

Class-defining Solutions for Cell & Gene Therapy

Investor Presentation
January, 2024



Certain statements contained in this presentation are not historical facts and may be forward-looking statements. Words such as “plans,” “expects,” “believes,” “anticipates,” “designed,” and similar words are intended to identify forward-looking statements. Forward-looking statements are based on our current expectations and beliefs, and involve a number of risks and uncertainties that are difficult to predict and that could cause actual results to differ materially from those stated or implied by the forward-looking statements. A description of certain of these risks, uncertainties and other matters can be found in filings we make with the U.S. Securities and Exchange Commission, all of which are available at www.sec.gov. Because forward-looking statements involve risks and uncertainties, actual results and events may differ materially from results and events currently expected by us. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. We undertake no obligation to publicly update these forward-looking statements to reflect events or circumstances that occur after the date hereof or to reflect any change in its expectations with regard to these forward-looking statements or the occurrence of unanticipated events.

This presentation contains industry, statistical and market data, which was obtained from the company’s own internal estimates and research as well as from industry and general publications and research, surveys and studies conducted by third parties. All of the market data used in this presentation involves a number of assumptions and limitations. While the company believes that the information from these industry publications, surveys and studies is reliable, the industry in which it operates is subject to a high degree of uncertainty and risk due to a variety of important factors. These and other factors could cause results to differ materially from those expressed in the estimates made by third parties and by the company. This presentation contains trademarks, trade names and service marks of other companies, which are the property of their respective owners. The company does not intend its use or display of other parties’ trademarks, trade names or service marks to imply, and such use or display should not be construed to imply, a relationship with, or endorsement or sponsorship of the company by, these other parties.

Non-GAAP Measures of Financial Performance:

To supplement our financial statements, which are presented on the basis of U.S. generally accepted accounting principles (GAAP), the following non-GAAP measures of financial performance are included in this presentation: adjusted gross profit and gross margin, adjusted operating expenses, adjusted operating income/(loss), adjusted net income/(loss), earnings before interest, taxes, depreciation and amortization (EBITDA), and adjusted EBITDA. A reconciliation of GAAP to adjusted non-GAAP financial measures is included as an attachment to this presentation.

We believe these non-GAAP financial measures are useful to investors in assessing our operating performance. We use these financial measures internally to evaluate our operating performance and for planning and forecasting of future periods. We also believe it is in the best interests of investors to provide this non-GAAP information.

While we believe these non-GAAP financial measures provide useful supplemental information to investors, there are limitations associated with the use of these non-GAAP financial measures. These non-GAAP financial measures may not be reported by competitors, and they may not be directly comparable to similarly titled measures of other companies due to differences in calculation methodologies. The non-GAAP financial measures are not an alternative to GAAP information and are not meant to be considered in isolation or as a substitute for comparable GAAP financial measures. They should be used only as a supplement to GAAP information and should be considered only in conjunction with our consolidated financial statements prepared in accordance with GAAP.

Our Mission

We are a leading provider of bioproduction tools and services to cell and gene therapy markets, supplying solutions that maintain the health and function of biologic source material and finished products during manufacturing, storage and distribution.

BioLife at a Glance

Leading provider of bioproduction tools to the fast-growing CGT market

~ \$143M

Revenue for the full year 2023¹

11%

Sequential increase in 4Q 23 Cell Processing revenue

14

Approved CGT therapies incorporate BioLife cell processing tools²

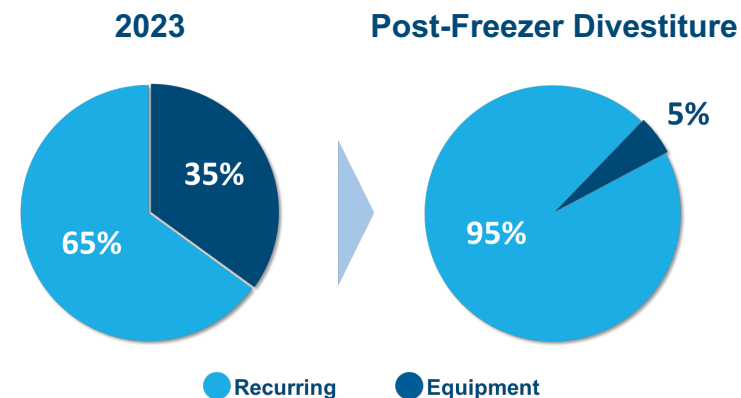
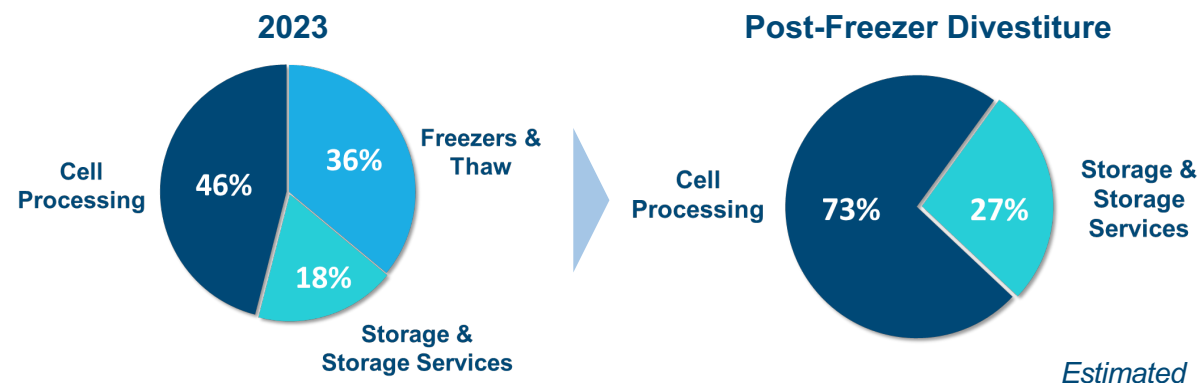
20

Active Phase 3 CGT trials using BioLife cell processing tools

83%

BioLife media in US FDA Approved CAR T Therapies

Revenue Mix Shift

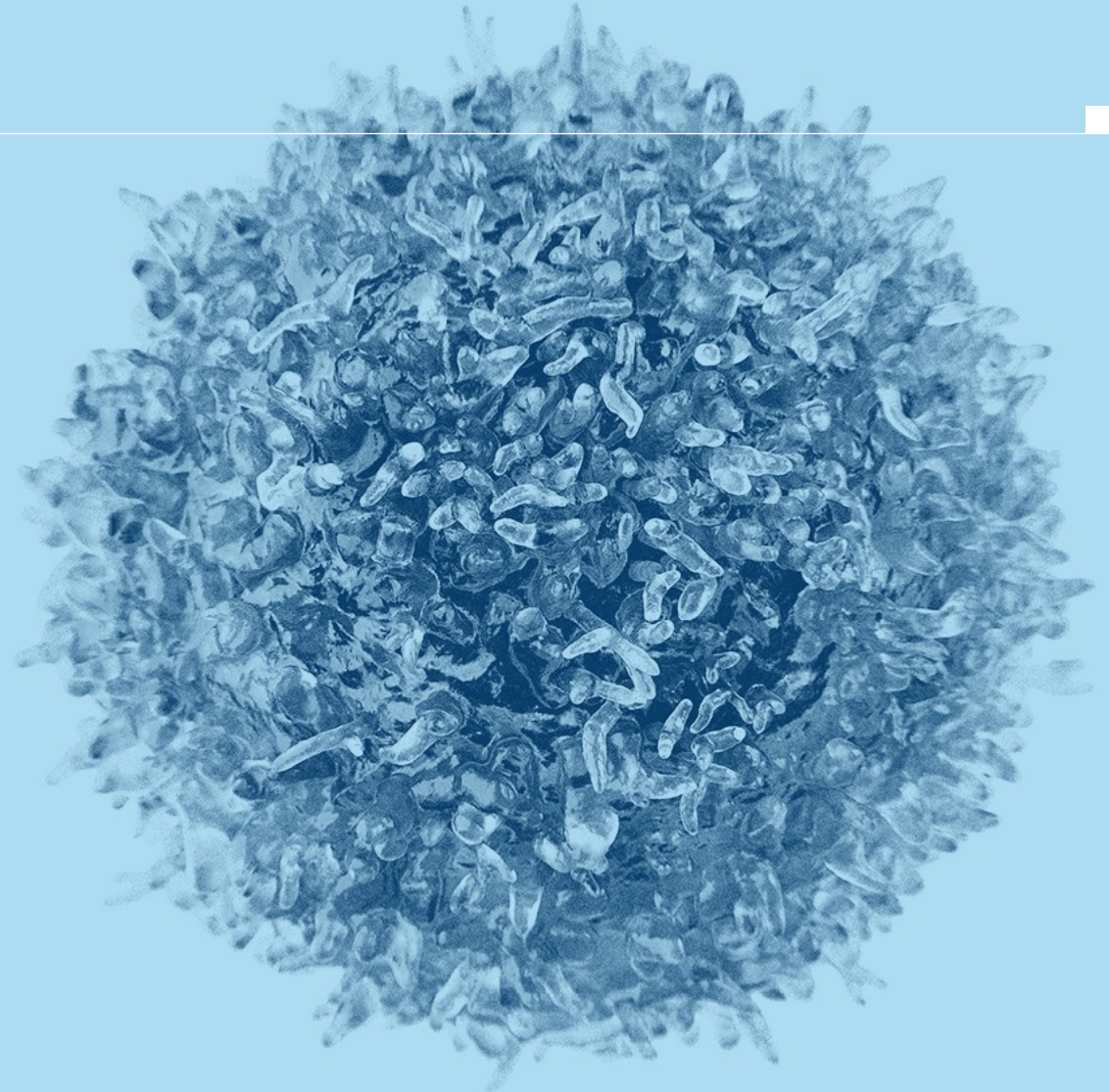


Investment Highlights – Pure Play Picks & Shovels for CGT

- ◆ **Class-defining portfolio of bioproduction tools and services** designed to improve quality and de-risk cell and gene therapy manufacturing and delivery
- ◆ **Well-positioned in the expanding cell and gene therapy market** expected to grow at 20-25% CAGR through 2033*
- ◆ **Biopreservation media is used in 14 approved therapies with up to 10 additional approvals through YE2024** - with the potential to generate \$500K - \$2M annual revenue per product post customer scale-up
- ◆ **Marquee customer base** with no competition in core biopreservation media business
- ◆ **Strategic decision to divest freezer businesses** in 1Q 24 to improve financial profile and focus portfolio on high margin, recurring revenue streams






Cell & Gene Therapy Market



CGT Pipeline Demand Drivers

Embedded BioLife Solutions

	North America	Asia Pacific	Europe	Total
 Developers	1,115	861	514	2,575
 Clinical Trials	940	747	340	1,804
 Investment	\$1.1B	\$0.9B	\$0.1B	\$2.2B

2023 Highlights

- There was a record 8 regulatory approvals of cell or gene therapies between the United States (US) and the European Union (EU) in the calendar year 2023
- BioLife products and services used in as many as 10 upcoming approvals expected by the end of 2024
- The FDA expects to achieve a rate of 10-20 cell and gene therapy approvals annually by 2025

Growing Clinical & Approval Pipelines

	Therapy	Therapy (Indication)	Status
Regulatory decision scheduled	Lifileucel (Iovance Biotherapeutics)	Cell Therapy (Metastatic melanoma)	February 24, 2024 (FDA) EMA MAA submission possible in H1 2024
	Libmeldy (Orchard Therapeutics)	Gene Therapy (Metachromatic leukodystrophy)	March 18, 2024 (FDA)
	Casgevy (Vertex Pharmaceuticals & CRISPR Therapeutics)	Gene Editing Therapy (Sickle cell disease and Beta-thalassemia)	FDA decision for β-thalassemia set for March 30, 2024 EU decision for sickle cell disease and β-thalassemia anticipated in Q1 2024
	Kresladi (Rocket Pharmaceuticals)	Gene Therapy (Leukocyte Adhesion Deficiency-I)	March 31, 2024 (FDA)
	Fidanacogene Elaparvovec (Pfizer)	Gene Therapy (Hemophilia B)	April 27, 2024 (FDA) MAA accepted; 2024 decision possible (EU)
	Pz-cel (Abeona Therapeutics)	Cell Therapy (Dystrophic epidermolysis bullosa)	May 25, 2024 (FDA)
BLA or MAA submitted or submission expected in 2023. 2024 decision possible.	Afami-cell (Adaptimmune Therapeutics)	Cell Therapy (Advanced synovial sarcoma)	2024 FDA approval decision possible
	Vyjuvek (Krystal Biotech)	Gene Therapy (Dystrophic Epidermolysis Bullosa)	2024 EU approval decision possible
	Obe-cel (Autolus Therapeutics)	CAR-T Cell Therapy (R/R B-cell acute lymphoblastic leukemia)	2024 FDA approval decision possible EMA MAA submission possible in H1 2024
	Upstaza (PTC Therapeutics)	Gene Therapy (AADC deficiency)	2024 FDA approval decision possible
	Elevidys (Sarepta Therapeutics and Roche)	Gene Therapy (Duchenne Muscular Dystrophy)	2024 EU approval decision possible

Sources: Alliance for Regenerative Medicine August & December 2023 Sector Snapshots

Biopreservation Challenges

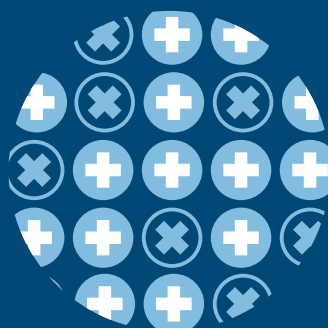
CAR T and other cell therapies **MUST** be kept alive during manufacturing, storage and shipping to maintain biologic potency

As *Ex Vivo* Time Increases, So Does Risk

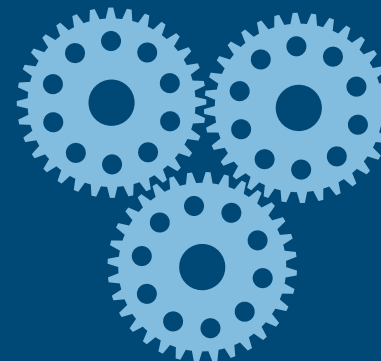
Survival
How Long



Viability
How Many



Function
How Well

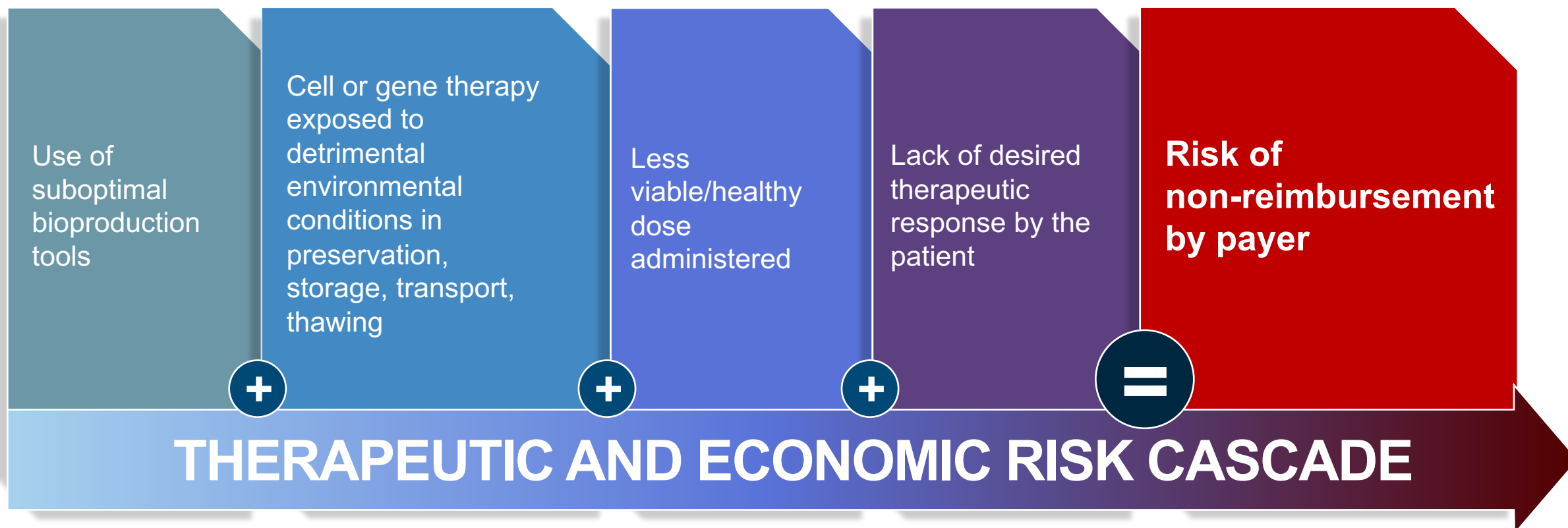


Causes of Reduced Biologic Potency

Poor Preservation ⚠️ **Temp Excursions** ⚠️ **Mechanical Shock**

Customer Reimbursement Environment

- ◊ “Pay for response/cure” paradigm
- ◊ Paid out over time only if initial and durable response to treatment is confirmed
- ◊ Increased economic risk for our customers



Allogeneic Opportunity



Accelerator of CAR T Clinical Adoption

- ◆ Estimated as few as 20-25% of eligible patients for approved CAR T therapies receive them due to access barriers
- ◆ Allogeneic CAR T addresses major limitations of autologous therapies:
 - Potentially improved efficacy
 - ✓ Shorter time to infusion / faster treatment: no lengthy “vein-to-vein” time
 - ✓ Use of healthier, non- pre-treated donor T cells eliminating “harvest failures”
 - Improved economics / access
 - ✓ Not constrained to limited number of certified treatment centers - banks of cells can be stored across treatment sites
 - ✓ Simplification of complex supply chain
 - Greater quality control in manufacturing process
 - ✓ Increased consistency / reduced variability
 - ✓ Improved economies of scale, lower COGS

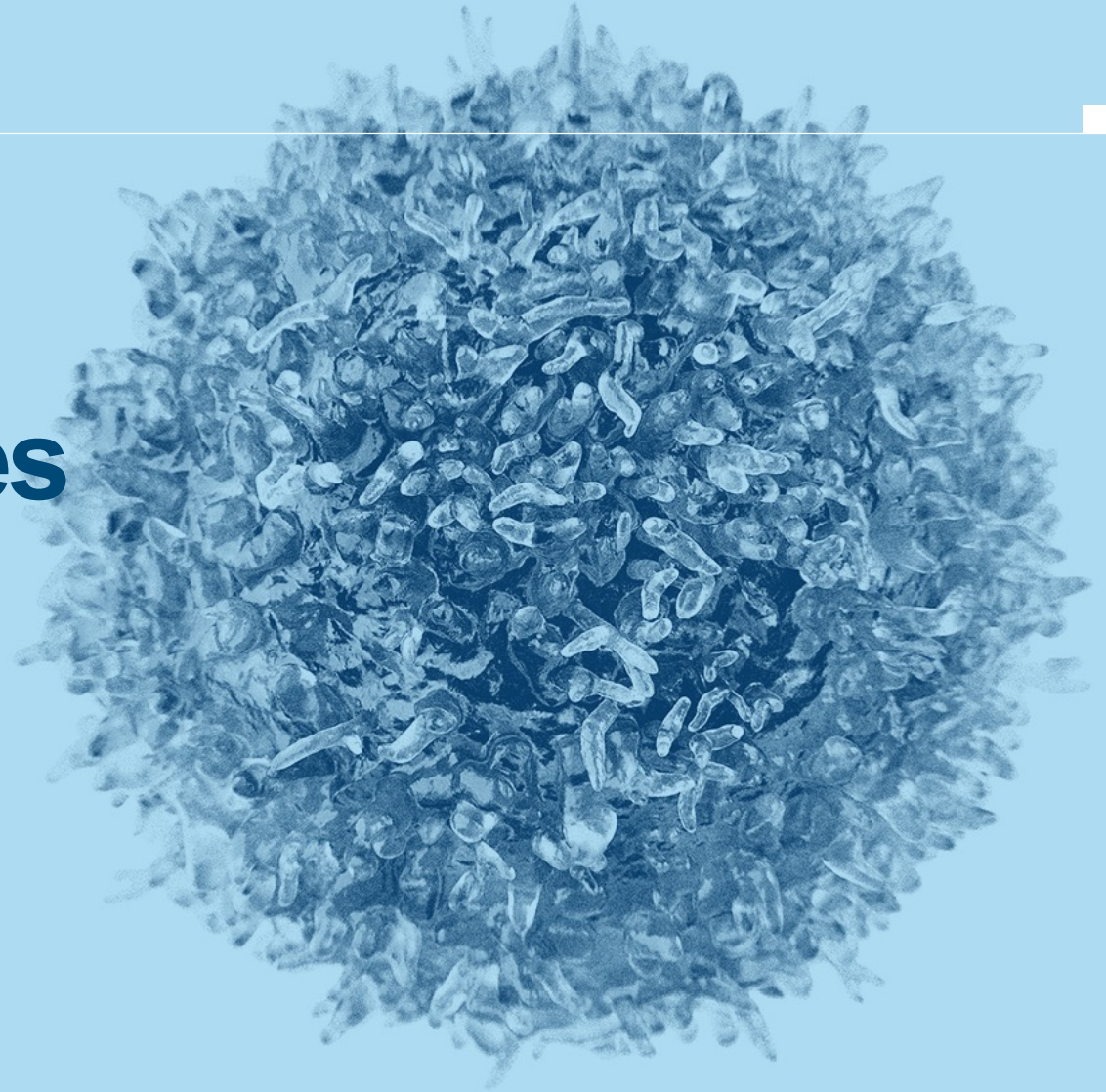


Sources

- Investigators Set Sights on Optimizing CAR T-Cell Therapy in Lymphoma. OncLive, Sept. 4, 2022
- Off-the-shelf CAR T cells hold ‘huge’ promise for cancer treatment, but more data needed. Healio, Dec. 21, 2022
- Caldwell, KJ, Gottschalk, S, Talleur, A. Allogeneic CAR Cell Therapy – More Than a Pipe Dream. Frontiers in Immunology, Jan., 2021



Products and Services Portfolio



Our Solutions Embedded in Customer CGT Workflow



Collection

Safely store and transport harvested cells from collection to processing



Formulation

Stabilize starting materials through expansion and cryopreservation



Fill & Packaging

Minimize variability between samples to ensure batch consistency & maximum recovery



Controlled-Rate Freezing

Ensure maximum viability & efficacy of frozen samples through optimized cooling rate



Storage

Reliably maintain stable minimum safe storage temperature to avoid loss of viability



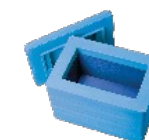
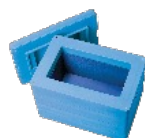
Cold Chain

Ensure the integrity & security of the chain of custody with temperature monitoring and traceability



Thawing

Safeguard consistent sample viability while minimizing contamination risk during thawing



BioLife Solutions Product Portfolio

Cell Processing



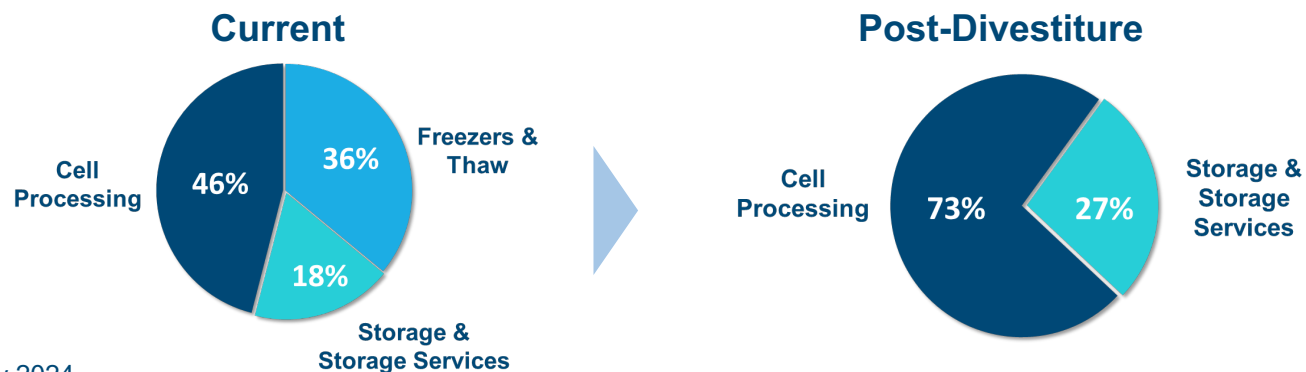
Storage and Services



Freezing* and Thawing



Revenue Mix



Momentum with Global CGT Customers

Biopreservation Media Products



- ◆ Cumulative 690+ US FDA Master File Cross-References
- ◆ Used in 14 approved CGT products worldwide, with up to 10 additional therapy approvals in 2024

Sexton Cell Processing Tools



- ◆ Used in ~180 clinical trials
- ◆ Used in 3 approved CGT products worldwide

Cold Chain Management Products



- ◆ Reached 12,000 shipments in 2023: ~ 50% increase from 2022
- ◆ By end of 2024, expect the evo[®] Platform to be used in the majority of currently approved CAR T-cell therapies


Divestiture of Stirling and CBS Freezer Businesses

→ Rationale	→ Benefits	→ Timing	→ Process Status
Improve financial profile and re-focus portfolio on high margin, recurring revenue streams	Elimination of margin drag and management bandwidth, allowing for focus on operational execution of cell processing and storage platforms	Completion expected in Q1 2024	LOI's received and diligence in process

Cell Processing Platform



Cell Processing

 **\$65.8mm**
2023 Sales revenue*

 **~20-25%**
Sector growth through 2033†

 **~ 99%**
Recurring revenue



CryoStor®
Freeze Media
[Proprietary]



HypoThermosol®
Storage Media
[Proprietary]



Sexton
Cell Processing Tools
[Proprietary]

*Preliminary / unaudited
† Morgan Stanley research report, August 17, 2023

BioLife Solutions Biopreservation Brand Differentiation

◆ **Scientific Technology**

- Intracellular-like; not isotonic such as culture media or saline
- Designed for low temperature conditions

◆ **Quality/Regulatory Footprint**

- Raised the bar for biopreservation media used in CGT
- cGMP manufacturing which facilitates integration into customer clinical manufacturing
- FDA Master File

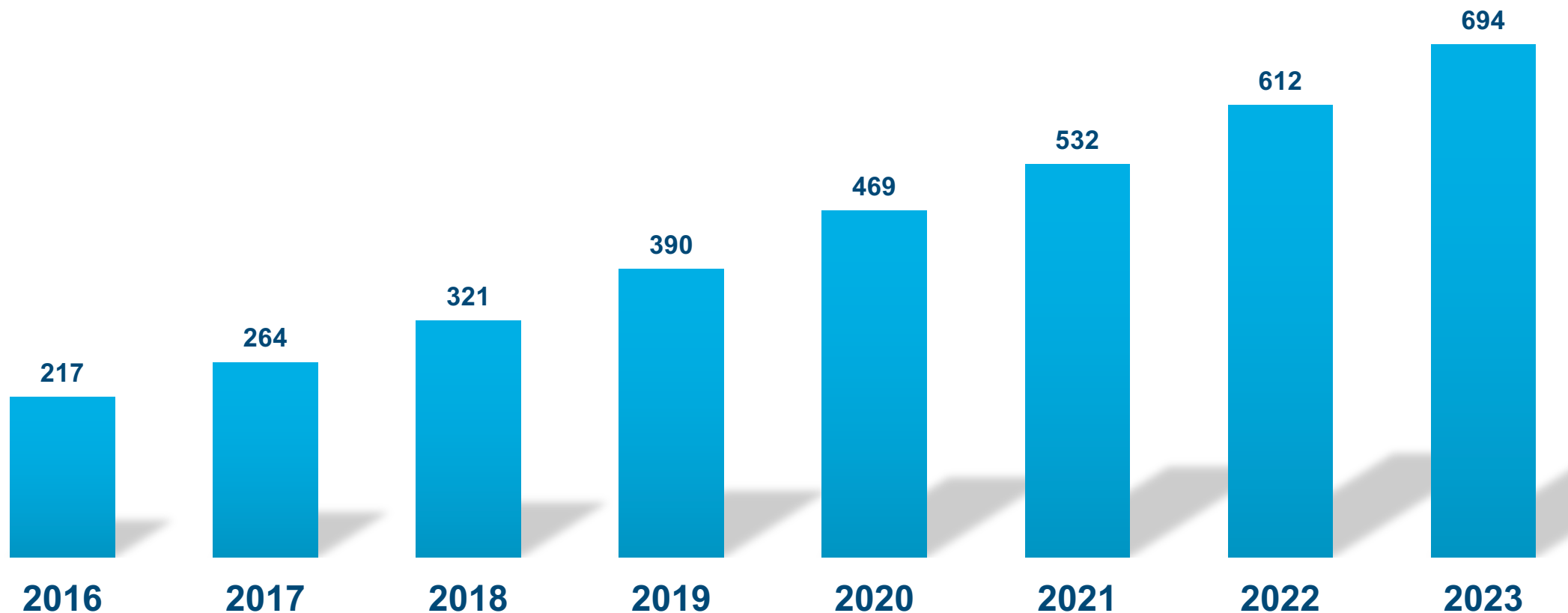
◆ **Scientific/Technical Expertise**

- Deep experience translating basic science concepts to the practical application utilized by CGT customer base
- The scientific expertise related to the development of Biopreservation Best Practices allows for early customer and market feedback, which leads downstream to a stronger customer-supplier relationship

BioLife Solutions is Synonymous with Biopreservation Best Practices



Biopreservation Media Cumulative US FDA Master File Cross References



US FDA Only - Master File Cross Reference Totals



Cell Processing Tools Used in 14 Approved Therapies Worldwide

3 of these are also using CellSeal® Vials



Use of Biopreservation Media or Cell Processing Tools in Products Approved in any Region – Selected Disclosures

Selected Marquee Customers

Direct



Strategic Distributors



CMO & CDMO



Clinical Centers



Biopreservation Media Growth Catalysts

Captive marquee base of CGT customers

- ◈ Directly and indirectly supplying majority of global CGT companies
- ◈ “Sticky” customer relationships: BioLife biopreservation media specified in ~700 US FDA Master File cross-references


CGT outlook as dominant treatment modality

- ◈ Currently serving large disease states; cell processing tools used in 14 approved therapies worldwide
- ◈ Embedded in 5 of 6 US FDA approved CAR T therapies
- ◈ Embedded in up to 10 additional approvals possible through the end of 2024
- ◈ Expecting continued expansion of indications, additional geographic approvals, and prioritization in the treatment regimen to 1st or 2nd line therapies
- ◈ Eventual transition to allogeneic therapies – possible upside demand driver

Storage & Storage Services Platform



Biologic Storage & Services

 **\$25.9mm**
2023 Sales revenue*

 **~15%**
Market growth through 2032†

 **~100%**
Recurring revenues



SciSafe® Biologic
Storage Services



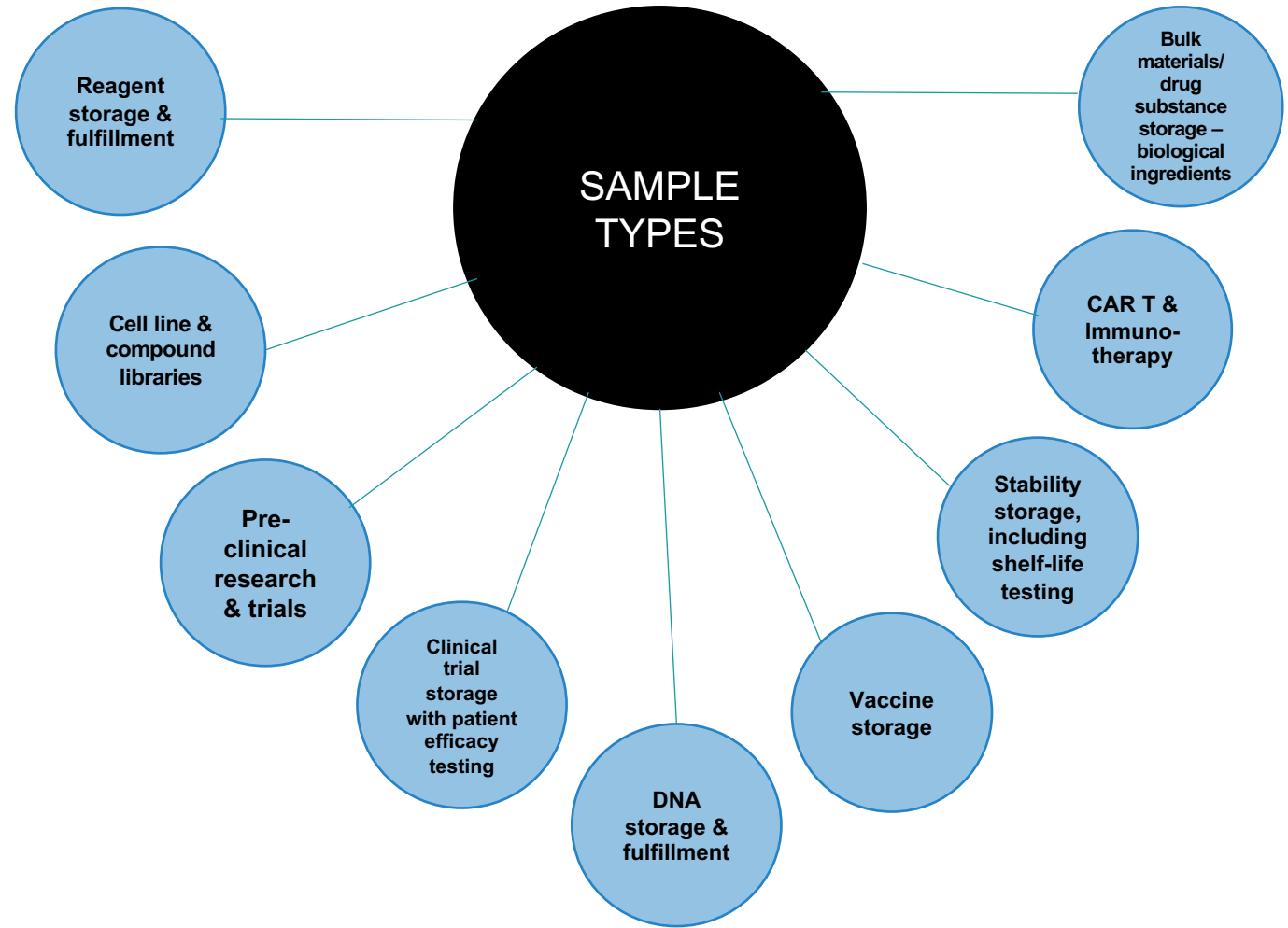
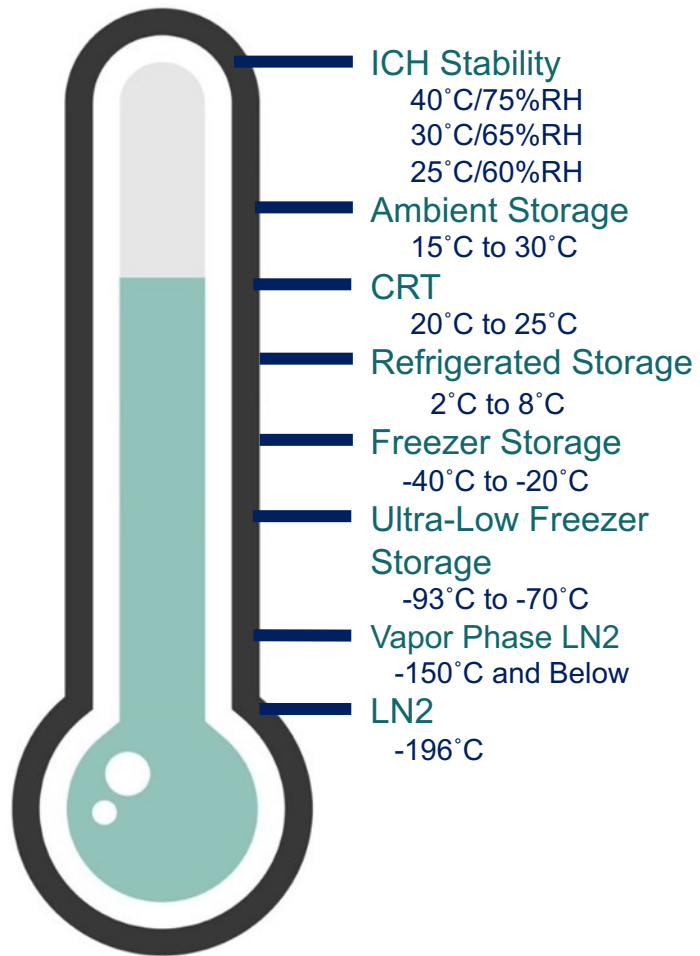
evo® Cold Chain
Management Platform

*Preliminary / unaudited

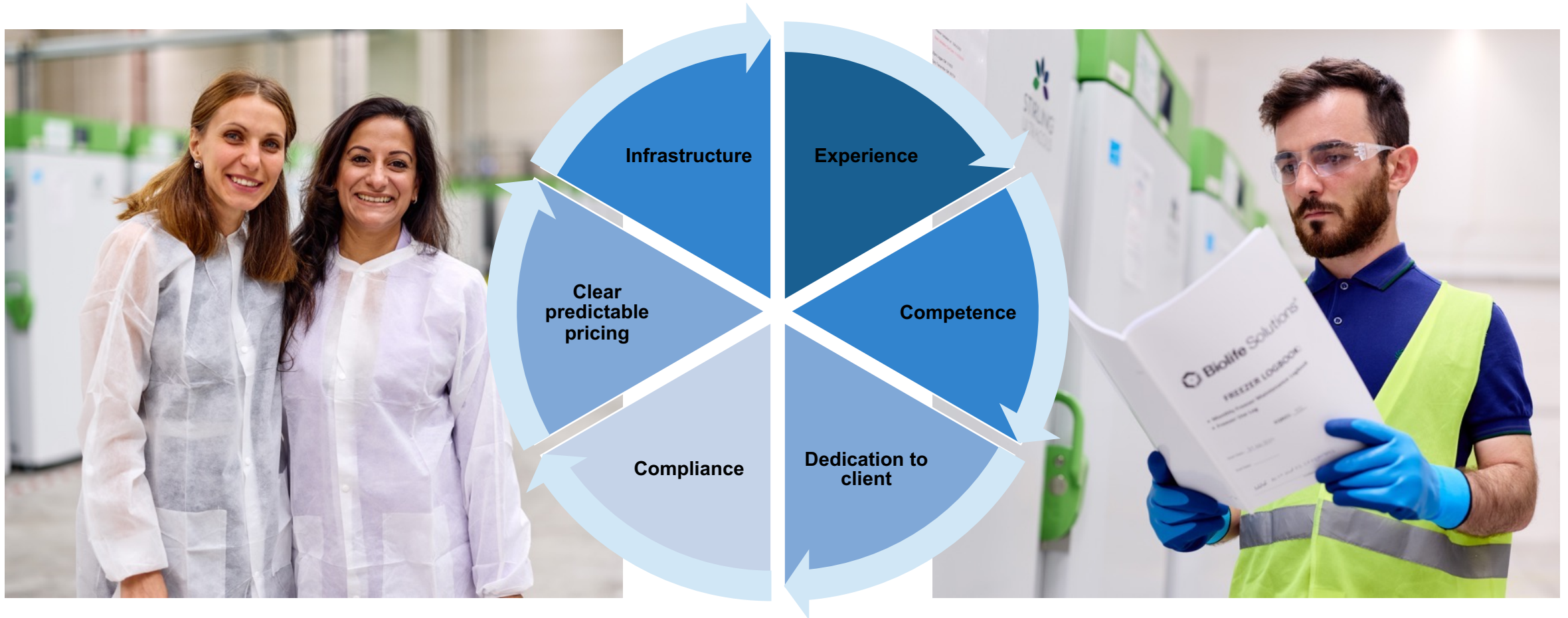
†Sources:

- Visiongain, Cell & Gene Therapy Logistics Market Report, May, 2023
- InsightAce Analytic, Global Cell & Gene Therapy Supply Chain/Logistics Market Report, May, 2023
- EMR, Global Cell & Gene Therapy Cold Chain Logistics Market Report, 2023

SciSafe®: Sample Types and Temperatures We Store...



SciSafe®: Why We Win: Circle Of Trust



evo® Cold Chain Management Platform



evo® Smart Shippers expand commercial reach of high-value regenerative medicines



Built-in monitoring systems minimize traceability challenges during shipment



evoS™ Web Application provides visibility to the location, status and condition of biologic materials



Leadership



Leadership Team



Roderick de Greef– Chairman & Chief Executive Officer
BA Economics & International Relations, MBA; 30+ years in senior financial, operating and BoD roles in medical technology and life science companies. 20+ years with BLFS Leadership in multiple roles including BoD, CFO and COO.



Aby J. Mathew, PhD – EVP, Chief Scientific Officer
BS Microbiology, PhD, Cell & Molecular Biology; co-developer of platform HypoThermosol® and CryoStor® media; in demand industry thought leader in biopreservation of cells and tissues for clinical applications; catalyst responsible for driving regenerative medicine market to adopt BLFS clinical grade biopreservation media; 6 issued and 6 pending patents; numerous journal articles.



Sarah Aebersold, J.D. – SVP, Human Resources
BA Psychology, JD. Joined BioLife in 2020 with over 15 years of HR leadership experience at various companies in the industries of Biotechnology, Medical Device, Software, and Healthcare.



Todd Berard – Chief Marketing Officer
BS, Biochemistry, MBA; 16 years marketing including leadership of marcom, corporate branding, product marketing, and positioning for Verathon, Physio Control (MDT), tech startups.



Karen Foster – SVP, Chief Quality and Operations Officer
BS Biological Sciences, MS Zoology, MBA; 25-year career in quality and manufacturing operations including 13 years VP Manufacturing Operations and Site Leader at ViaCord, 2 positions leading 80 member teams; certified Six Sigma Green Belt.



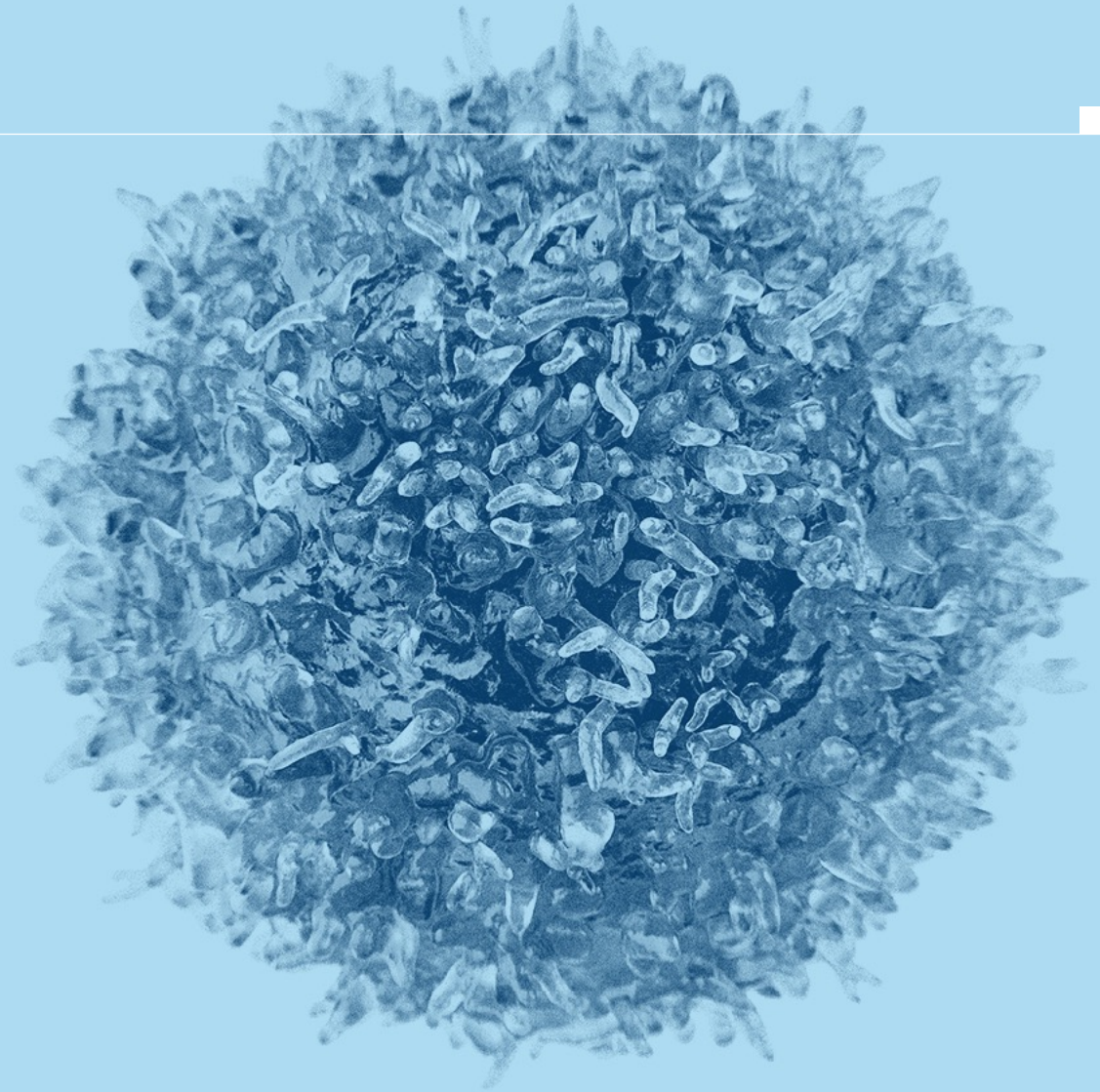
Garrie Richardson – Chief Revenue Officer
BS Marketing, MBA; 13+ years experience in biostorage services and the life science industry, previous owner and founder of SciSafe, Inc. He has intimate, hands-on experience with all aspects of sample management and is driving the company to become the global leader in sample management and integrated cold chain solutions.



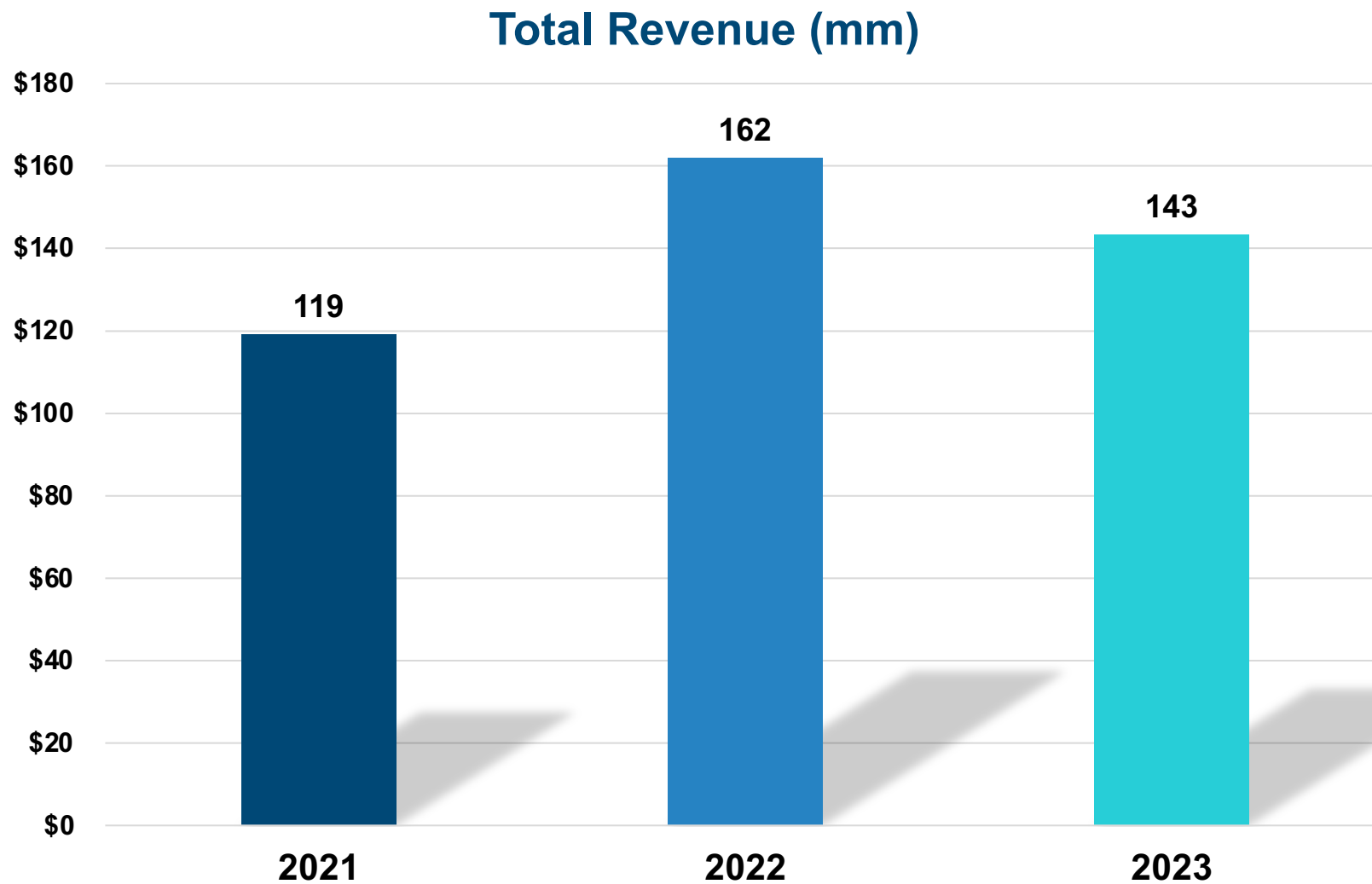
Troy Wichterman – Chief Financial Officer
BBA, MS Accounting, CPA (inactive); 13 years of experience in various finance and accounting roles; most recently served as BioLife's Vice President, Finance since November 2019. Started with BioLife in 2015 in positions of increasing responsibility.



Financial Information

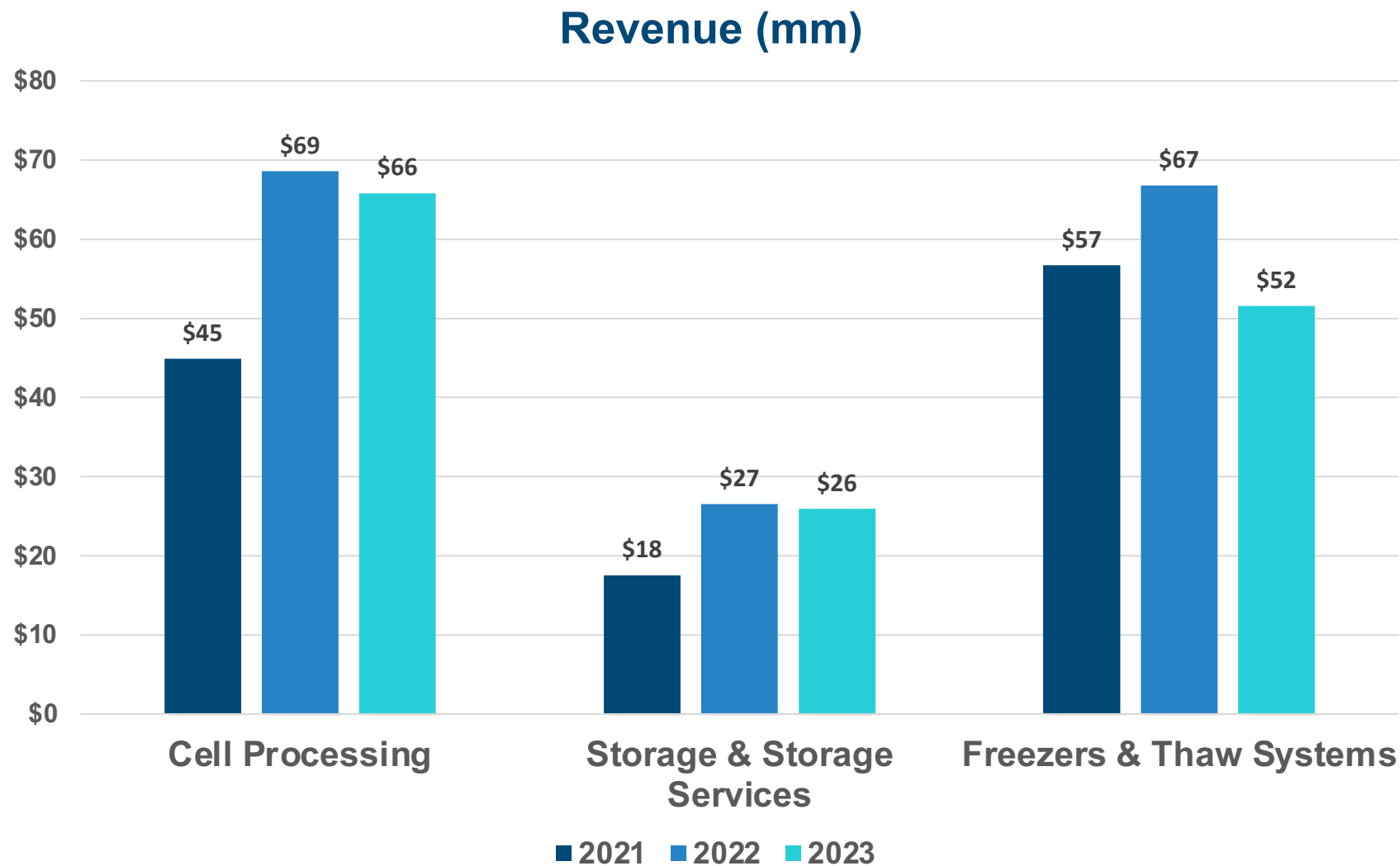


BioLife Total Revenue



Preliminary / unaudited

BioLife Platform Revenue

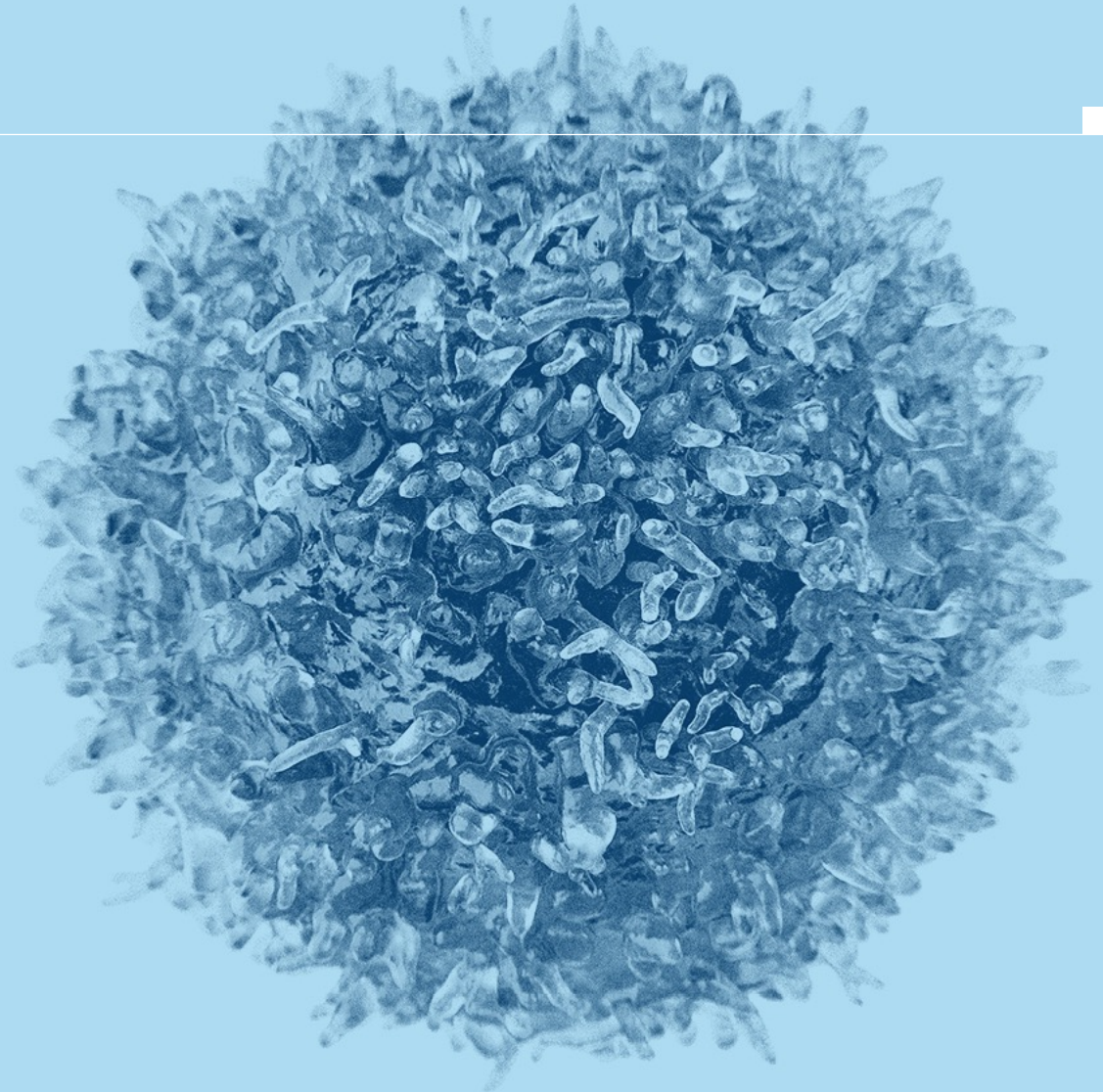


Investment Highlights – Pure Play Picks & Shovels for CGT

- ◆ **Class-defining portfolio of bioproduction tools and services** designed to improve quality and de-risk cell and gene therapy manufacturing and delivery
- ◆ **Well-positioned in the expanding cell and gene therapy market** expected to grow at 20-25% CAGR through 2033*
- ◆ **Biopreservation media is used in 14 approved therapies with up to 10 additional approvals through YE2024** - with the potential to generate \$500K - \$2M annual revenue per product post customer scale-up
- ◆ **Marquee customer base** with no competition in core biopreservation media business
- ◆ **Strategic decision to divest freezer businesses** in 1Q24 to improve financial profile and focus portfolio on high margin, recurring revenue streams



GAAP to Non-GAAP Financial Information



YTD 2023 Adjusted Financial Results (non-GAAP)

	Nine Months Ended September 30,			
	2023	2022	Change	Change %
(\$'s in millions, except percentage and basis point figures)				
Revenue	110.5	117.5	7.0	(6)%
Adjusted Gross Margin %	34%	34%	n/a	n/a
Adjusted Operating Expense	73.4	61.2	12.2	20%
Adjusted Operating Loss	(35.4)	(21.1)	(14.3)	68%
Adjusted EBITDAS	(5.40)	1.9	(7.30)	(384)%



GAAP to Non-GAAP Gross Profit

(In thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
GAAP GROSS PROFIT	\$ 10,916	\$ 12,442	\$ 35,303	\$ 36,369
GAAP GROSS MARGIN	33 %	31 %	32 %	31 %
ADJUSTMENTS TO GROSS PROFIT:				
Inventory step-up	—	—	—	251
Inventory reserve costs	(1,623)	—	562	—
Intangible asset amortization	733	1,296	2,199	3,482
ADJUSTED GROSS PROFIT	\$ 10,026	\$ 13,738	\$ 38,064	\$ 40,102
ADJUSTED GROSS MARGIN	30 %	34 %	34 %	34 %

GAAP to Non-GAAP Operating Expenses

(In thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
GAAP OPERATING EXPENSES	\$ 62,111	\$ 52,487	\$ 168,208	\$ 213,770
ADJUSTMENTS TO OPERATING EXPENSES:				
Cost of product, rental, and service revenue	(21,679)	(27,009)	(73,036)	(77,649)
Acquisition and divestiture costs	(250)	(1)	(3,226)	(18)
Severance costs	(493)	—	(493)	—
Intangible asset amortization	(1,356)	(2,513)	(4,266)	(8,236)
Loss on disposal of assets	(11)	169	(39)	(88)
Change in fair value of contingent consideration	1,580	(2,346)	1,778	3,348
Asset impairment charges	(15,485)	—	(15,485)	(69,900)
ADJUSTED OPERATING EXPENSES	\$ 24,417	\$ 20,787	\$ 73,441	\$ 61,227



GAAP to Non-GAAP Operating Loss

(In thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
GAAP OPERATING LOSS	\$ (28,783)	\$ (11,740)	\$ (57,670)	\$ (96,270)
ADJUSTMENTS TO GAAP OPERATING LOSS				
Inventory step-up	—	—	—	251
Acquisition and divestiture costs	250	1	3,226	18
Severance costs	493	—	493	—
Intangible asset amortization	1,356	2,513	4,266	8,236
Loss on disposal of assets	11	(169)	39	88
Change in fair value of contingent consideration	(1,580)	2,346	(1,778)	(3,348)
Asset impairment charges	15,485	—	15,485	69,900
Inventory reserve costs	(1,623)	—	562	—
ADJUSTED OPERATING LOSS	\$ (14,391)	\$ (7,049)	\$ (35,377)	\$ (21,125)

GAAP to Non-GAAP Net Loss

(In thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
GAAP NET LOSS	\$ (29,132)	\$ (10,317)	\$ (53,045)	\$ (90,616)
ADJUSTMENTS TO GAAP NET LOSS				
Inventory step-up	—	—	—	251
Acquisition and divestiture costs	250	1	3,226	18
Severance costs	493	—	493	—
Intangible asset amortization	1,356	2,513	4,266	8,236
Loss on disposal of assets	11	(169)	39	88
Change in fair value of investments	—	(697)	—	(697)
Change in fair value of contingent consideration	(1,580)	2,346	(1,778)	(3,348)
Income tax expense / (benefit)	115	(599)	212	(4,937)
Gain on settlement of Global Cooling escrow	—	—	(5,115)	—
Asset impairment charges	15,485	—	15,485	69,900
Inventory reserve costs	(1,623)	—	562	—
ADJUSTED NET LOSS	\$ (14,625)	\$ (6,922)	\$ (35,655)	\$ (21,105)



GAAP to Non-GAAP Adjusted EBITDA

Intangible asset amortization	1,356	2,513	4,266	8,236
Loss on disposal of assets	11	(169)	39	88
Change in fair value of investments	—	(697)		(697)
Change in fair value of contingent consideration	(1,580)	2,346	(1,778)	(3,348)
Income tax expense / (benefit)	115	(599)	212	(4,937)
Gain on settlement of Global Cooling escrow	—	—	(5,115)	—
Asset impairment charges	15,485	—	15,485	69,900
Inventory reserve costs	(1,623)	—	562	—
ADJUSTED NET LOSS	\$ (14,625)	\$ (6,922)	\$ (35,655)	\$ (21,105)

RECONCILIATION OF GAAP NET LOSS TO NON-GAAP ADJUSTED EBITDA

(In thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
GAAP NET LOSS	\$ (29,132)	\$ (10,317)	\$ (53,045)	\$ (90,616)
ADJUSTMENTS:				
Interest expense, net	476	15	1,305	250
Income tax expense / (benefit)	115	(599)	212	(4,937)
Depreciation	1,924	2,406	5,658	5,045
Intangible asset amortization	1,356	2,513	4,266	8,236
EBITDA	\$ (25,261)	\$ (5,982)	\$ (41,604)	\$ (82,022)

OTHER ADJUSTMENTS:

NASDAQ: BLFS

BioLife Solutions Inc.
3303 Monte Villa Parkway,
Suite 310, Bothell, WA 98021 USA
T +1.866.424.6543 or 425.402.1400
F +1.425.402.1433
E info@biolifesolutions.com
biolifesolutions.com

For additional questions or comments, please contact:

Roderick de Greef | Chief Executive Officer
rdegreef@BioLifeSolutions.com | (425) 686-6003

Troy Wichterman | Chief Financial Officer
twichterman@BioLifeSolutions.com | (425) 402-1400

www.biolifesolutions.com



biolifesolutions.com