



PHARMA SERVICES SUB-SECTOR REPORT:

BIOSTORAGE
BIOLOGICAL MATERIALS HANDLING
BIOBANKING
COLD CHAIN LOGISTICS

APRIL 2022

BOURNE PARTNERS

TABLE OF CONTENTS

I.	INDUSTRY OVERVIEW	3
II.	TRADING COMPS AND VALUATIONS	9
III.	M&A TRANSACTIONS AND DEAL PROFILES	12
IV.	BOURNE PARTNERS OVERVIEW	14

MARKET COMMENTARY

Bourne Partners is exclusively focused on Pharma and Pharma Services. Based on our recent Alcami – Masy Bioservices deal and our interaction with companies in the industry, below are the trends we are seeing:

- ▶ Contract Service providers continue to enjoy numerous tailwinds and growth opportunities:
 - CMOs/CDMOs are looking to add complementary services such as stability storage, secure and tightly controlled GMP storage for APIs, raw materials and finished good
 - Lack of in-house storage space will fuel growth
 - Customers are demanding more storage space and longer stability time
 - As supply chain disruptions remain active, companies are stockpiling raw materials and finished goods inventory and thus, need more storage space
 - Drive growth by providing colder temperature storage and handling capabilities
 - Increase in demand for freezers/controlled storage solutions coupled with delayed supply from the OEMs is driving M&A and consolidations
- ▶ General Market Overview:
 - Private Equity buyers continue to deploy record amounts of capital
 - Strategic buyers have strong balance sheets and earnings growth
 - Record M&A deal activities as companies are looking to expand capabilities, capacity, customers and geographic presence
 - Public comps and M&A transaction comps sets illustrate that Pharma Services sectors continue to trade at healthy multiples

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We welcome the opportunity to discuss the market and any ways we can be helpful to your company:

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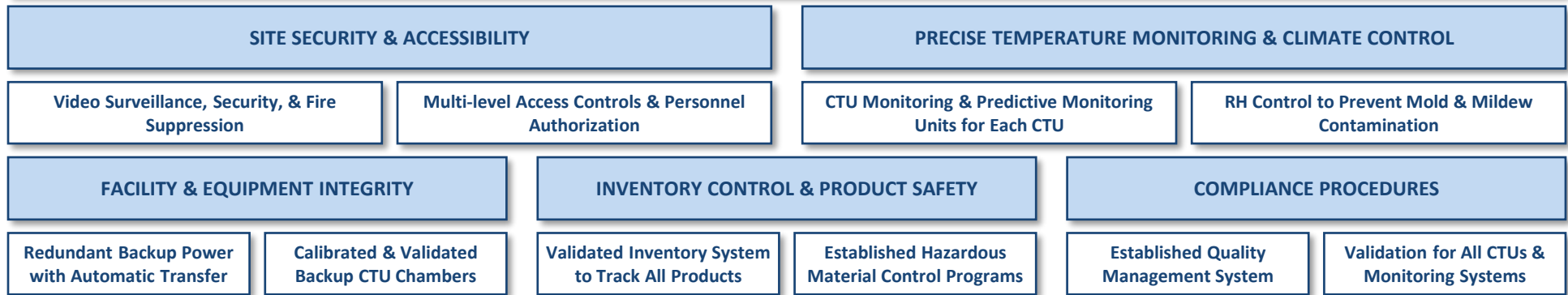
OFF-SITE GMP BIOPHARMA STORAGE PROVIDERS

Off-site GMP biopharma storage providers serve as a critical resource for biopharmaceutical companies and contract development and manufacturing organizations (“CDMOs”) facing storage and overflow issues

ATTRACTIVE MARKET DYNAMICS DEPENDENT UPON DEMAND FOR CONTRACT MANUFACTURING SERVICES

- ▶ The safe and proper storage of biopharma product is vital in the pharmaceutical manufacturing industry, and demand for storage is likely to grow in tandem with the increasing demand for contract manufacturing capabilities
- ▶ An off-site GMP storage provider is a valuable resource for keeping CDMO production lines moving by providing timely additional storage capacity and flexibility – CDMOs are susceptible to storage related bottlenecks, primarily before and after the manufacturing process
 - ▶ Some off-site GMP storage providers are seeing clients stockpile inventory and pay for storage as supply chain issues create problems with “Just in Time” inventory strategies
- ▶ As the industry grows and expands, it is getting “ever-colder” (e.g., -80 °C)
- ▶ One case study highlighting these trends is Aphenas’s purchase of a 500k sq. ft. site in Cookeville, TN, which expanded its offering into biologics, cold chain storage, and third-party logistics distribution. The site acquired by Aphenas had no existing business within those arenas and was a highly speculative purchase, demonstrating the existing and expected demand for GMP storage services, specifically cold chain and other temperature-controlled environments

KEY SUCCESS FACTORS FOR OFF-SITE GMP BIOPHARMA STORAGE PROVIDERS



TYPICAL STORAGE SERVICES



Source(s): Masy BioServices - Selecting Your Off-site GMP BioPharma Storage Provider; Bourne Partners’ Proprietary Industry Research

BIOLOGICAL SAMPLE HANDLING OVERVIEW

The global biological sample handling market is expected to grow at a CAGR of 8.2% from 2021 to 2027

Biological sample handling is the process of collection, storage, and processing of biological samples for further study or use – compound management and biological sample management play a significant role in the drug discovery process and DNA extraction

MARKET DRIVERS

- ▶ The growing concern of sample integrity and security is the major driving factor for the market
- ▶ Biological sample collection and storage provides necessary support for the R&D industry for disease identification and medication development
- ▶ The rising demand for the quality samples that can be used in a wide range of applications such as a clinical trial, research, and molecular epidemiology studies, continues to fuel market growth

REGIONAL OUTLOOKS

- ▶ **North America:** The US holds the largest regional market share due to the presence of many large key market players. The factors contributing to the growth include R&D investment in the biopharmaceutical sector and high healthcare expenditure. However, Canada is projected to grow at the highest CAGR due to its increasing number of biobanks and research initiatives
- ▶ **Asia-Pacific:** The Asia-Pacific region is projected to experience significant growth as a result of R&D spending increases and investments by government in life science research. The rising prevalence of chronic diseases, increasing number of biobanks, and awareness through public health programs will serve as a motivating factor for the growth of market in the region. The rising demand for quality samples and personalized medicine is also a key growth driver

MARKET SEGMENTS

- ▶ The global biological sample handling market is segmented based on Storage Type, Application, and Ownership
- ▶ **Storage Type:** Cold storage and room temperature storage
- ▶ **Application:** Drug discovery, forensic investigation, DNA extraction, proteomics, and genomics studies
 - The drug discovery segment holds a major market share in biological sample handling
- ▶ **Ownership:** Commercial and academics / research

KEY MARKET PLAYERS



BIOBANKING MARKET OVERVIEW

The global biobank market is expected to grow at a CAGR of 6.2% from 2020 to 2028

A biobank is a type of biorepository that stores biological samples (usually human) for use in research. Biobanks have become an important resource in medical research, supporting many types of contemporary research like genomics and personalized medicine

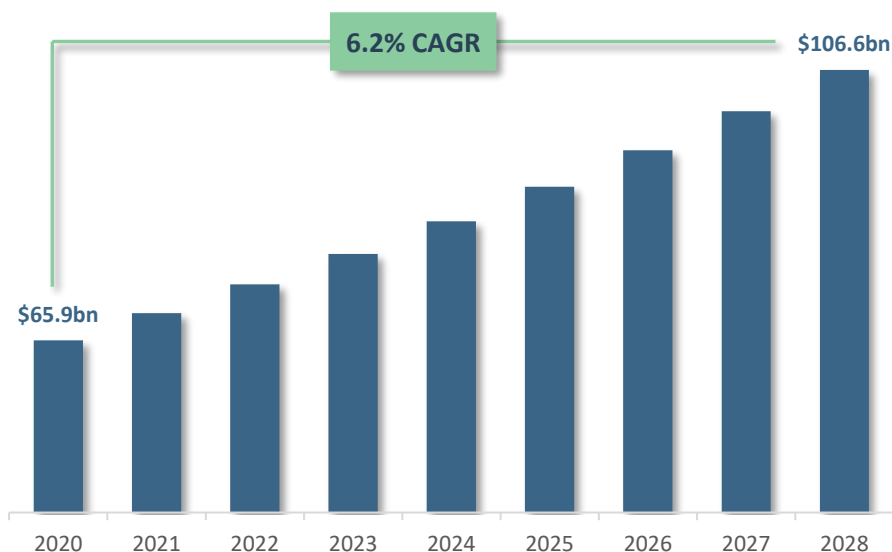
MARKET DRIVERS

- ▶ High investments for R&D of advanced therapies such as regenerative medicine, personalized medicine, and cancer genomic studies are driving the space
- ▶ The onset of COVID-19 has put biobanks at the forefront of pandemic control measures, resulting in the organic revenue growth of the market
- ▶ The increasing popularity of precision / personalized medicine and genetic testing has been a key driver of the market
- ▶ Market participants are continually expanding their offerings to keep pace with the rising demand for biostorage solutions

MARKET SEGMENTS

- ▶ **Biobank Services Segments:** Biobanking & Repository, Lab Processing, Qualification / Validation, Cold Chain Logistics, Other Services
- ▶ **Biobank Product Segments:** Temperature Control Systems, Incubators & Centrifuges, Alarms & Monitoring Systems, Accessories & Other Equipment
- ▶ **Biobank Biospecimen Segments:** Human Tissues, Organs, Stem Cells, Other Biospecimens
- ▶ **Biobank Application Segments:** Therapeutics, Drug Discovery & Clinical Research, Clinical Diagnostics, Other Applications

GLOBAL BIOBANK MARKET GROWTH



KEY MARKET PLAYERS



BIOPHARMA COLD CHAIN LOGISTICS MARKET OVERVIEW

The global cold chain market is expected to grow at a CAGR of 7.1% from 2020 to 2027

The biopharma cold chain market is comprised of the packaging, transportation, and data services used to maintain quality of pharmaceuticals, blood products, vaccines, and other biologics from the time of manufacture until the point of administration

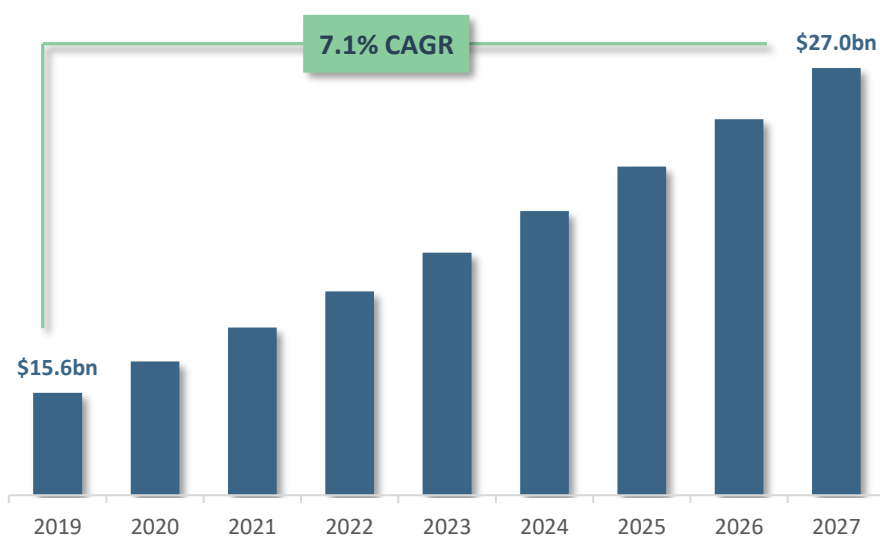
MARKET DRIVERS

- ▶ Market growth is particularly driven by the huge demand of temperature-sensitive drugs and biopharmaceutical products such as life-saving vaccines and blood plasma in the developed economies
- ▶ Market participants are continually developing their supply chain models while keeping an eye on latest technologies, including real time supply chain visibility, warehouse robotics, digital twins, blockchain and analytics, and autonomous vehicles
- ▶ Growth in this segment is driven by demand for temperature-sensitive drugs and vaccines along with adoption of sea-based pharma logistics

MARKET SEGMENTS

- ▶ The biopharma cold chain logistics market is primarily segmented on the basis of Storage, Transportation, and Monitoring components
- ▶ **Storage Components:** Warehouses and Refrigerated Containers
- ▶ **Transportation Components:** Sea Freight Logistics, Air Freight Logistics, Overland Logistics
- ▶ **Monitoring Components:** Hardware (Sensors, RFID, Telematics, etc.) and Software

GLOBAL BIOPHARMA COLD CHAIN MARKET GROWTH



KEY MARKET PLAYERS



Source(s): Polaris Market Research - Biopharma Cold Chain Logistics Market; Pharmaceutical Commerce - 2020 Biopharma Cold Chain Sourcebook forecasts a \$17.2-billion logistics market

LABORATORY FREEZERS MARKET OVERVIEW

The laboratory freezers market is expected to grow at a CAGR of 4.9% from 2022 to 2026

Laboratory freezers are used to store a variety of samples, including pharmaceutical, biological, and other commonly used laboratory samples

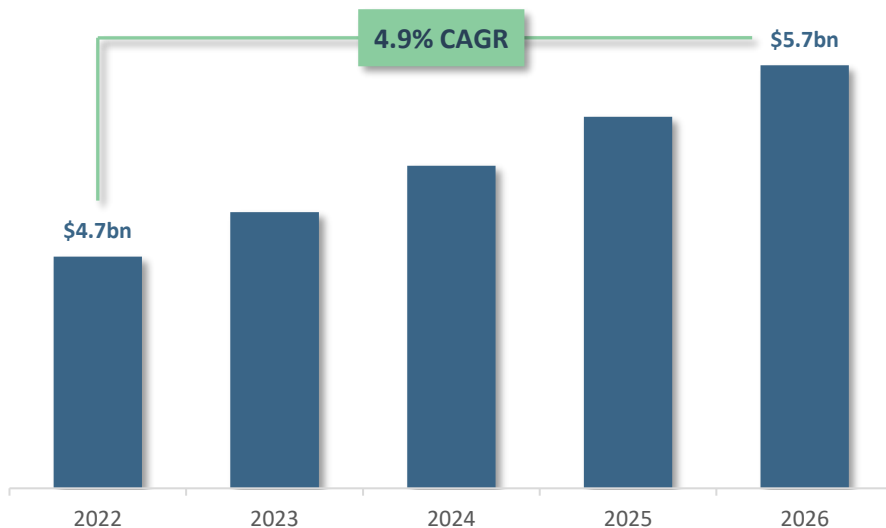
MARKET DRIVERS

- ▶ Market has seen notable growth over the last two years due to temperature-controlled storage requirements of COVID-19 vaccines
- ▶ The growing use of refurbished laboratory freezers and refrigerators could restrain future growth – refurbished medical devices are generally available at 50–60% lower prices than new instruments
- ▶ The global demand for blood and blood components is on the rise which will be a key driver for laboratory freezer demand
- ▶ The COVID-19 pandemic has spurred vaccine development which, in turn, should boost demand for laboratory freezers

MARKET SEGMENTS

- ▶ The biopharma cold chain logistics market is primarily segmented on the basis of product type
- ▶ **Freezers:** Ultra Low Temperature, Laboratory, Plasma, Enzyme, Explosion-proof, and Flammable Material Freezers
- ▶ **Refrigerators:** Laboratory, Blood Bank, Pharmacy, Flammable Material, Explosion-proof, and Chromatography Refrigerators
- ▶ **Cryopreservation Systems**

GLOBAL LABORATORY FREEZERS MARKET GROWTH



KEY MARKET PLAYERS



PUBLIC COMPANY TRADING COMPS

Trading Comps

USD in millions

Company	Ticker	Enterprise Value	Sales	LTM		Margin Analysis			Enterprise Value/			Enterprise Value	Debt/Equity	
				EBITDA	EBIT	Gross Profit	EBITDA	EBIT	Sales	EBITDA	EBIT		Value	Value
BioLife Solutions, Inc.	NASDAQ:BLFS	946.3	119.2	(16.7)	(29.2)	32.6%	NM	NM	7.9x	NM	NM	0.0%	0.0%	-
Cryo-Cell International, Inc.	NASDAQ:CCEL	62.1	28.9	4.3	3.2	64.8%	14.7%	11.1%	2.1x	14.6x	19.3x	4.5%	4.2%	0.7x
Cryoport, Inc.	NASDAQ:CYRX	1,382.0	222.6	6.8	(13.4)	43.4%	3.1%	NM	6.2x	202.5x	NM	30.9%	27.0%	62.6x
Cryosite Limited	ASX:CTE	13.0	8.0	1.2	1.1	58.8%	15.3%	13.6%	1.6x	10.7x	12.0x	5.4%	4.3%	0.6x
Eurofins Scientific SE	ENXTPA:ERF	20,557.0	7,639.8	1,987.8	1,537.9	28.5%	26.0%	20.1%	2.7x	10.3x	13.4x	15.2%	17.4%	1.6x
Sourcebio International Plc	AIM:SBI	115.5	106.9	29.5	27.5	41.2%	27.6%	25.7%	1.1x	3.9x	4.2x	16.0%	15.3%	0.6x
Thermo Fisher Scientific Inc.	NYSE:TMO	243,770.6	39,211.0	12,820.0	10,228.0	50.1%	32.7%	26.1%	6.2x	19.0x	23.8x	14.9%	17.1%	2.8x

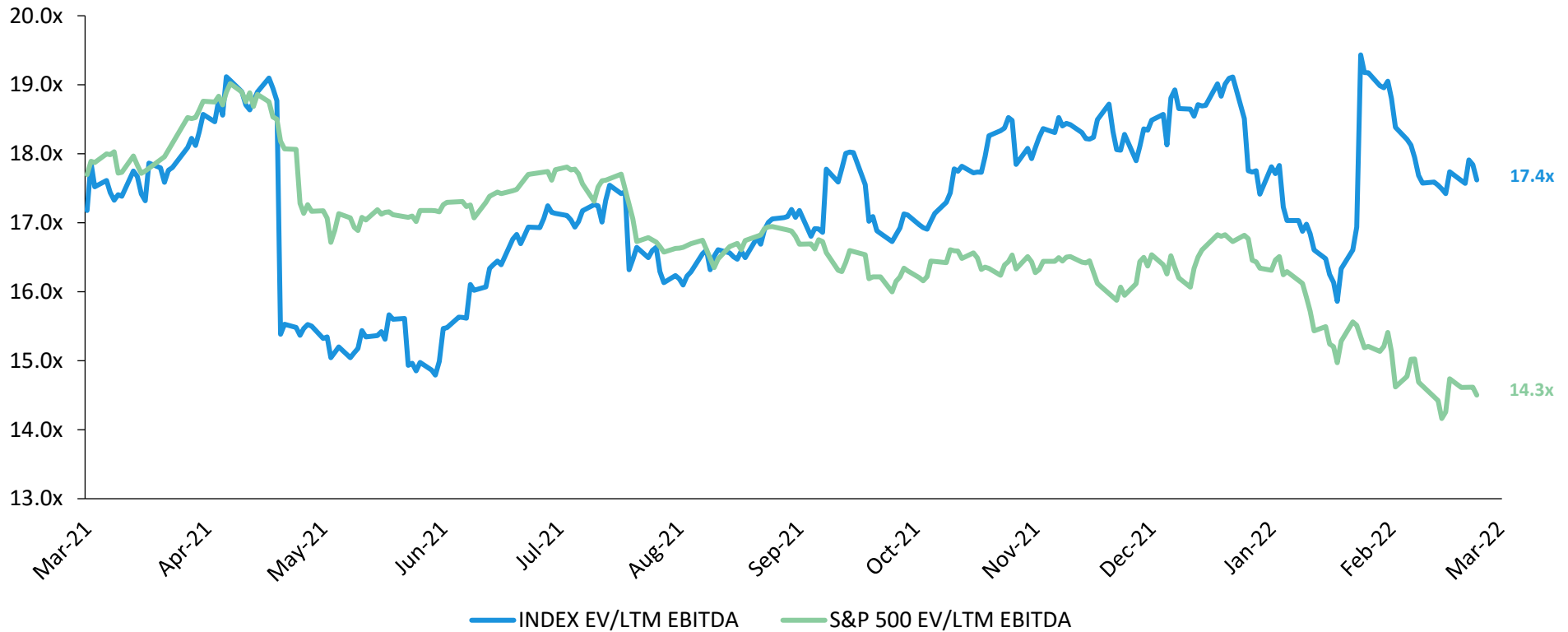
Median	43.4%	20.6%	20.1%	2.7x	12.6x	13.4x	14.9%	15.3%	0.7x
Mean	45.6%	19.9%	19.3%	4.0x	43.5x	14.5x	12.4%	12.2%	9.8x
Min	28.5%	3.1%	11.1%	1.1x	3.9x	4.2x	0.0%	0.0%	-
Max	64.8%	32.7%	26.1%	7.9x	202.5x	23.8x	30.9%	27.0%	62.6x



► The median EV multiples for the biostorage Index were 2.7x and 12.6x for LTM Sales and EBITDA, respectively

VALUATION TRENDS – LTM

HISTORICAL MULTIPLES FOR COMPARABLE PUBLIC COMPANY INDEX



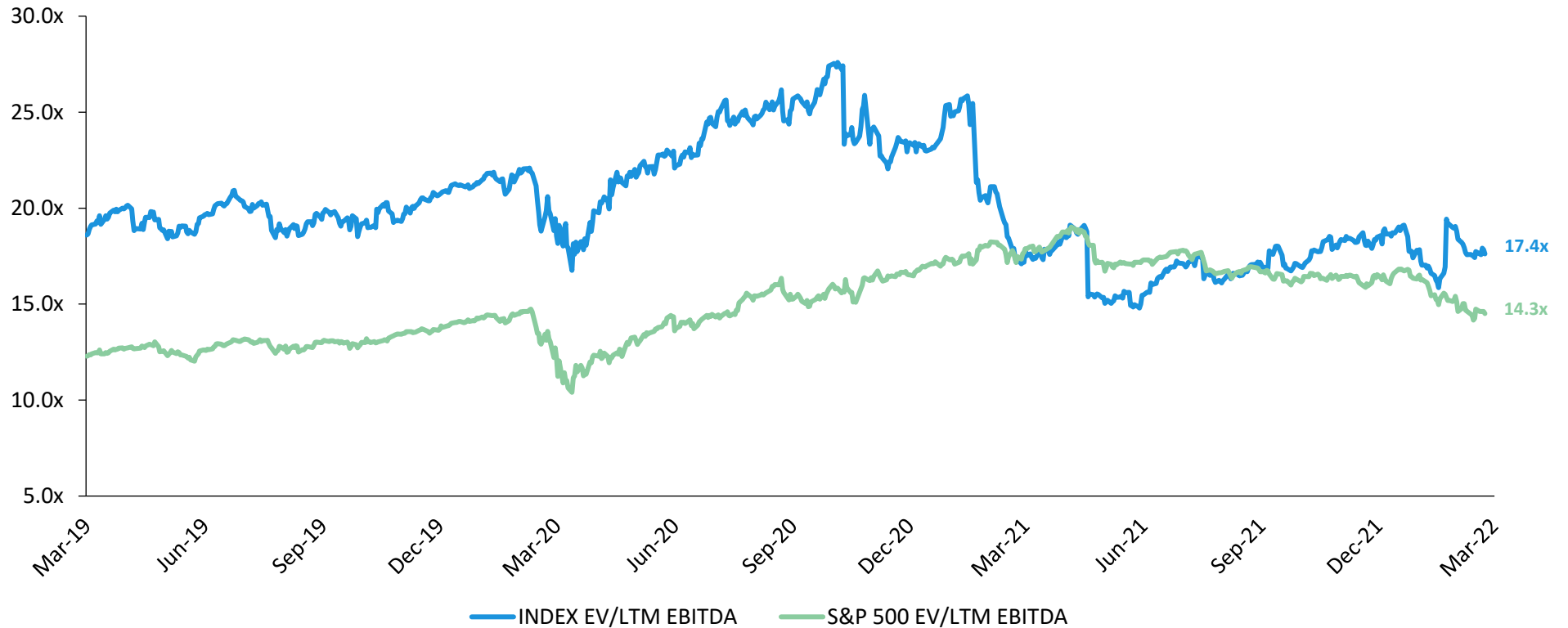
► The sector EV/EBITDA (LTM) multiples are trading at significant premiums to the S&P 500 (~**21.7%**)

Biostorage index consists of: Biolife Solutions (NAS:BLFS), Cryo-Cell International (NAS: CCEL), Cryoport (NAS: CYRX), Cryosite (ASX: CTE), Eurofins Scientific (ENXTPA:ERF), Sourcebio International (LSE:SBI), Thermo Fisher Scientific Inc. (NYSE:TMO)

Note: The steep drop in the index multiple in April 2021 can be attributed to the TMO-PPD acquisition

VALUATION TRENDS – LAST 3 YEARS

HISTORICAL MULTIPLES FOR COMPARABLE PUBLIC COMPANY INDEX



Biostorage index consists of: Biolife Solutions (NAS:BLFS), Cryo-Cell International (NAS: CCEL), Cryoport (NAS: CYRX), Cryosite (ASX: CTE), Eurofins Scientific (ENXTPA:ERF), Sourcebio International (LSE:SBI), Thermo Fisher Scientific Inc. (NYSE:TMO)

M&A TRANSACTION COMPS

Transaction Comps

USD in millions

Announced Date	Target	Target Description	Buyer	Geographic	Enterprise Value	LTM Revenue	LTM EBITDA	EV / LTM	
				Location				Revenue	EV / LTM EBITDA
Dec-21	Masy Bioservices	Masy operates 3 cGMP biostorage facilities and offers controlled storage solutions for various materials	Alcami	USA	NA	NA	NA	NA	NA
Mar-21	Global Cooling	Global Cooling manufactures and sells Stirling Ultracold freezers, which operate between -20°C and -86°C	BioLife Solutions	USA	266.3	39.0	NA	6.8x	NA
Sep-20	SciSafe Holdings	SciSafe is a leading biological and pharmaceutical storage service provider	BioLife Solutions	USA	48.2	6.0	NA	8.0x	NA
Sep-20	ProPharma Group	ProPharma Group is the leading global, independent, single-source service provider	Odyssey Investment Partners	USA	NA	NA	NA	NA	NA
Jun-19	Bebécord Stemlife International	Bebécord Stemlife International is a biological materials storage company	Crioestaminal	Portugal	12.2	NA	NA	NA	NA
Nov-18	Clean Cells	Clean Cells is a GMP licensed pharmaceutical company that has more than 20 yr of biological storage experience	ArchiMed	France	NA	NA	NA	NA	NA
Oct-18	Biomatrixa	Biomatrixa is a leading provider of biological sample preservation technology	Exact Sciences Corporation	USA	NA	NA	NA	NA	NA
Sep-18	Sherpa Clinical Packaging	Sherpa is a provider of clinical trial materials management services	PCI Pharma Services	USA	NA	NA	NA	NA	NA
Mar-17	EPL Archives	EPL is a biorepository services organization that provides material management and storage services	VWR Corporation	USA	NA	NA	NA	NA	NA
Nov-16	Marken	Marken is a global provider of supply chain solutions to the life sciences industry and a leader in clinical trails material storage and distribution	UPS	United Kingdom	570.0	NA	45.0	NA	12.7x
Oct-16	ProPharma Group	ProPharma Group is the leading global, independent, single-source service provider	Linden	USA	NA	NA	NA	NA	NA
Jun-16	Source BioScience	Source BioScience provides stability storage services	Harwood Capital	United Kingdom	96.7	38.2	7.4	2.5x	13.0x
Nov-15	BioStorage Technologies	BioStorage Technologies is a global provider of sample management and integrated cold chain solutions for the biopharma industry	Brooks Automation	USA	125.5	40.0	NA	3.1x	NA
Oct-15	Boyalife Stem Cell Technology	Boyalife Stem Cell Technology offers stem cell processing and storage services	Ningxia Xinri Hengli	China	308.1	13.4	NA	23.0x	NA

Median	125.5	38.2	26.2	6.8x	12.8x
Mean	203.9	27.3	26.2	8.7x	12.8x
Min	12.2	6.0	7.4	2.5x	12.7x
Max	570.0	40.0	45.0	23.0x	13.0x

Source(s): Capital IQ, as of 3/10/2022

SELECT DEAL PROFILES

SELECT DEAL PROFILES



- ▶ On December 15, 2021, Alcami acquired Masy Bioservices for an undisclosed amount
- ▶ Masy currently operates 3 cGMP biostorage facilities and offers secure and tightly controlled storage solutions for various materials
- ▶ The acquisition will add complementary service offerings and will further reinforce Alcami's growth and expansion initiatives



- ▶ On March 22, 2021, Biolife Solutions (NAS:BLFS) acquired Global Cooling for \$266.3mm which represents a ~6.8x multiple on LTM revenue of \$39.0mm
- ▶ Global Cooling manufactures and sells Stirling Ultracold freezers, which operate between -20°C and -86°C
- ▶ Biolife Solutions is a leading developer and supplier of a portfolio of class-defining bioproduction tools for cell and gene therapies



- ▶ On October 1, 2020, Biolife Solutions (NAS:BLFS) acquired SciSafe for \$48.2mm which represents a ~8.0x multiple on LTM revenue of \$6.0mm
- ▶ SciSafe is a multi-facility provider of biological materials storage to the cell and gene therapy and pharmaceutical industries
- ▶ Biolife Solutions is a leading developer and supplier of a portfolio of class-defining bioproduction tools for cell and gene therapies



- ▶ On October 15, 2020, ProPharma Group was acquired by Odyssey Investment Partners for an undisclosed amount
- ▶ The LBO included debt financing totaling \$323.9mm from a variety of lenders
- ▶ ProPharma Group offers compliance, quality assurance, and consulting services to customers in the pharmaceutical, biotechnology, and medical device industries



- ▶ On October 18, 2018, Exact Sciences (NAS:EXAS) acquired Biomatrixa for an undisclosed sum
- ▶ Biomatrixa is a leading provider of biological sample preservation technology
- ▶ The acquisition will strengthen pipeline capabilities and will help fuel growth and meet demand for Exact Sciences



- ▶ On September 10, 2018, Sherpa Clinical Packaging was acquired by PCI Pharma Services for an undisclosed sum
- ▶ Sherpa Clinical offers primary and secondary packaging, clinical labeling, cold chain logistics, sampling and storage, supply management, and other related services
- ▶ The deal enables PCI to better support customers from the early phases of clinical development through to commercial launch

BOURNE PARTNERS DEAL PROFILE: ALCAMI – MASY BIOSERVICES



Transaction Date:
Dec 15, 2021

COMPANY OVERVIEWS

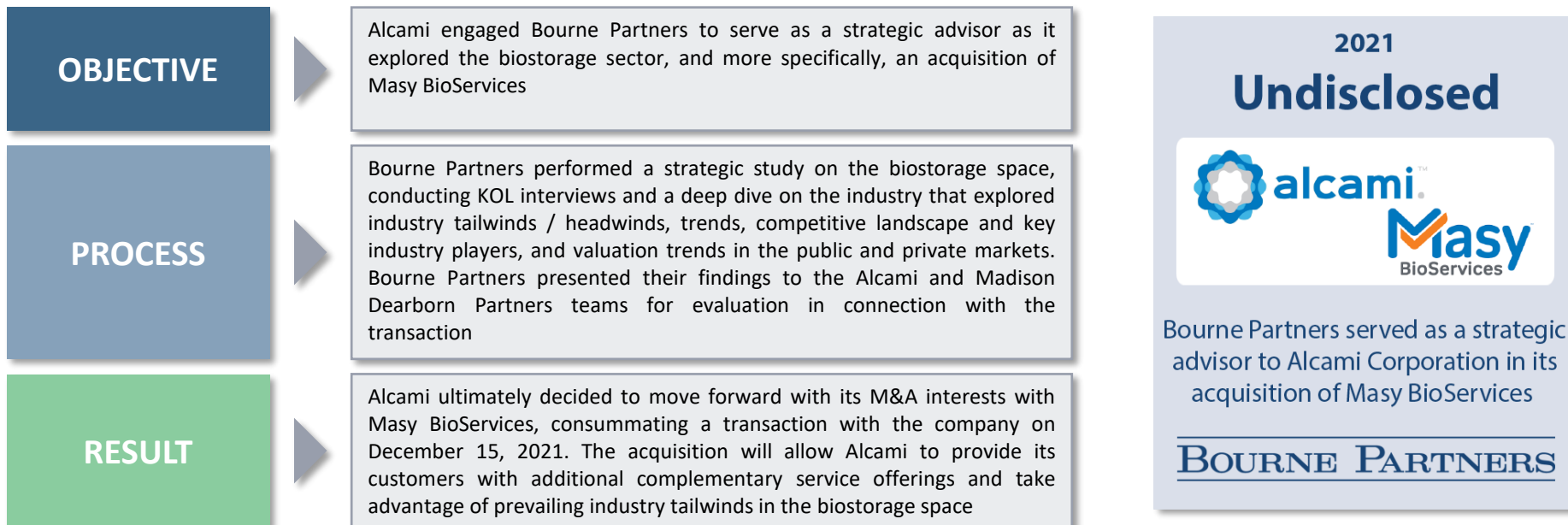
MASY BIOSERVICES

Masy provides quality solutions to the life sciences community, meeting qualifications for NVLAP accreditation to ISO 17025:2017 as well as ISO 9001:2015 certification. Services include calibration of primary standards and critical test equipment; validation and IQ/OQ/PQ of environmental chambers, autoclaves, and thermal warehouse mapping; and lab equipment rentals and sales. Masy offers cGMP biorepository options, with secure and tightly controlled temperature storage from -196°C to 70°C, including all ICH stability conditions, for various materials including vaccines, biopharmaceuticals, cell banks, tissues, compounds, and medical devices

ALCAMI

Alcami is a contract development and manufacturing organization headquartered in North Carolina with over 40 years of experience advancing products through every stage of the development lifecycle. Leveraging four US-based scientific campuses, Alcami serves pharmaceutical and biotech companies of all sizes providing customizable and innovative solutions for analytical development, clinical to commercial sterile and oral solid manufacturing, packaging, microbiology, and environmental monitoring services. Alcami is a portfolio company of Madison Dearborn Partners and Ampersand Capital Partners

BOURNE PARTNERS SERVED AS A STRATEGIC ADVISOR TO ALCAMI IN ITS ACQUISITION OF MASY BIOSERVICES



BOURNE PARTNERS OVERVIEW

BOURNE PARTNERS

Bourne Partners is a Pharma & Pharma Services-focused investment banking and private equity investment firm. Since 2001, Bourne Partners has been offering a unique perspective and unmatched expertise while remaining highly focused on fulfilling the various needs of established middle market Pharma & Pharma Services companies across the globe

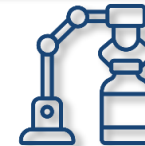
BOURNE PARTNERS MISSION STATEMENT

“We strive to enrich the lives and improve the health and well-being of our employees, partners, and patients across the globe by facilitating the efficient movement of capital through the global healthcare sector.”

HIGHLY FOCUSED FIRM



PHARMACEUTICALS



PHARMA SERVICES

BOURNE PARTNERS INVESTMENT BANKING (“BPIB”)

MERGERS & ACQUISITIONS		CAPITAL RAISING	
Company & Product Focus	Sell-Side Assignments	Debt	Equity
Buy-Side Assignments	\$20M to \$1B+ Enterprise Value	Alternative Options	\$20M to \$1B+
BUSINESS DEVELOPMENT SERVICES		STRATEGIC INITIATIVES & CONSULTING	
Partnerships U.S. and Abroad	In and Out-Licensing	Strategy & Management	Sales / Marketing, Operations

BOURNE PARTNERS STRATEGIC CAPITAL (“BPSC”)

PRIVATE EQUITY INVESTMENT FOCUS – PARTNERSHIP-BASED

Highly selective approach towards direct investments in private companies that are in the firm’s core focus sectors

BPSC principals must see a pathway to adding significant value to the business while investing personally and aligning economic interests with management

INVESTMENT CAPABILITIES

Middle Market	Actionable Growth Stage	Complex Situations	Creative Structures	Flexible Investment Sizes
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REPRESENTATIVE RECENT TRANSACTIONS & ASSIGNMENTS

 Non-core CDMO business has been acquired by 	 has been acquired by 	 has been acquired by 	 has been acquired by 	 has acquired assets from
2022	2021	2021	2021	2021

BPSC DIRECT INVESTMENTS



BPSC PRIVATE EQUITY ALLIANCE



LEADING BOUTIQUE PHARMA & PHARMA SERVICES ADVISORY PLATFORM

Dedicated advisory practice led by seasoned professionals that possess significant industry knowledge and experience

FOCUS AREAS			COMMON THEMES		RECENT CLIENTS & COUNTERPARTIES
PHARMA			Market Leaders with Scale	Proven M&A Platforms	
Specialty Pharma	Generic Pharma		Solid Quality & Regulatory History	Blue-Chip Customers	
PHARMA SERVICES			Expanding Suite of Services	Exceptional Margins	
CMO	CDMO	CRO	Robust BD Pipeline	Strong Cash Flow Generation	

REPRESENTATIVE TRANSACTIONS

<p>has been acquired by</p>	<p>has acquired</p>	<p>Non-core CDMO business has been acquired by</p>	<p>has been acquired by</p>	<p>has received Series A Financing from</p>	<p>Generic Rx Portfolio has been acquired by</p>	<p>has been acquired by</p>	<p>has been advised by</p> <p>on strategic initiatives</p>	<p>has sold several ANDAs to</p>	<p>has been acquired by</p>
<p>has been acquired by</p>	<p>has been acquired by</p>	<p>has acquired assets from</p>	<p>has been advised by</p> <p>on Multiple Successful Acquisitions</p>	<p>has been advised by</p> <p>on Multiple Successful Transactions</p>	<p>Huntsville Mfg./Pckg. Facility has been sold to</p>	<p>has been advised by</p> <p>on Strategic Initiatives</p>	<p>has been acquired by</p>	<p>has been acquired by</p>	<p>has been acquired by</p>