

INSIGHT

A network diagram consisting of numerous white nodes connected by thin white lines, forming a complex web. The nodes are small circles, some of which are highlighted in a light blue color. In the background, a person's face is visible, slightly blurred, looking towards the camera. The overall image has a blue and white color scheme.

PHARMA SERVICES

SECTOR SNAPSHOT

June 2019

BOURNE PARTNERS

CDMO – Transaction Comps

CDMO - Transaction Comps

USD in millions

Announced Date	Target	Target Description	Buyer	Geographic			EV / LTM		EV / LTM EBITDA
				Location	Enterprise Value	LTM Revenue	LTM EBITDA	Revenue	
Apr-19	Paragon Bioservices ¹	Operates as a CDMO that focuses on the development and manufacturing of biopharmaceuticals	Catalent Pharma Solutions	USA	\$1,200.0	\$101.0	\$56.0	11.9x	21.4x
Mar-19	Biogen (Denmark) Manufacturing Facility	Biopharmaceutical CDMO facility with 90,000L biologic production capacity	Fujifilm Diosynth Biotechnologies	Denmark	890.0	NA	NA	NA	NA
Mar-19	Brammer Bio	CDMO developing and manufacturing cell and gene therapies	Thermo Fisher	USA	1,700.0	NA	NA	NA	NA
Nov-18	Avista Pharma Solutions ²	CDMO offering services including analytical testing, API and drug product development, early stage discovery, and microbiology testing support	Cambrex Corporation	USA	252.0	65.0	NA	3.9x	NA
Jul-18	AMPAC Fine Chemicals ³	Operates as a custom manufacturer of APIs and registered intermediates for the pharmaceutical industry	SK Holdings	USA	455.0	200.0	NA	2.3x	NA
Jul-18	Halo Pharma	Provides contract development and manufacturing services in various dosage forms and drug delivery platforms	Cambrex Corporation	USA	425.0	105.0	27.0	4.0x	15.7x
Sep-17	Cook Pharmica	Provides contract development and manufacturing services to pharmaceutical and biopharmaceutical companies	Catalent Pharma Solutions	USA	950.0	177.8	NA	5.3x	NA
Jul-17	Aptuit	Provides drug discovery and development services, as well as API development and manufacturing services	Evotec	USA	300.0	92.9	11.6	3.2x	25.8x
Jun-17	PCAS SA	Provides chemical and analytical development and custom manufacturing services	Novacap	France	335.9	243.7	19.7	1.4x	17.0x
Jun-17	Albany Molecular Research	Contract research and manufacturing company that provides integrated drug discovery, development, and manufacturing	The Carlyle Group	USA	1,593.5	628.7	71.8	2.5x	22.2x
May-17	Patheon	Provides outsourced pharmaceutical development and manufacturing services	Thermo Fisher	USA	7,205.3	1,933.0	351.2	3.7x	20.5x

Notes:

NA - Not Available

1) "Biopharma Dive": 2018 Revenue Estimate; "Catalent : Paragon Gene Therapy Acquisition Fuels Further High-Growth High-Margin Biologics Mix Shift, As LT Targets Are Increased - ALERT": 2018 EBITDA Estimate

2) \$65.0 is approximate revenue from the Cambrex press release "Cambrex Completes Acquisition of Avista Pharma Solutions"

3) AMPAC Fine Chemicals transaction EV is according to Korean Herald
Source: S&P Capital IQ, as of June 28, 2019

Median	\$890.0	\$177.8	\$41.5	3.7x	21.0x
Mean	1,391.5	394.1	89.6	4.3x	20.5x
Min	252.0	65.0	11.6	1.4x	15.7x
Max	7,205.3	1,933.0	351.2	11.9x	25.8x

CRO – Transaction Comps

CRO - Transaction Comps

USD in millions

Announced Date	Target	Target Description	Buyer	Geographic			EV / LTM Revenue	EV / LTM EBITDA	
				Location	Enterprise Value	LTM Revenue			
Feb-19	Citoxlab	Contract research laboratory that provides a range of preclinical services to the pharma industry	Charles River Laboratories International	France	\$510.0	NA	\$36.7	NA	13.8x
Mar-18	Accelovance	Full-service, clinical CRO that focuses on oncology, vaccines, and general medicine	Linical USA	USA	32.9	\$26.8	NA	1.2x	NA
Feb-18	MPI Research	Provides preclinical and early clinical contract research services	Charles River Laboratories International	USA	800.0	240.0	68.4	3.3x	11.7x
Sep-17	Optimal Research	SMO providing solutions to CROs and pharmaceutical, biotechnology, and medical device companies	Synexus	USA	NA	NA	NA	NA	NA
Jul-17	MAPI Development	Non-clinical CRO that provides mission-critical research services and products	ICON	France	139.5	NA	NA	NA	NA
Jul-17	Chiltern International	CRO that provides clinical development, scientific services, and collaborative technologies	Covance	UK	1,200.0	NA	NA	NA	NA
Jun-17	PAREXEL International	Outsourcing services company that provides clinical research, consulting, and commercialization	Pamplona Capital Management	USA	5,007.4	2,097.0	342.8	2.4x	14.6x
May-17	inVentiv Health	Provides clinical trial, bioanalytical, and commercial services	INC Research Holdings	USA	4,513.7	2,177.4	292.7	2.1x	15.4x
Sep-16	ExecuPharm	Offers CRO support services including clinical trial management, monitoring, and site management	PAREXEL International	USA	155.0	NA	NA	NA	NA
May-16	IMS Health Holdings	Provides information and technology services to the healthcare industry worldwide	Quintiles Transnational Holdings	USA	13,266.8	3,063.0	743.0	4.3x	17.9x
May-16	Synexus	Engages in the identification, recruitment, and retention of patients for clinical trials on behalf of sponsors	Pharmaceutical Product Development	UK	257.8	68.8	15.9	3.7x	16.2x

Notes:

NA - Not Available

Median	\$655.0	\$1,168.5	\$180.5	2.9x	15.0x
Mean	2,588.3	1,278.8	249.9	2.9x	14.9x
Min	32.9	26.8	15.9	1.2x	11.7x
Max	13,266.8	3,063.0	743.0	4.3x	17.9x

Specialty Packaging – Transaction Comps

Specialty Packaging - Transaction Comps

USD in millions

Announced Date	Target	Target Description	Buyer	Geographic			EV / LTM	EV / LTM	
				Location	Enterprise Value	LTM Revenue	LTM EBITDA	Revenue	EBITDA
Apr-19	Three manufacturing facilities of Amcor	Provides packaging for med devices; 3 facilities in EU previously owned by Bemis	Tekni-Plex	USA	\$215.0	\$100.0	NA	2.2x	NA
Jan-19	RPC Group	Packaging segment designs plastic packaging for end markets, including the food, beverage, personal care, and healthcare markets	Apollo Management	United Kingdom	5,728.2	5,056.4	\$764.0	1.1x	7.5x
Dec-18	Caraustar Industries	Manufactures and supplies recycled paperboard and converted paperboard products, including for pharmaceutical and healthcare markets	Greif Packaging	USA	1,800.0	1,376.0	174.0	1.3x	10.3x
Aug-18	Bemis Company	Manufactures and sells packaging products in medical and pharmaceutical markets globally	Amcor	USA	6,777.9	4,099.4	573.0	1.7x	11.8x
Jul-18	CSP Technologies	Manufactures and distributes custom polymeric products for the medical device, diagnostics, and pharmaceutical markets, among others	AptarGroup	USA	529.4	140.0	40.7	3.8x	13.0x
Jul-18	Expera Specialty Solutions	Specialty paper and packaging company in North America that offers food packaging papers	Ahlstrom Munksjo Oyj	USA	615.0	721.0	66.0	0.9x	9.3x
Jun-18	Papeles y Cartones de Europa	Manufactures and sells paper and corrugated cardboard packaging products in Europe	DS Smith	Spain	2,100.6	1,049.5	203.6	2.0x	10.3x
Jan-18	Foam Fabricators	Designs and manufactures molded and fabricated foam and packaging products	Compass Diversified Holdings	USA	247.5	126.0	30.0	2.0x	8.3x
Nov-17	PAC SERVICE	Manufactures customized packaging paperboards	Reno De Medici	Italy	17.7	24.1	2.2	0.7x	7.9x
Jan-17	Multi Packaging Solutions	Prints, manufactures, and sells paperboard, paper, and plastic packaging products globally	WestRock Company	USA	2,256.5	1,567.0	214.5	1.4x	10.5x
Dec-16	Astrapak	Manufactures and distributes plastic packaging products mainly in South Africa	RPC Group	South Africa	88.5	102.8	8.8	0.9x	10.0x

Notes:

NA - Not Available

NM - Not Meaningful

Median	\$615.0	\$721.0	\$120.0	1.4x	10.2x
Mean	1,852.4	1,305.6	207.7	1.6x	9.9x
Min	17.7	24.1	2.2	0.7x	7.5x
Max	6,777.9	5,056.4	764.0	3.8x	13.0x

Distribution – Transaction Comps

Distribution - Transaction Comps

USD in millions

Announced Date	Target	Target Description	Buyer	Geographic			EV / LTM		
				Location	Enterprise Value	LTM Revenue	LTM EBITDA	Revenue	EBITDA
Aug-18	Aquilant	Aquilant Limited distributes and sells IV therapy, regional anesthesia and pain management products, and other devices for the medical and scientific sectors	H2 Equity Partners	United Kingdom	\$26.7	\$94.5	NA	0.3x	NA
Nov-17	H. D. Smith	Distributes and supplies healthcare products and business solutions to manufacturers and healthcare providers	AmerisourceBergen	USA	815.0	NA	NA	NA	NA
Nov-17	Cardinal Health (L)	Distributes pharmaceutical products, medical devices, and specialty pharmaceuticals to pharmacies and hospitals	Shanghai Pharma Century Global	Malaysia	557.0	3,845.7	\$83.3	0.1x	6.7x
Mar-17	Pelion	Engages in the trade of pharmaceuticals, cosmetics, and parapharmaceuticals, operating through wholesale, retail, services, and other segments	Korporacja Inwestycyjna Polskiej Farmacji	Poland	323.4	2,399.5	31.5	0.1x	10.3x
Aug-16	Anda	Distributes generic, branded, specialty, and over-the-counter pharmaceutical products	Teva Pharmaceutical Industries	USA	500.0	NA	NA	NA	NA
Jul-16	Pharmapar	Distributes generic drugs for privately insured individuals ,offering a range of medication types	Alliance Pharma	Canada	11.1	17.3	NA	0.6x	NA
May-16	Symmetry Surgical	Manufactures and distributes medical devices worldwide	RoundTable Healthcare Partners	USA	129.5	84.1	9.1	1.5x	14.2x
Mar-16	Rexall Pharma Plus	Operates a network of retail pharmacy stores in Canada, offering prescription centers that focus primarily on prescription and OTC products	McKesson Canada Corporation	Canada	2,154.3	2,000.0	200.0	1.1x	11.1x
Apr-15	Idis Group Holdings	Provides access to unlicensed pharmaceutical products internationally	Clinigen Group	United Kingdom	341.4	274.5	19.0	1.2x	18.0x
Feb-15	BioRx	Distributes specialty pharmaceuticals and medical supplies, and provides infusion services in the United States	Diplomat Pharmacy	USA	347.8	227.0	23.0	1.5x	15.1x

Notes:

NA - Not Available

Median	\$344.6	\$250.7	\$27.2	0.9x	12.7x
Mean	520.6	1,117.8	61.0	0.8x	12.6x
Min	11.1	17.3	9.1	0.1x	6.7x
Max	2,154.3	3,845.7	200.0	1.5x	18.0x

CDMO – Trading Comps

CDMO - Trading Comps

USD in millions

Company	Ticker	Enterprise Value	LTM			Margin Analysis			Enterprise Value/			Debt/		
			Sales	EBITDA	EBIT	Gross Profit	EBITDA	EBIT	Sales	EBITDA	EBIT	Enterprise Value	Equity Value	EBITDA
Bachem Holding AG	SWX:BANB	\$1,918.4	\$287.1	\$76.6	\$55.7	29.5%	26.7%	19.4%	6.7x	25.0x	34.4x	8.0%	8.6%	2.0x
Balchem Corporation	NasdaqGS:BCPC	3,245.1	639.3	152.3	108.6	31.6%	23.8%	17.0%	5.1x	21.3x	29.9x	4.6%	4.7%	1.0x
Cambrex Corporation	NYSE:CBM	1,957.8	549.0	151.4	106.4	36.3%	27.6%	19.4%	3.6x	12.9x	18.4x	27.6%	36.4%	3.6x
Catalent, Inc.	NYSE:CTLT	9,672.9	2,477.6	544.2	317.7	31.6%	22.0%	12.8%	3.9x	17.8x	30.4x	22.6%	28.3%	4.0x
Consort Medical plc	LSE:CSRT	682.7	397.4	71.3	53.3	18.0%	17.9%	13.4%	1.7x	9.6x	12.8x	21.2%	26.0%	2.0x
Eurofins Scientific SE	ENXTPA:ERF	10,536.5	4,329.2	810.4	493.4	19.0%	18.7%	11.4%	2.4x	13.0x	21.4x	34.3%	48.2%	4.5x
Johnson Matthey Plc	LSE:JMAT	8,923.6	13,992.9	925.9	722.8	9.5%	6.6%	5.2%	0.6x	9.6x	12.3x	19.2%	22.0%	1.9x
Lonza Group Ltd	SWX:LONN	28,745.6	5,632.3	1,518.4	1,036.6	39.3%	27.0%	18.4%	5.1x	18.9x	27.7x	14.6%	16.7%	2.8x
Recipharm AB (publ)	OM:RECI B	1,257.8	718.3	107.0	40.2	68.6%	14.9%	5.6%	1.8x	11.8x	31.3x	41.1%	62.3%	4.8x
Siegfried Holding AG	SWX:SFZN	1,555.9	807.2	127.4	77.6	19.7%	15.8%	9.6%	1.9x	12.2x	20.1x	7.2%	7.5%	0.9x
Thermo Fisher Scientific Inc.	NYSE:TMO	136,331.4	24,630.0	6,242.0	3,995.0	44.7%	25.3%	16.2%	5.5x	21.8x	34.1x	13.9%	15.9%	3.0x
West Pharmaceutical Services, Inc.	NYSE:WST	9,012.3	1,745.2	363.7	260.2	32.0%	20.8%	14.9%	5.2x	24.8x	34.6x	3.0%	3.0%	0.8x

Median	31.6%	21.4%	14.2%	3.7x	15.4x	28.8x	16.9%	19.3%	2.4x
Mean	31.6%	20.6%	13.6%	3.6x	16.6x	25.6x	18.1%	23.3%	2.6x
Min	9.5%	6.6%	5.2%	0.6x	9.6x	12.3x	3.0%	3.0%	0.8x
Max	68.6%	27.6%	19.4%	6.7x	25.0x	34.6x	41.1%	62.3%	4.8x

- The median EV multiples for CDMOs rebounded in Q1 and were 3.7x and 15.4x for Sales and EBITDA, respectively
- Expansion amongst the largest CDMO players, especially in the biologics market, persisted throughout 1H 2019 as manufacturers attempt to meet customer demand
 - WuXi Biologics' new manufacturing center in Chengdu, China will give WuXi an initial bioreactor capacity of 48,000 L with potential for 144,000 L upon completion
 - Fujifilm's \$890mm investment in Biogen's biologics facility sheds light on the overall industry strategy of acquiring scale-up capabilities to improve efficiencies within biologics manufacturing processes
- Early-stage development capabilities remain a key importance that give larger one-stop-shop CDMOs a cost advantage during the scale-up process

CRO – Trading Comps

CRO - Trading Comps

USD in millions

Company	Ticker	Enterprise Value	LTM			Margin Analysis			Enterprise Value/			Debt/		
			Sales	EBITDA	EBIT	Gross Profit	EBITDA	EBIT	Sales	EBITDA	EBIT	Enterprise Value	Equity Value	EBITDA
Charles River Laboratories International	NYSE:CRL	\$8,228.7	\$2,376.7	\$539.0	\$365.1	36.7%	22.7%	15.4%	3.5x	15.3x	22.5x	20.7%	25.5%	3.2x
ICON Public Limited Company	NasdaqGS:ICLR	8,110.8	2,650.5	460.6	396.1	29.7%	17.4%	14.9%	3.1x	17.6x	20.5x	5.7%	5.7%	1.0x
IQVIA Holdings Inc.	NYSE:IQV	41,492.8	10,533.0	1,821.0	846.0	35.0%	17.3%	8.0%	3.9x	22.8x	49.0x	28.6%	38.8%	6.5x
Linalco., Ltd.	TSE:2183	198.0	102.1	15.0	10.9	33.7%	14.7%	10.7%	1.9x	13.2x	18.1x	21.5%	21.2%	2.8x
Medpace Holdings, Inc.	NasdaqGS:MEDP	2,298.9	742.3	143.8	106.8	64.0%	19.4%	14.4%	3.1x	16.0x	21.5x	4.8%	5.0%	0.8x
PRA Health Sciences, Inc.	NasdaqGS:PRAH	7,305.3	2,892.1	447.4	334.9	48.2%	15.5%	11.6%	2.5x	16.3x	21.8x	17.6%	20.7%	2.9x
Syneos Health, Inc.	Nasdaq:SYNH	8,068.0	4,451.9	551.5	284.6	21.8%	12.4%	6.4%	1.8x	14.6x	28.3x	38.5%	61.2%	5.6x
Median						35.0%	17.3%	11.6%	3.1x	16.0x	21.8x	20.7%	21.2%	2.9x
Mean						38.5%	17.0%	11.6%	2.8x	16.5x	26.0x	19.6%	25.4%	3.3x
Min						21.8%	12.4%	6.4%	1.8x	13.2x	18.1x	4.8%	5.0%	0.8x
Max						64.0%	22.7%	15.4%	3.9x	22.8x	49.0x	38.5%	61.2%	6.5x

- The median EV multiples for CROs were 3.1x and 16.0x for Sales and EBITDA, respectively
- Since 2017, there has been a strong trend of consolidation in the CRO space. Strategic acquirers and private equity investors continue to show robust interest in the space
- The growth in the biosimilars and biologics markets, adoption of new technologies, rising demand for specialized testing services, and the emerging Asian markets further drive the CRO market¹
- While it's unlikely that there will be many 'megadeals' in 2019, expect M&A activity for smaller, bolt-on acquisitions to remain strong
 - Pharma companies look to large CROs for more expansive, global clinical trials but there is still a need for small- to mid-sized CROs who specialize in very focused indications such as immunology and oncology

1) Marketwatch: Global Contract Research Organization (CRO) Market 2019
Source: S&P Capital IQ, as of June 28, 2019

Specialty Packaging – Trading Comps

Specialty Packaging - Trading Comps

USD in millions

Company	Ticker	Enterprise Value	LTM			Margin Analysis			Enterprise Value/			Debt/		
			Sales	EBITDA	EBIT	Gross Profit	EBITDA	EBIT	Sales	EBITDA	EBIT	Enterprise Value	Equity Value	EBITDA
Ancor plc	ASX:AMC	\$18,063.1	\$2,408.5	\$597.0	\$265.1	20.0%	24.8%	11.0%	7.5x	30.3x	68.1x	0.0%	0.0%	–
AptarGroup, Inc.	NYSE:ATR	8,700.8	2,805.9	563.4	385.3	35.4%	20.1%	13.7%	3.1x	15.4x	22.6x	15.0%	17.1%	2.3x
Berry Global Group, Inc.	NYSE:BERY	12,114.5	8,048.0	1,348.0	801.0	18.1%	16.7%	10.0%	1.5x	9.0x	15.1x	47.4%	85.5%	4.3x
CCL Industries Inc.	TSX:CCL.B	10,242.6	3,940.3	748.1	537.3	28.7%	19.0%	13.6%	2.6x	13.7x	19.1x	19.8%	23.6%	2.7x
Gerresheimer AG	DB:GXI	3,001.3	1,578.3	325.2	165.5	29.0%	20.6%	10.5%	1.9x	9.2x	18.1x	25.7%	32.9%	2.4x
Mondi plc	LSE:MNDI	13,409.0	8,565.4	1,961.3	1,452.9	45.7%	22.9%	17.0%	1.6x	6.8x	9.2x	19.4%	23.9%	1.3x
RPC Group Plc	LSE:RPC	5,692.1	5,048.3	762.0	473.6	48.9%	15.1%	9.4%	1.1x	7.5x	12.0x	35.1%	48.3%	2.6x
Sonoco Products Company	NYSE:SON	8,108.0	5,438.5	736.8	500.0	19.5%	13.5%	9.2%	1.5x	11.0x	16.2x	21.3%	26.6%	2.3x
West Pharmaceutical Services, Inc.	NYSE:WST	9,012.3	1,745.2	363.7	260.2	32.0%	20.8%	14.9%	5.2x	24.8x	34.6x	3.0%	3.0%	0.8x
WestRock Company	NYSE:WRK	19,717.5	17,321.5	2,939.2	1,631.9	20.3%	17.0%	9.4%	1.1x	6.7x	12.1x	54.8%	118.9%	3.7x
Winpak Ltd.	TSX:WPK	1,805.6	892.0	195.9	154.6	30.7%	22.0%	17.3%	2.0x	9.2x	11.7x	0.0%	0.0%	0.0x
Median						29.0%	20.1%	11.0%	1.9x	9.2x	16.2x	19.8%	23.9%	2.3x
Mean						29.8%	19.3%	12.4%	2.6x	13.1x	21.7x	22.0%	34.5%	2.0x
Min						18.1%	13.5%	9.2%	1.1x	6.7x	9.2x	0.0%	0.0%	–
Max						48.9%	24.8%	17.3%	7.5x	30.3x	68.1x	54.8%	118.9%	4.3x

- The median EV multiples for Specialty Packaging were 1.9x and 9.2x for Sales and EBITDA, respectively
- Expect further consolidation as strategic buyers look to roll up niche capabilities and capacity and as private equity looks for cash flow reliable packagers from which to build a platform
- The most successful pharma packagers experience sticky customer relationships and a steady revenue stream
- The new wave of medicines, including biologics and gene therapies, are pressuring packagers to acquire specialized capabilities such as cold-chain technologies and aseptic fill/finish operations

Distribution – Trading Comps

Distribution - Trading Comps

USD in millions

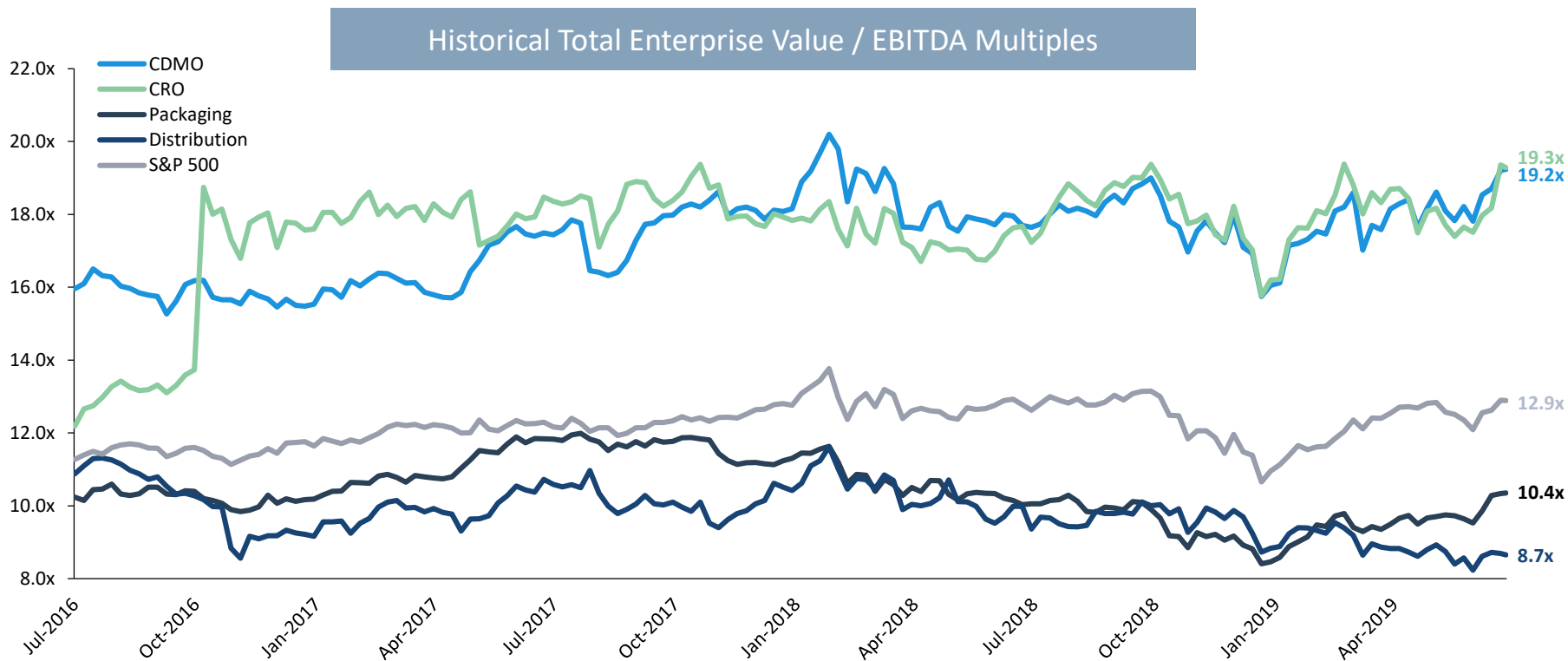
Company	Ticker	Enterprise Value	LTM			Margin Analysis			Enterprise Value/			Debt/		
			Sales	EBITDA	EBIT	Gross Profit	EBITDA	EBIT	Sales	EBITDA	EBIT	Enterprise Value	Equity Value	EBITDA
AmerisourceBergen Corporation	NYSE:ABC	\$19,533.4	\$175,151.5	\$2,276.4	\$1,735.6	2.7%	1.3%	NM	0.1x	8.6x	11.3x	23.8%	26.1%	2.0x
Cardinal Health, Inc.	NYSE:CAH	19,296.1	143,530.0	2,775.0	1,763.0	4.8%	1.9%	1.2%	0.1x	7.0x	10.9x	47.1%	66.5%	3.3x
Henry Schein, Inc.	NasdaqGS:HSIC	11,863.8	13,288.8	1,117.5	905.4	27.3%	8.4%	6.8%	0.9x	10.6x	13.1x	13.0%	14.8%	1.4x
McKesson Europe AG	HMSE:CLS1	6,856.0	25,982.5	227.9	111.1	10.0%	NM	NM	0.3x	NM	NM	24.5%	27.4%	7.4x
McKesson Corporation	NYSE:MCK	29,251.9	214,319.0	4,229.0	3,280.0	5.5%	2.0%	1.5%	0.1x	6.9x	8.9x	26.1%	31.1%	1.8x
Owens & Minor, Inc.	NYSE:OMI	2,064.8	9,927.5	217.4	117.4	14.4%	2.2%	1.2%	0.2x	9.5x	17.6x	94.4%	1018.5%	9.0x
Patterson Companies, Inc.	NasdaqGS:PDGO	2,910.3	5,538.4	215.8	132.3	21.1%	3.9%	2.4%	0.5x	13.5x	22.0x	27.0%	35.0%	3.6x
UDG Healthcare plc	LSE:UDG	2,476.1	1,296.5	167.2	114.3	28.9%	12.9%	8.8%	1.9x	14.8x	21.7x	9.7%	10.0%	1.4x

NM - Not Meaningful

Median	12.2%	2.2%	2.0%	0.2x	9.5x	13.1x	25.3%	29.2%	2.7x
Mean	14.3%	4.7%	3.7%	0.5x	10.1x	15.1x	33.2%	153.7%	3.7x
Min	2.7%	1.3%	1.2%	0.1x	6.9x	8.9x	9.7%	10.0%	1.4x
Max	28.9%	12.9%	8.8%	1.9x	14.8x	22.0x	94.4%	1018.5%	9.0x

- The median EV multiples for Distribution were 0.2x and 9.5x for Sales and EBITDA, respectively
- Distributors look to streamline the supply chain, serving the entire continuum of care, including drug manufacturers, acute care, retailers, payors, and patients
- Increasing demand for pharmaceutical drugs in emerging markets is causing distributors to quickly implement global manufacturing supply chain networks

Valuation Trends – Last 3 Years



CDMO basket consists of: Bachem (SWX:BANB), Balchem (NasdaqGS:BCPC), Cambrex (NYSE:CBM), Catalent (NYSE:CTLT), Consort Medical plc (LSE:CSRT), Eurofins Scientific SE (ENXTPA:ERF), Johnson Matthey Plc (LSE:JMAT), Lonza (SWX:LONN), Recipharm AB (OM:RECI B), Siegfried (SWX:SFZN), Thermo Fisher Scientific Inc. (NYSE:TMO), and West Pharmaceutical Services, Inc. (NYSE:WST)

CRO basket consists of: Charles River (NYSE:CRL), ICON (NasdaqGS:ICLR), IQVIA (NYSE:IQV), Medpace (NasdaqGS:MEDP), PRA Health Sciences (NasdaqGS:PRAH), and Syneos Health, Inc. (NasdaqGS:SYNH)

Distribution basket consists of: AmerisourceBergen (NYSE:ABC), Cardinal Health (NYSE:CAH), Henry Schlein (NasdaqGS:HSIC), McKesson Europe (HMSE:CLS1), McKesson (NYSE:MCK), Owens & Minor (NYSE:OMI), Patterson Companies (NasdaqGS:PDCO), and UDG Healthcare (LSE:UDG)

Packaging basket consists of: Amcor Limited (ASX:AMC), AptarGroup, Inc. (NYSE:ATR), Berry Global Group, Inc. (NYSE:BERY), CCL Industries Inc. (TSX:CCL.B), Gerresheimer AG (DB:GXI), Mondi plc (LSE:MNDI), RPC Group plc (LSE:RPC), Sonoco Products Company (NYSE:SON), West Pharmaceutical Services, Inc. (NYSE:WST), WestRock Company (NYSE:WRK), and Wipac Ltd. (TSX:WPK)

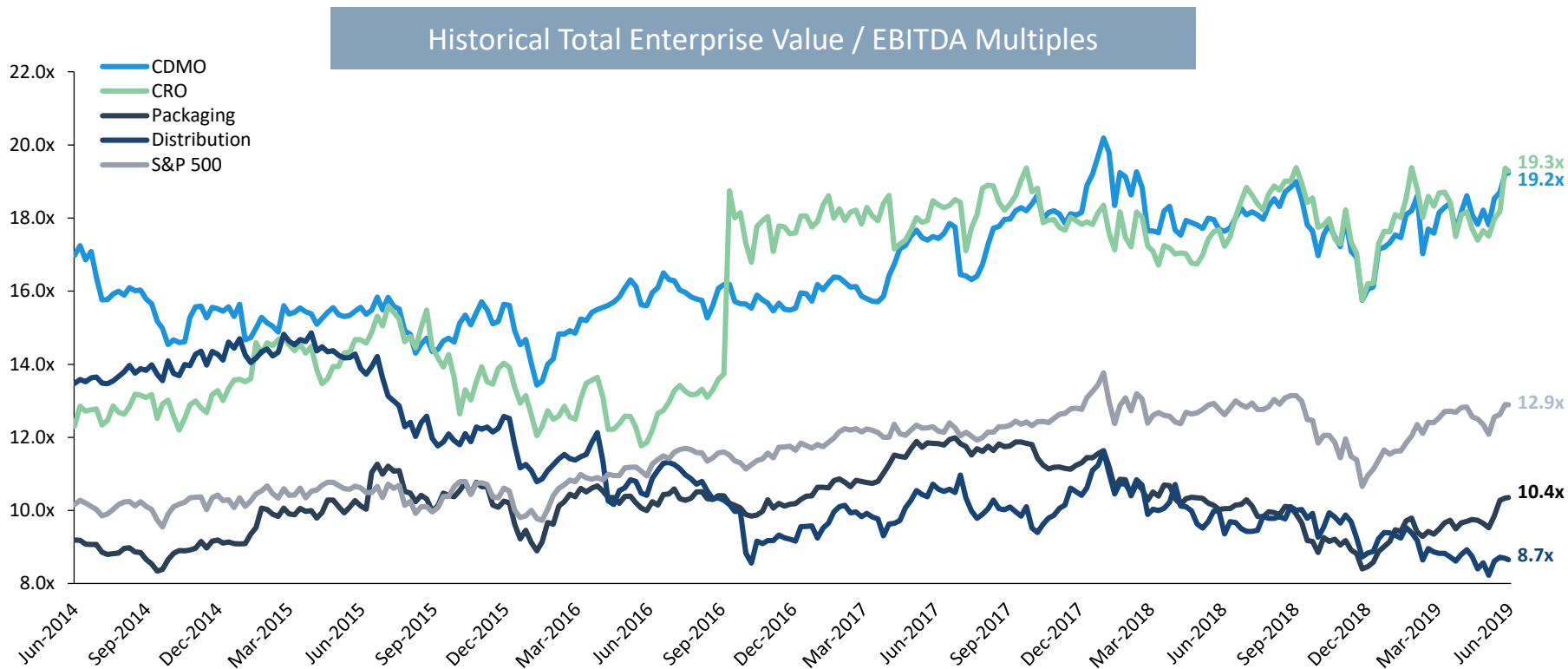
Valuation Trends (Current, 3 Year, & LTM Comparisons)

- Below are the current EV / EBITDA multiples for each sector:
 - CDMO: 19.2x (49.2% above current S&P multiples)
 - CRO: 19.3x (49.6% above current S&P multiples)
 - Specialty Packaging: 10.4x (19.7% below current S&P multiples)
 - Distribution: 8.7x (32.9% below current S&P multiples)
 - S&P 500: 12.9x

- Below are the average EV / EBITDA multiples for each sector over the last 3 years:
 - CDMO: 17.4x (41.9% above average S&P multiples)
 - CRO: 17.5x (43.4% above average S&P multiples)
 - Specialty Packaging: 10.4x (14.7% below average S&P multiples)
 - Distribution: 9.8x (19.6% below average S&P multiples)
 - S&P 500: 12.2x

- Below are the % change in EV / EBITDA multiples for each sector over the last 3 years (and LTM):
 - CDMO: +20.5% (up 9.0% in the last 12 months)
 - CRO: +58.2% (up 11.9% in the last 12 months)
 - Specialty Packaging: +1.1% (up 3.0% in the last 12 months)
 - Distribution: -20.5% (down 7.6% in the last 12 months)
 - S&P 500: +14.3% (up 2.1% in the last 12 months)

Valuation Trends – Last 5 Years



CDMO basket consists of: Bachem (SWX:BANB), Balchem (NasdaqGS:BCPC), Cambrex (NYSE:CBM), Catalent (NYSE:CTLT), Consort Medical plc (LSE:CSRT), Eurofins Scientific SE (ENXTPA:ERF), Johnson Matthey Plc (LSE:JMAT), Lonza (SWX:LONN), Recipharm AB (OM:RECI B), Siegfried (SWX:SFZN), Thermo Fisher Scientific Inc. (NYSE:TMO), and West Pharmaceutical Services, Inc. (NYSE:WST)

CRO basket consists of: Charles River (NYSE:CRL), ICON (NasdaqGS:ICLR), IQVIA (NYSE:IQV), Medpace (NasdaqGS:MEDP), PRA Health Sciences (NasdaqGS:PRAH), and Syneos Health, Inc. (NasdaqGS:SYNH)

Distribution basket consists of: AmerisourceBergen (NYSE:ABC), Cardinal Health (NYSE:CAH), Henry Schlein (NasdaqGS:HSIC), McKesson Europe (HMSE:CLS1), McKesson (NYSE:MCK), Owens & Minor (NYSE:OMI), Patterson Companies (NasdaqGS:PDCO), and UDG Healthcare (LSE:UDG)

Packaging basket consists of: Amcor Limited (ASX:AMC), AptarGroup, Inc. (NYSE:ATR), Berry Global Group, Inc. (NYSE:BERY), CCL Industries Inc. (TSX:CCL.B), Gerresheimer AG (DB:GX1), Mondi plc (LSE:MNDI), RPC Group plc (LSE:RPC), Sonoco Products Company (NYSE:SON), West Pharmaceutical Services, Inc. (NYSE:WST), WestRock Company (NYSE:WRK), and Winpak Ltd. (TSX:WPK)

Valuation Trends (Current, 5 Year, & LTM Comparisons)

- Below are the average EV / EBITDA multiples for each sector over the last 5 years:
 - CDMO: 16.5x (43.8% above average S&P multiples)
 - CRO: 15.9x (38.3% above average S&P multiples)
 - Specialty Packaging: 10.2x (11.5% below average S&P multiples)
 - Distribution: 11.1x (3.5% below average S&P multiples)
 - S&P 500: 11.5x
- Below are the % change in EV / EBITDA multiples for each sector over the last 5 years (and LTM):
 - CDMO: +13.3% (up 9.0% in the last 12 months)
 - CRO: +56.7% (up 11.9% in the last 12 months)
 - Specialty Packaging: +12.7% (up 3.0% in the last 12 months)
 - Distribution: -35.8% (down 7.6% in the last 12 months)
 - S&P 500: +26.8% (up 2.1% in the last 12 months)