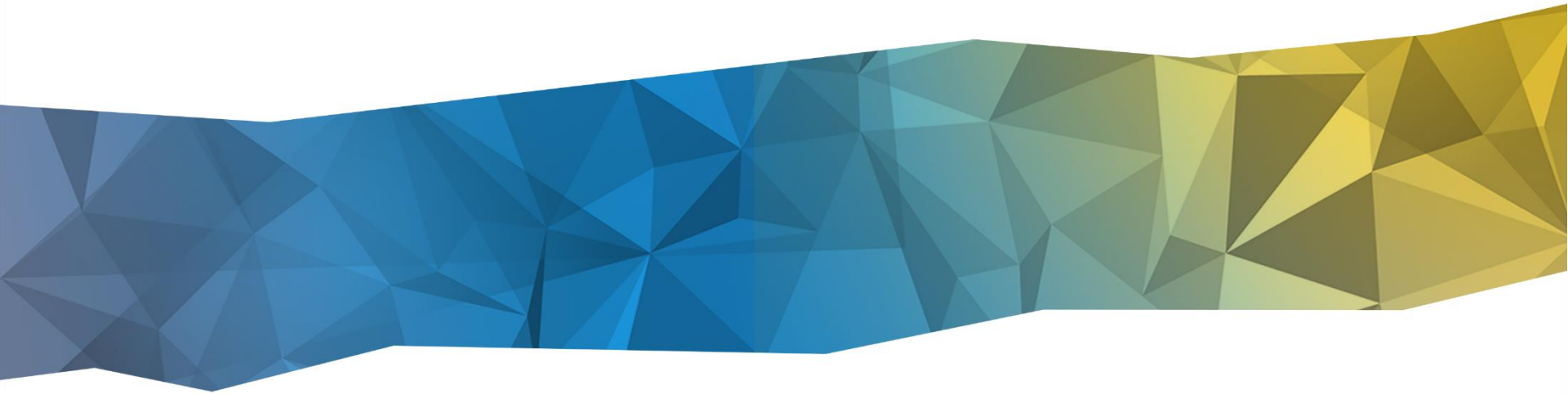


INSIGHT

PHARMA SERVICES SECTOR SNAPSHOT



Q2 2018

BOURNE PARTNERS

CMO - Transaction Comps

CMO Transaction Comps

USD in millions, except for per-share amounts

Announced Date	Target	Target Description	Buyer	Geographic Location	Enterprise Value	LTM Revenue	LTM EBITDA	EV / LTM Revenue	EV / LTM EBITDA
Jul-18	Juniper Pharmaceuticals	Diversified healthcare company that focuses on developing novel intra-vaginal therapeutics that address unmet medical needs in women's health	Catalent Pharma Solutions, Inc.	USA	\$121.9	\$54.3	\$1.7	2.2x	NM
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
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	CMC Biologics	Provides contract process development and biopharmaceuticals manufacturing services	Asahi Glass Co., Ltd.	Denmark	514.3	NA	NA	NA	NA
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
Aug-16	Ash Stevens, Inc.	Develops and manufactures drug substances and APIs	Piramal Pharma Solutions Inc.	USA	53.0	18.3	NA	2.9x	NA
Jul-16	Gland Pharma Limited	Manufactures small volume parenterals including vials, ampoules, pre-filled syringes, and lyophilized vials	Fosun Pharma Industrial Pte. Ltd.	India	1,588.6	188.2	NA	8.4x	NA
May-16	Euticals S.p.a.	Manufactures and sells APIs, customs synthesis, and fine chemical products	Albany Molecular Research, Inc.	Italy	353.1	243.1	26.8	1.5x	13.2x

Notes:

NA - Not Available

NM - Not Meaningful

Median	\$433.7	\$188.2	\$26.8	3.2x	16.0x
Mean	1,519.0	406.1	118.3	3.6x	16.6x
High	7,205.3	1,933.0	351.2	8.4x	22.2x
Low	25.0	13.1	2.0	1.4x	11.2x

CRO - Transaction Comps

CRO Transaction Comps

USD in millions, except for per share amounts

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 contract research organization that provides mission-critical research services and products	ICON Public Limited Company	France	139.5	NA	NA	NA	NA
Jul-17	Chiltern International Limited	Contract research organization 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/contract research organization	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

NM - Not Meaningful

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, except for per-share amounts

Announced Date	Target	Target Description	Buyer	Geographic Location	Enterprise Value	LTM Revenue	LTM EBITDA	EV / LTM Revenue	EV / LTM EBITDA
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 generics 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
Jan-15	Norchem Ltd.	Distributes and markets pharmaceuticals	Lexon (UK) Limited	UK	34.9	37.9	NA	0.9x	NA

Notes:

NA - Not Available

NM - Not Meaningful

Median	\$344.6	\$250.7	\$27.2	1.0x	12.7x
Mean	521.4	1,110.8	61.0	0.9x	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

CMO - Trading Comps

CMO - 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
Bachem Holding AG	SWXBANB	\$131.7	13.6	\$1,787.7	\$79.7	\$97.4	\$1,867.3	\$268.4	\$72.9	\$51.5	\$2.3	\$0.3	\$296.6	\$82.2	\$3.6	10.5%	12.8%	\$28.3	\$2.8
Balchem Corporation	NasdaqGS:BCPC	98.1	32.1	3,151.1	167.6	210.3	3,318.7	618.5	148.5	104.8	1.78	7.6	661.1	162.3	3.0	6.9%	9.3%	19.9	0.4
Cambrex Corporation	NYSE:CBM	52.3	33.0	1,723.8	(187.6)	0.0	1,536.2	570.7	177.9	145.7	2.71	1.1	556.1	153.1	3.1	(2.6%)	(13.9%)	18.0	NA
Catalent, Inc.	NYSE:CTLT	41.9	133.4	5,586.8	2,374.9	2,777.1	7,961.7	2,395.0	484.6	308.4	0.83	104.0	2,581.2	589.0	1.8	7.8%	21.5%	8.0	NA
Consort Medical plc	LSE:CSRT	15.7	49.0	770.5	131.4	160.9	901.9	428.1	92.8	57.5	0.67	4.4	426.8	78.5	0.9	(0.3%)	(15.4%)	6.9	0.3
Jubilant Life Sciences Limited	BSE:530019	10.2	159.3	1,623.9	454.2	506.0	2,078.0	1,155.3	218.5	183.5	0.59	43.7	1,297.6	268.7	0.9	12.3%	22.9%	4.0	0.0
Koninklijke DSM N.V.	ENXTAM:DSM	100.5	173.0	17,387.1	736.7	3,250.0	18,123.9	10,974.5	1,781.4	1,228.3	2.54	131.8	10,808.1	2,081.4	5.9	(1.5%)	16.8%	50.9	2.3
Lonza Group Ltd	SWXLONN	265.2	74.2	19,690.4	3,939.2	4,438.9	23,629.6	5,238.3	1,289.8	893.7	6.72	77.0	6,045.1	1,558.1	11.9	15.4%	20.8%	85.8	2.8
Recipharm AB (publ)	OM:RECI B	15.0	67.3	1,007.7	464.0	520.4	1,471.7	665.2	96.3	37.3	0.11	15.1	693.6	109.9	0.4	4.3%	14.0%	8.9	NA
Siegfried Holding AG	SWXSFZN	399.1	4.2	1,671.4	67.7	102.7	1,739.1	770.1	112.0	61.9	9.08	3.8	810.8	136.7	16.1	5.3%	22.0%	166.8	2.5
Teligent, Inc.	NasdaqGS:TLGT	3.5	53.5	185.2	110.8	123.6	296.0	61.9	(13.1)	(18.0)	(0.18)	11.5	81.6	6.8	(0.0)	31.7%	(152.4%)	0.8	NA
West Pharmaceutical Services, Inc.	NYSE:WST	99.3	73.6	7,305.5	(1.8)	198.0	7,303.7	1,627.1	335.2	235.4	2.05	7.6	1,785.8	387.7	2.9	8.5%	15.7%	17.7	0.5

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	SWXBANB	31-Dec	30-Jun-18	31.6%	27.1%	19.2%	7.0 x	25.6 x	36.3 x	6.3 x	22.7 x	58.1 x	36.4 x	5.2%	5.4%	1.3 x	NM	4.7 x	2.1%
Balchem Corporation	NasdaqGS:BCPC	31-Dec	30-Jun-18	31.7%	24.0%	16.9%	5.4 x	22.4 x	31.7 x	5.0 x	20.4 x	55.1 x	32.9 x	6.3%	6.7%	1.4 x	13.7 x	4.9 x	0.4%
Cambrex Corporation	NYSE:CBM	31-Dec	30-Jun-18	41.0%	31.2%	25.5%	2.7 x	8.6 x	10.5 x	2.8 x	10.0 x	19.3 x	17.1 x	0.0%	0.0%	0.0 x	136.3 x	2.9 x	NA
Catalent, Inc.	NYSE:CTLT	30-Jun	30-Jun-18	30.7%	20.2%	12.9%	3.3 x	16.4 x	25.8 x	3.1 x	13.5 x	50.2 x	23.6 x	34.9%	49.7%	5.7 x	3.0 x	5.2 x	NA
Consort Medical plc	LSE:CSRT	30-Apr	30-Jun-18	22.0%	21.7%	13.4%	2.1 x	9.7 x	15.7 x	2.1 x	11.5 x	23.3 x	17.4 x	17.8%	20.9%	1.7 x	13.1 x	2.3 x	1.8%
Jubilant Life Sciences Limited	BSE:530019	31-Mar	30-Jun-18	56.2%	18.9%	15.9%	1.8 x	9.5 x	11.3 x	1.6 x	7.7 x	17.2 x	11.5 x	24.3%	31.2%	2.3 x	4.2 x	2.5 x	0.5%
Koninklijke DSM N.V.	ENXTAM:DSM	31-Dec	30-Jun-18	36.0%	16.2%	11.2%	1.7 x	10.2 x	14.8 x	1.7 x	8.7 x	39.6 x	17.0 x	17.9%	18.7%	1.8 x	9.3 x	2.0 x	2.3%
Lonza Group Ltd	SWXLONN	31-Dec	30-Jun-18	38.2%	24.6%	17.1%	4.5 x	18.3 x	26.4 x	3.9 x	15.2 x	39.5 x	22.2 x	18.8%	22.5%	3.4 x	11.6 x	3.1 x	1.1%
Recipharm AB (publ)	OM:RECI B	31-Dec	30-Jun-18	68.3%	14.5%	5.6%	2.2 x	15.3 x	39.4 x	2.1 x	13.4 x	NM	35.9 x	35.4%	51.6%	5.4 x	2.5 x	1.7 x	NA
Siegfried Holding AG	SWXSFZN	31-Dec	30-Jun-18	18.5%	14.5%	8.0%	2.3 x	15.5 x	28.1 x	2.1 x	12.7 x	43.9 x	24.8 x	5.9%	6.1%	0.9 x	16.3 x	2.4 x	0.6%
Teligent, Inc.	NasdaqGS:TLGT	31-Dec	30-Jun-18	4.5%	NM	NM	4.8 x	NM	NM	3.6 x	43.2 x	NM	NM	41.8%	66.7%	-9.5 x	NM	4.6 x	NA
West Pharmaceutical Services, Inc.	NYSE:WST	31-Dec	30-Jun-18	31.5%	20.6%	14.5%	4.5 x	21.8 x	31.0 x	4.1 x	18.8 x	48.5 x	33.8 x	2.7%	2.7%	0.6 x	31.0 x	5.6 x	0.5%

* All estimates from Capital IQ

Debt calculations only included for entities with debt

NA - Not Available

NM - not meaningful

	Median	Mean	Min	Max
Gross Profit	31.7%	20.6%	14.5%	31.7%
EBITDA	20.6%	21.2%	14.6%	31.2%
EBIT	14.5%	14.6%	5.6%	25.5%
Sales	3.0 x	3.5 x	1.7 x	7.0 x
EBITDA	15.5 x	15.8 x	8.6 x	25.6 x
EBIT	26.4 x	24.6 x	10.5 x	39.4 x
NTM Sales	2.9 x	3.2 x	1.6 x	6.3 x
NTM EBITDA	13.5 x	16.5 x	7.7 x	43.2 x
LTM	41.8 x	39.5 x	17.2 x	58.1 x
NTM Forecast	23.6 x	24.8 x	11.5 x	36.4 x
Enterprise Value	17.9%	17.6%	0.0%	41.8%
Equity Value	19.8%	23.5%	0.0%	66.7%
EBITDA	1.6 x	1.3 x	-9.5 x	5.7 x
Interest Coverage	12.3 x	24.1 x	2.5 x	136.3 x
Price to Book	3.0 x	3.5 x	1.7 x	5.6 x
Dividend %	0.8%	1.2%	0.4%	2.3%

- Demand for capacity and the need to differentiate their offerings continues to be a main driver for M&A activity by larger CMOs
- The median EV multiples for CMOs were 3.0x and 15.5x 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					NTM Forecast			NTM YoY Growth		Book Value	Dividend /share
								Revenue	EBITDA	EBIT	EPS	Interest Expense	Revenue	EBITDA	EPS	Revenue	EBITDA		
Charles River Laboratories International, Inc.	NYSE:CRL	\$112.3	47.9	\$5,378.6	\$942.4	\$1,132.7	\$6,321.0	\$1,905.8	\$449.4	\$317.4	\$4.09	\$34.0	\$2,307.0	\$559.0	\$5.9	21.1%	24.4%	\$23.8	NA
ICON Public Limited Company	NasdaqGS:ICLR	132.5	53.8	7,129.3	(4.6)	349.0	7,124.7	1,946.6	413.4	349.7	3.85	13.2	2,619.6	462.6	6.2	34.6%	11.9%	22.4	NA
IQVIA Holdings Inc.	NYSE:IQV	99.8	202.3	20,195.0	9,446.0	10,453.0	29,641.0	8,263.0	1,737.0	810.0	1.21	367.0	10,344.1	2,213.7	5.5	25.2%	27.4%	39.5	NA
Linical Co., Ltd.	TSE:2183	22.4	22.7	509.6	(39.9)	8.8	469.6	85.8	19.4	17.4	0.48	0.0	120.0	25.2	0.6	39.8%	30.0%	2.2	0.10
Medpace Holdings, Inc.	NasdaqGS:MEDP	43.0	35.5	1,527.6	201.4	223.7	1,729.0	455.8	113.6	69.0	0.91	8.1	434.2	106.5	1.9	(4.7%)	(6.3%)	14.5	NA
PRA Health Sciences, Inc.	NasdaqGS:PRAH	93.4	64.1	5,982.2	1,208.2	1,338.9	7,190.4	2,162.5	361.5	271.1	1.73	52.0	2,987.7	462.7	4.3	38.2%	28.0%	14.7	NA
Syneos Health, Inc.	Nasdaq:SYNH	46.9	102.8	4,820.4	2,784.4	2,971.1	7,604.8	2,658.0	370.0	137.7	(0.18)	92.4	4,530.5	603.7	2.8	70.5%	63.2%	28.0	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-Jun-18	38.5%	23.6%	16.7%	3.3 x	14.1 x	19.9 x	2.7 x	11.3 x	27.4 x	18.9 x	17.9%	21.1%	2.5 x	9.3 x	4.7 x	NA
ICON Public Limited Company	NasdaqGS:ICLR	31-Dec	30-Jun-18	46.1%	21.2%	18.0%	3.7 x	17.2 x	20.4 x	2.7 x	15.4 x	34.4 x	21.3 x	4.9%	4.9%	0.8 x	26.4 x	5.9 x	NA
IQVIA Holdings Inc.	NYSE:IQV	31-Dec	30-Jun-18	42.5%	21.0%	9.8%	3.6 x	17.1 x	36.6 x	2.9 x	13.4 x	82.3 x	18.1 x	35.3%	51.8%	6.0 x	2.2 x	2.5 x	NA
Linical Co., Ltd.	TSE:2183	31-Mar	30-Jun-18	38.8%	22.6%	20.3%	5.5 x	24.3 x	27.0 x	3.9 x	18.7 x	47.2 x	35.3 x	1.9%	1.7%	0.5 x	NM	10.4 x	0.5%
Medpace Holdings, Inc.	NasdaqGS:MEDP	31-Dec	30-Jun-18	51.5%	24.9%	15.1%	3.8 x	15.2 x	25.0 x	4.0 x	16.2 x	47.2 x	23.1 x	12.9%	14.6%	2.0 x	8.6 x	3.0 x	NA
PRA Health Sciences, Inc.	NasdaqGS:PRAH	31-Dec	30-Jun-18	36.3%	16.7%	12.5%	3.3 x	19.9 x	26.5 x	2.4 x	15.5 x	54.0 x	21.8 x	18.6%	22.4%	3.7 x	5.2 x	6.4 x	NA
Syneos Health, Inc.	Nasdaq:SYNH	31-Dec	30-Jun-18	39.5%	13.9%	5.2%	2.9 x	20.6 x	55.2 x	1.7 x	12.6 x	NM	16.9 x	39.1%	61.6%	8.0 x	1.5 x	1.7 x	NA

* All estimates from Capital IQ

Debt calculations only included for entities with debt

NA - Not Available

NM - not meaningful

Median	39.5%	21.2%	15.1%	3.6 x	17.2 x	26.5 x	2.7 x	15.4 x	47.2 x	21.3 x	17.9%	21.1%	2.5 x	6.9 x	4.7 x	0.5%
Mean	41.9%	20.6%	13.9%	3.7 x	18.3 x	30.1 x	2.9 x	14.7 x	48.8 x	22.2 x	18.7%	25.4%	3.4 x	8.9 x	4.9 x	0.5%
Min	36.3%	13.9%	5.2%	2.9 x	14.1 x	19.9 x	1.7 x	11.3 x	27.4 x	16.9 x	1.9%	1.7%	0.5 x	1.5 x	1.7 x	0.5%
Max	51.5%	24.9%	20.3%	5.5 x	24.3 x	55.2 x	4.0 x	18.7 x	82.3 x	35.3 x	39.1%	61.6%	8.0 x	26.4 x	10.4 x	0.5%

- CROs seek to provide innovative and efficient solutions with technology playing an important role in efforts to streamline clinical operations¹
- Subsector of the industry trading at historical highs as illustrated by heightened EV multiples
- The median EV multiples for CROs were 3.6x and 17.2x for Sales and EBITDA, respectively

Distribution - Trading Comps

Distribution - 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		
AmerisourceBergen Corporation	NYSE:ABC	\$85.3	219.8	\$18,742.7	\$2,801.6	\$4,892.9	\$21,544.2	\$159,327.3	\$2,375.8	\$1,928.2	\$5.37	\$160.5	\$175,148.6	\$2,411.9	\$6.8	9.9%	1.5%	\$14.5	\$1.5
Cardinal Health, Inc.	NYSE:CAH	\$48.8	310.7	15,170.8	7,403.0	9,578.0	22,573.8	134,426.0	3,222.0	2,251.0	4.24	318.0	139,803.7	2,746.0	\$4.9	4.0%	(14.8%)	24.2	\$1.8
Henry Schein, Inc.	NasdaqGS:HSIC	\$72.6	154.0	11,188.4	1,869.6	1,968.8	13,058.0	12,759.0	1,081.0	880.6	3.03	59.8	13,549.1	1,135.0	\$4.2	6.2%	5.0%	18.8	NA
McKesson Europe AG	HMSE:CLS1	\$30.8	203.2	6,259.5	702.0	1,683.1	6,961.5	25,982.5	185.4	65.0	0.10	64.1	NA	NA	NA	NA	NA	11.5	\$0.9
McKesson Corporation	NYSE:MCK	\$133.4	201.8	26,916.9	5,437.0	8,109.0	32,353.9	208,357.0	3,872.0	2,921.0	6.64	283.0	216,165.6	4,127.0	\$13.4	3.7%	6.6%	48.5	\$1.3
Owens & Minor, Inc.	NYSE:OMI	\$16.7	61.8	1,032.5	809.4	897.1	1,842.0	9,362.3	198.6	144.5	1.23	35.3	10,187.8	312.3	\$2.1	8.8%	57.3%	16.5	\$1.0
Patterson Companies, Inc.	NasdaqGS:PDCCO	\$22.7	92.4	2,095.6	953.3	1,016.2	3,048.9	5,465.7	303.7	219.9	1.21	46.7	5,558.7	306.8	\$1.7	1.7%	1.0%	15.9	\$1.0
UDG Healthcare plc	LSE:UDG	\$10.9	248.7	2,710.2	46.6	257.5	2,756.8	1,316.2	160.9	110.6	0.24	9.5	1,406.4	179.4	\$0.5	6.9%	11.5%	3.5	\$0.1

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			
AmerisourceBergen Corporation	NYSE:ABC	30-Sep	30-Jun-18	2.9%	1.5%	1.2%	0.1 x	9.1 x	11.2 x	0.1 x	8.9 x	15.9 x	12.6 x	22.7%	26.1%	2.1 x	12.0 x	5.9 x	1.7%
Cardinal Health, Inc.	NYSE:CAH	30-Jun	30-Jun-18	5.3%	2.4%	1.7%	0.2 x	7.0 x	10.0 x	0.2 x	8.2 x	11.5 x	10.0 x	42.4%	63.1%	3.0 x	7.1 x	2.0 x	3.8%
Henry Schein, Inc.	NasdaqGS:HSIC	30-Dec	30-Jun-18	27.2%	8.5%	6.9%	1.0 x	12.1 x	14.8 x	1.0 x	11.5 x	24.0 x	17.4 x	15.1%	17.6%	1.8 x	14.7 x	3.9 x	NA
McKesson Europe AG	HMSE:CLS1	31-Mar	30-Jun-18	10.1%	NM	0.3%	0.3 x	37.5 x	NM	NA	NA	NM	NA	24.2%	26.9%	9.1 x	1.0 x	2.7 x	2.9%
McKesson Corporation	NYSE:MCK	31-Mar	30-Jun-18	5.4%	1.9%	1.4%	0.2 x	8.4 x	11.1 x	0.1 x	7.8 x	20.1 x	10.0 x	25.1%	30.1%	2.1 x	10.3 x	2.7 x	1.0%
Owens & Minor, Inc.	NYSE:OMI	31-Dec	30-Jun-18	13.0%	2.1%	1.5%	0.2 x	9.3 x	12.7 x	0.2 x	5.9 x	13.6 x	7.9 x	48.7%	86.9%	4.5 x	4.1 x	1.0 x	6.2%
Patterson Companies, Inc.	NasdaqGS:PDCCO	28-Apr	30-Jun-18	21.9%	5.6%	4.0%	0.6 x	10.0 x	13.9 x	0.5 x	9.9 x	18.7 x	13.2 x	33.3%	48.5%	3.3 x	4.7 x	1.4 x	4.6%
UDG Healthcare plc	LSE:UDG	30-Sep	30-Jun-18	28.3%	12.2%	8.4%	2.1 x	17.1 x	24.9 x	2.0 x	15.4 x	44.6 x	23.0 x	9.3%	9.5%	1.6 x	11.6 x	3.1 x	1.3%

* All estimates from Capital IQ

Debt calculations only included for entities with debt

NA - Not Available

NM - not meaningful

Median	11.5%	2.4%	1.6%	0.2 x	9.7 x	12.7 x	0.2 x	8.9 x	18.7 x	12.6 x	24.6%	28.5%	2.5 x	8.7 x	2.7 x	2.9%
Mean	14.3%	4.9%	3.2%	0.6 x	13.8 x	14.1 x	0.6 x	9.7 x	21.2 x	13.4 x	27.6%	38.6%	3.4 x	8.2 x	2.8 x	3.1%
Min	2.9%	1.5%	0.3%	0.1 x	7.0 x	10.0 x	0.1 x	5.9 x	11.5 x	7.9 x	9.3%	9.5%	1.6 x	1.0 x	1.0 x	1.0%
Max	28.3%	12.2%	8.4%	2.1 x	37.5 x	24.9 x	2.0 x	15.4 x	44.6 x	23.0 x	48.7%	86.9%	9.1 x	14.7 x	5.9 x	6.2%

- Trading at lower sales multiples relative to other Pharma Services segments in general due to lower earnings margins from pricing pressure for branded and generic drugs
- The two outliers, UDG and Henry Schein, have superior margins and YoY growth relative to most competitors
- The median EV multiples for Distribution were 0.3x and 9.7x 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	\$179.5	102.3	\$18,365.9	\$6,415.2	\$6,777.0	\$24,781.1	\$10,640.5	\$2,042.3	\$1,580.0	\$7.92	\$246.2	\$11,585.0	\$2,182.2	\$11.7	8.9%	6.8%	\$68.4	NA
Quest Diagnostics Incorporated	NYSE:DGX	109.9	135.8	14,931.7	3,849.0	3,973.0	18,780.7	7,776.0	1,573.0	1,291.0	5.01	162.0	7,784.1	1,604.8	\$6.7	0.1%	2.0%	37.0	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-Jun-18	33.4%	19.2%	14.8%	2.3 x	12.1 x	15.7 x	2.1 x	11.4 x	22.7 x	15.4 x	27.3%	36.9%	3.3 x	6.4 x	2.6 x	NA
Quest Diagnostics Incorporated	NYSE:DGX	31-Dec	30-Jun-18	39.2%	20.2%	16.6%	2.4 x	11.9 x	14.5 x	2.4 x	11.7 x	21.9 x	16.4 x	21.2%	26.6%	2.5 x	8.0 x	3.0 x	1.7%

* All estimates from Capital IQ

Debt calculations only included for entities with debt

NA - Not Available

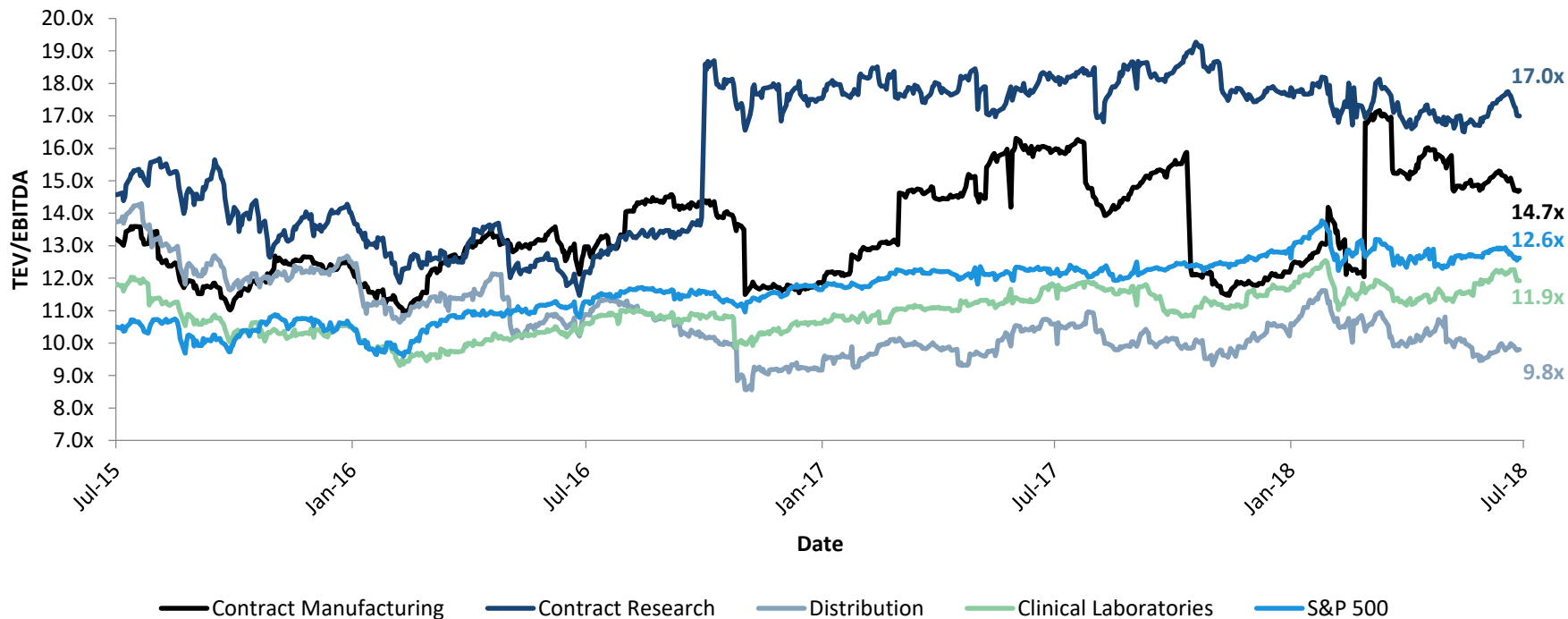
NM - not meaningful

Median	36.3%	19.7%	15.7%	2.4 x	12.0 x	15.1 x	2.3 x	11.5 x	22.3 x	15.9 x	24.3%	31.8%	2.9 x	7.2 x	2.8 x	1.7%
Mean	36.3%	19.7%	15.7%	2.4 x	12.0 x	15.1 x	2.3 x	11.5 x	22.3 x	15.9 x	24.3%	31.8%	2.9 x	7.2 x	2.8 x	1.7%
Min	33.4%	19.2%	14.8%	2.3 x	11.9 x	14.5 x	2.1 x	11.4 x	21.9 x	15.4 x	21.2%	26.6%	2.5 x	6.4 x	2.6 x	1.7%
Max	39.2%	20.2%	16.6%	2.4 x	12.1 x	15.7 x	2.4 x	11.7 x	22.7 x	16.4 x	27.3%	36.9%	3.3 x	8.0 x	3.0 x	1.7%

- Small sample size due to limited amount of public players within the space
- The median EV multiples for Clinical Laboratories were 2.4x and 12.0x 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 are trading at historical highs
- The CRO segment has held steady the past year while CMO is recovering after a significant dip

CMO basket consists of the following: Bachem (SWX:BANB), Balchem (NasdaqGS:BCPC), Cambrex (NYSE:CBM), Catalent (NYSE:CTLT), Jubilant (BSE:530019), DSM (ENXTAM:DSM), Lonza (SWX:LONN), Recipharm AB (OM:RECI B), Siegfried (SWX:SFZN), Teligent (NasdaqGS:TLGT), 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)

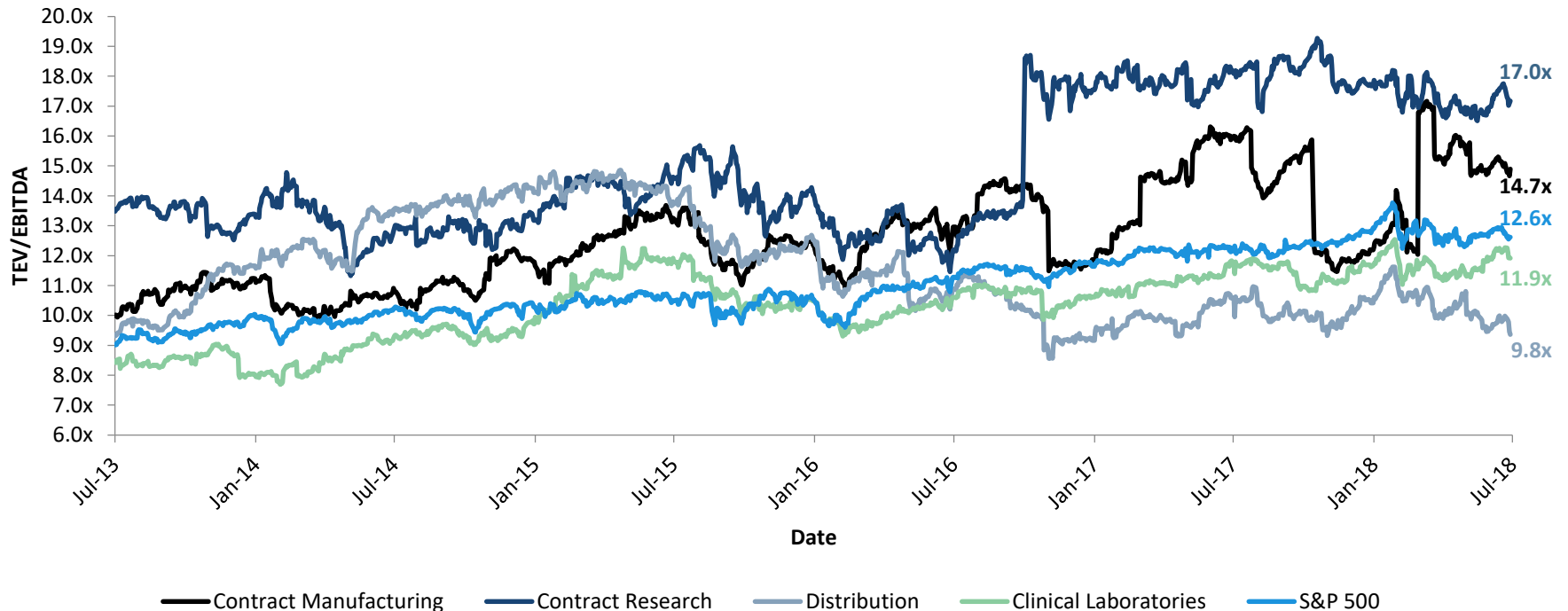
Clinical Laboratories basket consists of: Lab Corp (NYSE:LH) and Quest Diagnostics (NYSE:DGX)

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

- Below are the *current* TEV / EBITDA multiples for each sector:
 - CMO: 14.7x (16.7% above current S&P multiples)
 - CRO: 17.0x (34.9% above current S&P multiples)
 - Distribution: 9.8x (22.2% below current S&P multiples)
 - Clinical Laboratories: 11.9x (5.6% below current S&P multiples)
 - S&P 500: 12.6x
- Below are the *average* TEV / EBITDA multiples for each sector over the last 3 years:
 - CMO: 13.4x (15.4% above average S&P multiples)
 - CRO: 15.9x (37.0% above average S&P multiples)
 - Distribution: 10.7x (8.1% below average S&P multiples)
 - Clinical Laboratories: 10.9x (6.0% below average S&P multiples)
 - S&P 500: 11.6x
- Below are the % change in TEV / EBITDA multiples for each sector over the last 3 years (and LTM):
 - CMO: +11.2% (*down 6.7% in the last 12 months*)
 - CRO: +16.6% (*down 3.1% in the last 12 months*)
 - Distribution: -28.7% (*down 7.4% in the last 12 months*)
 - Clinical Laboratories: +0.9% (*up 4.4% in the last 12 months*)
 - S&P 500: 20.3% (*up 4.6% 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

CMO basket consists of the following: Bachem (SWX:BANB), Balchem (NasdaqGS:BCPC), Cambrex (NYSE:CBM), Catalent (NYSE:CTLT), Jubilant (BSE:530019), DSM (ENXTAM:DSM), Lonza (SWX:LONN), Recipharm AB (OM:RECI B), Siegfried (SWX:SFZN), Teligent (NasdaqGS:TLGT), 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, 5 Year, & LTM Comparisons)

- Below are the current TEV / EBITDA multiples for each sector:
 - CMO: 14.7x (16.7% above current S&P multiples)
 - CRO: 17.0x (34.9% above current S&P multiples)
 - Distribution: 9.8x (22.2% below current S&P multiples)
 - Clinical Laboratories: 11.9x (5.6% below current S&P multiples)
 - S&P 500: 12.6x
- Below are the average TEV / EBITDA multiples for each sector over the last 5 years:
 - CMO: 12.6x (14.6% above average S&P multiples)
 - CRO: 14.9x (36.1% above average S&P multiples)
 - Distribution: 11.5x (5.1% above average S&P multiples)
 - Clinical Laboratories: 10.3x (5.8% below average S&P multiples)
 - S&P 500: 11.0x
- Below are the % change in TEV / EBITDA multiples for each sector over the last 5 years (and LTM):
 - CMO: +49.1% (*down 6.7% in the last 12 months*)
 - CRO: +27.3% (*down 3.1% in the last 12 months*)
 - Distribution: +0.5% (*down 7.4% in the last 12 months*)
 - Clinical Laboratories: +40.6% (*up 4.4% in the last 12 months*)
 - S&P 500: 40.0% (*up 4.6% in the last 12 months*)