



Enabling discovery, safety and
production of tomorrow's therapeutics

NASDAQ: HBIO
HBIO Investor Overview

Jim Green, Chairman, President & CEO
Jennifer Cote, CFO & Treasurer
June 5, 2024

Forward-Looking Statements and 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, earnings, cash and debt position, growth and the introduction of new products, and the strength of the Company’s market position and business model. 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 in 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.

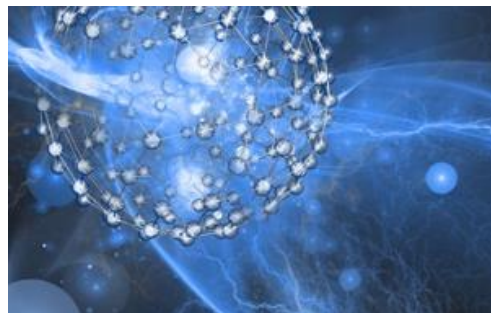
Use of Non-GAAP Financial Information

This document includes 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, adjusted diluted earnings (loss) per share, foreign exchange adjusted revenue, and net debt. We believe that this non-GAAP financial information provides investors with an enhanced understanding of the underlying operations of the 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, loss on equity securities, income taxes and the tax impact of the 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. Non-GAAP historical financial statement information included herein is accompanied by a reconciliation to the nearest corresponding GAAP measure which is included as exhibits 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 are less capable of being controlled or reliably predicted by management. These items could cause the forward-looking measures presented in our outlook statements to vary materially from our GAAP results.

The non-GAAP financial information provided in this presentation 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.

Trusted provider of advanced life science tools to the leading academic research institutions, contract research organizations, pharmaceutical and bio-tech companies



CELLULAR & MOLECULAR

Leading provider of technologies and tools necessary for research, discovery and creation of tomorrow's breakthrough drugs, vaccines and therapies



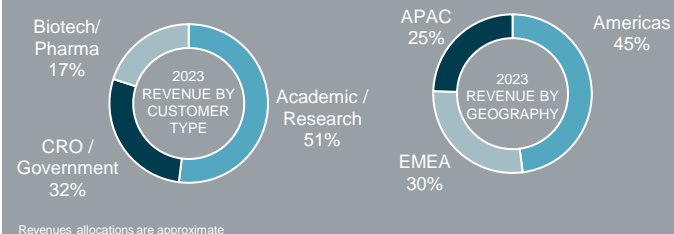
PRE-CLINICAL SYSTEMS

Market leading provider of the recognized gold standard for data acquisition, processing, and regulatory report generation for safety pharmacology and toxicology testing

COMPANY PROFILE

- NASDAQ: HBIO
- Global sales footprint, 3 core manufacturing facilities
- Approx. 390 employees, 33 PhD, 54 Masters, 77 Bachelors
- 2023 Revenues: \$112.3M
- FY'23 Adj. EBITDA: \$14.6M (13% of rev), up 34% vs PY*
- 35%+ recurring revenues
- Headquarters: Greater Boston, MA

BALANCED PORTFOLIO



* Non-GAAP measure; see reconciliation to GAAP financial measures in Appendix.

Harvard Bioscience Highlights

Long standing relationships with blue-chip customers

Essential natural growth end markets

Direct sales force complemented by distributors for global reach

High touch sales approach with elite applications & data scientists

Trusted reputation with limited competitors and high switching costs

High barrier innovative technologies

Strong established brands

Expand into high volume applications

Disciplined capital allocation balancing growth and financial performance

Focus on commercial expansion of addressable markets

Long term target: Double digit revenue growth, 60% gross margin, 20% EBITDA

Targeted growth strategy

DIVERSIFIED CUSTOMER / REVENUE MODEL

Systems & Software



Consumables



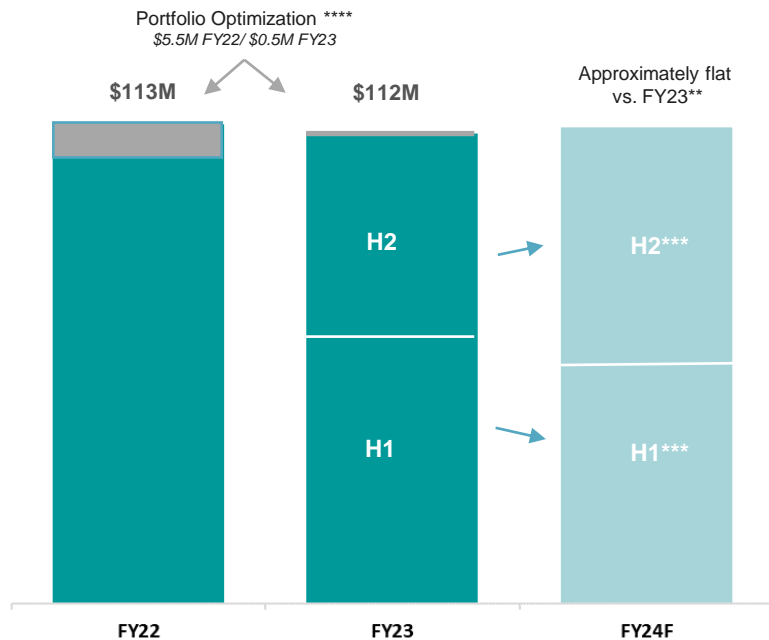
Services



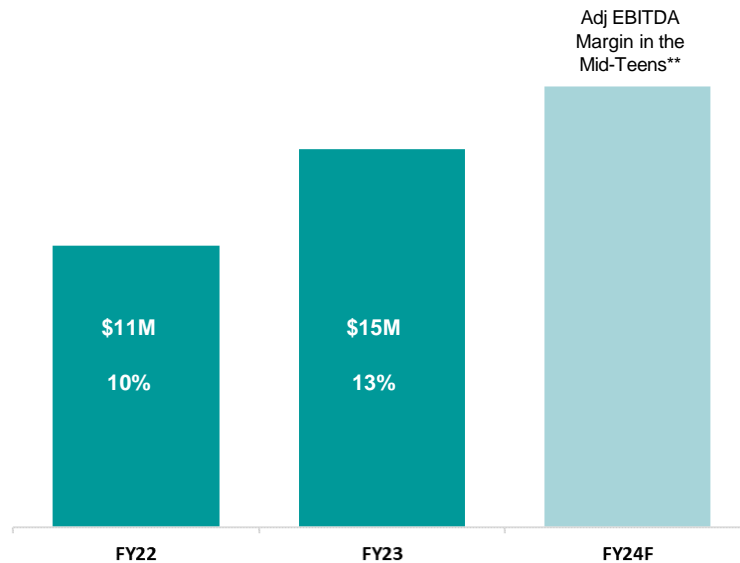
Sales and Earnings Trends

Expect weakness in H1 2024 vs a strong 2023 comparison; H2 2024 growth vs both H1 2024 and H2 2023**

REVENUES



ADJUSTED EBITDA & EBITDA MARGIN*



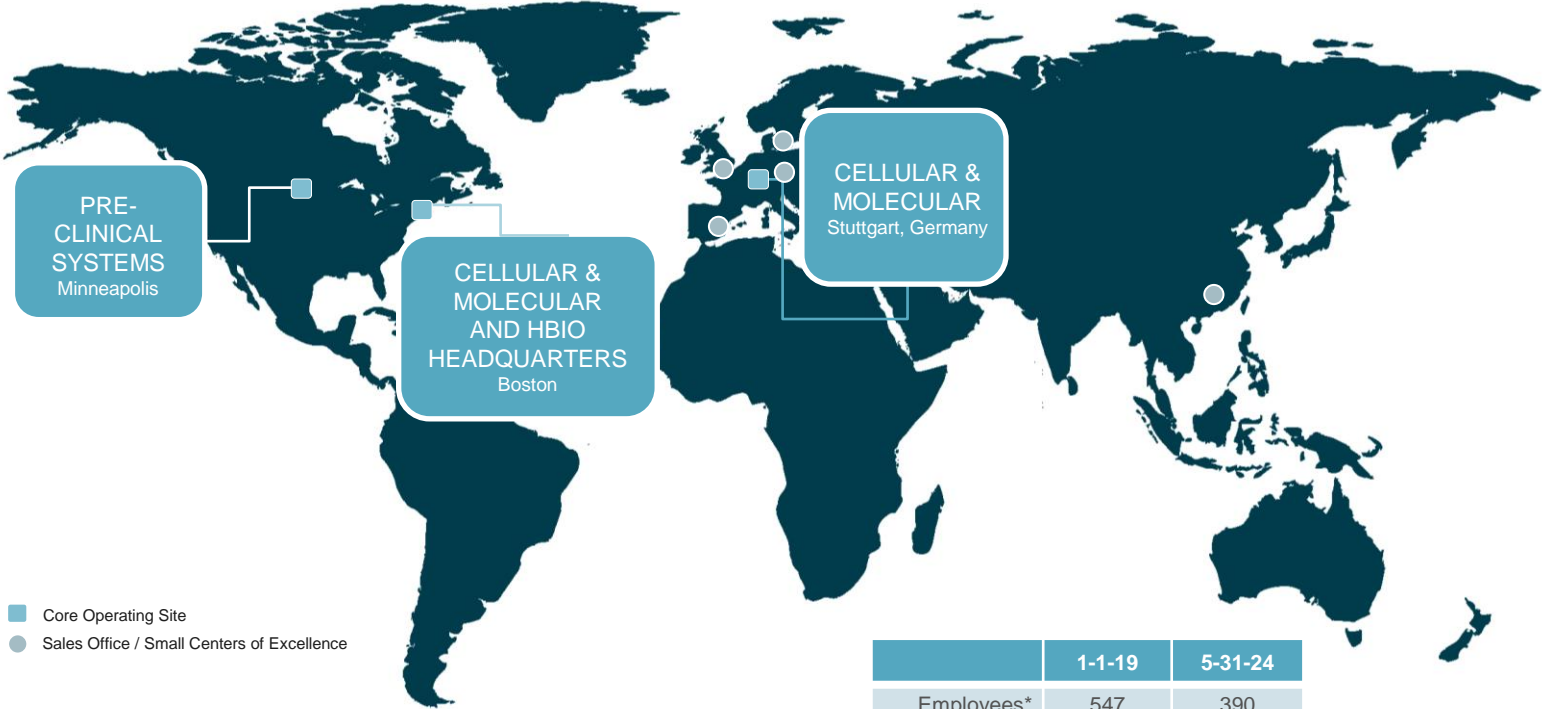
* Non-GAAP measure; see reconciliations to GAAP financial measures in Appendix.

** 2024 Guidance as discussed in Q1 earnings release on May 7, 2024. This presentation is not a reaffirmation of guidance.

*** 2024 H1/H2 is approximate for illustrative purposes.

**** 2022 Revenue includes \$5.5 million in sales of discontinued products; 2023 Revenue includes \$0.5 million in sales of discontinued products; net difference is \$5.0 million

Today's Global Footprint



*Headcount is approximate

	1-1-19	5-31-24
Employees*	547	390
Sites	14	8

Essential Technologies Serving Well-funded, High-growth Secular Markets with Demographic Tailwinds

DRIVERS

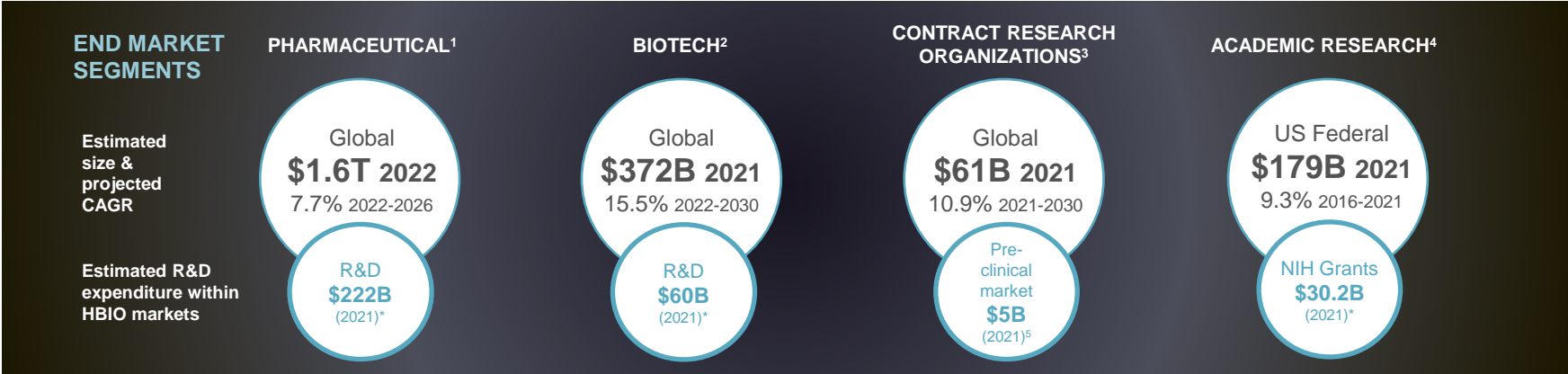
Rising incidence of disease – cardiac, cancer, respiratory, diabetes, obesity, Alzheimer’s, neurological, infectious



Increased funding for research and development of **advanced therapeutics**



Increased demand for research tools, devices and systems that improve efficiency & productivity and **enable therapeutics discovery and safety & regulatory through bio-production**



1) <https://www.researchandmarkets.com/reports/5553406/pharmaceuticals-global-market-report-2022-by>
 2) <https://www.acumenresearchandconsulting.com/biotechnology-market>
 3) <https://www.emergenresearch.com/request-sample/1221>
 4) <https://ncses.nsf.gov/pubs/nsf22323>
 5) <https://www.grandviewresearch.com/industry-analysis/preclinical-cro-market>

*Internal estimates calculated based on publicly-available data.

Blue Chip Customer Base



ACADEMIC RESEARCH

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



CONTRACT RESEARCH ORGANIZATIONS

- Pre-clinical studies to determine safety and efficacy of new pharmaceuticals
- Pharmaceutical companies are outsourcing significant pre-clinical activities to CROs



BIOTECH, PHARMACEUTICAL

- Perform early discovery and then transition from discovery through pre-clinical regulatory and on to production
- Leverage discoveries from academics & bio-techs
- Bridge to bio-production



Value Proposition

Breakthrough technologies and applications, increase innovative publications

Reduce test cycle-time, increase volume and study types, drives CROs revenue growth

Reduce development cycle time means more compounds drives BioPharma revenue growth

Subset of blue-chip recurring customers

Extend Technology Leadership in Academic Research & Discovery



Adapt Technologies to High Volume Applications in Biopharma and CRO's

New Product Introductions: Focused on Commercialization

Base business targets above-market growth, drive high growth opportunities in bio-production and cellular organoid applications

STRENGTHEN THE BASE



PRECLINICAL



CMT

- Extend leadership in telemetry with the introduction of SoHo™ Shared Housing telemetry family of implants
- Introduced latest Ponemah™ software integrating VivaMARS™ high-capacity behavioral testing system with our industry leading GLP data management and reporting system
- VivaMARS™ expands our addressable market into neuro pharmacology applications
- Extend leading position in cellular/molecular/inhalation-respiration technologies
- Expand field service offerings

~85% of FY23 Rev

EXPAND TO BIO-PRODUCTION



CMT

- Adapted our well known BTX electroporation family to cGMP bioproduction applications
- Released our GLP/cGMP compliant Amino Acid Analyzer for Biopharma bioproduction, adapted from our leading AAA clinical analyzer

~10% of FY23 Rev

INNOVATE CELLULAR

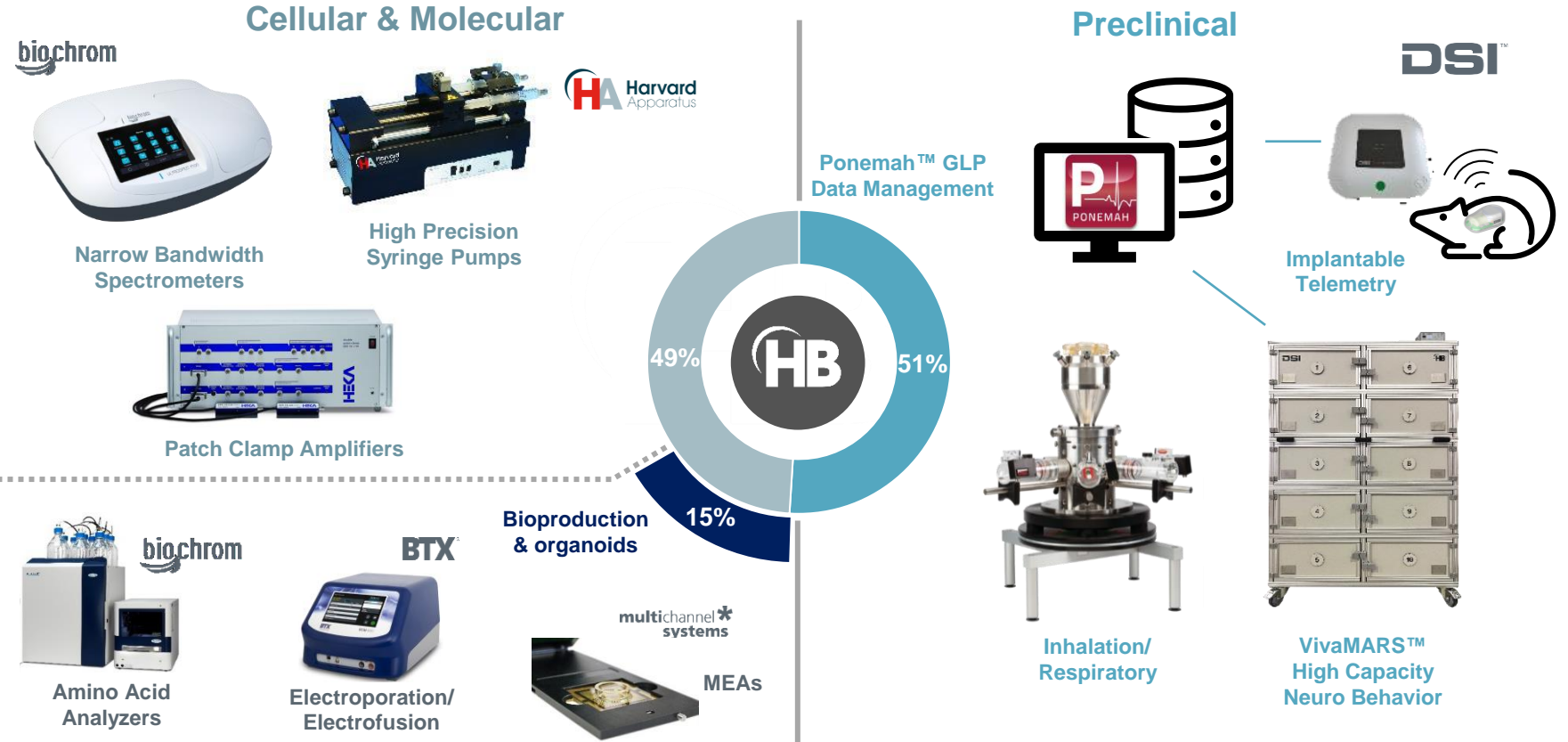


CMT-
ORGANOIDS

- Launched the Mesh MEA™ Organoid Platform at SfN
- Showcased Mesh MEA™ at Society for Toxicology
- Initial applications in research and biopharma discovery for neuro, exploring in-vitro safety applications

~5% of FY23 Rev

Maintain Industry Leadership, Expand Bioproduction & Innovate in Organoids

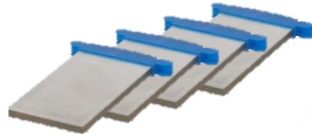


Expand to Bio-Production: BTX Electroporation as a Bridge to Bio-Production

HBIO IS A PIONEER IN ELECTROPORATION AND ELECTROFUSION DRIVING NOVEL DISCOVERIES IN DRUG CREATION



AgilePulse™ MAX



Consumable: Flatpack
Reaction Chamber



ECM 2001+

Bio-Production Applications and Configuration

- Used for today's most challenging cell modifications, CAR T-Cell transfection, monoclonal antibodies, Cell and Gene Therapy (CGT), CRISPR
- Ideal for bioproduction when Biotech or Pharma customers utilize our system to create the original compound
- Low barrier transition to production, faster time to market and reduced cost



Bio30+
AAA system

Amino Acid Analyzer (AAA)

- High precision amino acids/protein analysis
- For biologic therapies that rely on precise amino acid content
- Enables on site bioproduction testing of buffers and solutions to improve production cycle time

Innovate: Mesh MEA™ Organoid Platform, Built on our Leading MEA Technology

MOVING TO HUMAN & PATIENT DERIVED LONG-LIFE ORGANOIDS FOR EARLY IN VITRO TESTING

Today's
Drug Testing



Immortalized
Cells



Large Population
Small Animal Models



Small Animal
Model Safety



Large Animal Non-
Human Primate

Potential
Future Path



Immortalized
Cells



In-Vitro Ephys w/
Human Organoids

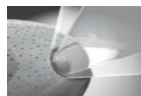


Small Animal
Model Safety

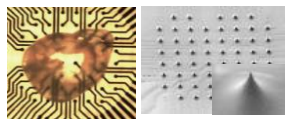


Large Animal Non-
Human Primate

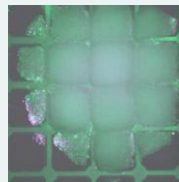
Individual Cell
Electrophysiology



2D/3D
Organ on chip

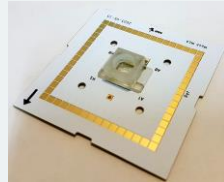


Mesh



First to market!

Biochip



In-Vitro Electrophysiology Organoid Analysis

- Enabling longitudinal organoid studies
- Neuro and cardiac applications
- Reduce test cycle time, increase yield



Investment Thesis: Deliver Strong, Profitable, Long-Term Growth

**NEW PRODUCT INTRODUCTIONS FOCUSED ON TOP-LINE GROWTH
& RECURRING REVENUES**

**LARGE, LOYAL CUSTOMER BASE IN DRUG RESEARCH & DISCOVERY,
SAFETY & REGULATORY, AND BIO-PRODUCTION MARKETS**

**FOCUSED ON LONG TERM DOUBLE DIGIT TOPLINE GROWTH, 60% GROSS
MARGIN & 20%+ ADJUSTED EBITDA MARGIN**



Enabling discovery, safety and
production of tomorrow's therapeutics

Thank You

Appendix

Reconciliation of GAAP to Non-GAAP Financial Measures

	(in thousands)	
	Year Ended 31-Dec-22	Year Ended 31-Dec-23
GAAP net loss	\$ (9,516)	\$ (3,415)
Stock-based compensation	4,411	5,000
Acquired asset amortization and impairment	6,236	5,561
Settlement, restructuring, & other	5,603	253
Unrealized loss on equity securities	-	632
Income taxes	(1,689)	(1,604)
Adjusted net income	5,045	6,427
Depreciation	1,338	1,440
Interest and other expense, net	2,426	4,221
Adjusted income taxes ⁽¹⁾	2,026	2,463
Adjusted EBITDA	\$ 10,835	\$ 14,551
Revenues	\$ 113,335	\$ 112,250
Adjusted EBITDA margin ⁽²⁾	10%	13%

(1) 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.

(2) Adjusted EBITDA margin % is calculated as Adjusted EBITDA / Revenue.