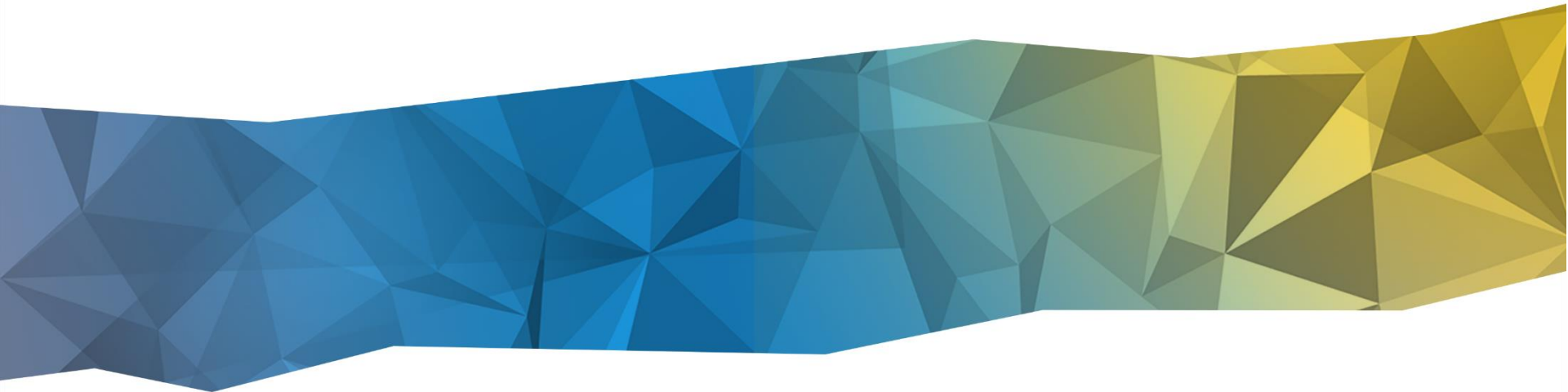


# INSIGHT

## PHARMA SERVICES SECTOR SNAPSHOT



Q3 2018

BOURNE PARTNERS

# CDMO - Transaction Comps

## CDMO Transaction Comps

USD in millions.

Announced Date	Target	Target Description	Buyer	Geographic Location	Enterprise Value	LTM Revenue	LTM EBITDA	EV / LTM Revenue	EV / LTM EBITDA
Jul-18	AMPAC Fine Chemicals LLC	Operates as a custom manufacturer of APIs and registered intermediates for the pharmaceutical industry globally	SK Holdings Co., Ltd.	USA	\$455.0	\$200.0	NA	NA	NA
Jul-18	Halo Pharma, Inc.	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
Jun-18	Alcami Corporation	Offers services in the areas of early-phase formulation development, analytical testing, and manufacturing	Madison Dearborn Partners	USA	NA	NA	NA	NA	NA
Sep-17	Cook Pharmica LLC	Provides contract development and manufacturing services to pharmaceutical and biopharmaceutical companies	Catalent Pharma Solutions, Inc.	USA	950.0	177.8	NA	5.3x	NA
Jul-17	Aptuit LLC	Provides drug discovery and development services as well as API development and manufacturing services	Evotec AG	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, Inc.	Contract research and manufacturing company that provides integrated drug discovery, development, and manufacturing	The Carlyle Group L.P.	USA	1,593.5	628.7	71.8	2.5x	22.2x
May-17	Patheon N.V.	Provides outsourced pharmaceutical development and manufacturing services	Thermo Fisher	USA	7,205.3	1,933.0	351.2	3.7x	20.5x
Dec-16	Capsugel, Inc.	Develops dosage forms and solutions for the healthcare industry around the world	Lonza Group Ltd.	USA	5,500.0	1,000.0	344.0	5.5x	16.0x
Sep-16	PharmaCore, Inc.	Specializes in developing, manufacturing, and scaling up APIs for clinical phase projects	Cambrex Corporation	USA	25.0	17.0	2.0	1.5x	12.5x

Notes:

NA - Not Available

Median	\$455.0	\$200.0	\$27.0	3.5x	17.0x
Mean	1,865.5	488.7	118.2	3.4x	18.5x
High	7,205.3	1,933.0	351.2	5.5x	25.8x
Low	25.0	17.0	2.0	1.4x	12.5x

Source: S&P Capital IQ, September 30, 2018

\*AMPAC Fine Chemicals transaction EV is according to Korean Herald

# CRO - Transaction Comps

## CRO Transaction Comps

USD in millions

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

Notes:

NA - Not Available

Median	\$800.0	\$1,168.5	\$292.7	2.9x	15.4x
Mean	2,819.2	1,278.8	292.6	2.9x	15.2x
High	13,266.8	3,063.0	743.0	4.3x	17.9x
Low	32.9	26.8	15.9	1.2x	11.7x

# Distribution - Transaction Comps

## Pharma Distribution Transaction Comps

USD in millions

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

Notes:

NA - Not Available

NM - Not Meaningful

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

# CDMO - Trading Comps

## CDMO - Trading Comps

USD in millions, except for per-share amounts

Company	Ticker	Share Price	Shares Out	Equity Value	Net Debt (Cash)	Total Debt	Enterprise Value	LTM				Interest Expense	NTM Forecast			NTM YoY Growth		Book Value	Dividend /share
								Sales	EBITDA	EBIT	EPS		Sales	EBITDA	EPS	Sales	EBITDA		
Bachem Holding AG	SWX:BANB	\$128.7	13.6	\$1,747.2	\$134.3	\$145.9	\$1,881.5	\$254.7	\$68.6	\$47.1	\$2.3	\$0.3	\$288.6	\$78.2	\$3.5	13.3%	14.0%	\$26.2	\$2.8
Balchem Corporation	NasdaqGS:BCPC	112.1	32.2	3,610.6	148.3	210.8	3,758.9	635.1	152.5	108.6	1.78	8.0	713.8	166.9	3.1	12.4%	9.4%	20.6	0.4
Cambrex Corporation	NYSE:CBM	68.4	33.3	2,274.9	(171.3)	0.0	2,103.5	586.9	186.4	154.3	2.71	0.7	634.5	178.4	3.2	8.1%	(4.3%)	18.8	NA
Catalent, Inc.	NYSE:CTLT	45.6	145.2	6,614.1	2,311.1	2,721.3	8,925.2	2,463.4	491.3	301.2	0.92	111.4	2,559.0	613.2	1.9	3.9%	24.8%	8.1	NA
Consort Medical plc	LSE:CSRT	15.5	49.0	761.3	131.4	160.9	892.7	428.1	91.9	57.2	0.67	4.4	424.1	79.1	0.9	(0.9%)	(13.9%)	6.9	0.3
Eurofins Scientific SE	ENXTPA:ERF	568.1	17.7	10,062.7	1,912.1	2,564.3	11,974.9	3,871.0	686.4	431.2	13.14	71.6	4,692.0	868.5	19.3	21.2%	26.5%	165.8	2.8
Johnson Matthey Plc	LSE:JMAT	46.5	192.0	8,920.7	948.8	1,423.3	9,869.6	19,821.7	934.8	708.8	2.13	54.7	5,397.0	961.5	3.0	(72.8%)	2.9%	17.4	1.1
Jubilant Life Sciences Limited	BSE:530019	10.1	155.8	1,569.9	431.6	480.8	2,001.5	1,174.1	224.5	186.7	0.59	42.1	1,243.8	261.4	0.9	5.9%	16.4%	3.8	NA
Lonza Group Ltd	SWX:LONN	343.2	74.2	25,480.3	3,755.3	4,246.5	29,235.6	5,912.3	1,482.6	1,030.7	6.72	14.1	6,427.9	1,705.6	13.6	8.7%	15.0%	86.0	2.8
Recipharm AB (publ)	OM:RECI B	16.0	67.4	1,076.6	372.3	493.4	1,448.8	662.8	96.8	39.6	0.11	15.5	760.5	113.4	0.4	14.7%	17.1%	9.1	NA
Siegfried Holding AG	SWX:SFZN	467.7	4.2	1,958.7	57.6	80.9	2,016.3	783.6	119.0	68.4	9.08	2.6	854.8	150.2	18.6	9.1%	26.2%	171.1	2.4
Thermo Fisher Scientific Inc.	NYSE:TMO	244.1	402.8	98,314.5	18,655.0	19,592.0	116,969.5	23,094.0	5,781.0	3,544.0	4.28	655.0	24,464.0	6,463.1	11.6	5.9%	11.8%	65.7	0.6
West Pharmaceutical Services, Inc.	NYSE:WST	123.5	73.5	9,079.8	(29.1)	196.4	9,050.7	1,677.0	346.5	244.7	2.05	7.6	1,799.5	392.0	3.1	7.3%	13.1%	17.4	0.6

Company	Ticker	FYE	Data as of	Margin Analysis			Enterprise Value/				P/E		Debt/			Interest Coverage	Price to Book	Dividend %	
				Gross Profit	EBITDA	EBIT	Sales	EBITDA	EBIT	NTM Sales	NTM EBITDA	LTM	NTM Forecast	Enterprise Value	Equity Value				EBITDA
Bachem Holding AG	SWX:BANB	31-Dec	30-Sep-18	30.2%	26.9%	18.5%	7.4 x	27.4 x	39.9 x	6.5 x	24.1 x	56.8 x	36.6 x	7.8%	8.3%	2.1 x	141.4 x	4.9 x	2.2%
Balchem Corporation	NasdaqGS:BCPC	31-Dec	30-Sep-18	31.9%	24.0%	17.1%	5.9 x	24.6 x	34.6 x	5.3 x	22.5 x	62.9 x	35.8 x	5.6%	5.8%	1.4 x	13.6 x	5.4 x	0.4%
Cambrex Corporation	NYSE:CBM	31-Dec	30-Sep-18	40.9%	31.8%	26.3%	3.6 x	11.3 x	13.6 x	3.3 x	11.8 x	25.2 x	21.6 x	0.0%	0.0%	0.0 x	NM	3.6 x	NA
Catalent, Inc.	NYSE:CTLT	30-Jun	30-Sep-18	30.6%	19.9%	12.2%	3.6 x	18.2 x	29.6 x	3.5 x	14.6 x	49.3 x	24.4 x	30.5%	41.1%	5.5 x	2.7 x	5.6 x	NA
Consort Medical plc	LSE:CSRT	30-Apr	30-Sep-18	13.7%	21.5%	13.4%	2.1 x	9.7 x	15.6 x	2.1 x	11.3 x	23.1 x	17.2 x	18.0%	21.1%	1.8 x	13.0 x	2.2 x	1.9%
Eurofins Scientific SE	ENXTPA:ERF	31-Dec	30-Sep-18	18.9%	17.7%	11.1%	3.1 x	17.4 x	27.8 x	2.6 x	13.8 x	43.2 x	29.4 x	21.4%	25.5%	3.7 x	6.0 x	3.4 x	0.5%
Johnson Matthey Plc	LSE:JMAT	31-Mar	30-Sep-18	6.4%	4.7%	3.6%	0.5 x	10.6 x	13.9 x	1.8 x	10.3 x	21.8 x	15.5 x	14.4%	16.0%	1.5 x	12.9 x	2.7 x	2.4%
Jubilant Life Sciences Limited	BSE:530019	31-Mar	30-Sep-18	56.3%	19.1%	15.9%	1.7 x	8.9 x	10.7 x	1.6 x	7.7 x	17.0 x	11.6 x	24.0%	30.6%	2.1 x	4.4 x	2.6 x	NA
Lonza Group Ltd	SWX:LONN	31-Dec	30-Sep-18	38.6%	25.1%	17.4%	4.9 x	19.7 x	28.4 x	4.5 x	17.1 x	51.1 x	25.2 x	14.5%	16.7%	2.9 x	73.1 x	4.0 x	0.8%
Recipharm AB (publ)	OM:RECI B	31-Dec	30-Sep-18	68.6%	14.6%	6.0%	2.2 x	15.0 x	36.6 x	1.9 x	12.8 x	NM	37.9 x	34.1%	45.8%	5.1 x	2.6 x	1.8 x	NA
Siegfried Holding AG	SWX:SFZN	31-Dec	30-Sep-18	19.7%	15.2%	8.7%	2.6 x	16.9 x	29.5 x	2.4 x	13.4 x	51.5 x	25.1 x	4.0%	4.1%	0.7 x	26.8 x	2.7 x	0.5%
Thermo Fisher Scientific Inc.	NYSE:TMO	31-Dec	30-Sep-18	44.8%	25.0%	15.3%	5.1 x	20.2 x	33.0 x	4.8 x	18.1 x	57.0 x	21.1 x	16.7%	19.9%	3.4 x	5.4 x	3.7 x	0.3%
West Pharmaceutical Services, Inc.	NYSE:WST	31-Dec	30-Sep-18	31.6%	20.7%	14.6%	5.4 x	26.1 x	37.0 x	5.0 x	23.1 x	60.4 x	39.8 x	2.2%	2.2%	0.6 x	32.2 x	7.1 x	0.4%

Median	31.6%	20.7%	14.6%	3.6x	17.4x	29.5x	3.3 x	13.8 x	50.2 x	25.1 x	14.5%	16.7%	2.1 x	13.0 x	3.6 x	0.5%
Mean	33.3%	20.5%	13.9%	3.7 x	17.4 x	26.9 x	3.5 x	15.4 x	43.3 x	26.3 x	14.9%	18.2%	2.4 x	27.9 x	3.8 x	1.0%
Min	6.4%	4.7%	3.6%	0.5 x	8.9 x	10.7 x	1.6 x	7.7 x	17.0 x	11.6 x	0.0%	0.0%	0.0 x	2.6 x	1.8 x	0.3%
Max	68.6%	31.8%	26.3%	7.4 x	27.4 x	39.9 x	6.5 x	24.1 x	62.9 x	39.8 x	34.1%	45.8%	5.5 x	141.4 x	7.1 x	2.4%

Debt calculations only included for entities with debt

NA - Not Available

NM - not meaningful

- YTD 2018, the CDMO industry continues to be in a phase of intense consolidation as large CDMOs look to build out services from early-stage development to drug-product manufacturing
- The median EV multiples for CDMOs were 3.6x and 17.4x for Sales and EBITDA, respectively

# CRO - Trading Comps

## CRO - Trading Comps

USD in millions, except for per-share amounts

Company	Ticker	Share Price	Shares Out	Equity Value	Net Debt (Cash)	Total Debt	Enterprise Value	LTM				Interest Expense	NTM Forecast			NTM YoY Growth		Book Value	Dividend /share
								Revenue	EBITDA	EBIT	EPS		Revenue	EBITDA	EPS	Revenue	EBITDA		
Charles River Laboratories International, Inc.	NYSE:CRL	\$134.5	48.0	\$6,462.3	\$1,634.6	\$1,827.8	\$8,096.9	\$2,022.0	\$469.5	\$326.0	\$4.09	\$45.2	\$2,383.3	\$573.8	\$6.0	17.9%	22.2%	\$24.6	NA
ICON Public Limited Company	NasdaqGS:ICLR	153.8	54.3	8,352.9	(23.9)	349.1	8,329.0	2,157.2	430.7	364.3	3.85	13.4	2,683.1	476.5	6.4	24.4%	10.6%	22.8	NA
IQVIA Holdings Inc.	NYSE:IQV	\$129.7	202.6	\$26,283.6	\$9,806.0	\$10,734.0	\$36,089.6	\$8,475.0	\$1,786.0	\$822.0	\$1.21	\$393.0	\$10,640.3	\$2,273.9	\$5.8	25.5%	27.3%	\$36.4	NA
Linical Co., Ltd.	TSE:2183	16.1	22.7	364.7	(5.7)	45.5	358.9	87.8	17.1	15.2	0.48	0.1	116.3	22.6	0.6	32.4%	32.4%	2.0	0.10
Medpace Holdings, Inc.	NasdaqGS:MEDP	\$59.9	37.4	\$2,239.5	\$168.9	\$191.1	\$2,408.4	\$531.4	\$118.8	\$76.1	\$0.91	\$8.6	\$729.4	\$142.5	\$2.7	37.3%	20.0%	\$15.3	NA
PRA Health Sciences, Inc.	NasdaqGS:PRAH	110.2	64.4	7,093.1	1,177.4	1,300.6	8,270.5	2,351.6	383.2	280.4	1.73	56.6	3,062.8	479.7	4.5	30.2%	25.2%	14.7	NA
Syneos Health, Inc.	Nasdaq:SYNH	\$51.6	102.9	\$5,305.1	\$2,730.4	\$2,903.2	\$8,035.4	\$3,472.4	\$441.8	\$157.5	(\$0.18)	\$122.0	\$4,600.9	\$618.8	\$3.0	32.5%	40.1%	\$27.4	NA

Company	Ticker	FYE	Data as of	Margin Analysis			Enterprise Value/				P/E		Debt/			Interest Coverage	Price to Book	Dividend %	
				Gross Profit	EBITDA	EBIT	Revenue	EBITDA	EBIT	NTM Revenue	NTM EBITDA	LTM	NTM Forecast	Enterprise Value	Equity Value				EBITDA
Charles River Laboratories International, Inc.	NYSE:CRL	30-Dec	30-Sep-18	37.8%	23.2%	16.1%	4.0 x	17.2 x	24.8 x	3.4 x	14.1 x	32.9 x	22.5 x	22.6%	28.3%	3.9 x	7.2 x	5.5 x	NA
ICON Public Limited Company	NasdaqGS:ICLR	31-Dec	30-Sep-18	50.0%	20.0%	16.9%	3.9 x	19.3 x	22.9 x	3.1 x	17.5 x	40.0 x	23.9 x	4.2%	4.2%	0.8 x	27.3 x	6.7 x	NA
IQVIA Holdings Inc.	NYSE:IQV	31-Dec	30-Sep-18	42.6%	21.1%	9.7%	4.3 x	20.2 x	43.9 x	3.4 x	15.9 x	NM	22.3 x	29.7%	40.8%	6.0 x	2.1 x	3.6 x	NA
Linical Co., Ltd.	TSE:2183	31-Mar	30-Sep-18	38.0%	19.4%	17.3%	4.1 x	21.0 x	23.7 x	3.1 x	15.9 x	33.9 x	28.0 x	12.7%	12.5%	2.7 x	NM	8.1 x	0.6%
Medpace Holdings, Inc.	NasdaqGS:MEDP	31-Dec	30-Sep-18	56.6%	22.3%	14.3%	4.5 x	20.3 x	31.6 x	3.3 x	16.9 x	65.7 x	22.6 x	7.9%	8.5%	1.6 x	8.9 x	3.9 x	NA
PRA Health Sciences, Inc.	NasdaqGS:PRAH	31-Dec	30-Sep-18	38.0%	16.3%	11.9%	3.5 x	21.6 x	29.5 x	2.7 x	17.2 x	63.7 x	24.5 x	15.7%	18.3%	3.4 x	5.0 x	7.5 x	NA
Syneos Health, Inc.	Nasdaq:SYNH	31-Dec	30-Sep-18	42.5%	12.7%	4.5%	2.3 x	18.2 x	51.0 x	1.7 x	13.0 x	NM	17.5 x	36.1%	54.7%	6.6 x	1.3 x	1.9 x	NA

<b>Median</b>	42.5%	20.0%	14.3%	4.0x	20.2x	29.5x	3.1 x	15.9 x	40.0 x	22.6 x	15.7%	18.3%	3.4 x	6.1 x	5.5 x	0.6%
<b>Mean</b>	43.6%	19.3%	13.0%	3.8 x	19.7 x	32.5 x	3.0 x	15.8 x	47.2 x	23.0 x	18.4%	23.9%	3.6 x	8.6 x	5.3 x	0.6%
<b>Min</b>	37.8%	12.7%	4.5%	2.3 x	17.2 x	22.9 x	1.7 x	13.0 x	32.9 x	17.5 x	4.2%	4.2%	0.8 x	1.3 x	1.9 x	0.6%
<b>Max</b>	56.6%	23.2%	17.3%	4.5 x	21.6 x	51.0 x	3.4 x	17.5 x	65.7 x	28.0 x	36.1%	54.7%	6.6 x	27.3 x	8.1 x	0.6%

- CROs look to further differentiate themselves by offering a broader range of capabilities and larger geographic footprint
- CRO subsector of the Pharma Services industry continues to trade at historical highs as illustrated by heightened EV multiples
- The median EV multiples for CROs were 4.0x and 20.2x for Sales and EBITDA, respectively



# Clinical Laboratories - Trading Comps

## Clinical Laboratories - Trading Comps

USD in millions, except for per-share amounts

Company	Ticker	Share Price	Shares Out	Equity Value	Net Debt (Cash)	Total Debt	Enterprise Value	LTM					NTM Forecast			NTM YoY Growth		Book Value	Dividend /share
								Sales	EBITDA	EBIT	EPS	Interest Expense	Sales	EBITDA	EPS	Sales	EBITDA		
Laboratory Corporation of America Holdings	NYSE:LH	\$173.7	101.9	\$17,698.0	\$6,241.4	\$6,462.8	\$23,939.4	\$10,978.6	\$2,079.1	\$1,605.3	\$7.92	\$254.3	\$11,590.3	\$2,119.5	\$11.6	5.6%	1.9%	\$69.0	NA
Quest Diagnostics Incorporated	NYSE:DGX	\$107.9	136.7	14,747.7	3,702.0	3,834.0	18,449.7	7,831.0	1,571.0	1,278.0	5.01	162.0	7,863.7	1,610.2	\$6.8	0.4%	2.5%	38.4	1.85

Company	Ticker	FYE	Data as of	Margin Analysis			Enterprise Value/			P/E			Debt/			Interest Coverage	Price to Book	Dividend %	
				Gross Profit	EBITDA	EBIT	Sales	EBITDA	EBIT	NTM Sales	NTM EBITDA	LTM	NTM Forecast	Enterprise Value	Equity Value				EBITDA
Laboratory Corporation of America Holdings	NYSE:LH	31-Dec	30-Sep-18	32.9%	18.9%	14.6%	2.2 x	11.5 x	14.9 x	2.1 x	11.3 x	21.9 x	14.9 x	27.0%	36.5%	3.1 x	6.3 x	2.5 x	NA
Quest Diagnostics Incorporated	NYSE:DGX	31-Dec	30-Sep-18	38.8%	20.1%	16.3%	2.4 x	11.7 x	14.4 x	2.3 x	11.5 x	21.5 x	15.9 x	20.8%	26.0%	2.4 x	7.9 x	2.8 x	1.7%

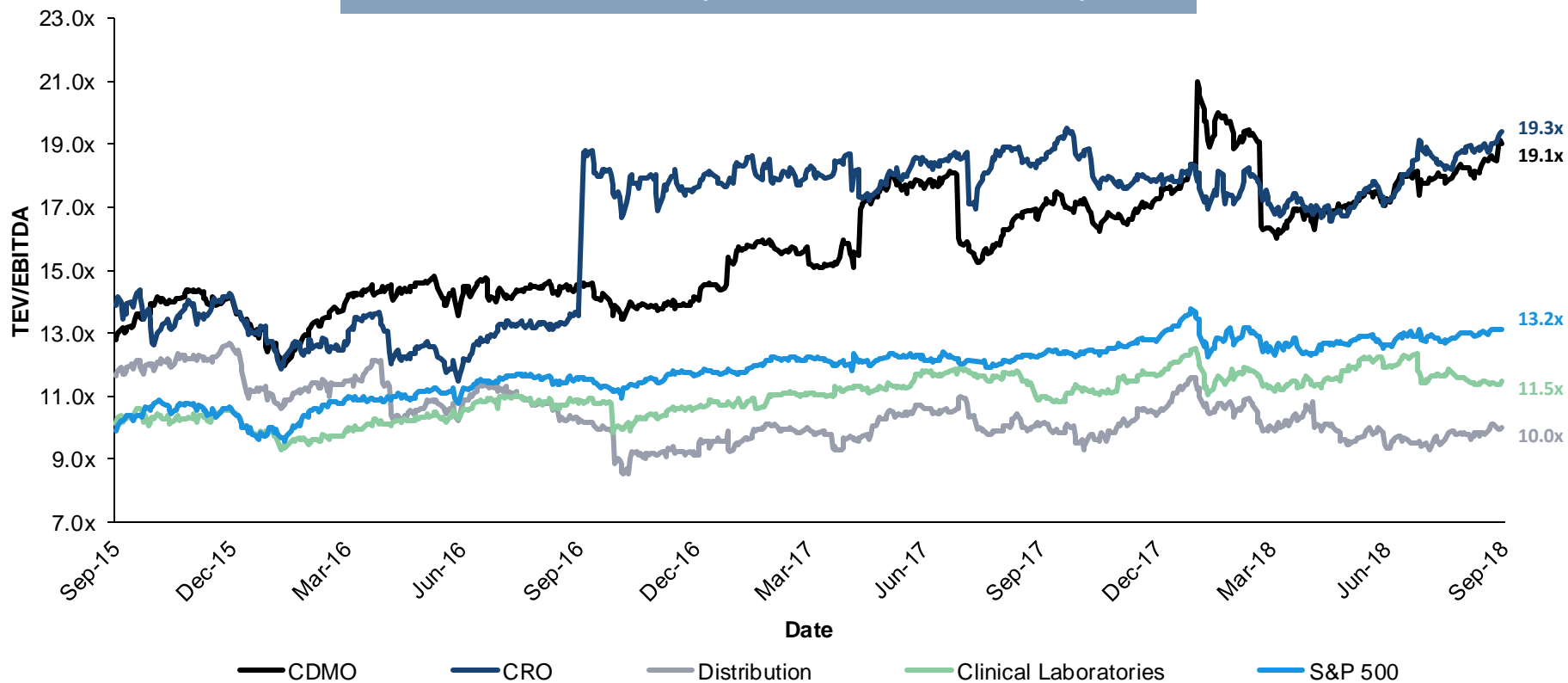
NA - Not Available	<b>Median</b>	35.8%	19.5%	15.5%	2.3 x	11.6 x	14.7 x	2.2 x	11.4 x	21.7 x	15.4 x	23.9%	31.3%	2.8 x	7.1 x	2.7 x	1.7%
	<b>Mean</b>	35.8%	19.5%	15.5%	2.3 x	11.6 x	14.7 x	2.2 x	11.4 x	21.7 x	15.4 x	23.9%	31.3%	2.8 x	7.1 x	2.7 x	1.7%
	<b>Min</b>	32.9%	18.9%	14.6%	2.2 x	11.5 x	14.4 x	2.1 x	11.3 x	21.5 x	14.9 x	20.8%	26.0%	2.4 x	6.3 x	2.5 x	1.7%
	<b>Max</b>	38.8%	20.1%	16.3%	2.4 x	11.7 x	14.9 x	2.3 x	11.5 x	21.9 x	15.9 x	27.0%	36.5%	3.1 x	7.9 x	2.8 x	1.7%

- Small sample size due to limited amount of public players within the space
- The median EV multiples for Clinical Laboratories were 2.3x and 11.6x for Sales and EBITDA, respectively



# Valuation Trends - Last 3 Years

Historical Total Enterprise Value / EBITDA Multiples



- The pharma services subsectors, except Distribution, have positive trends over the past few years and trade at historical highs

CDMO basket consists of the following: Bachem (SWX:BANB), Balchem (NasdaqGS:BCPC), Cambrex (NYSE:CBM), Catalent (NYSE:CTLT), Jubilant (BSE:530019), Lonza (SWX:LONN), Recipharm AB (OM:RECI B), Siegfried (SWX:SFZN), and West Pharmaceuticals (NYSE:WST)

CRO basket consists of the following: Charles River (NYSE:CRL), ICON (NasdaqGS:ICLR), IQVIA (NYSE:IQV), Medpace (NasdaqGS:MEDP), PRA Health Sciences (NasdaqGS:PRAH), 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)

Clinical Laboratories basket consists of: Lab Corp (NYSE:LH) and Quest Diagnostics (NYSE:DGX)

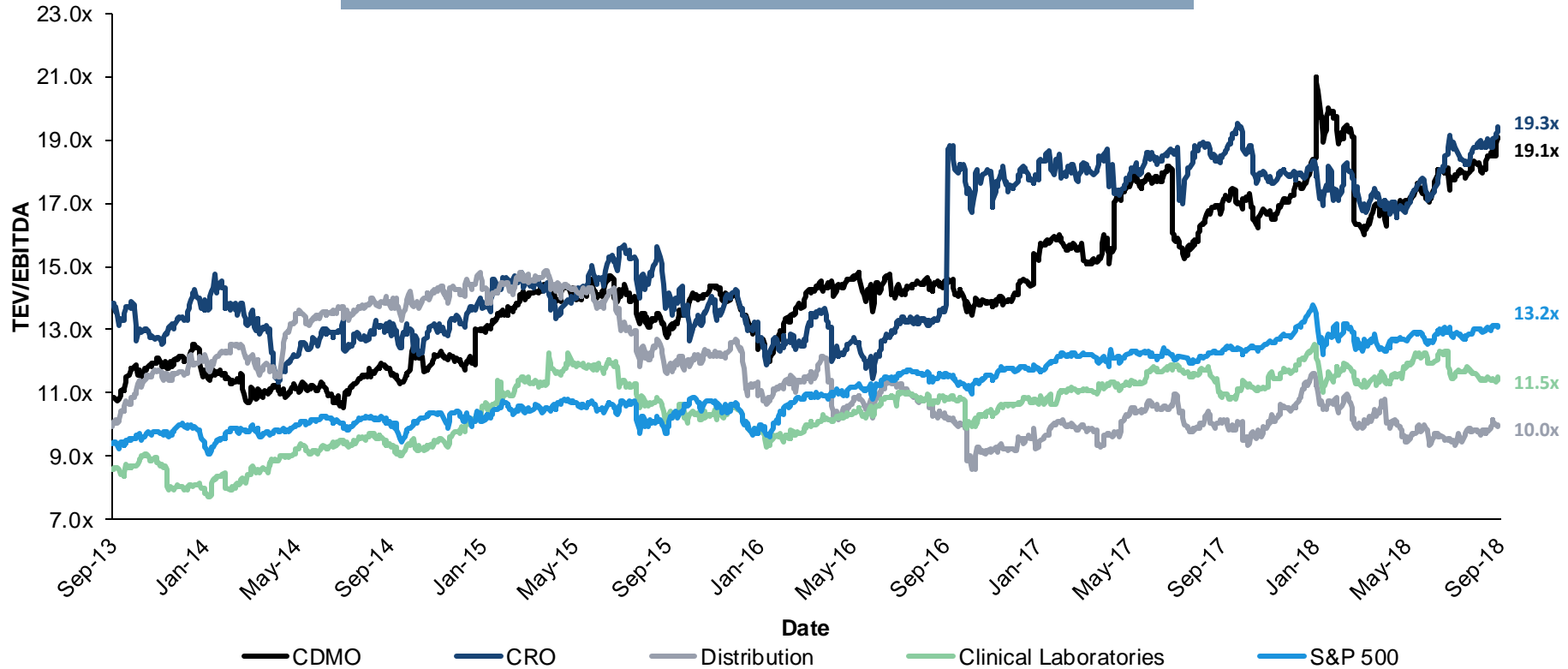
# Valuation Trends (Current, 3 Year, & LTM Comparisons)

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- Below are the *current* TEV / EBITDA multiples for each sector:
  - CDMO: 19.1x (44.9% above current S&P multiples)
  - CRO: 19.3x (46.2% above current S&P multiples)
  - Distribution: 10.0x (24.2% below current S&P multiples)
  - Clinical Laboratories: 11.5x (12.9% below current S&P multiples)
  - S&P 500: 13.2x
- Below are the *average* TEV / EBITDA multiples for each sector over the last 3 years:
  - CDMO: 15.7x (31.9% above average S&P multiples)
  - CRO: 16.3x (37.0% above average S&P multiples)
  - Distribution: 10.4x (12.6% below average S&P multiples)
  - Clinical Laboratories: 11.0x (7.6% below average S&P multiples)
  - S&P 500: 11.9x
- Below are the % change in TEV / EBITDA multiples for each sector over the last 3 years (and LTM):
  - CDMO: +49.0% (*up 12.3% in the last 12 months*)
  - CRO: +39.6% (*up 4.7% in the last 12 months*)
  - Distribution: -14.2% (*down 0.9% in the last 12 months*)
  - Clinical Laboratories: +13.5% (*up 4.6% in the last 12 months*)
  - S&P 500: +32.7% (*up 6.6% in the last 12 months*)

# Valuation Trends - Last 5 Years

Historical Total Enterprise Value / EBITDA Multiples



- 5 year outlook shows heightened values for CMOs, CROs, and Clinical Labs compared to historical trading multiples and the S&P 500 index

CDMO basket consists of the following: Bachem (SWX:BANB), Balchem (NasdaqGS:BCPC), Cambrex (NYSE:CBM), Catalent (NYSE:CTLT), Jubilant (BSE:530019), Lonza (SWX:LONN), Recipharm AB (OM:RECI B), Siegfried (SWX:SFZN), and West Pharmaceuticals (NYSE:WST)  
 CRO basket consists of the following: Charles River (NYSE:CRL), ICON (NasdaqGS:ICLR), IQVIA (NYSE:IQV), Medpace (NasdaqGS:MEDP), PRA Health Sciences (NasdaqGS:PRAH), 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)  
 Clinical Laboratories basket consists of: Lab Corp (NYSE:LH) and Quest Diagnostics (NYSE:DGX)  
 Source: S&P Capital IQ, September 30, 2018

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

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- Below are the *current* TEV / EBITDA multiples for each sector:
  - CDMO: 19.1x (44.9% above current S&P multiples)
  - CRO: 19.3x (46.2% above current S&P multiples)
  - Distribution: 10.0x (24.2% below current S&P multiples)
  - Clinical Laboratories: 11.5x (12.9% below current S&P multiples)
  - S&P 500: 13.2x
- Below are the average TEV / EBITDA multiples for each sector over the last 5 years:
  - CDMO: 14.4x (28.6% above average S&P multiples)
  - CRO: 15.2x (35.7% above average S&P multiples)
  - Distribution: 11.5x (2.7% above average S&P multiples)
  - Clinical Laboratories: 10.5x (6.3% below average S&P multiples)
  - S&P 500: 11.2x
- Below are the % change in TEV / EBITDA multiples for each sector over the last 3 years (and LTM):
  - CDMO: +75.9% (*up 12.3% in the last 12 months*)
  - CRO: +40.4% (*up 4.7% in the last 12 months*)
  - Distribution: -0.7% (*down 0.9% in the last 12 months*)
  - Clinical Laboratories: +34.1% (*up 4.6% in the last 12 months*)
  - S&P 500: +40.1% (*up 6.6% in the last 12 months*)