

CRO Industry Preview

Fourth-Quarter Earnings Outlook for Pharma Outsourcing; Quintiles Is Our Best Idea in an Expensive Space

- Fourth-quarter reporting for our CRO coverage universe begins January 29 with Parexel; a detailed reporting schedule is attached to this note.
- We believe fundamentals remain solid, with late-stage bookings expected to be near 1.2 times, bolstered by Parexel's recent positive preannouncement and continued improvements within early development. Although restructurings at some large pharma companies have heightened investor concerns, leading indicators suggest that demand trends should remain fairly strong in the near to intermediate term.
- We expect foreign exchange to be a net positive for companies exposed to the euro, pound, or Swiss franc (the bulk of the exposure on our list), but for those exposed to the yen, there will likely be a headwind.
- Valuation for the group is hovering around five-year peak levels. As a result, we believe the best strategy is to look for relatively attractive valuations. Quintiles is our best idea this quarter given strong bookings of late, a diversified client base, potentially improved performance from the underappreciated I.H.S. business, and an attractive relative valuation.
- We are maintaining our ratings and estimates for the group. We rate Quintiles, Covance, ICON, and WuXi Outperform and Charles River, Parexel, and PDI Market Perform.

Our discussion continues on the following page.

January 28, 2014

Quintiles Transnational Holdings Inc.
Symbol: Q (NYSE)
Price: \$46.54 (52-Wk.: \$40-\$52)
Stock Rating: **Outperform**
Company Profile: **Established Growth**

Charles River Laboratories International, Inc.
Symbol: CRL (NYSE)
Price: \$57.02 (52-Wk.: \$39-\$60)
Stock Rating: **Market Perform**
Company Profile: **Core Growth**

PAREXEL International Corporation
Symbol: PRXL (NASDAQ)
Price: \$47.63 (52-Wk.: \$31-\$55)
Stock Rating: **Market Perform**
Company Profile: **Aggressive Growth**

ICON plc
Symbol: ICLR (NASDAQ)
Price: \$41.23 (52-Wk.: \$27-\$44)
Stock Rating: **Outperform**
Company Profile: **Aggressive Growth**

PDI, Inc.
Symbol: PDII (NASDAQ)
Price: \$5.89 (52-Wk.: \$4-\$8)
Stock Rating: **Market Perform**
Company Profile: **Aggressive Growth**

Covance Inc.
Symbol: CVD (NYSE)
Price: \$93.04 (52-Wk.: \$65-\$97)
Stock Rating: **Outperform**
Company Profile: **Established Growth**

WuXi PharmaTech Inc.
Symbol: WX (NYSE)
Price: \$34.78 (52-Wk.: \$15-\$39)
Stock Rating: **Outperform**
Company Profile: **Aggressive Growth**

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Conclusions

Fourth-quarter earnings are scheduled to begin January 29 for our pharmaceutical outsourcing coverage universe with Parexel, followed by Covance on February 4. Included in this note are a reporting schedule and a brief overview of quarterly expectations for each CRO under coverage.

Full year 2013 performance for CROs was generally strong, with the group soundly outperforming the S&P 500 by about 38 percentage points. Performance thus far in 2014 continues to be strong as the group has outperformed by 6 percentage points. Exhibit 1 details stock price performance of late and current valuations relative to historical averages. As a result of strong performance in the fourth quarter and the early days of 2014, several names on our list are approaching or exceeding their five-year peak multiples. While there has been concern that recent pharma restructurings could disrupt bookings, fundamentals for the group remain solid, in our opinion: early-stage demand appears to be gradually improving and late-stage demand remains on course to provide a 1.2-times book-to-bill ratio for the group. As a result, we remain constructive on the space, but given the high valuation by historical standards, we would guide new investment dollars toward some of the less expensive names in the space. Our best idea heading into the quarter is Quintiles given a favorable valuation and broad diversification across clients, therapeutic areas, and breadth of capabilities. Below, we take a look at some macroeconomic influences and leading indicators for CROs, and provide updated thoughts on each stock.

Exhibit 1. Year-to-Date Performance and Historical Valuation Comparison

Contract Research Organizations (CROs)	Rating	Current Price	2013 Performance	YTD 2014 Performance	Current 2014 PE	5-Year Trough	5-Year Average	5-Year Peak
Charles River Laboratories (CRL)	M/C	56.83	41.6%	7.1%	17.9x	9.0x	13.7x	17.3x
Covance (CVD)	O/E	93.89	52.4%	6.6%	25.0x	11.5x	18.5x	24.1x
ICON plc (ICLR)	O/A	41.68	45.6%	3.1%	21.6x	10.5x	17.2x	22.6x
Parexel International (PRXL)	M/A	48.40	52.7%	7.1%	22.4x	9.0x	17.5x	24.5x
Quintiles (Q)*	O/E	47.30	NA	2.1%	20.3x	18.7x	20.3x	21.9x
WuXi PharmaTech (WX)	O/A	35.85	143.7%	-6.6%	19.2x	6.3x	13.5x	22.9x
CRO Avg.			67.2%	3.2%	21.1x	10.8x	16.8x	22.2x
S&P 500 (SPX)		1,792.50	29.6%	-3.0%	14.4x	10.5x	16.3x	25.3x

*As of 05.09.13

Sources: FactSet and William Blair & Company, L.L.C. estimates

Foreign Exchange

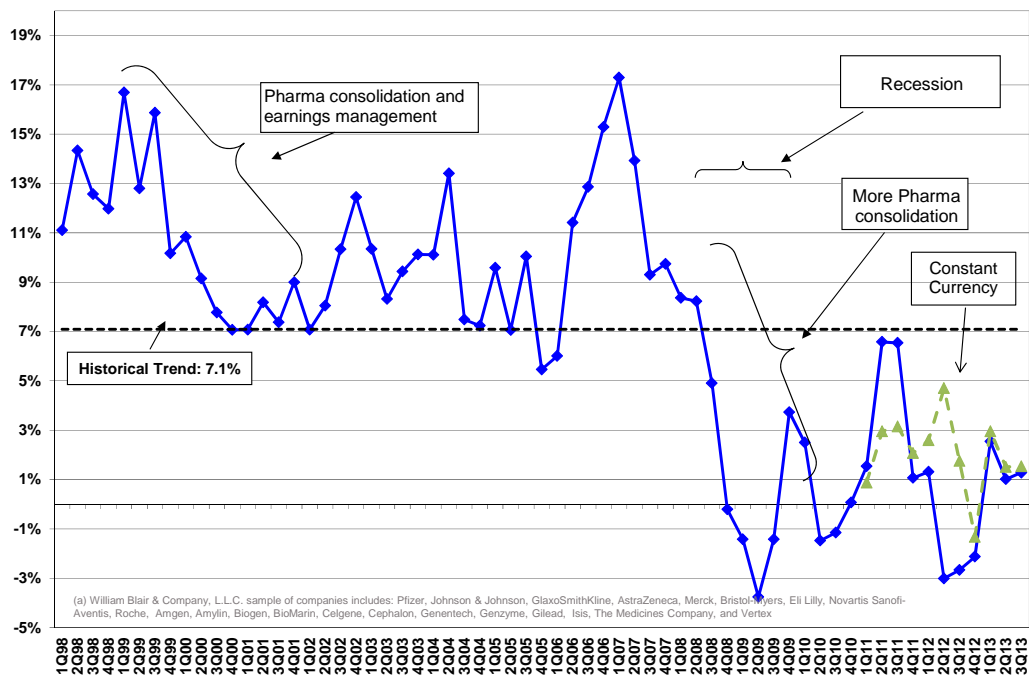
The dollar depreciated by 5% relative to the euro in fourth quarter 2013, representing the fourth straight quarter of depreciation. The dollar depreciated by 3% relative to the Swiss franc and 1% relative to the British pound. Relative to the Japanese yen, the dollar appreciated 24%. Thus, we expect foreign exchange to be a modest tailwind for the fourth quarter.

Market Expectations

Our recent channel checks suggest that pharmaceutical companies remain focused on clinical development, although it appears that early-stage demand may be showing more consistent signs of improvement. There have been a number of false starts in early stage, so we are watching this trend with caution. While it appears that capacity across the industry has filled, pricing has yet to recover (according to our checks). On the late-stage side, we expect RFP activity to be strong this quarter. Parexel, for example, recently mentioned that bookings would be around 1.3 times following a weak calendar third quarter. We believe late-stage bookings will remain around 1.2 times for the group.

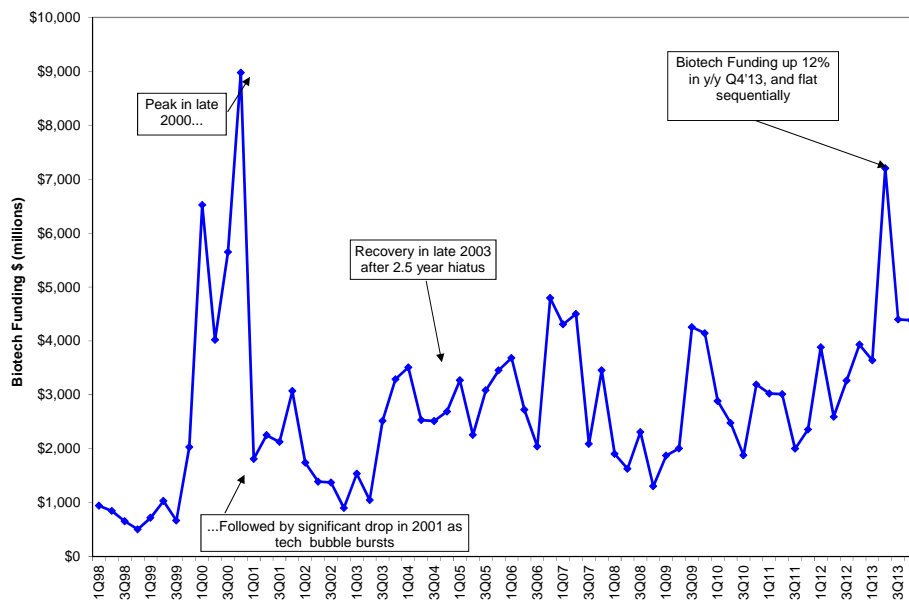
More broadly, we believe there is some anxiety surrounding the 2013 restructuring announcements by several pharmaceutical companies, including Merck (MRK \$52.87), Novartis (NVS \$79.56), Shire (SHGP \$146.36; Market Perform), and Forest Laboratories (FRX \$66.10). While we acknowledge that there could be some impact to R&D growth for those companies, we believe that there appears to be stability in R&D spending trends for large pharma companies as a whole. Pfizer (PFE \$30.42) has guided to 1.5% growth in R&D in 2014, the first year of growth since the merger with Wyeth. More broadly, through third quarter 2013, R&D spending growth for the companies we track was in the low single digits (up about 1.6%). In addition, biotech funding remains strong (even if below recent highs) and the number of compounds in the industry's pipeline continues to grow. Taken together, we believe this should lead to another quarter of solid bookings for the group.

Exhibit 2. R&D Spending Growth, Quarterly, 1998 to Present



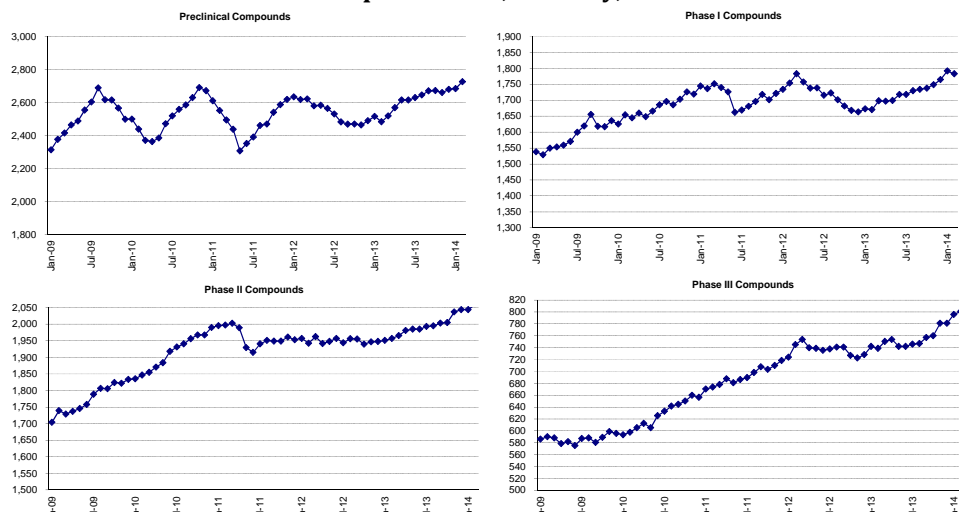
Sources: Company reports

Exhibit 3. Biotech Funding Data, Quarterly, 1998 to Present



Source: BioCentury

Exhibit 4. Pipeline Data, Monthly, 2009 to Present



Source: BioCentury

Company-Specific Thoughts

Best stock idea: Quintiles (Q): No Change to Outperform Rating or Estimates

Thanks to a well-diversified customer base, strong presence across the outsourcing spectrum, and solid bookings recently in both the product development and I.H.S. segments, we believe Quintiles is well positioned for a solid quarter and a strong 2014. We believe I.H.S. could be an interesting differentiator for Quintiles in 2014 given strong bookings of late. We believe these strong bookings can continue an improvement in the pace of new product approvals over the past year and a lessening amount of generic erosion.

We model fourth-quarter EPS of \$0.53 (up 27.5%) on 2.4% revenue growth and 120 basis points of operating margin improvement. At 20.5 times our 2014 estimate, the stock is currently valued at a discount relative to late-stage peers, which trade at an average of 22.9 times. Given this valuation discount and our confidence in the company's ability to execute on its growth targets, Quintiles is our top CRO pick heading into fourth-quarter earnings.

Covance (CVD): No Change to Outperform Rating or Estimates

Similar to Quintiles, Covance has a very well diversified client base with capabilities from discovery through clinical development. Given strong growth in the high-margin central lab, improving demand in toxicology, and a reduction in IT expenses, 2014 should be a very strong earnings growth year for Covance.

We model fourth-quarter EPS of \$0.84 (up 14%) on 9% revenue growth and 130 basis points of operating leverage. Still, the stock is the most expensive in the group, trading at 25.0 times 2014 estimates, compared with the late-stage peer group at 21.4 times. Given the strong fundamentals, we suggest adding to Covance positions on pullbacks.

Parexel (PRXL): No Change to Market Perform Rating or Estimates

After poor calendar third-quarter results, Parexel preannounced better bookings in the calendar fourth quarter, relieving fears that the strong growth trajectory the company has been on is coming to an abrupt end. We believe that growth will likely slow from recent levels given tough comparisons for its large strategic relationships, placing more reliance on margin expansion to drive EPS growth. While we are encouraged by the rebound in bookings, management's uneven execution on margins makes us more guarded on the stock, particularly after the notable rebound in the past several weeks.

We model fiscal second-quarter EPS of \$0.50 (up 21%) on 14% revenue growth and 180 basis points of operating leverage. The stock is trading at 22.3 times calendar 2014 estimates, which is right in line with the late-stage peer group.

ICON plc (ICLR): No Change to Outperform Rating or Estimates

Similar to Parexel, tough comparisons for ICON's large strategic relationships may result in slowing growth over the next several quarters. However, execution at ICON has been strong, with margins seemingly on a clear path for steady improvement if revenues decelerate as expected.

We model fourth-quarter EPS of \$0.45 (up 31%) on 12% revenue growth and 200 basis points of operating leverage. The stock is trading at 21.5 times 2014 estimates, compared with its late-stage peer group at 22.6 times.

WuXi (WX): No Change to Outperform Rating or Estimates

WuXi shares have rallied in recent months, thanks mostly to increasing expectations for the manufacturing business, which will be producing active ingredients for such potential blockbuster drugs as Pharmacyclics' (PCYC \$128.59; Outperform) Imbruvica. While contract manufacturing certainly appears to be the largest opportunity for growth at WuXi, it is also seeing less pricing headwinds in the core chemistry business and accelerating growth from new offerings in the biologics areas. We expect these trends to continue, which should bode well for the stock over the intermediate term.

We model fourth-quarter EPS of \$0.46 (up 19%) on 22% revenue growth and 60 basis points of operating leverage. The stock is trading at 19.1 times 2014 estimates, compared with the Western peer group at 21.5 times, suggesting the multiple has further room to expand.

Charles River Laboratories (CRL): No Change to Market Perform Rating or Estimates

Given that Charles River has the most exposure to early development of any CRO, we believe a rotation out of late-stage players and into Charles River would make sense, if a turn in the toxicology market continues. However, we are concerned by potential structural headwinds in the core research models market, where it appears that large pharma restructuring is driving an ongoing reduction in model consumption. As a result, we are maintaining our Market Perform rating on the stock until we have greater clarity that this issue has stabilized.

We model fourth-quarter EPS of \$0.69 (up 7%) on 4% revenue growth and 90 basis points of operating leverage. The stock is trading at 18.0 times 2014 estimates, which is above the top end of recent historical peaks, but still well below the late-stage peer group at 22.3 times.

PDI, Inc. (PDII): No Change to Market Perform Rating or Estimates

Similar to Quintiles's I.H.S. division, we believe PDI should benefit from the eventual increase in outsourcing penetration in the commercialization business as an increasing number of branded drugs are being sold by progressively smaller internal salesforces at biopharmaceutical companies. Beyond this likely improvement in the demand environment, PDI has embarked on a more aggressive strategy through its Interpace Biopharma division in which it will market molecular diagnostic tests for small (virtual?) innovator companies. We believe this is a compelling strategy to improve growth and returns in the business. However, we will await feedback on the initial success of these partnerships before becoming more constructive on the stock, given the company's inconsistent record with new ventures.

Exhibits 6 and 7 show a reporting schedule that details our expectations and consensus for our coverage universe.

Exhibit 6. Fourth Quarter 2013 Reporting Schedule – Pharmaceutical Outsourcing Companies

Company	Analyst	Ticker	Rating/ Profile	Reporting period	Announcement date	Conference call date / time	Conference call dial in/ Replay details	Quarterly EPS			Calendar 2014 EPS		Preview Comments
								WB est.	Cons.	Year ago	WB est.	Cons.	
Parexel	Kreger	PRXL	M/A	2Q (Sept) FY14	Wednesday 1/29/14 postmarket	Thursday 1/30/14 9:00am CT	Dial in: 408-940-3886 PAREXEL	\$0.50	\$0.49	\$0.41	\$2.17	\$2.24	We model 14% revenue growth, operating margin of 9.4%, and net new business of nearly \$634 million, which translates into a book-to-bill ratio of 1.32 times. We believe the focus of the call will be on the industry demand environment - particularly from strategic partners - and indications around a sustained improvement in demand and margins over the balance of the year.
Covance	Kreger	CVD	O/E	4Q'13	Tuesday 2/4/14 postmarket	Wednesday 2/5/14 8:00am CT	Dial in: 800-818-6592 6520252	\$0.84	\$0.84	\$0.73	\$3.75	\$3.82	We look for 9% revenue growth (10% on a constant currency organic basis), operating margin of 10.7%, and adjusted net new business of roughly \$735 million (to support a 1.2-times net book-to-bill ratio). Focus will be on margin expansion efforts, demand trends in early and late, and the current demand environment.
Charles River	Kreger	Q	M/C	4Q'13	Wednesday 2/12/14 premarket	Thursday 2/13/14 7:30am CT	Dial in: 800-230-1085	\$0.69	\$0.68	\$0.64	\$3.17	\$3.09	We model fourth quarter EPS of \$0.69 (up 7%) on 4% revenue growth and 90 basis points of operating leverage.
Quintiles	Kreger	Q	O/E	4Q'13	Thursday 2/13/14 premarket	Thursday 2/13/14 7:00am CT	Dial in: 855-484-7367	\$0.53	\$0.55	\$0.41	\$2.33	\$2.31	We expect a revenue up 2.4% (4.1% organic constant dollar), operating margin of 13.3%, and net new business of about \$1.2 billion to support a book-to-bill ratio of 1.25 times.
ICON plc	Kreger	ICLR	O/A	4Q'13	Thursday 2/20/14 premarket	Thursday 2/20/14 8:00am CT	TBA	\$0.45	\$0.45	\$0.34	\$1.93	\$1.97	We expect revenue growth of 12%, operating margin of 10.1%, and net new business of about \$409 million to support a book-to-bill ratio of 1.22 times.
WuXi	Kreger	WX	O/A	4Q'13	Expected in early March	Expected in early March	TBA	\$0.46	\$0.46	\$0.38	\$1.87	\$1.92	We estimate revenue growth of 22%, and a non-GAAP operating income growth of 26%. We believe the focus of the call will be on the industry demand and competitive environment in China, and the company's ability to increase margins in light of labor cost inflation and the appreciating RMB.

Exhibit 7. Fourth Quarter 2013 Reporting Schedule – Other Covered Companies

Company	Analyst	Ticker	Rating/ Profile	Reporting period	Announcement date	Conference call date / time	Conference call dial in/ Replay details	Quarterly EPS			Calendar 2014 EPS		Preview Comments
								WB est.	Cons.	Year ago	WB est.	Cons.	
Cardinal Health	Kreger	CAH	O/E	2Q (Sept) FY14	Thursday 1/30/14 premarket	Thursday 1/30/14 7:30am CT	Dial in: 913-312-1500 7319186	\$0.75	\$0.83	\$0.93	\$3.87	\$3.78	We model pharmaceutical distribution revenue to be down 24% and profit to be down 20%, and medical distribution revenue and profit to be up 13% and 19%, respectively. We believe the focus will be on commentary on generic contribution, AssuraMed, and on CAH's developing strategies in specialty and emerging markets.
Align Technology	Kreger	ALGN	O/A	4Q'13	Thursday, 1/30/14 postmarket	Tuesday, 1/30/14 3:30pm CT	dial in: 201-689-8261	\$0.42	\$0.43	\$0.26	\$1.72	\$1.72	We model sales to be up 19.8% and EBIT to be up 49.9%. Focus will be on the health of the orthodontic market, if they generate operating leverage, and if the recent consumables trend translates into case volume acceleration. Commentary on new products such as G5, Realine, and SmartForce will be of interest. We expect case volume in the second half of 2013 to be 21.6% , compared with 14% reported in the first three quarters of 2013.
Henry Schein	Kreger	HSIC	O/C	4Q'13	Tuesday 2/11/14 premarket	Tuesday 2/11/14 9:00am CT	TBA	\$1.39	\$1.39	\$1.26	\$5.34	\$5.40	We estimate consolidated total revenue growth of 4.5% including acquisitions (3.5% revenue growth on an organic, constant-dollar basis) and operating margin of 7.45% (down 8 basis points). We look for updates on the dental, vet and medical markets, with particular focus on Europe and dental consumables.
Zoetis	Kreger	ZTS	M/E	4Q'13	Tuesday 2/11/14 premarket	Tuesday 2/11/14 7:30am CT		\$0.34	\$0.34	\$0.11	\$1.55	\$1.61	We estimate consolidated total revenue growth of 2.5% and operating margin of 22.6% (up 680 basis points). We look will be listening for commentary related to cattle placements as the US recovers from drought conditions. We also look for commentary related to the PED virus and how that has affected swine market growth.
Express Scripts	Kreger/ Murphy	ESRX	O/C	4Q'13	Thursday 2/20/14 postmarket	Friday 2/21/14 7:00am CT	Dial in: 212-883-1234	\$1.10	\$1.12	\$1.04	\$4.95	\$4.93	We expect 5.2% EPS growth, total revenue decline of 9.8%, total adjusted claims reduction of 13.5% and EBITDA/adjusted claim of \$4.71 (up 17.3% from last year). The key focus of the call will likely be the selling season update, the transition of certain health plan clients on 1/1, preparations for ACA implementation and commentary on health exchanges.
Dentsply	Kreger	KRAY	M/E	4Q'13	Expected Late February	Expected Late February	TBA	\$0.60	\$0.61	\$0.56	\$2.57	\$2.58	We model sales excluding precious metals to be up 2.6% (up 1.9% internal, constant dollar) and operating income to be up 4.0%. Focus will be on the health of the global dental market, particularly in the U.S., how that translates into consumable growth trends. Also interested in commentary around the implant business given strong results from competitor, Biomet.
Aratana Therapeutics	Lugo/ Kreger	PETX	O/A	4Q'13	Expected Mid March	Expected Mid March	TBA	NA	NA	NA	NA	NA	NA
Catamaran Corporation	Murphy/ Kreger	CTRX	O/A	4Q'13	Expected late February	Expected late February	TBA	\$0.54	\$0.54	\$0.39	\$2.30	\$2.39	We expect adjusted EPS of \$0.54 (38% growth), total adjusted PBM claims growth of roughly 17%, and revenue/adjusted claim of \$52 up 6% from last year). We also model HCIT transactions of 89 million (down 23%) and revenue per transaction of 21 cents (up 3.5%). We expect discussion will focus on the recently-announced Cigna win and new business progress during this selling season.
MWI Veterinary Supply	Kreger	MWIV	O/A	1Q (Dec) FY14	Expected mid February	Expected mid February	TBA	\$1.40	\$1.43	\$1.32	\$5.85	\$5.87	We estimate total revenue growth of 21% (8% organic growth). We also estimate EBITDA growth of 8% and operating margin of 4.17%. Focus will be on the broader demand environment, the integration of Ivesco, expectations for the production business, and the performance of new product introductions in the space.
Sirona Dental Systems	Kreger	SIRO	O/C	1Q (Dec) FY14	Expected mid February	TBA	TBA	\$0.94	\$0.92	\$0.94	\$3.77	\$3.73	We estimate revenue of 7.5% (up 6.0% on a constant currency basis) and operating income (excluding amortization) up 5.5% on an operating margin of 25.15% (excluding amortization). We look for commentary on CAD/CAM (particularly OmniCam and Apollo products), digital imaging equipment trends, and most importantly margin trends. Expectations are low given conservative guidance, thus, we believe investors expect a beat and raise quarter.
Patterson Companies	Kreger	PDCO	M/C	3Q (Jan) FY14	Expected in Late February	TBA	TBA	\$0.57	\$0.57	\$0.52	\$2.33	\$2.34	We estimate revenue growth of 16.2% as reported (3.4% organic) and operating margin of 9.15%. We will be paying particular attention to operating margin trends excluding the NVS acquisition. We also expect management to provide commentary on OmniCam growth trends.

Schedule for other comparable company conference calls (uncovered)*

Pharmacy

CVS Caremark (CVS)*	2/11/2014
Walgreen Co (WAG)*	3/25/2014

Med/Surg Distribution

Owens & Minor (OMI)	2/10/2014
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Specialty / Other Distribution

Bioscrip (BIOS)	TBD
Omnicare (OCR)	2/19/2014

Dental Distribution / Mfg

3M (MMM)*	1/30/2014
Biolase Technology (BIOL)	TBA
Danaher (DHR)*	1/28/2014
Nobel Biocare	2/18/2014
Straumann	2/25/2014

Managed Care

Aetna (AET)	2/6/2014
Cigna (CI)	2/7/2014
Humana (HUM)	2/5/2014
United Health (UNH)	1/16/2014
Wellpoint (WLP)	1/29/2014

Pharma Distribution

AmerisourceBergen (ABC)	1/23/2014
McKesson (MCK)	1/30/2014

Pharma/Biotech

Abbvie (ABBV)	1/31/2014
Amgen (AMGN)	1/28/2014
AstraZeneca (AZN)	2/6/2014
Biogen IDEC (BIIB)	1/29/2014
Bristol-Myers Squibb (BMY)	1/24/2014
Eli Lilly (LLY)	1/30/2014
GlaxoSmithKline (GSK)	2/5/2014
J&J (JNJ)	1/21/2014
Merck (MRK)	2/5/2014
Novartis (NVS)	1/29/2014
Pfizer (PFE)	1/28/2014
Roche	1/30/2014
Sanofi (SNY)	2/6/2014

Generics Manufacturers

Actavis Pharmaceuticals (ACT)	2/20/2014
Dr. Reddy Lab (DRREDDY-IN)	NA
Mylan (MYL)	2/27/2014
Ranbaxy Labs (RANBAXY-IN)	2/4/2014
Teva Pharmaceuticals (TEVA)	2/6/2014

Sources: Thomson, Company Reports, and William Blair estimates

IMPORTANT DISCLOSURES

Additional information is available upon request.

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DOW JONES: 15,837.88

S&P 500: 1,781.56

NASDAQ: 4,083.61

Current Rating Distribution (as of 12/31/13)

Coverage Universe	Percent	Inv. Banking Relationships*	Percent
Outperform (Buy)	63	Outperform (Buy)	16
Market Perform (Hold)	33	Market Perform (Hold)	3
Underperform (Sell)	1	Underperform (Sell)	0

*Percentage of companies in each rating category that are investment banking clients, defined as companies for which William Blair has received compensation for investment banking services within the past 12 months.

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The ratings, price targets (where used), valuation methodologies, and company profile assessments reflect the opinion of the individual analyst and are subject to change at any time.

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