

### Analysis of the CRO Market September 2014: Market Analysis



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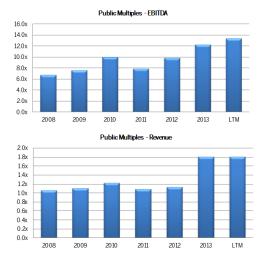
## **CRO Market Analysis**

The CRO market favors a full service model and strategic partnerships

#### Overview

The U.S. CRO industry is currently valued at \$24 billion and is expected to grow to \$33 billion by 2018.<sup>1</sup>

Revenue multiples are currently tracking at a median of 1.7x, while EBITDA multiples have a median of 12.9x. Since 2012, these have seen compound annual growth rates of 55% and 32%, respectively. Since the end of 2013, the CRO Index has consistently outperformed the S&P 500. Transaction multiples are tracking in a similar range, with median revenue multiples of 2.5x and median EBITDA multiples of 11.3x over the past 2 years.



#### Trends

Recent M&A activity in the CRO industry indicates a continuing trend toward a full service model. Top players have been acquiring small niche CROs to expand service offerings and form strategic partnerships with large pharmaceutical companies.

In the past two years, some notable expansion trends

have been moves into technology platforms and widespread geographic expansion.

An example of a large player targeting technology is Quintiles' acquisition of Patient Reminders in June 2013. This equipped Quintiles with a new service that allows clients or sponsors to reach patients directly with personalized messages and reminders of their study. The goal of this transaction was to increase subject compliance and retention in clinical trials.

More recently, BioClinica's acquisition of Blueprint Clinical in June 2014 bolstered its existing electronic platform for Risk-Based Monitoring in clinical trials. The purchase integrated Blueprint's "Compass" platform, a cloud-based site scoring tool, with its own system (eClinical) providing a technological advance.

Geographic expansion is also a common theme among major players. For example, JSS Medical made clear moves to grow across Latin America, Europe and North America in a short four month span. From September 2013 to January 2014, JSS acquired Latam Clinical Trials, Medevol, and Integrated Research respectively. Similarly, PAREXEL acquired ATLAS Medical in July 2014 to expand its presence to Turkey, the Middle East, and North Africa. ICON, with its purchase of Aptiv Solutions, both expanded its capabilities in adaptive trial design, and bolstered its Japanese market presence.

Both the trend toward technology transactions and geographic expansion fall under the larger picture of a move toward all-encompassing CROs. These full service companies provide broad offerings and cast a wide global net on the growing CRO industry.

<sup>1</sup> Outsourcing-Pharma.com: Global Trials Growth Driving CRO Consolidation, Says M&A Report



## **Contract Research Organization Index**

Below is an index of selected CRO companies compared to the S&P 500 over the past five years.



\*CRO Index includes: Bioanalytical Systems Inc., Charles River Laboratories International Inc., CMIC Holdings Co., Covance Inc., Cyprotex plc, EPS Corporation, Ergomed Plc., Eurofins Scientific S.A., ICON plc, I'ROM HOLDINGS CO., LTD., PAREXEL International Corporation, Quintiles Transactional Holdings Inc., and WuXi Pharma Tech Inc.

Source: Capital IQ

### **Comparable Company Analysis**

Below is a snapshot of selected companies in the CRO market.

Company	Drico	Price 52-Week		EV* Net Debt	Market Cap	EV/Sales			EV/EBITDA			
Company	FILE	High	Low	_v	Net Debt	mai ket Gap	2012	2013	LTM	2012	2013	LTM
Bioanalytical Systems Inc.	\$ 2.28	\$ 3.80	\$ 1.25	\$ 23.8	\$ 5.4	\$ 18.4	0.7x	1.3x	1.0x	14.7x	10.7x	9.4x
Charles River Laboratories International, Inc.	\$ 61.07	\$ 62.50	\$ 44.12	\$ 3,562.1	\$ 684.7	\$ 2,850.6	2.1x	2.6x	2.9x	9.3x	11.9x	13.1x
CMIC HOLDINGS Co., Ltd.	\$ 17.98	\$ 18.92	\$ 10.58	\$ 386.3	\$ 62.0	\$ 323.6	0.5x	0.5x	0.8x	3.9x	4.4x	7.1x
Covance Inc.	\$ 85.91	\$ 106.50	\$ 79.21	\$ 4,498.9	\$ (357.9)	\$ 4,856.8	1.4x	1.9x	1.8x	10.1x	12.8x	11.2x
Cyprotex plc	\$ 0.83	\$ 2.21	\$ 0.77	\$ 26.2	\$ 7.6	\$ 18.5	1.1x	1.8x	1.4x	9.9x	12.4x	22.2x
Ergomed Plc	\$ 2.60	\$ 2.66	\$ 2.50	\$ 71.6	\$ (3.2)	\$ 74.7	NA	NA	2.9x	NA	NA	23.5x
EPS Corporation	\$ 12.45	\$ 13.20	\$ 8.32	\$ 401.9	\$ (63.4)	\$ 441.4	0.9x	1.2x	1.0x	6.0x	12.0x	7.6x
Eurofins Scientific SA	\$ 249.44	\$ 315.20	\$ 214.26	\$ 4,461.7	\$ 685.0	\$ 3,766.5	2.0x	2.7x	2.5x	12.3x	16.8x	15.1x
ICON Public Limited Company	\$ 56.17	\$ 57.16	\$ 35.33	\$ 3,301.4	\$ (175.4)	\$ 3,476.8	1.3x	1.7x	2.3x	12.7x	12.8x	15.6x
I'ROM HOLDINGS CO., LTD.	\$ 7.08	\$ 13.89	\$ 5.88	\$ 61.9	\$ (10.8)	\$ 72.3	0.4x	1.8x	1.5x	25.1x	NA	NA
PAREXEL International Corporation	\$ 61.96	\$ 62.05	\$ 37.53	\$ 3,454.4	\$ 63.1	\$ 3,391.3	1.1x	1.5x	1.8x	9.7x	11.3x	12.3x
Quintiles Transnational Holdings Inc.	\$ 57.00	\$ 58.77	\$ 40.10	\$ 8,686.4	\$ 1,431.6	\$ 7,254.8	0.0x	2.0x	2.2x	0.0x	13.4x	13.7x
WuXi PharmaTech (Cayman) Inc.	\$ 35.75	\$ 40.72	\$ 26.33	\$ 2,237.9	\$ (246.9)	\$ 2,484.7	1.9x	4.3x	3.6x	7.3x	16.4x	14.5x

		EV/Sales				4	
		2012 2013 LTM			2012	2013	LTM
*Enterprise Value (EV) = market capitalization + net debt + noncontrolling interest	High	2.1x	4.3x	3.6x	25.1x	16.8x	23.5x
All currency figures in USD. Price figures in actual dollars; EV, Net Debt, and Market Cap in millions	Mean	1.1x	1.9x	2.0x	10.1x	12.3x	13.8x
Market Cap and Enterprise Value as of 09/18/2014	Median	1.1x	1.8x	1.8x	9.8x	12.4x	13.4x
Source: Capital IQ	Low	0.0x	0.5x	0.8x	0.0x	4.4x	7.1x



# **Comparable Transaction Analysis**

### Below is a snapshot of selected transactions in the CRO market.

Close Date	Target	Acquirer	Description	Transaction Value (\$M)	Enterprise Value (\$M)	EV / Revenue	EV / Ebitda
8/27/2014	Helderberg Clinical Trials Centre	Synexus Limited	The acquisition of Helderberg, a specialist clinical trial site in Cape Town, expands Synexus' geographic presence in South Africa to four centers.	NA	NA	NA	NA
7/30/2014		Hangzhou Tigermed Consulting Co., Ltd. (SZSE:300347)	The acquisition of a 70% stake in Pennsylvania-based Frontage Laboratories, a CRO with specialties in early stage development, complements Tigermed's strength in late stage clinical development in China.	50.3	72.0	NA	NA
7/30/2014	Karmic Lifesciences	Cliantha Research Limited	The acquisition of Karmic Lifesciences, a ICH-GCP compliant CRO based in Mumbai, expands Cliantha Research's clinical data management, pharmaceutical analytics and medical marketing businesses.	NA	NA	NA	NA
7/21/2014	Platine Pharma Services SAS (Majority Stake)	Advanced BioScience Laboratories, Inc.	The acquisition of a majority stake in Platine Pharma, a France-based specialist in immunomonitoring and immunogenicity services, expands Advanced BioScience's presence into Europe.	NA	NA	NA	NA
7/16/2014	Gentris LLC	Cancer Genetics, Inc. (NasdaqCM:CGIX)	The acquisition of Gentris, a market leader in pharmacogenomics solutions, will complement Cancer Genetics' existing oncology business.	6.3	6.3	NA	NA
7/15/2014	Ockham Development Group Inc.	Chiltern International Ltd.	Chiltern International and Ockham Development have merged operations and combined under the name Chiltern. The complementary transaction strengthens their combined service offerings in oncology specialization, biopharmaceutical services, and tailored resourcing solutions.	NA	NA	NA	NA
7/11/2014	Inogent Laboratories Private Limited	GVK BioSciences Private Limited	GVK BioSciences acquired the remaining 6.12% stake in Inogent Laboratories, completing its joint venture with the process R&D, custom chemical synthesis & manufacturing service company.	1.5	24.4	NA	NA
7/3/2014	AnalytiCon Discovery GmbH (Majority Stake)	Biotechnology Research and Information Network AG	The acquisition of a majority stake in AnalytiCon, a natural products company, combines the two companies' independent disciplines of biology and natural product chemistry. This gives the two partners a key position in fully integrated drug development.	NA	NA	NA	NA
7/1/2014	OSO BioPharmaceuticals Manufacturing, LLC	Albany Molecular Research Inc. (NasdaqGS:AMRI)	AMRI's acquisition of OsoBio significantly adds to its sterile manufacturing capabilities, extending its industry-leading position in early stage contract manufacturing. OsoBio is recognized as a premier contract manufacturer of highly complex injectable drug products.	110.0	110.0	NA	NA
7/1/2014	ATLAS Medical Services, Ltd.	PAREXEL International Corporation (PRXL)	The acquisition of ATLAS will help PAREXEL expand its presence to Turkey, the Middle East, and North Africa.	NA	NA	NA	NA
6/22/2014	ORION Clinical Services Ltd.	Simbec Company Inc.	The merger of Simbec and Orion Clinical creates a combined entity, the Simbec-Orion Group Limited. UK- based Simbec-Orion is a full-service CRQ, with capabilities in both early and late stage clinical development and expertise in oncology, rare, and orphan diseases.	21.3	21.3	NA	NA
6/16/2014	Blueprint Clinical Inc.	BioClinica, Inc.	The acquisition of Blueprint Clinical brings a technological advance to BioClinca's Risk-Based Monitoring strategies for clinical trials. Blueprint adds "Compass," a cloud-based site scoring tool, to BioClinica's existing eClinical platform.	NA	NA	NA	NA
6/12/2014	SimBioSys Inc.	John Wiley & Sons Inc. (NYSE:JW.A)	The acquisition of SimBioSys accelerates the development of Wiley Science Solutions, an integrated suite of workflow tools for researchers. SimBioSys provides scientific software tools to facilitate drug discovery.	NA	NA	NA	NA
5/30/2014	Deloitte Analytics LLC	TrialScope Inc.	TrialScope, a provider of clinical trial solutions, acquired Deloitte Analytics, including the PharmaCM business and key personnel. Deloitte Analytics provides technology solutions for clinical trial registration and transparency.	NA	NA	NA	NA
5/27/2014	Euprotec Ltd.	Evotec AG (XTRA:EVT)	The acquisition of Euprotec, a UK-based specialist contract research ogranisation, will enable Evotec to establish an anti-infective drug platform.	5.3	5.3	NA	NA
5/13/2014	Commercial Microbial Facilities From Merck	KBI BioPharma Inc.	Through the acquisition of Merck's commercial microbial facilities in Colorado, KBI welcomes a team of reknowned scientists from Merck and will now be able to offer expanded microbial development and manufacturing services up to 1500L scale.	NA	NA	NA	NA
5/8/2014	Aptiv Solutions, Inc.	ICON Public Limited Company (NasdaqGS:ICLR)	The acquisition of Aptiv will help ICON expand its presence both geographically in Japan and generally in the medical device market. Additionally, ICON will be able to leverage Aptiv's extensive adaptive trial capabilities and regulatory expertise.	143.5	143.5	NA	NA
5/5/2014	TrialNetworks	DrugDev Inc.	DrugDev's acquisition optimizes its clinical trials processs through TrialNetworks' trial management technology platform.	NA	NA	NA	NA
5/1/2014	Harlan Laboratories	Life Sciences Research Ltd.	The acquisition of Harlan Laboratories, a provider of non-clinical contract research, is in line with Life Sciences Research Ltd.'s strategy to broaden its support for the pharmaceutical, crop protection and chemical industries.	NA	NA	NA	NA
4/28/2014	SCIREQ Scientific Respiratory Equipment Inc.	emka TECHNOLOGIES S.A.	The acquisition of SCIREQ, a leader in the fields of preclinical respiratory research and inhalation exposure, adds developed products and valuable information about the lungs to emka Technologies' scientific instrument repertoire.	NA	NA	NA	NA
4/4/2014	Cedarburg Pharmaceuticals, Inc.	Albany Molecular Research Inc. (NasdaqGS:AMRI)	This acquisition is consistent with AMRI's strategy to be the preeminent supplier of complex drug development services and products. Cedarburg is a contract developer and manufacturer of technically complex active pharmaceutical ingredients (API's) for both generic and branded customers.	41.0	41.0	2.5x	7.5x
4/3/2014	MedPace, Inc.	Cinven Limited	European PE firm Cinven acquired MedPace, a leading CRO based in the US. Medpace serves mid-cap pharma and smaller biotech players, a gap in the CRO market that Cinven hopes to capitalize on for organic growth opportunities.	915.0	915.0	NA	9.7x



# Comparable Transaction Analysis cont'd.

Close Date	Target	Acquirer	Description	Transaction Value (\$M)	Enterprise Value (\$M)	EV / Revenue	EV / Ebitda
3/31/2014	Galapagos NV (ENXTBR:GLPG), CRO Services Division	Charles River Laboratories International, Inc. (NYSE: CRL)	Charles River's acquisition of Galapagos' CRO Services Division positions the firm as a full-service, early- stage CRO with integrated in vitro and in vivo capabilities. The purchased CRO Services Division provides drug discovery services and is located in the UK and the Netherlands.	186.5	186.5	2.1x	12.0x
3/26/2014	DreamCIS Inc.	Leenos Corp.	The acquistion of a 70% stake in DreamCIS, a South Korean based CRO, expands Leenos' CRO capabilities to clinical trials, obervational study, post marketing surveillance, and data management through a network of clinical trial centers worldwide.	12.3	17.6	NA	NA
3/17/2014	ImmunoTox Inc.	AlBioTech Inc.	AlBioTech's acquisition of ImmunoTox adds to its existing biotechnology services by allowing it to perform assessments examining the effect of drugs and other physical agents on the immune system. ImmunoTox is a Richmond-based CRO focused on immunotoxicology and immunopharmacology,	NA	NA	NA	NA
3/12/2014	SYNARC Inc.	BioClinica, Inc.	The acquisition of SYNARC, pharmaceutical services company offering clinical-trial design and execution, transformed the combined entity into a global leader in specialty outsourced clinical services.	NA	NA	NA	NA
3/12/2014 (Announced)	Dootsonic Ltd.	d-Wise Technologies, Inc.	The acquisition of Dootsonic, a UK-based clinical systems technology consultancy, bolsters d-Wise's European presence and the services it offers to its Life Sciences, Healthcare and Insurance customers.	NA	NA	NA	NA
3/11/2014	Patheon, Inc.	JLL Partners and Koninklijke DSM N.V. (ENXTAM:DSM)	The acquisition of Patheon is part of a merger with DSM Pharmaceutical Products that positions the combined entity as a leader in the pharmaceutical industry, with increased scale and new value chain capabilites. Patheon provides an integrated supply chain model to customers.	1,922.5	1,860.9	1.8x	14.5x
3/11/2014	Choice Pharma (HK) Limited	Clinipace Worldwide, Inc.	The acquisition of Choice Pharma, a digital clinical research services company based in Hong Kong, strengthens Clinipace Worldwide's geographic footprint in Asia. The merger also focuses on operational efficiencies in the region.	NA	NA	NA	NA
3/6/2014	MEK Consulting S.A.R.L	INC Research, LLC	The acquisition of MEK Consulting widens INC Research's geographic scope into the Middle East and North Africa. MEK provides clinical research services to pharmaceutical companies.	NA	NA	NA	NA
2/28/2014	JGC Pharma Services Co., Ltd.	EPS Corporation (TSE:4282)	The acquisition of JGC Pharma, a Japan-based CRO, will expand EPS Corp's CRO operations with a focus on medical consulting and clinical development in Japan.	10.8	10.8	0.6x	NA
2/28/2014	Aragen Bioscience Inc.	GVK BioSciences Private Limited	The acquisition of Aragen, a US-based preclinical CRO specializing in biologics, enables GVK to expand its service offering and gives GVK expertise in biologics services and a significant US presence.	NA	NA	NA	NA
2/27/2014	Advanced BioScience Laboratories Inc., In-Vivo Animal Model Services Related Assets	BIOQUAL, Inc. (OTCPK:BIOQ)	Through the acquisition of ABL's in-vivo animal model services-related assets, BIOQUAL gains access to state-of-the-art facilities and experienced personnel.	7.5	7.5	NA	NA
1/22/2014	Community Research	CTI Clinical Trial and Consulting Services Inc.	The acquisition of Community Research, a network of three CROs in Greater Cincinnati, will add a dedicated phase-1 clinical trials group to CTI.	NA	NA	NA	NA
1/15/2014	P-pro. Korea Co. Ltd.	Linical Co. Ltd. (TSE:2183)	The acquisition of P-pro Korea, a site management organization providing clinical trial services, enables Linical to strengthen its position in the Korean CRO market.	0.1	0.1	NA	NA
1/9/2014	Medvance Ltd	North American Science Associates, Inc.	This acquisition of Medvance, an England-based CRO specialized in medical device and in-vitro diagnostics, enables NAMSA to expand its international presence and clinical and consulting services.	NA	NA	NA	NA
1/7/2014	ViroClinics Biosciences B.V.	Gilde Healthcare Partners B.V.	Gilde Healthcare acquired ViroClinics, a virology CRO, because it believes there is a growing need for high quality clinical laboratory services in the pharmaceutical industry.	NA	NA	NA	NA
1/7/2014	Integrated Research Inc.	JSS Medical Research, Inc.	The acquisition of Integrated Research, a CRO providing clinical research management services to pharmaceutical and biotechnology companies, expands JSS Medical's clinical research team to help manage local Canadian studies more effectively.	NA	NA	NA	NA
1/1/2014	CeeTox, Inc.	Cyprotex plc (AIM:CRX); formerly known as Apredica	The acquisition of CeeTox, a provider of toxicology services to the cosmetic & personal care industries, diversifies Cyprotex's revenue base beyond its core pharmaceutical preclinical services business.	6.1	6.1	1.6x	NA
12/11/2013	Quotient Clinical Limited	Bridgepoint Development Capital	Quotient Clinical and Bridgewater believe there is opportunity to grow the business as a stand-alone platform.	NA	NA	NA	NA
12/9/2013	Medevol Limited	JSS Medical Research, Inc.	The acquisition of Medevol, a CRO specializing in phases II-IV, strengthens JSS Medical's operations in the UK.	1.1	1.1	NA	NA
12/5/2013	Clinical Development Group	HCA Holdings, Inc. (NYSE:HCA)	The acquisition of CDG provides Sarah Cannon Research Institute (subsidiary of HCA) expanded capabilities in global clinical and regulatory planning, trial project management and expands its academic relationships. A new office was opened in Cambridge, MA following the acquisition.	NA	NA	NA	NA
12/2/2013 (Announced)	Mediscience Planning Inc. (JASDAQ:2182)	M3, Inc. (TSE:2413)	M3 acquired the remaining 75% stake in Mediscience. The acquisition allows M3 to leverage Mediscience's strong presence in the CRO industry and accelerate its shift towards online trials.	NA	NA	NA	NA
11/25/2013	Jennerex Biotherapeutics, Inc.	SillaJen, Inc.	The acquisition of the remaining stake in Jennerex allows SillaJen to strengthen its core business of developing targeted biological products for cancer. Jennerex is a clinical-stage biotechnology company specializing in the development of targeted oncolytic immunotherapies for solid tumors.	150.0	NA	NA	NA
11/13/2013 (Announced)	Lifetree Clinical Research, L.C.	PRA International, Inc.	The acquisition allows PRA to to grow Phase I-II clinical research services in specialized patient populations. Lifetree focuses on early stage, patient population studies, and is therapeutically focused in Human Abuse Liability, addiction, pain, psychiatry, neurology, and infectious disease services.	NA	NA	NA	NA



# Comparable Transaction Analysis cont'd.

Close Date	Target	Acquirer	Description	Transaction Value (\$M)	Enterprise Value (\$M)	EV / Revenue	EV / Ebitda
11/11/2013	Promasys BV.	OmniComm Systems Inc. (OTCPK:OMCM)	The acquisition of Promasys, provider of clinical trial software, expands OmniComm's footprint in the Asia/Pacific region markets and other emerging markets.	1.0	1.0	NA	NA
11/5/2013 (Announced)	P-pro. Korea Co., Ltd.	Linical Co., Ltd. (TSE:2183)	The acquisition will expand Linical's footprint in Korea. In May 2013, Linical established two subsidiaries engaged in the CRO business, one in Korea and one in Taiwan.	NA	NA	NA	NA
10/28/2013	AAIPharma Services Corp.	Cambridge Major Laboratories Inc.	The combined organization will provide comprehensive services and can partner with customers to address the majority of their pharmaceutical development and manufacturing requirements. The transaction was a merger of equals.	NA	NA	NA	NA
10/21/2013	CFS Clinical, LLC	DrugDev Inc.	The acquisition is part of DrugDev's long-term plan to build a standardized environment for the clinical trials process that could make it easier for investigators and sponsors to work together virtually.	NA	NA	NA	NA
10/15/2013	ikfe CRO GmbH	Clinlogix, LLC	This acquisition strengthens Clinlogix's strategic resources, knowledge base and infrastructure in the European pharmaceutical market.	NA	NA	NA	NA
10/15/2013	WorldCare Clinical, LLC	ProScan Imaging, LLC	ProScan acquired the remaining share of WorldCare Clinical. The acquisition allows more synergies between WCC's trial management and assessment accuracy and consistency testing methodology and ProScan's world-wide medical image file exchange platform and its international teleradiology assets.	NA	NA	NA	NA
10/14/2013	IXICO Ltd.	Phytopharm plc (OTCPK:PHYO.F) to be renamed IXICO plc	The acquisition will strengthen Phytopharm's balance sheet to grow its clinical trial services business and to bring new technology solutions to the diagnosis of dementia and other conditions.	8.9	NA	NA	NA
10/11/2013	Imaxio SA, The Genomic Activities of Imaxio	Hybrigenics Société Anonyme (ENXTPA:ALHYG)	The acquisition of Imaxio's genomics business helps Hybrigenics strengthen its genomics services.	NA	NA	NA	NA
10/11/2013	BDM Consulting, Inc.	Hangzhou Tigermed Consulting Co., Ltd. (SZSE:300347)	Hangzhou Tigermed acquired 55% stake in BDM Consulting. Tigermed-BDM Inc., a contract research organization, specializes in biostatistics, SAS programming, and data management.	2.1	3.9	NA	NA
10/1/2013	Bend Research Inc.	Capsugel, Inc.	The acquisition of Bend Research complements Capsugel DFS' capabilities in lipid and liquid formulations, modified and targeted release delivery and specialized manufacturing solutions.	NA	NA	NA	NA
9/30/2013	IKFE Institut für klinische Forschung und Entwicklung GmbH	Hyal Pharma GmbH	The pharmaceutical portfolio of the IKFE Group complements the activities of Hyal Pharma GmbH and increases Hyal Pharma's footprint in the German market.	NA	NA	NA	NA
9/26/2013	Latam Clinical Trials, Inc.	JSS Medical Research, Inc.	The addition of Latam Clinical Trials strengthens JSS Medical Research's presence in Latin America. It allows JSS to extend its services in the region and enhance its current position by adding regional clinical services in addition to the already established services.	NA	NA	NA	NA
9/24/2013	ReSearch Pharmaceutical Services, Inc.	PRA Holdings Inc.	The merger strengthens PRA's capabilities and geographical presence. The combination of PRA and RPS creates the fourth largest contract research organization, offering an enhanced array of services and capabilities to support its clients.	NA	NA	NA	NA
9/16/2013	Novella Clinical, Inc.	Quintiles Transnational Holdings Inc. (NYSE:Q)	The acquisition bolsters Quintiles' small biopharma, oncology and medical device capabilities.	193.7	167.5	NA	NA
9/12/2013	Molecular Profiles Ltd.	Columbia Laboratories Inc. (NasdaqCM:CBRX)	The acquisition of Molecular Profiles strengthens and diversifies Columbia's revenue stream. It allows Columbia Laboratories to penetrate the pharmaceutical outsourcing market for formulation development and manufacturing services.	25.4	25.4	2.8x	10.5x
9/9/2013	Stat Tech Services, LLC	CROS NT SRL	The acquisition of Stat-Tech Services adds expands CROS NT's CRO services to include medical devices. The deal also increases CROS NT's geographical reach while adding critical mass to its operations.	NA	NA	NA	NA
8/27/2013	Acurian, Inc.	Pharmaceutical Product Development, LLC	The acquisition strengthens PPD's comprehensive suite of feasibility, patient recruitment and retention services. Acurian provides solutions needed to recruit, enroll, and retain patients for clinical trials.	NA	NA	NA	NA
8/19/2013	Kirkegaard & Perry Laboratories, Inc.	SeraCare Life Sciences, Inc.	The acquisition of Kirkegaard, a company that makes antibodies used for biomedical research, expands SeraCare's expertise in the emerging field of personalized medicine.	NA	NA	NA	NA
8/15/2013	Bracket	Parthenon Capital Partners	Parthenon Capital Partners acquired Bracket because it believes life sciences companies will continue to increase their utilization of technology enabled solutions designed to optimize trial efficiency and ensure data integrity.	NA	NA	NA	NA
8/12/2013	Great Lakes Drug Development, Inc.	Certara, L.P.	The acquisition will further increase the depth of Certara's early drug development analysis, modeling and simulation expertise.	NA	NA	NA	NA
7/31/2013	ReSearch Pharmaceutical Services, Inc.	Kohlberg Kravis Roberts & Co. L.P. (NYSE:KKR)	The transaction enables the company to offer a more comprehensive range of services across all segments of the biopharmaceutical industry through their expanded capabilities, therapeutic expertise, and greater geographic presence. It plans to combine PRA and ReSearch Pharmaceutical Services.	NA	NA	NA	NA
7/30/2013	Precos Ltd.	Crown Bioscience, Inc.	The acquisition allows Crown Bioscience to become the world's largest supplier of oncology CRO services with a global footprint spanning North America, Europe and Asia Pacific.	5.0	5.0	NA	NA
7/25/2013	Cirrus Pharmaceuticals, Inc	Kemwell Biopharma Pvt Ltd	The acquisition will transform Cirrus into a global player in R&D services by significantly strengthening its capabilities in inhalation R&D and increasing offerings in other areas such as oral solids dosage forms.	NA	NA	NA	NA



# Comparable Transaction Analysis cont'd.

Close Date	Target	Acquirer	Description	Transaction Value (\$M)	Enterprise Value (\$M)	EV / Revenue	EV / Ebitda
7/24/2013	Comprehensive Clinical Development, Late Phase Division	Clinical Research Advantage, Inc.	This acquisition will increase Clinical Research Advantage's capabilities and provide the opportunity to move into new therapeutic areas of clincal research.	NA	NA	NA	NĂ
7/23/2013	GleneaglesCRC Pte Ltd.	EPS Corporation	The additional 51% acquisition of Gleneagles helps EPS expand its overseas CRO operations, paritcularly in the Asia-Pacific region.	NA	NA	NA	NA
7/11/2013	Kells Medical Research Group, Inc.	Manna Research	This acquisition represents the fourth Canadian research center that Manna has acquired in the past 15 months and is its first in Montreal.	NA	NA	NA	NA
7/8/2013	Health Sciences Research Group	Social & Scientific Systems, Inc.	This acquisition expands Social & Scientific Systems' clinical research services and bioinformatics work.	NA	NA	NA	NA
6/30/2013	PRA International, Inc.	Kohlberg Kravis Roberts & Co. L.P. (NYSE:KKR)	KKR has acquired PRA International because it believes PRA is one of the fastest growing companies in the CRO sector and it is led by a talented management team with a long track record of success. It plans to combine PRA and ReSearch Pharmaceutical Services.	1,300.0	1,300.0	NA	13.7x
6/24/2013	Patient Reminders Ltd.	Quintiles Transnational Holdings Inc. (NYSE:Q)	The acquisition of Patient Reminders provides Quintiles Transnational with a new service that allows clients/sponsors to reach patients directly with personalized messages and reminders about aspects of their study. This should increase subject compliance and retention in clinical trials.	NA	NA	NA	NA
6/3/2013	Entelechon GmbH	Eurofins Scientific, Inc.	This acquisition extends Eurofins' gene synthesis business.	NA	NA	NA	NA
5/14/2013	Vince & Associates Clinical Research Inc.	Algorithme Pharma USA Inc.	This acquisition will provide Altasciences with comprehensive Phase I/II-a clinical drug development capabilities.	NA	NA	NA	NA
5/8/2013	Diteba Research Laboratories, Inc.	Nutrasource Diagnostics, Inc.	This acquisition allows Nutrasource to expand its in-house bioanalytical capabilities and its innovative new biological and analytical testing methods.	NA	NA	NA	NA
4/30/2013	HERON Group Limited	PAREXEL International Corporation (NasdaqGS:PRXL)	This acquisition will further expand PAREXEL's offered services and add to consultancy segment.	38.1	38.1	NA	NA
4/26/2013	Beardsworth Consulting Group, Inc.	TFS Trial Form Support International AB	This acquisition increases TFS' operational capabilities in North America and substantially expands its customer portfolio of smaller and midsized life sciences companies.	NA	NA	NA	NA
4/23/2013	Micro Images	Information Management Services Inc.	The acquisition of Micro Images, a Texas-based provider of consumables and supplies for document scanners, extends IMS' offerings past product delivery into maintenance, consumables and custom programs.	NA	NA	NA	NA
3/27/2013	Sponsors Clinical Research Group, LLC	bioRASI, LLC	This acquisition addresses the increasing demand for optimizing global clinical trials and builds upon bioRASI's presence throughout Eastern Europe.	NA	NA	NA	NA
3/14/2013	Complete Genomics, Inc.	BGI	This acquisition will enhance BGI's complementary scientific and technological expertise and R&D capabilities.	133.4	90.2	4.7x	NA
3/12/2013	CoreLab Partners and BioClinica, Inc.	Ampersand Capital, JLL Partners	The two private equity firms have acquired CoreLab Partners and BioClinica, and subsequently merged the companies to create a leading provider of medical imaging services and superior eClinical solutions for clinical trials.	122.1	108.2	1.4x	10.5x

Maximum	4.7x	14.5x
Average	2.8x	11.3x
Average Median	2.5x	11.3x
Minimum	1.8x	7.5x

\*Enterprise Value (EV) = market capitalization + net debt + noncontrolling interest