



## Team

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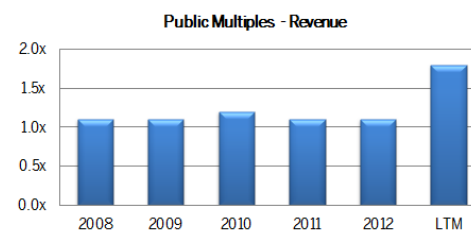
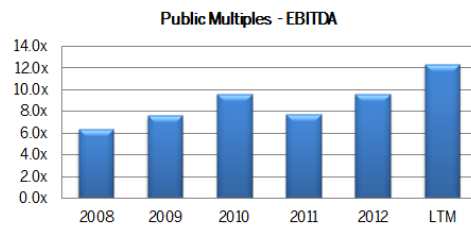
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## CRO Market Analysis

The CRO market favors a full service model and strategic partnerships

### Overview

The U.S. CRO industry is currently valued at \$15.1 billion and is expected to grow at an annualized rate of 11.0% to \$25.5 billion during the five years to 2018.<sup>1</sup> Revenue multiples are currently tracking at a median of 1.6x, while EBITDA multiples have a median of 12.8x. Since 2011, these have seen compound annual growth rates of 28% and 29%, respectively. Transaction multiples are tracking in a similar range, with median revenue multiples of 2.3x and median EBITDA multiples of 10.5x over the past 2 years.



### Trends

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

For example, in April 2013, PAREXEL International, a leading global CRO, acquired Heron Group, a life sciences consultancy firm for \$24 million. PAREXEL

announced shortly after that its acquisition of Heron Group will further its ability to offer their clients a full spectrum of services that aid in product development. Similarly, Eurofins Scientific, a world leader in bio analytical support, has been actively seeking service expansion. In September 2012, Eurofins acquired Pan Labs' pharmacology unit to leverage its discovery capabilities and build a significant spectrum of new services that can be offered to clients.

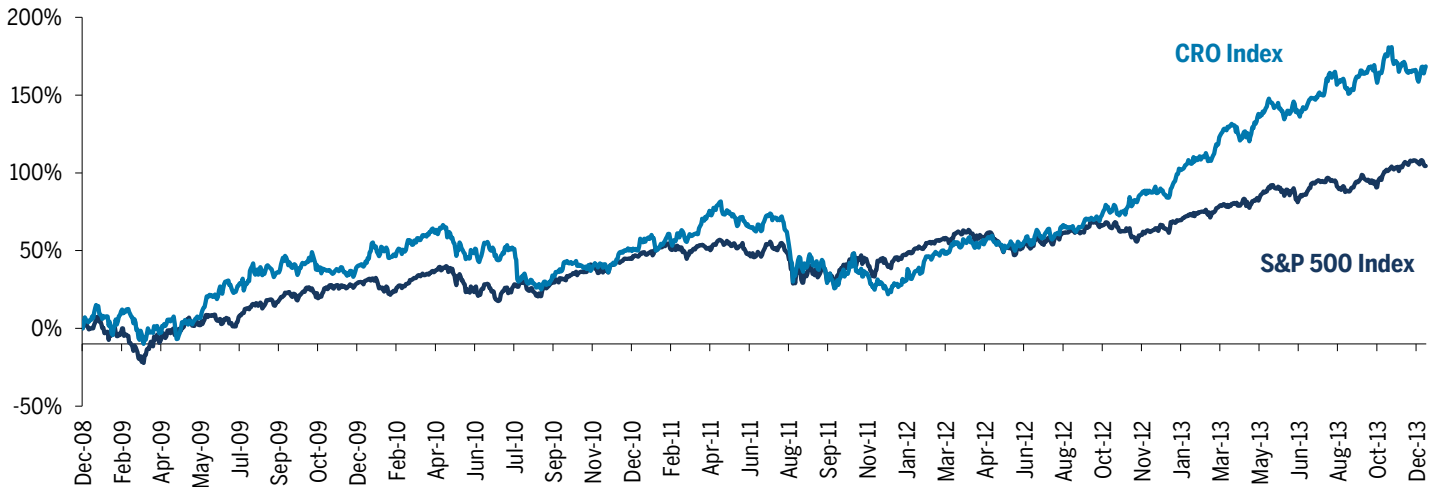
As top players become more fully integrated, they are better equipped to engage in lucrative strategic partnerships with pharmaceutical companies. PAREXEL's CEO and Chairman, Josef von Rickenbach, said in a June 2013 press release, "The majority of our business wins continue to be from strategic partnerships."

In May 2013, Quintiles entered a five year clinical development agreement with Merck Serono S.A. The agreement spans the full spectrum of clinical development, from Phase I trials through post-marketing approval, enabling Merck Serono to expand global reach through Quintiles' broad expertise in worldwide.

Similarly, in October 2012, Charles River Laboratories signed a three year agreement with AstraZeneca to be its preferred partner for outsourced regulatory safety assessment and drug pharmacokinetics. Charles River recently estimated that approximately 25% of its total revenue is derived from its strategic partnerships. These are some examples of the trend towards strategic partnerships by large full service CROs.

## 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., Cerep S.A., Charles River Laboratories International Inc., CMIC Holdings Co., Covance Inc., Cyprotex plc, EPS Corporation, 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	Price	52-Week		EV*	Net Debt	Market Cap	EV/Sales			EV/EBITDA		
		High	Low				2011	2012	LTM	2011	2012	LTM
Bioanalytical Systems Inc.	\$ 2.16	\$ 2.46	\$ 1.13	\$ 22.9	\$ 6.2	\$ 16.6	0.5x	0.7x	1.0x	10.9x	14.7x	7.7x
Cerep SA	\$ 2.55	\$ 2.79	\$ 1.47	\$ 27.7	\$ (4.4)	\$ 32.2	0.2x	0.9x	1.0x	1.6x	9.5x	16.0x
Charles River Laboratories International, Inc.	\$ 52.54	\$ 53.81	\$ 36.50	\$ 3,044.6	\$ 498.9	\$ 2,528.1	1.8x	2.1x	2.6x	7.7x	9.3x	11.5x
CMIC HOLDINGS Co., Ltd.	\$ 11.43	\$ 28.09	\$ 11.14	\$ 231.3	\$ 25.1	\$ 205.7	0.5x	0.5x	0.4x	4.4x	3.9x	3.5x
Covance Inc.	\$ 86.04	\$ 91.99	\$ 56.65	\$ 4,505.2	\$ (327.6)	\$ 4,832.8	1.2x	1.4x	1.9x	8.0x	10.1x	12.8x
Cyprotex plc	\$ 0.12	\$ 0.12	\$ 0.05	\$ 27.2	\$ 0.7	\$ 26.5	1.2x	1.1x	2.0x	8.0x	9.9x	11.6x
EPS Corporation	\$ 1,092.65	\$ 1,638.01	\$ 862.11	\$ 345.7	\$ (71.4)	\$ 390.8	0.6x	0.9x	0.9x	3.9x	6.0x	8.2x
Eurofins Scientific SA	\$ 242.16	\$ 283.13	\$ 164.69	\$ 4,160.2	\$ 516.9	\$ 3,632.4	1.3x	2.0x	2.8x	7.5x	12.3x	16.6x
ICON Public Limited Company	\$ 38.11	\$ 44.23	\$ 26.70	\$ 2,116.1	\$ (216.3)	\$ 2,332.5	0.9x	1.3x	1.6x	11.1x	12.7x	13.1x
I'ROM HOLDINGS CO., LTD.	\$ 9.95	\$ 16.95	\$ 4.89	\$ 72.9	\$ (20.1)	\$ 93.0	0.6x	0.4x	1.4x	NA	25.1x	17.9x
PAREXEL International Corporation	\$ 41.86	\$ 55.02	\$ 28.45	\$ 2,562.0	\$ 196.7	\$ 2,365.3	1.1x	1.1x	1.4x	9.9x	9.7x	11.4x
Quintiles Transnational Holdings Inc.	\$ 44.97	\$ 47.50	\$ 40.10	\$ 7,261.5	\$ 1,463.6	\$ 5,797.9	NA	NA	1.9x	NA	NA	13.9x
WuXi PharmaTech (Cayman) Inc.	\$ 33.83	\$ 34.15	\$ 15.08	\$ 2,137.8	\$ (271.1)	\$ 2,408.9	1.6x	1.9x	3.9x	5.5x	7.3x	14.6x

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

All currency figures in USD. Price figures in actual dollars; EV, Net Debt, and Market Cap in millions

Market Cap and Enterprise Value as of 12/14/2013

Source: Capital IQ

**High**

**Mean**

**Median**

**Low**

	EV/Sales			EV/EBITDA		
	2011	2012	LTM	2011	2012	LTM
<b>High</b>	1.8x	2.1x	3.9x	11.1x	25.1x	17.9x
<b>Mean</b>	1.0x	1.2x	1.8x	7.1x	10.9x	12.2x
<b>Median</b>	1.0x	1.1x	1.6x	7.7x	9.8x	12.8x
<b>Low</b>	0.2x	0.4x	0.4x	1.6x	3.9x	3.5x

## Comparable Transaction Analysis

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

Close Date	Target	Acquirer	Description	Transaction Value	Enterprise Value	EV / Revenue	EV / EBITDA
12/11/2013 Announced	Advanced BioScience Laboratories Inc., In-Vivo Animal Model Services Related Assets	BIOQUAL, Inc. (OTCPK:BIOQ)	The acquisition will increase BIOQUAL's presence in the animal model services business.	NA	NA	NA	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. Bridgepoint Development Capital completed the acquisition of Quotient Clinical Limited.	NA	NA	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 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 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, pediatric and infectious disease services.	NA	NA	NA	NA
11/11/2013	Promasys BV.	OmniComm Systems Inc. (OTCPK:OMCM)	The Promasys application helps expand OmniComm's eClinical product line. Additionally, the languages supported by Promasys gives OmniComm access to markets including the Asia/Pacific region and other emerging markets. Promasys provides clinical trial software.	1.0	1.0	NA	NA
11/5/2013 Announced	P-pro. Korea Co., Ltd.	Linal Co., Ltd. (TSE:2183)	The acquisition will expand Linal's footprint in Korea. In May 2013, Linal established two subsidiaries engaged in the CRO business, one in Korea and one in Taiwan.	NA	NA	NA	NA
10/28/2013	AAI Pharma 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:PHYOF) 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.	NA	NA	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

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

## Comparable Transaction Analysis cont'd.

Close Date	Target	Acquirer	Description	Transaction Value	Enterprise Value	EV / Revenue	EV / EBITDA
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
8/15/2013	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 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
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 clinical research.	NA	NA	NA	NA
7/23/2013	GleneaglesCRC Pte Ltd.	EPS Corporation	The additional 51% acquisition of Gleneagles helps EPS expand its overseas CRO operations, particularly 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	13.7
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
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
3/6/2013	Bird Engineering B.V.	Purac Biochem BV	This acquisition is in line with Purac's strategy to develop into a leading supplier of bio-based ingredients and solutions.	NA	NA	NA	NA
3/1/2013	Harrison Clinical Research GmbH	Syneract, Inc. (n/k/a SyneractHCR)	This transaction will enhance support for Syneract's larger and later phase programs and will create a new multinational CRO in 16 countries.	NA	NA	NA	NA

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

## Comparable Transaction Analysis cont'd.

Close Date	Target	Acquirer	Description	Transaction Value	Enterprise Value	EV / Revenue	EV / EBITDA
3/1/2013	Radiant Development	Accelovance, Inc.	This acquisition continues the expansion strategy of Accelovance's CRO business, catering to Biotech and small/mid Pharma sponsors.	NA	NA	NA	NA
2/21/2013	AROS Applied Biotechnology ApS	Eurofins Scientific SA (ENXTPA:ERF)	This acquisition expands the geographic footprint of Eurofins' genomics solutions services.	NA	NA	NA	NA
1/4/2013	Vital River Laboratories Co., Ltd.	Charles River Laboratories International, Inc.	This acquisition will enhance Charles River's research models and associated services in the emerging China market for drug discovery and development.	26.8	35.7	NA	NA
12/31/2012	Miami Research Associates	QPS, LLC	This acquisition will allow QPS to conduct first-in-human trials in the U.S. and will expand its current offering of patient populations for Phase I-IV studies.	NA	NA	NA	NA
12/31/2012	BELTAS Ltd.	Clinical Network Services Pty. Ltd.	This acquisition continues CNS's goal of widening its capabilities across Australia and New Zealand.	NA	NA	NA	NA
12/21/2012	Cerep SA	Eurofins Scientific SA (ENXTPA:ERF)	This transaction will expand the presence of Eurofins in the discovery pharmacology market.	37.9	25.9	0.9x	9.9x
11/20/2012	MediTech Strategic Consultants B.V.	Medpace, Inc.	This acquisition expands Medpace's medical device development services.	NA	NA	NA	NA
11/14/2012	Metrics, Inc.	Mayne Pharma Group Limited	This acquisition provides scale to the U.S. market for Mayne Pharma and brings additional technical capabilities and material.	120.0	120.0	2.3x	7.5x
11/7/2012	BioSeek, Inc.	DiscoveRx Corporation	The acquisition of Bioseek provides new expertise in primary cell disease models as well as a highly differentiated compound characterization service.	NA	NA	NA	NA
10/21/2012	Radiant Research, Inc.	CRA Holdings, Inc.	This acquisition expands CRA's clinical expertise and breadth of therapeutic capabilities and extends its geographic reach.	NA	NA	NA	NA
9/30/2012	Vitalea Science, Inc.	Eckert & Ziegler Isotope Products, Inc.	This acquisition brings Eckert & Ziegler to the CRO market, servicing Pharmaceutical companies.	NA	NA	NA	NA
9/25/2012	Paragon Biomedical, Inc.	Clinipace Worldwide, Inc.	This acquisition is in line with Clinipace Worldwide's long-term goal to drive growth in clinical research through a technology-amplified service platform. It will also provide a larger service offering.	NA	NA	NA	NA
9/20/2012	Ricerca Biosciences, Pan Labs Pharmacology Unit	Eurofins Scientific SA (ENXTPA:ERF)	This acquisition strengthens Eurofin's growing presence in the U.S. and Taiwan and also adds to its Discovery CRO services.	NA	NA	NA	NA
8/29/2012	JSW LifeSciences GmbH	QPS, LLC	This acquisition broadens QPS' preclinical and Phase II-IV capabilities and increases its Central & East European presence.	NA	NA	NA	NA
8/24/2012	Accugenix, Inc.	Charles River Laboratories International, Inc.	This acquisition helped Charles River strengthen its microbial detection services in the biopharmaceutical, medical device and consumer care sectors.	17.0	17.0	NA	NA
8/10/2012	Expression Analysis, Inc.	Quintiles Transnational Holdings Inc. (NYSE:Q)	This acquisition brings genetic sequencing expertise to Quintiles and is another step forward in its efforts to expand its drug development services.	NA	NA	NA	NA
7/31/2012	MEDTOX Scientific Inc.	Laboratory Corp. of America Holdings	This acquisition expands LabCorp's Toxicology Center of Excellence and adds to the assets of the LabCorp Specialty Testing Group.	248.2	241.2	2.2x	16.6x

Maximum	4.7x	16.6x
Average	2.6x	11.6x
Median	2.3x	10.5x
Minimum	0.9x	7.5x

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