



Enabling discovery, safety and
production of tomorrow's therapeutics

HBIO Investor Overview

Jim Green, Chairman, President & CEO

Sidoti Conference

May 10, 2023



Forward-Looking Statements and Non-GAAP Financial Information

Forward-Looking Statements

This document and related oral statement by the Company contain 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 revenues, earnings, cash position, growth, operational performance, 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 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.

Management’s Use of Non-GAAP Financial Information

This presentation includes non-GAAP financial information, including adjusted EBITDA, adjusted EBITDA margin, and net leverage ratio. 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. Items excluded include stock-based compensation, amortization of intangibles related to acquisitions, litigation settlement, restructuring and other costs, and income taxes. They also exclude 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. Any non-GAAP financial statement information included herein is accompanied by a reconciliation to the nearest corresponding GAAP measure which are included in the appendix.

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

Who We Are...

Most trusted partner of the leading academic research institutions, contract research organizations, and pharmaceutical and bio-tech companies in the discovery, production, and safety and regulatory compliance of tomorrow's life-saving therapies.



Foundation in Place for Sustainable, Profitable Growth

HIGH PERFORMANCE STRUCTURE IN PLACE

2019-2022 organizational transformation with core product lines, lower cost structure, optimized sales organization and a proven leadership team

FROM TRANSFORMATION TO SUSTAINABLE LONG TERM PROFITABLE GROWTH

Pivoting focus from transformation to long term targets of sustainable high single digit growth, with 60% gross margins & 20%+ adjusted EBITDA* margin

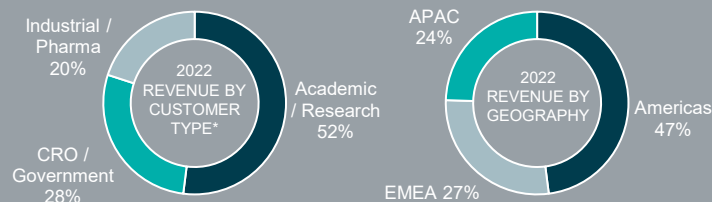
LOYAL CUSTOMER BASE IN DRUG DISCOVERY, SAFETY & REGULATORY, PRODUCTION

Trusted partner in large high-growth therapeutics markets with extensive blue-chip customer base and growing recurring revenue

COMPANY PROFILE

- Global sales footprint
- 3 Core Manufacturing facilities
- ~455 Employees
- 2022 Revenue: \$113M
- 2022 Adjusted EBITDA*: \$11M (10% of rev)
- 35%+ recurring revenues
- Founded 1901
- Headquarters: Greater Boston, MA

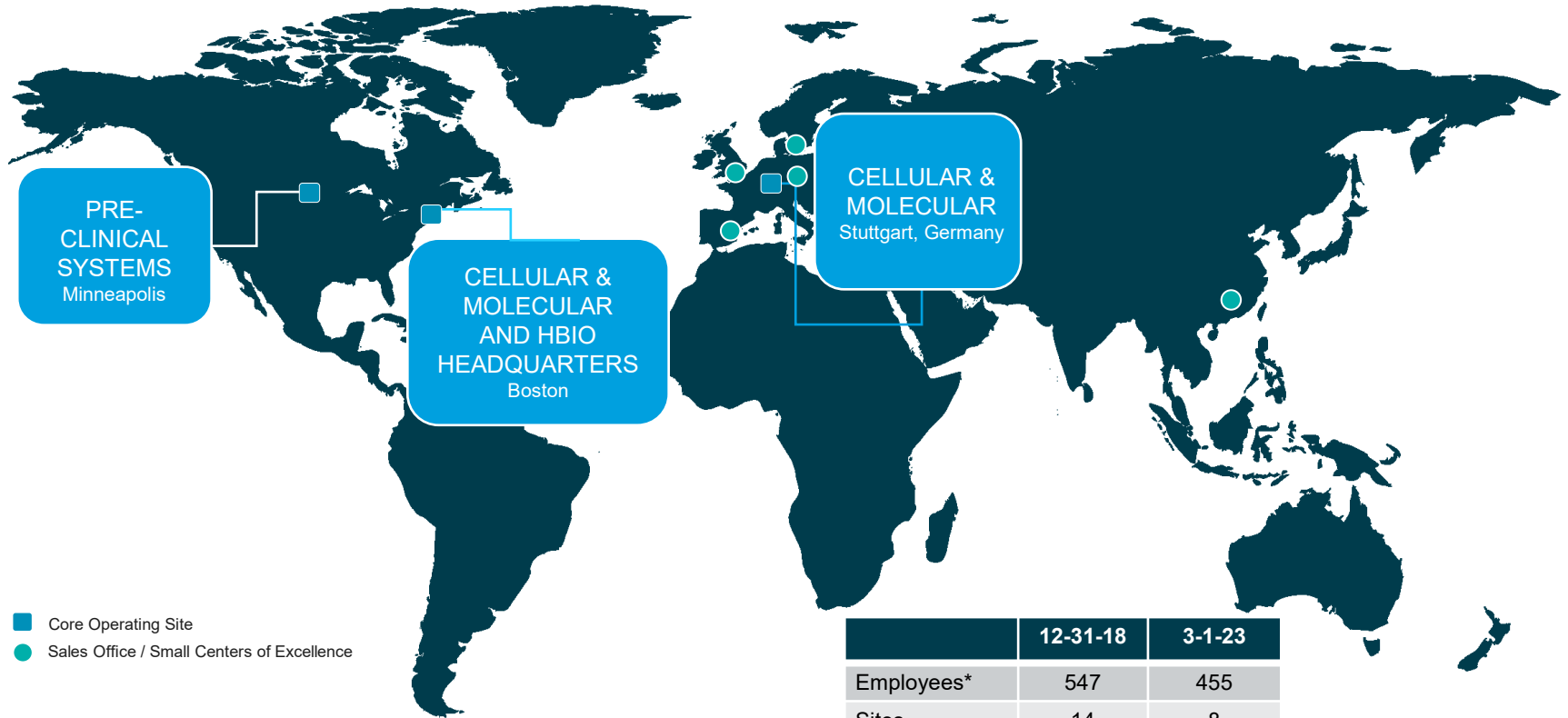
BALANCED PORTFOLIO



2022 Revenue: Revenues by customer type include estimation for small % of revenues

* Non-GAAP measure, reconciliations to GAAP financial measures are available in the Appendix.

Today's Global Footprint



	12-31-18	3-1-23
Employees*	547	455
Sites	14	8

*Headcount is approximate

Serving Well-funded, High-growth Market Segments Driven by Demographic Tailwinds

DRIVERS

Rising incidence of disease – cardiac, cancer, immunology, 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 thru bio-production**

END MARKET SEGMENTS

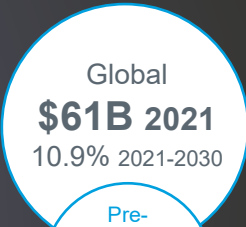
PHARMACEUTICAL¹

BIOTECH²

CONTRACT RESEARCH ORGANIZATIONS³

ACADEMIC RESEARCH⁴

Estimated size & projected CAGR



Estimated R&D expenditure within HBIO markets



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://nces.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

- Research labs primarily government & grant funded
- Scientific research & teaching
- Early discovery of new drugs and compounds for therapies and vaccines



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
- Often leverage discoveries from academics & bio-techs
- Bridge to bioproduction



Subset of blue-chip recurring customers

Foundation to Deliver the Vision

Experienced Leadership Team

Seasoned leaders with a proven track record of creating value through business fundamentals focused on revenue & earnings growth, operating cash flow and deleveraging

Trusted Sales/Application Experts

Welcomed and trusted partner to academic research, pharma, biotech and CRO customers for solutions to their toughest challenges



Experienced R&D Team

Track record delivering exciting new products focused on high-growth therapeutics with renewed focus on solutions, annuity consumable and service streams

Lean Operating Platform

Focused on lean operating structure dedicated to continuous improvement

Leading Technologies, Competitive Advantage

TARGETED PORTFOLIO OF TECHNOLOGY EXPERTISE

Mixed-signal
ASIC Design

RF
Communication

Ultra-low-noise
Amplifiers

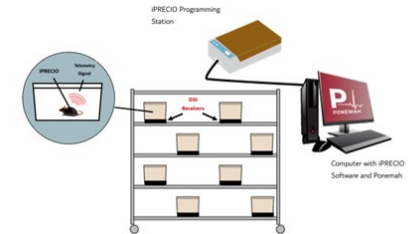
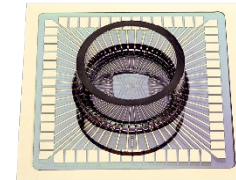
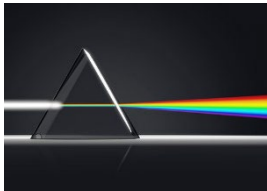
Precision High
Voltage

Spectrophotometry

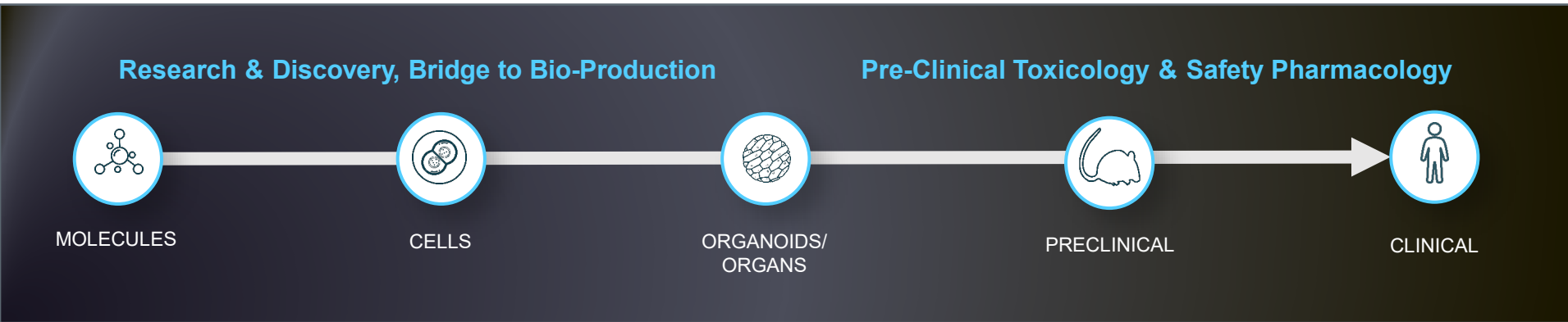
Chromatography

Large Data Pool
Analysis

Formal Regulatory
Reporting



Research, Development and Production Across the Continuum



GROWTH DRIVERS 2023 AND BEYOND

- ✓ Cellular and Molecular (CMT): Expand Discovery and Enter Bioproduction
- ✓ Pre-Clinical Systems: Extend Bundle adding Cellular & Behavioral Products
- ✓ Expand Recurring Revenues: Consumables and Services

Cellular and Molecular: Expand Discovery, Enter Production

TOP DISEASE TARGETS: CARDIOVASCULAR, IMMUNOLOGY / VIROLOGY, NEUROLOGY, & ONCOLOGY

APPLICATIONS

- ✓ Market leader in high efficiency electroporation systems for hard-to-transfect cell lines, CAR T- cell creation, CRISPR related transfection
- ✓ Market leader in electrofusion systems for monoclonal antibody generation and embryo and oocyte manipulation
- ✓ High density micro electrode arrays for cell-based studies and bridge to organoids
- ✓ High performance liquid chromatography for amino acid analysis

GROWTH STRATEGY

- ✓ Expand product offerings and solutions targeted to CROs, Pharma, Biotech
- ✓ Scale up customers leveraging our electroporation portfolio to bio-production
- ✓ Expand Amino Acid Analyzer consumables, penetrate pharma production QC

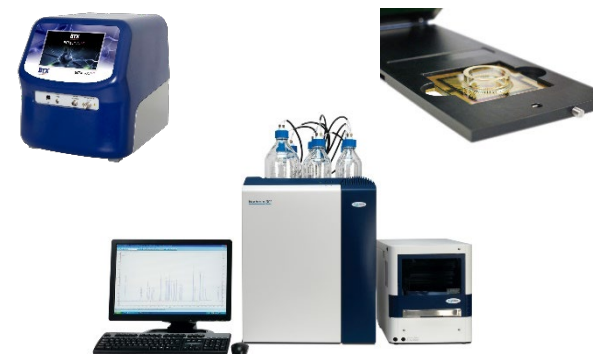
Note: See system configuration examples in Appendix II.

PORTFOLIO POSITION



* Based on FY 2022 revenue

PRODUCTS & SERVICES



Pre-Clinical Systems: Integrate/Bundle Cellular & Behavioral

SAFETY AND REGULATORY APPROVAL REQUIRED FOR ALL THERAPIES PRIOR TO HUMAN CLINICAL USE

APPLICATIONS

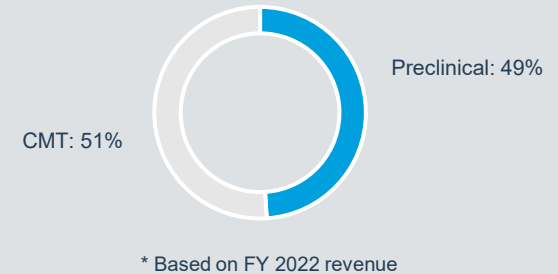
- ✓ Leader in GLP compliant enterprise software systems for data collection, reduction and regulatory reporting, longitudinal studies, access for future AI applications
- ✓ Leader in wireless real-time telemetry and implantable devices for animal model research from mice to primates
- ✓ Realtime behavioral systems integrated with our enterprise system
- ✓ Inhalation systems for respiratory and exposure studies

GROWTH STRATEGY

- ✓ Expand sales of Ponemah enterprise software systems w-consumables & services
- ✓ Next-gen continuous glucose monitoring – only vendor offering full telemetry
- ✓ Offer Integrated real-time behavior with telemetry via enterprise software platform
- ✓ Continued growth with our exclusive SmartStudy™ inhalation systems

Note: See system configuration examples in Appendix II.

PORTFOLIO POSITION



PRODUCTS & SERVICES



Expand Recurring Revenues: Consumables, Services

LEVERAGE OUR CURRENT LOYAL CUSTOMER INSTALLED BASE

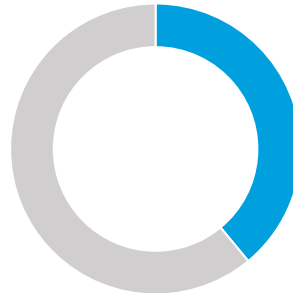
- ✓ Expand software offering to integrate data models from our broad portfolio
- ✓ Expand product offering to include annual validation services
- ✓ Expand specialized field service programs targeted to pharma and biotech
- ✓ Expand manufacturing capabilities to support GMP bioprocessing

PRODUCTS & SERVICES



INCREASING FOCUS ON RECURRING ANNUITY REVENUES

Global Revenues



35%+ revenues recurring*

- ✓ Consumables (including probes)
- ✓ Enterprise Software Maintenance
- ✓ Services and repairs
- ✓ Supplies and accessories

*Based on FY 2022 revenue

Note: See system configuration examples in Appendix II.

2023 Strategic Priorities

Accelerate Revenue Growth

- New product introductions.
- Expand cellular and molecular sales to Industrial Applications in Pharma, Biotech, CROs.
- Penetrate bioproduction.

Operating Discipline

- Improve operating leverage with leaner operations, reducing COGS and improved gross margins.
- Reduce working capital through reductions of inventories while improving selected lead times.
- Improve supply chain through efficient consolidation to best suppliers, reduce cash-to-cash cycle.
- Deliver significant operating improvement in gross margin, adj. EBITDA* and cash flows.

Strategic Capital Allocation

- Pay down debt and reduce net leverage ratio* to ~2x by end of 2023.
- Modest CAPEX increase to accelerate new product launches and manufacturing growth.

* Non-GAAP measure, reconciliations to GAAP financial measures are available in the Appendix.

Investment Thesis:

Built for Sustainable, Profitable Growth in 2023 and Beyond

HIGH-MARGIN, LOWER COST STRUCTURE IN PLACE

3-year turnaround completed in Q4 2022 with new enhanced sales and operating structure and improved product lines with sustainable growth

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

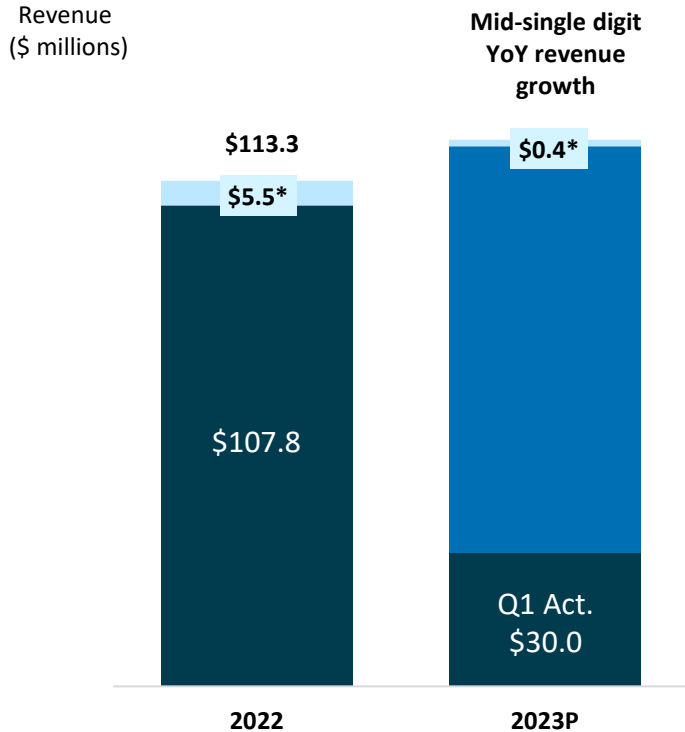
NEW PRODUCT INTRODUCTIONS, FOCUS ON RECURRING REVENUES TO DRIVE SUSTAINABLE PROFITABLE GROWTH

*Focused on strategic portfolio opportunities to drive sustainable long term topline growth, with 60% gross margins and 20%+ adjusted EBITDA margins**

* Non-GAAP measure, reconciliations to GAAP financial measures are available in the Appendix.

2023 Outlook: Looking Forward

New Products & Services Drive Pharma, CRO, Biotech & Research Growth



* 2022 Revenue includes \$5.5 million in sales of discontinued products; 2023 Revenue includes estimated \$0.4 million from sales of discontinued products; net difference is \$5.1 million.

For FY2023, we expect:

- Reported revenue growth in the mid-single digits, includes approx. 4 percentage points of discontinued products compared to 2022
- Gross margins to remain strong in the 60% range
- Adjusted EBITDA margins** to the 16% to 17% range
- Expanded adj. EBITDA** combined with improving working capital drives strong cash flow that supports significant debt pay down
- Reduce net leverage ratio** to ~2x level by end of 2023

** Non-GAAP measure, reconciliations to GAAP financial measures are available in the Appendix.



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Thank You



Appendix I:
GAAP to Non-GAAP Reconciliations

HARVARD BIOSCIENCE, INC.
Reconciliation of GAAP to Non-GAAP Financial Measures
(in thousands)

	Year Ended 31-Dec-19	Year Ended 31-Dec-20	Year Ended 31-Dec-21	Year Ended 31-Dec-22
GAAP net loss	(4,687)	(7,810)	(288)	(\$9,516)
Stock-based compensation	3,034	3,647	4,169	4,411
Acquired asset amortization and impairment	7,224	5,710	5,840	6,122
Settlement, restructuring, & other	3,943	6,042	4,462	5,603
Depreciation	1,987	1,922	1,781	1,453
Interest and other expense, net	5,879	5,637	2,207	2,426
Adjusted income taxes ⁽¹⁾	(815)	518	146	336
Adjusted EBITDA	\$16,565	\$15,666	\$18,317	\$10,835
Revenue	\$116,176	\$102,100	\$118,904	\$113,335
Adjusted EBITDA margin ⁽²⁾	14.3%	15.3%	15.4%	9.6%
Total Debt	\$54,997	\$49,399	\$49,450	\$47,664
Less: Cash and cash equivalents	\$8,335	\$8,317	\$7,821	\$4,508
Net Debt	\$46,662	\$41,082	\$41,629	\$43,156
Net Leverage Ratio ⁽³⁾	2.8	2.6	2.3	4.0

⁽¹⁾ Income taxes includes the tax effect of adjusting for the reconciling items using the calculated effective tax rate, including the post - 2017 impact of tax reform in the jurisdictions in which the reconciling items arise.

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

⁽³⁾ Net Leverage Ratio is calculated as Net Debt / Adjusted EBITDA.

Appendix II:

Example System Configurations

Cellular & Molecular Example: BTX Electroporation Solution

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

- ✓ Cell modification, CAR T-Cell creation
- ✓ Electrofusion including monoclonal antibody generation
- ✓ Other CRISPR related applications
- ✓ Expanding initial inroads (bridge) to bio-production

Electroporation / Electrofusion Consumables

- ✓ General Use Cuvettes
- ✓ In Vitro Coaxial Chambers
- ✓ Flat Pack Higher Volume Reaction Chambers



(Consumable: Flat Pack Reaction Chamber)

Electroporation / Electrofusion Systems

Drug Discovery Configuration: Market leader for high flexibility and ease of use for transforming the most challenging cell lines. Also configurable for bio-production.

Academic & Pharma Research Configuration: Highly flexible, easy to use to support top academic research to support immunology, oncology, metabolic and neurologic therapies.



ECM2001s

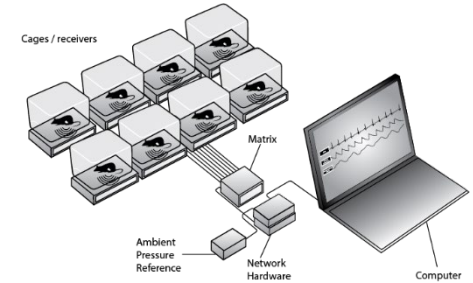
Pre-Clinical Example: Continuous Telemetry Solution

Market Leader in GLP Compliant vital physiologic measurements, recording and formal reporting required by FDA/regulatory bodies to support drug migration from pre-clinical to stage 1 clinical trials in human use.

- ✓ Understand diseases, discover therapies, safety & efficacy
- ✓ Cardiovascular, Neurological, Metabolic Disease
- ✓ Efficacy, safety pharmacology and toxicology testing
- ✓ GLP regulatory compliant Enterprise platform with 21CFR11

Continuous Monitoring Wireless Solutions

- ✓ Wireless Telemetry Implants:
- ✓ Real-time measurement physiologic endpoint
- ✓ Blood Pressure
- ✓ Temperature
- ✓ EKG, EMG, EEG
- ✓ Activity
- ✓ Respiratory
- ✓ Glucose (new exclusive addition)



Ponemah Enterprise Software

CRO/Pharma Configuration: GLP Regulatory Compliant Market Leading Enterprise Solution for telemetry measurement collection/ data reduction and formal reporting for toxicology and Safety Pharmacology and other regulatory requirements prior to human clinical use.

Academic Research Configuration: Lighter version, easy to use / train their researchers and extremely flexible to support new drug development and disease modeling for top global academics, support long term longitudinal studies.