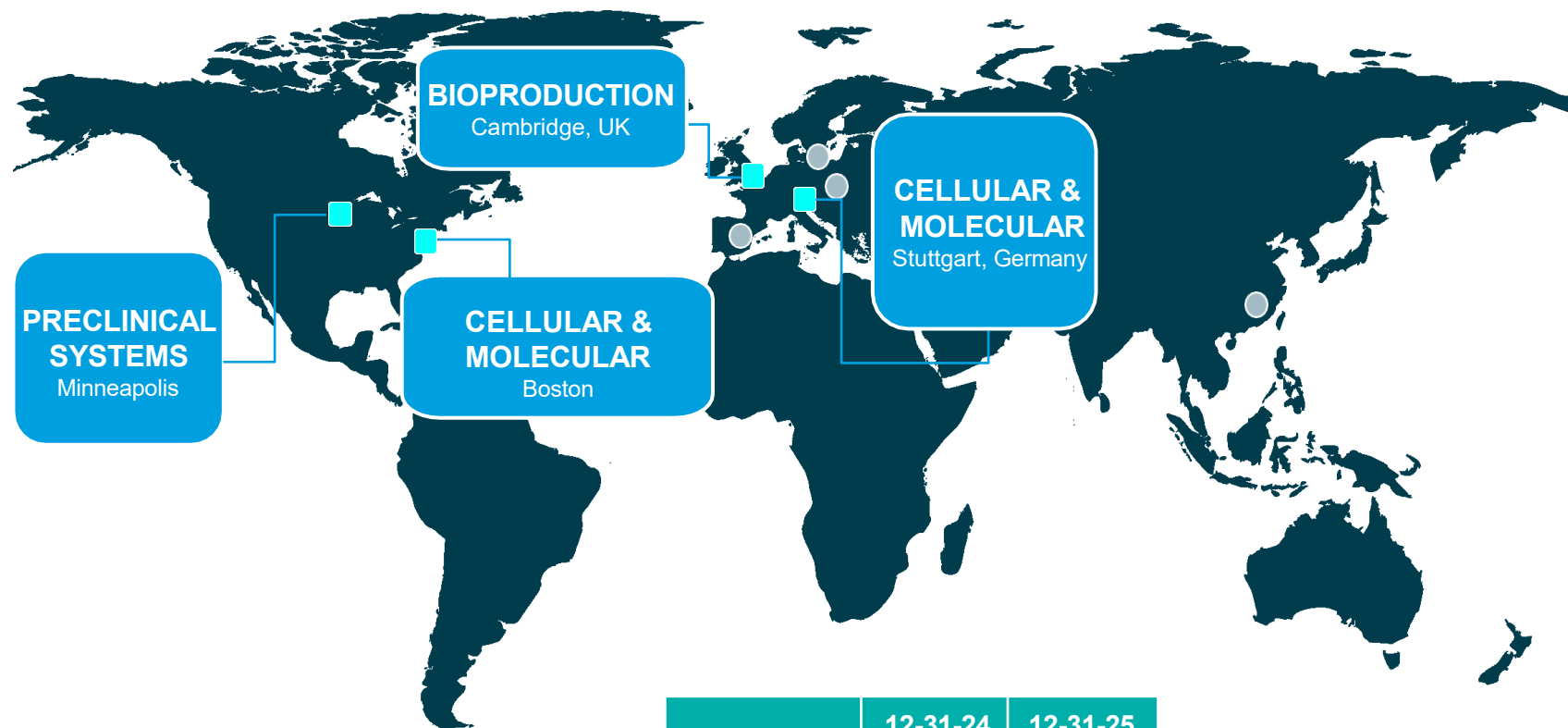


\$10B+
Translational
Tools Market

Global Footprint & Distribution – Built to Scale Efficiently

A global operating platform with embedded growth leverage

- Strong commercial organization with 45 highly technical, deeply knowledgeable direct sales representatives
- Considerable manufacturing flexibility across five facilities adequately covers NA, EMEA, & Asia
- JD Edwards ERP system consolidation (completed in 2024) improved sales & operations planning
- Streamlining production footprint & improving manufacturing efficiency through phased closure of Holliston, MA plant



■ Core Operating Site
● Sales Office / Small Centers of Excellence

*Headcount is approximate.

	12-31-24	12-31-25
Employees*	354	339
Product Lines	10	10
Sites	8	8

Note: Headquarters moving to Minneapolis in 1Q27; Additional manufacturing sites in Sweden, Barcelona, and Freiburg

Blue-Chip Customers Across Multiple Revenue Streams

ACADEMIC RESEARCH

50% of 2025 Revenue

Who



What

- Scientific Research labs primarily government & grant funded
- Early discovery of new novel drugs & compounds for therapies & vaccines
- Advanced cellular testing & gene editing

Why

Breakthrough technologies & applications drive innovation

BIOTECH, PHARMACEUTICAL

28% of 2025 Revenue



- Perform early discovery & then transition from discovery through preclinical regulatory & on to production
- Leverage discoveries from academics & biotech's
- Bridge to bio-production

Reduced development cycle time drives BioPharma revenue growth

CONTRACT RESEARCH ORGANIZATIONS

22% of 2025 Revenue

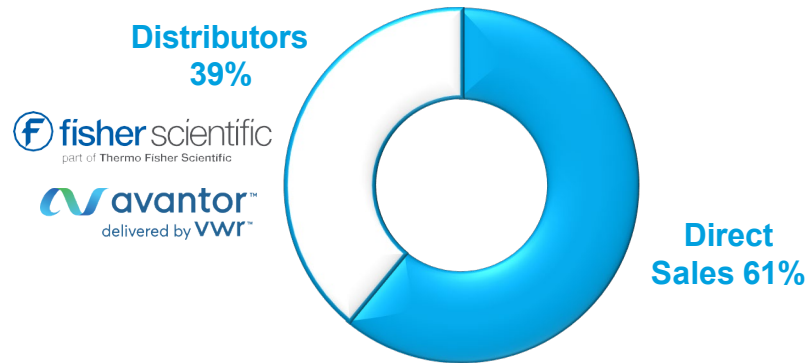


- Preclinical studies to determine safety & efficacy of new pharmaceuticals
- Pharmaceutical companies are outsourcing significant preclinical activities to CROs

Reduced test cycle-time drives CROs revenue growth

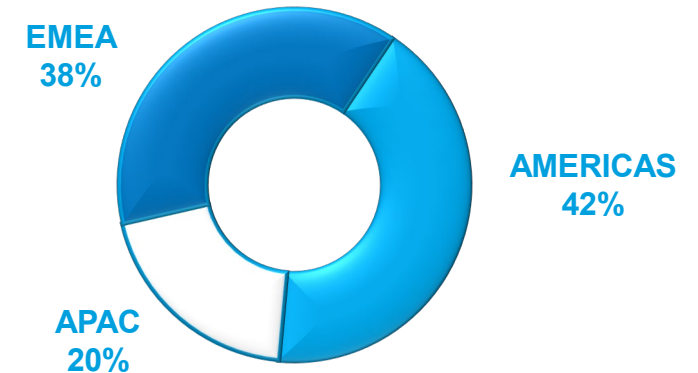
Direct Sales Force Complemented by Key Distributors for Global Reach

CHANNEL REVENUE MIX 2025 REVENUE BY SALES CHANNEL



- Signed Fisher North America agreement in August 2025, which increases customer access
- Working to sign similar agreement with another distributor in 2026, which would expand reach into large pharma

SALES FORCE GEOGRAPHY 2025 SALES REPS BY REGION

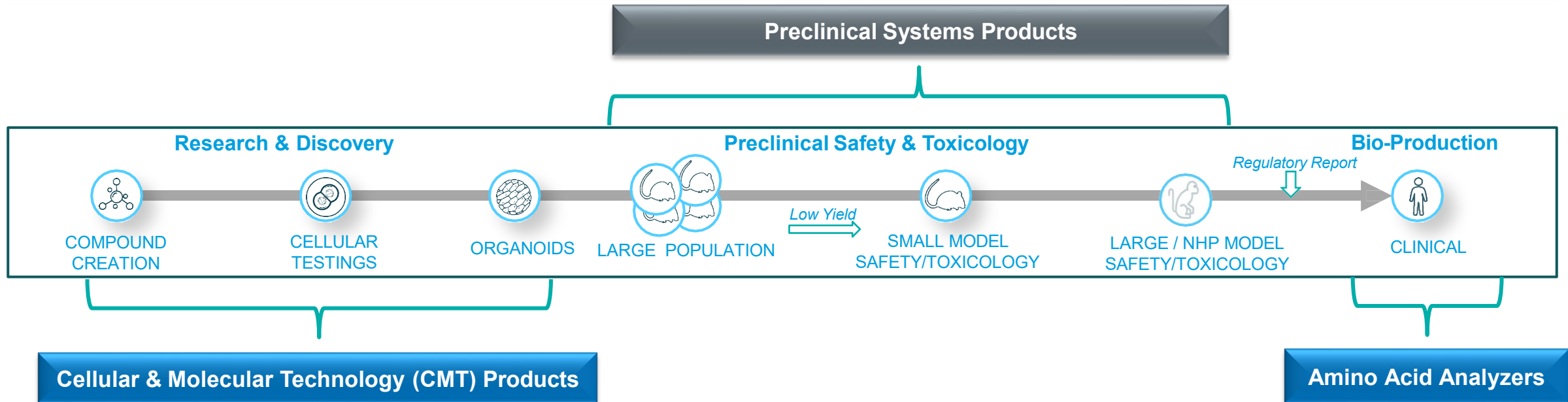


- Effective direct sales channel supported by 45 highly technical, deeply knowledgeable direct sales representatives
- Global reach with strategic geographic mix based on sales & distribution footprint

Broad Portfolio Serves as One Stop Shop for Customers

- Leading provider of products across the drug development cycle, spanning research & discovery, bioproduction & preclinical testing
- Diversified offerings that span the gamut of preclinical workflows & applications
- Top-tier market positions across the majority of product lines

Drug Discovery Life Cycle & Where We Fit In



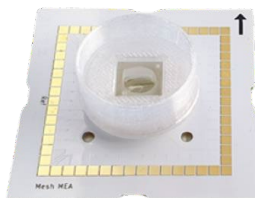
Organoids & MeshMEA™: Powering Shift to Human-Relevant Discovery

FIRST &
DIFFERENTIATED



Industry's first platform for long-term functional recording inside living organoids

- Enables continuous neuro & cardiac data over weeks to months



MeshMEA™

FASTER & MORE
PREDICTIVE



Earlier safety & efficacy insights versus traditional animal models

- Improves compound selection while reducing development time & cost



MEA2100 Mini System

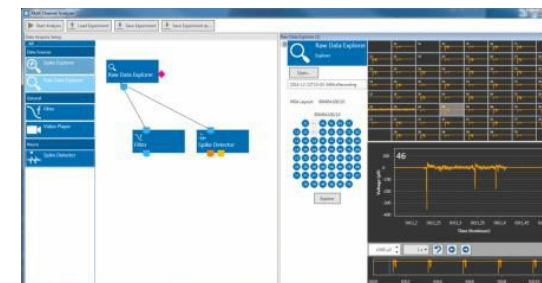
Incub8™ System

RECURRING &
HIGH-MARGIN



Integrated hardware, consumables, & advanced analysis software

- Creates high switching costs & expanding recurring revenue streams



MCS Software Platform

NPI Pipeline Provides High Growth Opportunities

STRENGTHEN THE BASE: MARKET LEADERSHIP & PROFITABLE GROWTH



PRECLINICAL



CMT

- Ponemah™ Enterprise Data Acquisition/Analysis GLP
- Introduced 2nd release of SoHo shared housing implantable telemetry system to extend leadership in wireless telemetry
- Introduced VivaMARS™ high-volume GLP behavioral system
- Well established cellular/molecular/inhalation-respiration technologies for research/discovery
- Recurring revenue streams from consumables, software & services



HIGH-GROWTH PLATFORMS: FROM INVESTMENT TO IMPACT

Bio-Production

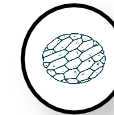


CMT

- BTX® electroporation / electrofusion system
- Supports latest applications in cell & gene editing, cell & gene therapy (CGT)
- Introduced BTX & Amino Acid Analysis for bioproduction

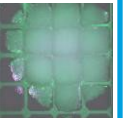


In-Vitro Organoid Apps



CMT - ORGANIDS

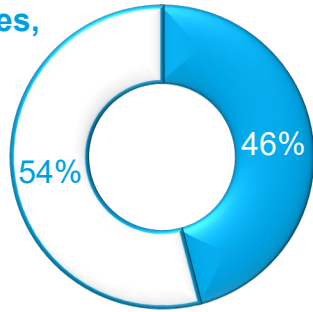
- Introduced breakthrough MeshMEA™ organoid platform
- Leverages leadership position in advanced electrophysiology with Incub8™ platform
- Adapts leading MEA technology to emerging organoid applications in neuro & cardiac safety toxicology



Recurring Revenue, Strong Margins & Cash Generation

Recurring Revenue

54% recurring consumables, software & services revenue

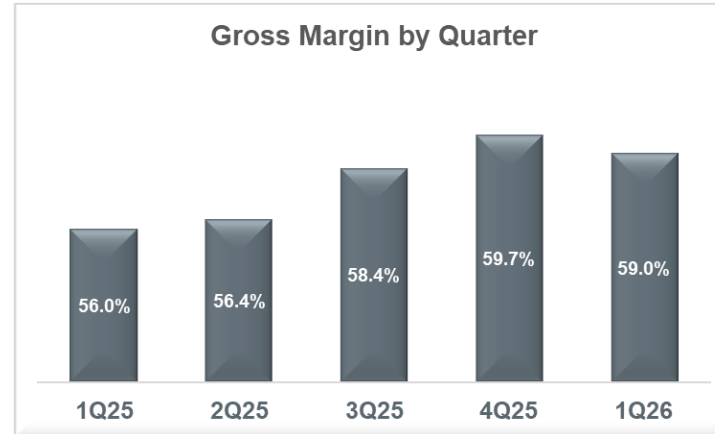


46% non-recurring equipment revenue

Note: represents full year 2025 revenue mix

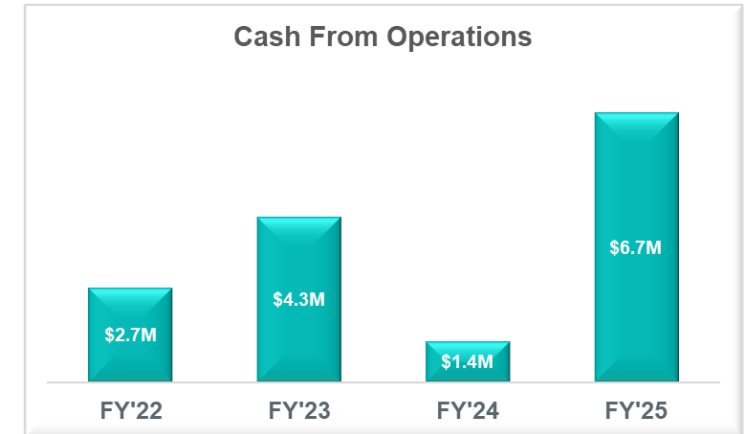
- 54% recurring revenue in 2025
- Clear path to 60% recurring revenue
- Focusing NPI on resources & investments on higher-margin consumables service & software

High Gross Margin



- Improvement driven by cost reductions to date
- Maintaining cost discipline & operational efficiency going forward
- Differentiated & innovative high-margin platforms such as SoHo™ telemetry, & proprietary MeshMEA & Incub8 platforms

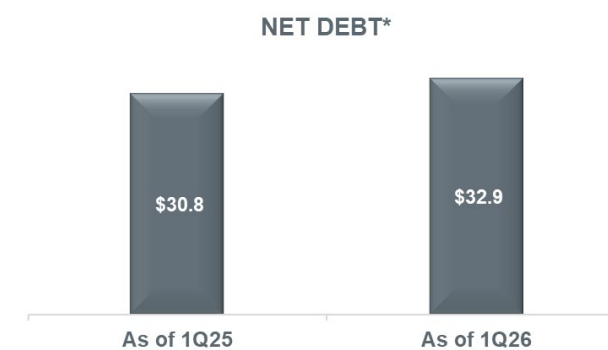
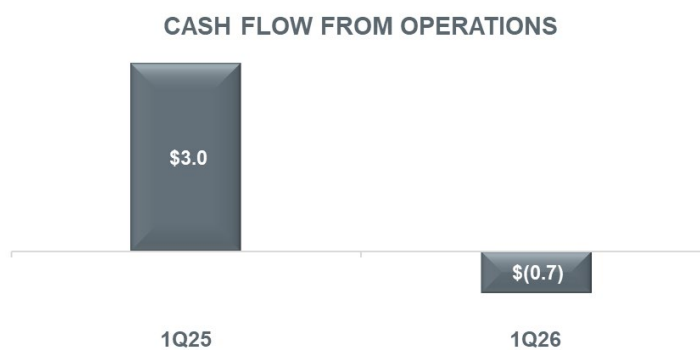
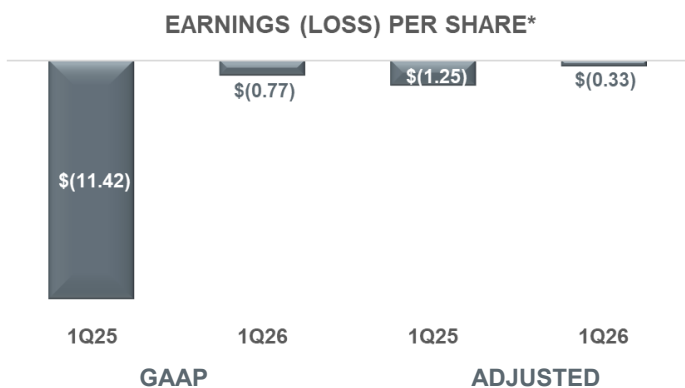
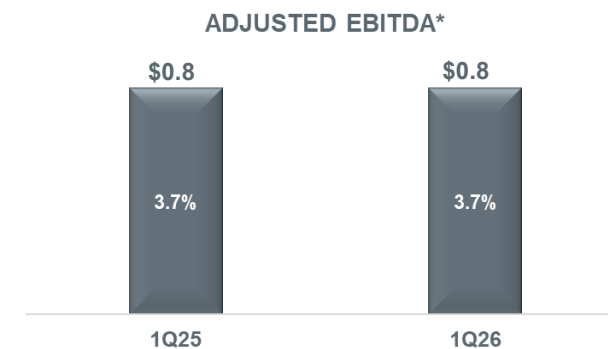
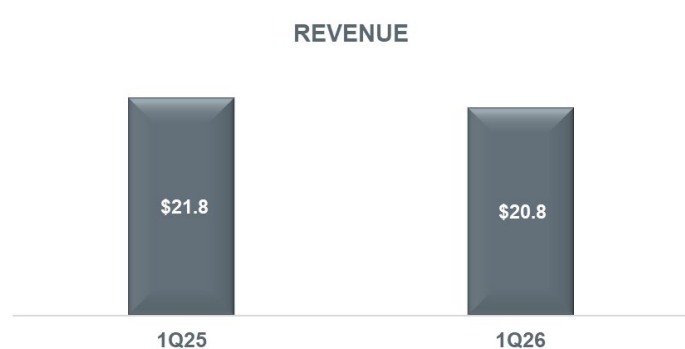
Positive Cash Flow



- Cash generation driven by operational improvements
- Manufacturing consolidation expected to unlock additional efficiencies
- Additional cash will provide opportunity to invest in innovation

1Q26 Financial Metrics (GAAP except where noted)

\$ Million except per share data



- Cash flow from operations decreased primarily due to higher inventory as well as one-time costs related to the reverse split and S3 filing

* Non-GAAP measure, see Slide 28-30 for reconciliation to GAAP financial measures

Outlook

REVENUE

2Q26 Revenue between \$20.5M - \$22.5M

FY26 Revenue growth between 2%-4%

ADJ. GROSS MARGIN

2Q26 GM between 57% - 59%

FY26 GM between 58% - 60%

ADJ. EBITDA

2Q26 Adj. EBITDA between \$1M - \$2M

FY26 Adj. EBITDA growth between 6%-10%

Investment Highlights: Strong Foundation Poised for Growth

Market Leadership with Structural Tailwinds

#1 preclinical telemetry franchise for 35+ years, & early organoid leadership

Blue-Chip Customer Base

Selling to diverse, blue-chip customer base on a global scale

Recurring Revenue, High Margins & Positive Cash Flow

Software, consumables, installed base drive visibility & margin expansion on products with high barrier to entry, generating increased cash for the Company

Differentiated New Product Innovation (NPI) Pipeline

MeshMEA™, SoHo™, Incub8™ extend leadership into high-growth adjacencies

New Management & BoD

Refocused management team with deep experience supported by technically deep employee base & refreshed board of directors

Strengthened Balance Sheet & Streamlined Operations

Refinancing & manufacturing consolidation unlock operating leverage

Appendix

Leading Reputation, with Multiple Competitive Advantages

A differentiated platform with durable market leadership

Breadth Across the Translational Workflow

- Only provider spanning in vivo telemetry & in vitro organoid platforms
- Enables standardized data & cross-selling across development stages



First-Mover & Technology Leadership

- Category-defining MeshMEA™ & decades of electrophysiology expertise
- Continuous innovation extending leadership into high-growth markets

Sticky Installed Base & Recurring Revenue

- Mission-critical software embedded in regulated customer workflows
- High switching costs with growing consumables & service revenue

Robust Data & Brand Equity

- Proprietary platforms validated in CRO & pharma environments
- Long-standing relationships & strong scientific reputation

Creates durable market leadership, strong pricing power, & long-term revenue visibility

Revenue Breakdown

HBIO Revenue	1Q26	1Q25	% Var
Americas	\$9.7M	\$10.7M	-9%
EMEA	\$6.5M	\$6.0M	+7%
APAC	\$4.6M	\$5.1M	-9%
China	\$2.8M	\$2.7M	+3%
HBIO Total	\$20.8M	\$21.8M	-5%

Americas decrease due to NIH funding delays which caused lower academic and government sales

EMEA increase due to strong NPI uptake, with higher sales from distribution partners and to pharma customers

APAC decrease due to lower sales from distribution partners; **China increase** due to higher sales to CROs

Diversified Platform Powering the Full Translational Workflow

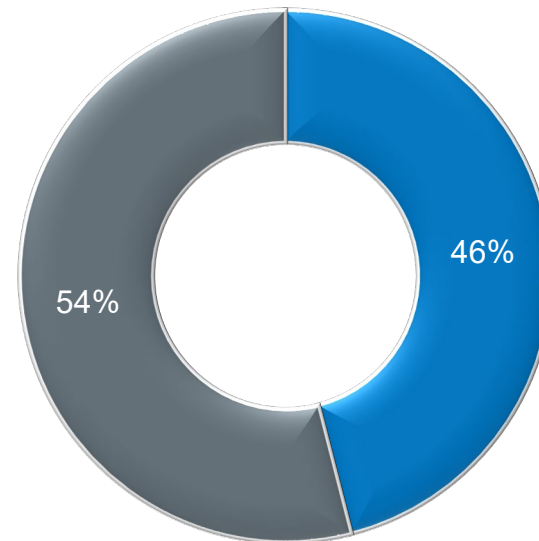
Two complementary engines covering critical stages of drug discovery through preclinical development while driving cash flow today & growth tomorrow

Preclinical Systems

Market Leadership & Cash Generation

- ✓ Global leader in implantable & external telemetry for safety pharmacology & toxicology
- ✓ Mission-critical data acquisition & regulatory-ready software platforms
- ✓ High recurring revenue from software, consumables, & long-term customer relationships
- ✓ Cash flow foundation funding innovation & expansion across the portfolio

~\$47M FY25A Rev.



~\$40M FY25A Rev.

Cellular & Molecular Technology (CMT)

Innovation & High-Growth Applications

- ✓ Positioned at the center of NAM adoption & human-relevant research models
- ✓ Leading electrophysiology platforms supporting discovery, translational, & organoid research
- ✓ First-of-its-kind MeshMEA™ system enabling long-term organoid data acquisition
- ✓ Expanding into gene editing, bioproduction, & next-generation in vitro workflows

Pre-Clinical Systems Products

Inhalation / Respiratory



Collects basic respiratory endpoints & performs lung function analysis

VivaMARS™ Neuro-Behavioral System



High-capacity behavior Assessment

New: SoHo™ Implantable Telemetry System



Measurement of biopotentials in small lab animals
 Maximize data output while minimizing costs
 Captures physiological data from freely moving animals within social groups

Implantable / External Telemetry



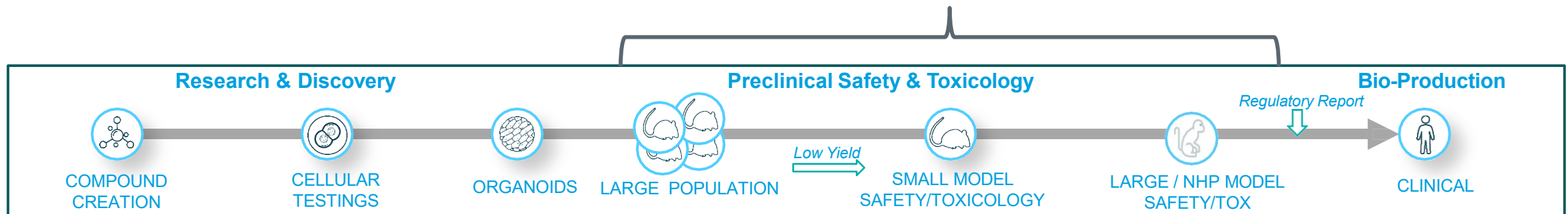
Includes small & large animal applications

Ponemah Data Management

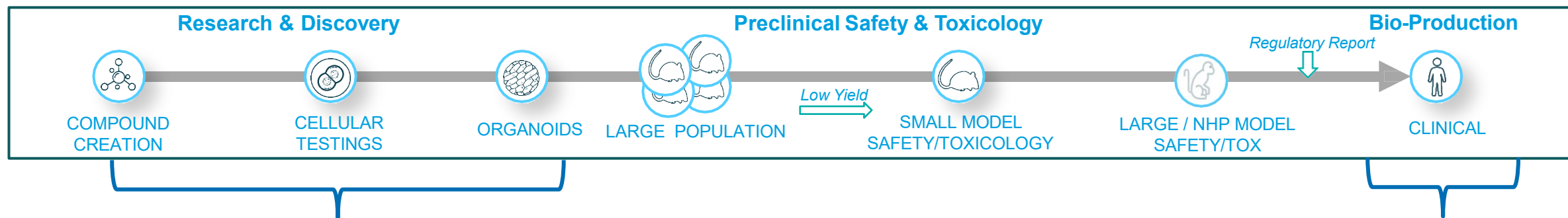


Software designed for optimal data acquisition & analysis

Denotes New Products



Cellular & Molecular Technology (CMT) Products

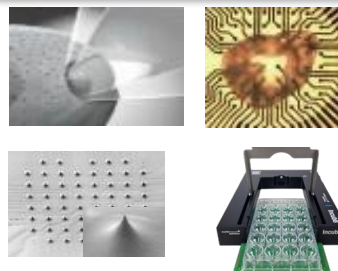


BTX® Electroporation / Electrofusion



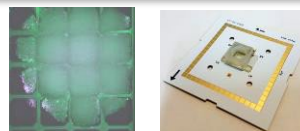
Electroporation technology bridges from therapy to production

Cellular Platforms (MEA / Patchclamp)



Precision Electrophysiology

First: MeshMEA Organoid Platform



In-Vitro Electrophysiology Analysis

Reduce test time/cost, increase yield

Neuro & cardiac longitudinal studies

Perfect for New Approach Methodologies (NAMs)

Spectrophotometers



Composition analysis to support molecular testing

High Precision Syringe Pumps



Injection & perfusion applications

Amino Acid Analyzers



Protein analysis of buffers & solutions

Denotes New Products

Non-GAAP Reconciliation Tables

Non-GAAP Reconciliation Table – Adjusted Operating Income

	Three Months Ended 3/31/2026	Three Months Ended 3/31/2025
GAAP operating loss	\$ (1,174)	\$ (49,668)
Stock-based compensation	257	600
Acquired asset amortization	820	1,160
Goodwill impairment	-	47,951
Other operating expenses (1)	235	264
Other adjustments	93	12
Adjusted operating income	\$ 231	\$ 319
Operating margin	(5.7%)	(228.1%)
Adjusted operating margin	1.1%	1.5%

(1) Other operating expenses for the three months ended March 31, 2026 includes \$235 thousand of restructuring-related charges compared to \$93 thousand of restructuring-related charges and \$171 thousand of employee retention tax credit fees for the three months ended March 31, 2025.

Non-GAAP Reconciliation Table – Adjusted EBITDA

	Three Months Ended		Three Months Ended	
	3/31/2026		3/31/2025	
GAAP net loss	\$	(3,424)	\$	(50,340)
Stock-based compensation		257		600
Acquired asset amortization		820		1,160
Goodwill impairment		-		47,951
Other operating expenses (1)		235		264
Other adjustments		93		12
Income taxes		525		(199)
Adjusted net loss		(1,494)		(552)
Depreciation & amortization		536		495
Interest and other expense, net (2)		2,133		1,126
Adjusted income taxes (3)		(408)		(255)
Adjusted EBITDA	\$	767	\$	814
Adjusted EBITDA margin		3.7%		3.7%

(1) Other operating expenses for the three months ended March 31, 2026 includes \$235 thousand of restructuring-related charges compared to \$93 thousand of restructuring-related charges and \$171 thousand of employee retention tax credit fees for the three months ended March 31, 2025.

(2) Interest expense for the three months ended March 31, 2026 was \$1.7 million, compared to \$0.9 million for the three months ended March 31, 2025. Other expense, net was \$405 thousand for the three months ended March 31, 2026, compared to \$193 thousand for the three months ended March 31, 2025.

(3) Adjusted income taxes includes the tax effect of adjusting for the reconciling items using the tax rates in the jurisdictions in which the reconciling items arise.

Non-GAAP Reconciliation Tables – Adjusted EPS & Net Debt

	Three Months Ended		Three Months Ended
	3/31/2026		3/31/2025
Diluted loss per share (GAAP) *	\$	(0.77)	\$ (11.42)
Diluted adjusted loss per share *	\$	(0.33)	\$ (1.25)
Weighted average common shares:			
Diluted GAAP *		4,473	4,410
Diluted Adjusted *		4,473	4,410

* Retroactively presented to reflect 1-for-10 reverse stock split effective on March 13, 2026.

	March 31,	
	2026	2025
Debt, including unamortized deferred financing costs	\$ 36,211	\$ 35,958
Unamortized deferred financing costs	3,789	392
Cash and cash equivalents	(7,098)	(5,546)
Net debt	\$ 32,902	\$ 30,804

The logo features the text "HBio" in a bold, white, sans-serif font. A white, curved line arches over the "H" and "B", resembling a stylized "C" or a protective shield. The background is a dark teal color with a low-poly, geometric pattern of various shades of blue and green.

HBio