

Diagnostic Testing and Technology Report

Competitive Intelligence & Analysis for an Expanding Global Market

Stephanie Murg, Managing Editor, smurg@ioma.com

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Established 1979

Inverness, Beckman In Bidding War For Biosite

In late March, biomedical equipment giant Beckman Coulter (Fullerton, CA) agreed to acquire Biosite (San Diego, CA), an immunoassay company focused on point-of-care (POC) testing (also called near-patient testing). Acquiring Biosite would enable Beckman to gain a strong foothold in the POC testing market, both inside and outside of hospitals. Valued at \$1.55 billion, the deal offered \$85 in cash per share, a 55% premium over the previous day's share price.

"The combined company becomes the leading immunoassay company," said Scott Garrett, president and CEO of Beckman Coulter, on a March 26 conference call. "We have the installed base. They will bring new valuable tests."

But it looks as if Beckman spoke too soon. On April 10, Biosite announced that it would sit down with IVD company Inverness Medical Innovations (Waltham, MA), who proposed an unsolicited counteroffer *Continued on p. 9*

FDA Clears Cepheid's Meningitis Test

The U.S. Food and Drug Administration (FDA) has cleared for marketing Xpert EV, a molecular diagnostic test for enteroviral meningitis. The Xpert EV test was developed by Cepheid (Sunnyvale, CA). It can rapidly detect enteroviral meningitis and also help physicians to distinguish between the condition's viral and more severe bacterial forms.

Meningitis, an infection of the cerebrospinal fluid (CSF) that surrounds the brain and spinal cord, is typically diagnosed with CSF obtained through a spinal tap. Results for traditional tests can take up to a week. The fully automated Xpert EV test uses reverse transcription polymerase chain reaction (RT-PCR) to isolate and amplify genetic material in CSF and identifies infections resulting from enteroviruses, the class of viruses that cause 85% to 95% of viral meningitis cases.

The Xpert EV test runs on Cepheid's GeneXpert system and is performed by applying a CSF sample to a single-use cartridge and loading it into the GeneXpert DX system. Test results are available in 2.5 hours. The accuracy of the Xpert EV test was confirmed in a multi-site study of 255 patient samples that demonstrated the test's robust specificity (96.3%) and sensitivity (97.2%).

This FDA approval makes Xpert EV Cepheid's third clinical in vitro diagnostic test. In 2006, the company received FDA 510(k) clearances of two tests for Group B Streptococcus: Xpert GBS and Smart GBS. 

Roche To Acquire BioVeris For \$600m To Expand Diagnostics Biz

Roche (Basel, Switzerland) has agreed to acquire BioVeris (Gaithersburg, MD) for \$21.50 per share, or \$600 million, the companies announced in early April. Roche will use the acquisition to expand its \$5.7 billion immunodiagnostics business beyond human diagnostics into such market segments as life science research and development, patient self-testing, drug discovery, veterinary testing, and clinical trials. The transaction is expected to close during the third quarter of 2007.

BioVeris develops, sells, and manufactures the M-Series family of products, which can be used as a platform for clinical diagnostic systems and nonclinical diagnostics for the bio-security, life science, and industrial markets.

Roche's immunochemistry business is driven by its Elecsys immunochemistry product line, the fastest-growing portfolio of Roche Diagnostics' lab diagnostics business. According to Roche, the buy will give the company ownership of "the complete patent estate of the electrochemiluminescence (ECL) technology deployed in the Elecsys product line." Among the benefits of ECL technology are enhanced sensitivity, short incubation times, and broad measuring ranges.

In connection with the acquisition, BioVeris will sell to two new companies established by BioVeris Chairman and CEO Samuel J. Wohlstadter assets related to its vaccine research and the development of certain instruments intended for point-of-care use. 🏠

Agilent Will Buy Stratagene For \$246m

Agilent Technologies (Santa Clara, CA) has signed an agreement to acquire Stratagene (La Jolla, CA) in a cash deal valued at \$246.2 million, or \$10.94 per share, a 28% premium to Stratagene's April 5 closing price of \$8.51. Under the terms of the agreement, Stratagene will operate as a division within Agilent's Life Sciences Solutions Unit. The acquisition is expected to close by early July.

Founded in 1984, Stratagene develops, manufactures, and markets specialized life science research and diagnostic products. The company's diagnostic unit develops and manufactures products for urinalysis and automated instrument and reagent systems that use blood samples to test for more than 1,000 different allergies and autoimmune disorders. Stratagene also plans to expand its portfolio to include molecular diagnostic kits and instrumentation. The company's 400 employees are expected to join Agilent.

Agilent is banking on the deal to expand its customer base, noting Stratagene's "strong R&D team as well as excellent presence in the important academic and government markets."

Meanwhile, Stratagene founder and CEO Dr. Joseph A. Sorge announced that he has formed a new molecular diagnostics company. After the acquisition closes, his new company will pay Agilent \$6.6 million for certain assets of Stratagene and will license from Agilent some of their molecular diagnostic technologies.

With 19,000 employees in 110 countries, Agilent focuses on electronic and bio-

analytical measurement systems for such sectors as communications, electronics, life sciences, and chemical analysis. Agilent had net revenue of \$5.0 billion in fiscal year 2006. 🏛️

PSA Poor Predictor Of Lethal Prostate Cancer But Good Indicator Of Disease Recurrence

“Early PSA characteristics perform poorly in distinguishing those who develop a lethal prostate cancer from those at low or no risk of disease progression.”

Two new studies offer greater insight into the meaning of prostate-specific antigen (PSA) testing, the still controversial prostate cancer screening tool. A study in the April 4 issue of the *Journal of the National Cancer Institute (JNCI)* finds that the amount of PSA in a man’s bloodstream at the time of prostate cancer diagnosis or its rate of change over the course of the disease does not adequately predict lethal prostate cancer. However, a new Mayo Clinic study, published in the April issue of *Mayo Clinic Proceedings*, found that PSA is the first indicator of recurrent prostate cancer after radical prostatectomy.

The FDA has approved the use of the PSA test along with a digital rectal exam to help detect prostate cancer in men age 50 and older. The PSA test is also FDA-approved for use monitoring patients with a history of prostate cancer for disease recurrence.

The *JNCI* study addresses the need to identify methods to determine which patients will develop lethal prostate cancer, so as to avoid unnecessary treatment. Increased PSA before prostate cancer treatment has been associated with the patient’s prognosis, which suggests that early measurements of PSA may predict the behavior of the tumor.

Researchers at the Karolinska Institute (Stockholm, Sweden) put this theory to the test. They analyzed the rate of change of PSA levels in 267 men who were diagnosed with early localized prostate cancer between 1998 and 1999. At the conclusion of the December 2003 follow-up, 34 patients had died from prostate cancer, and 18 had developed metastatic prostate cancer but were still alive. Although initial PSA values and the rate of change were associated with later development of lethal prostate cancer, they were not sufficiently accurate to predict lethal cancer.

The authors concluded that while PSA measurement is associated with cancer prognosis and is an important monitoring tool, “early PSA characteristics perform poorly in distinguishing those who develop a lethal prostate cancer from those at low or no risk of disease progression. Therefore, better decision tools are needed for active monitoring of patients with early disease.”

An accompanying editorial written by Dipen Parekh, M.D., of the University of Texas Health Science Center at San Antonio, and colleagues called for clinical trials “to examine surveillance strategies to help patients and their physicians identify and treat tumors that will otherwise be life threatening and to carefully follow those that will not.”

Meanwhile, the recently published Mayo Clinic study used a new twist on PSA measurement, PSA doubling time (DT), to detect the likelihood of cancer recurrence after radical prostatectomy. PSA DT, the duration for PSA levels in the blood

Patients with a PSA doubling time of three to 12 months are at a significant risk for the development of systematic disease and cancer-specific death.

to increase by 100%, proved to be a reliable way to distinguish which patients have prolonged innocuous PSA levels after therapy from those who are at high risk for disease recurrence and death from prostate cancer.

The study, conducted by Mayo Clinic researcher Michael Blute, M.D., and colleagues, concludes that patients with a PSA DT of less than three months after therapy are at imminent risk of death from prostate cancer. Patients with a DT of three to 12 months are at a significant risk for the development of systematic disease and cancer-specific death.

According to the authors, the new findings should prompt physicians whose patients have DTs of less than one year to treat them with systematic therapies. Patients with PSA DTs of one to 10 years are more likely to have a local rather than systematic recurrence, and patients with a PSA DT of greater than 10 years are at a low risk of recurrence. 🏛️

NASA Tests Hand-Held Lab-On-A-Chip Device

How do you perform a lab test in space? On March 31, NASA took steps to answer this question when astronaut Sunita Williams began testing the Lab-on-a-Chip Application Development-Portable Test System (LOCAD-PTS) on board the space station. LOCAD-PTS is a hand-held device for rapid detection of biological and chemical substances.

The current study aims to provide an early warning system that will enable crew members to protect the health and safety of those on board the station. Astronauts swab surfaces within the cabin, add swab material to the LOCAD-PTS, and within 15 minutes obtain results on a display screen. The equipment was launched on the space shuttle Discovery in December of last year.

Tests are performed on a thumb-sized, disposable cartridge inserted into the hand-held reader. Once the crew has dispensed the sample into the inserted cartridge, pumps in the reader draw the dissolved sample into the cartridge where a reaction takes place that produces a green dye in the presence of most microorganisms. The LOCAD-PTS reader then measures the absorbance intensity of the green color, compares it with an in-built calibration curve, and then displays on the screen a quantitative value of endotoxin ranging from 5 to 0.05 endotoxin units (EU) per milliliter. The 0.05 EU/ml sensitivity limit correlates to a few bacterial cells per milliliter. If media slides have been used during procedures, they are incubated for three days and then photographed, with the images down-linked to ground.

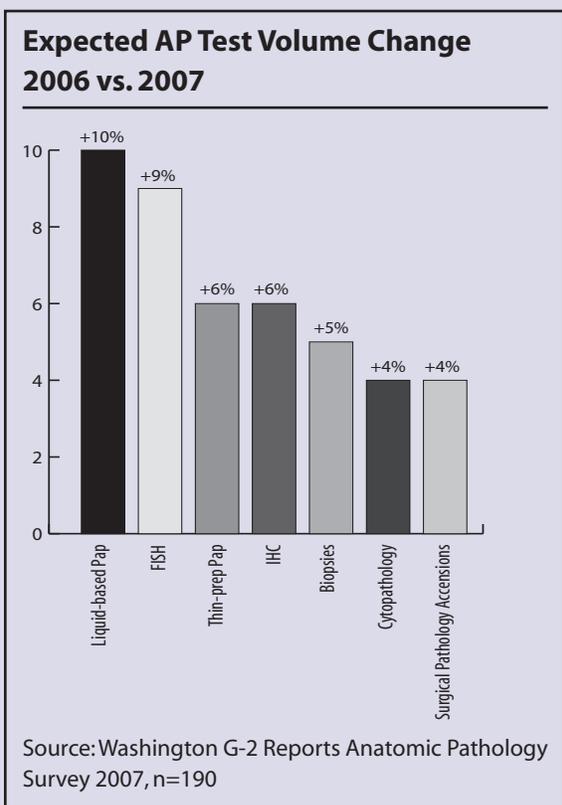
While current applications focus on detecting bacteria and fungi, other sample cartridges are in the works that will detect chemical substances and proteins in urine, saliva, and blood for aiding medical diagnoses. NASA also plans to use LOCAD-PTS to assess water, air, and food supplies.

Over the next few months, the LOCAD-PTS method will be tested against various common culture methods to see how all methods compare when detecting and analyzing bacteria. A more advanced version of LOCAD-PTS will launch onboard Space Shuttle Endeavour, scheduled for a December launch to the International Space Station. 🏛️

Anatomic Pathology Testing Growing In Volume, Hindered By Reimbursement And Staffing Shortages

Anatomic pathology (AP) practices expect growth in all categories of testing this year compared with 2006, including an average increase of 10% in liquid-based Pap testing and a 9% increase in fluorescent in situ hybridization (FISH), according to a survey of 190 anatomic pathology providers recently conducted by Washington G-2 Reports.

When asked to predict the percentage change in volume of AP testing for 2007 compared to 2006, the practices surveyed were generally optimistic, predicting an average volume increase in seven test categories.



Liquid-based Pap testing (+10%) and FISH testing (+9%) led the pack, followed by average volume increases of 6% predicted for both Thin-prep automated imaging of Pap smears and immunohistochemistry (IHC). AP practices surveyed predicted an average increase of 5% in biopsies (CPT code 88305) and 4% for both cytopathology and surgical pathology accessions.

AP Challenges

Despite growing volumes, practice growth remains a challenge. For the AP practices surveyed, the biggest challenges to growth in 2007 are expanding and developing new client business and reimbursement. Just under three-fourths (72%) of survey respondents, most of which were from hospital-based AP practices, cited expanding current business and developing new clients among their biggest challenges, and a slightly larger proportion (73%) pointed to reimbursement.

Approximately one-third or more of respondents said that competitive pricing (35%), acquiring or using new technology (34%), and competing for managed care contracts (31%) were among the most significant challenges they faced, while 24% are struggling with testing quality and turnaround time.

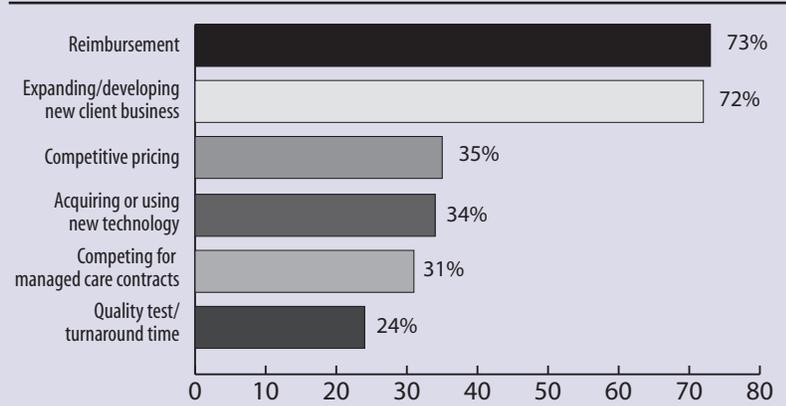
The competition isn't just coming from pricing. AP practices also perceive increased competition from specialty physicians. Two-thirds (66%) of survey respondents pointed to dermatologists as stepping up their competition with AP, while almost half pointed to urologists (49%) and gastroenterologists (45%).

Staffing is another significant problem in the AP world as well as the clinical laboratory industry as a whole. Nearly three-quarters of the AP practices surveyed reported having encountered a shortage of pathologists and technicians, and many reported that this has negatively affected their turnaround time for

tests. "It's hard to recruit top pathologists, so salaries are going up, while pricing is going down," said one laboratory director.

"We've also seen the shortage of histologists driving up salaries locally."

What are the biggest challenges to growing your anatomic pathology business in 2007?



Source: Washington G-2 Reports Anatomic Pathology Survey 2007, n=190

Strategies for Growth

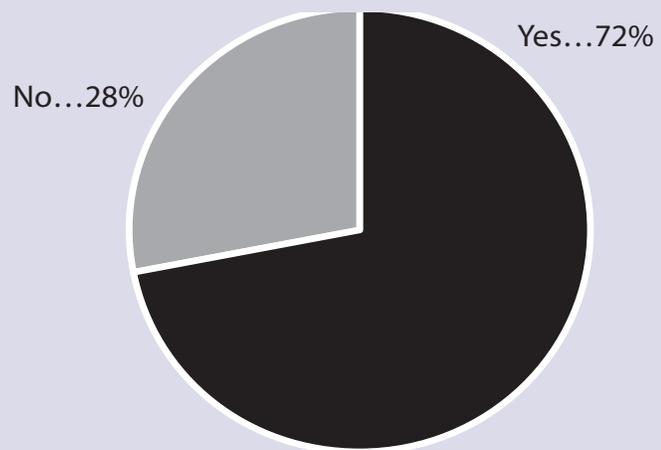
Among the growth strategies AP practices reported using include adding new tests such as Urovysion, hiring more personnel, aggressive marketing, and improved Web connectivity. "We are developing and implementing a clinical outreach plan to market our services to referral and non-referral physician groups," said one lab director. "We will systematically promote each of our clinical specialty areas via print and electronic outreach activities, including the distribution of print collateral materials and a redesigned Web site in concert with an online clinical reference lab."

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In the face of staffing shortages, labs are trying whatever they can, including "operating lean," using overtime, and implementing "creative scheduling." Labs are increasingly expanding the search for staff beyond their local areas and offering higher salaries to retain skilled staff. One lab that cannot locate appropriately trained staff is taking matters into its own hands. "We have had to become a school of histotechnology," said the lab's director.

Finally, many AP practices are increasingly automating their laboratories to help address staffing problems. Over half (57%) of the labs surveyed report that their histology laboratory is automated, with 44% using Ventana Medical Systems histology automation systems, 31% using Dako, and 19% using Sakura. 🏛️

Has Your Lab Encountered a Shortage of Qualified Staff*?



*Pathologists, medical technologists/technicians, cytotechnologists/technicians, and histotechnologists/technicians
Source: Washington G-2 Reports Anatomic Pathology Survey 2007, n=190

New Microarray Test Identifies Tumor's ER And HER-2 Status

Immunohistochemistry was once the only way to measure levels of hormone receptor gene expression in breast cancer tumors, but according to a paper recently published in *Lancet Oncology* online, this testing can now be performed on a genomic microarray.

A team of scientists at the University of Texas M.D. Anderson Cancer Center have developed and validated a new microarray test that identifies whether a breast tumor's growth is fueled by estrogen and evaluates the expression of human epidermal growth factor receptor 2 (HER-2), a growth factor receptor that makes a tumor vulnerable to trastuzumab (marketed by Genentech as Herceptin). About 70% of breast cancers are estrogen-receptor (ER) positive, and another 15% to 25% are HER-2 positive. Treatment varies based on receptor status.

"This moves us closer to developing an integrated single genomic test that could estimate the risk of cancer relapse after surgery, determine the ER and HER-2 status, and also gauge the sensitivity of the tumor to hormone therapy and chemotherapy," says Lajos Pusztai, M.D., Ph.D., an associate professor in the M.D. Anderson Department of Breast Medical Oncology and a co-director of the study. M. D. Anderson will soon begin a clinical trial to use these tests to recommend treatment for patients with newly diagnosed breast cancer.

Employing Affymetrix microarrays, the researchers gathered ER and HER-2 gene expression data from 495 breast cancer samples obtained through fine needle aspiration biopsies or traditional biopsies. Their gene expression thresholds predicted ER-positive status with 90% accuracy and HER-2 positive status with 93% accuracy. The microarray-based tests disagreed with the results of immunohistochemical analysis by 8% for ER and 11% for HER-2, a standard degree of variance when different diagnostic methods are applied to the same sample. 🏠

Axial Biotech And ProteoGenix Raise Millions In Series B Funding

Two young biotech companies focused on molecular testing have raised millions in Series B funding rounds. ProteoGenix (Portland, OR) just completed a \$20 million funding round co-led by New Leaf Venture Partners and TPG Growth, while four-year-old Axial Biotech (Salt Lake City, UT) has raised \$15.3 million from lead investor Johnson and Johnson Development Group, along with vSpring Capital and Ohio Biotech Group.

Co-founded by Oregon Health Sciences University researchers Srinivasa Nagalla, M.D., and Michael Gravett, M.D., ProteoGenix is focused on developing and marketing diagnostic tests for pregnancy-related complications. The company has used high-throughput protein analysis techniques to identify protein biomarkers for common prenatal and maternal diseases.

Since 2004, ProteoGenix has been working with mass spectrometry instrumentation company Bruker Daltonics (Billerica, MA) on developing a noninvasive

biomarker-based screening test that uses mass spectrometry to identify women at risk for premature birth caused by infection. Ultimately, the company plans to develop rapid, easy-to-interpret tests that can be used by CLIA central laboratories or at the point of care.

Also focused on molecular testing, Axial Biotech (Salt Lake City, UT) is developing diagnostics and therapeutics for spinal disorders, a unique category for gene-based prognostic tests. The company believes that detection of spinal disorders by pre-symptomatic DNA testing will create new opportunities for prevention and early intervention.

Axial's first disease target is adolescent idiopathic scoliosis, a market estimated at more than \$150 million. Once validated, Axial will perform a genetic test for the disorder in its own reference laboratory. The company plans to eventually launch product-development programs for gene-based tests for such spinal disorders as degenerative disc disease and osteoporosis, as well as for bio-mechanical devices and gene-based therapeutics that target spinal disorders. 🏠

Quest And LabCorp Average \$15.83 In Revenue Per Test

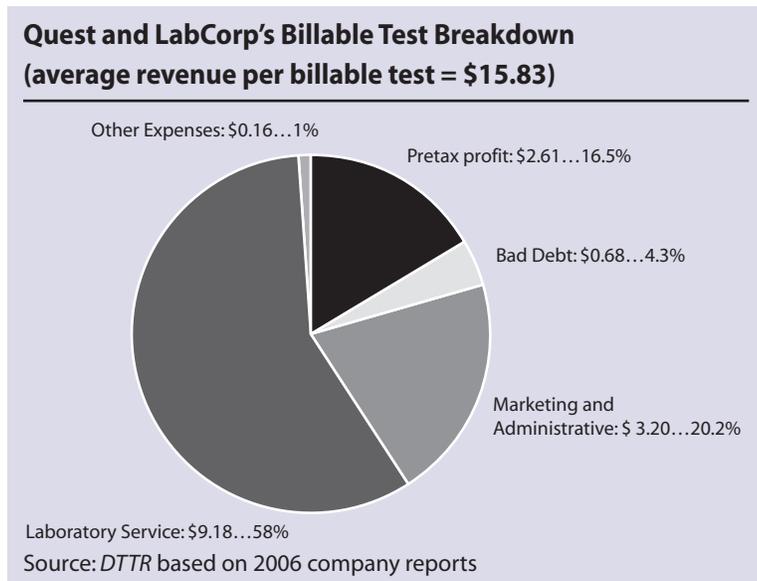
Quest and LabCorp, the two largest commercial laboratories in the United States, earn an average of \$39.56 in revenue per requisition. Assuming 2.5 billable tests per requisition, Quest and LabCorp average \$15.83 in revenue per billable test, but where does that \$15.83 go?

Of that \$15.83, an average of \$9.18, or 58%, is spent to acquire, transport, and test the average billable unit. An additional \$3.20 (20.2%) is spent on marketing and administration, which also includes their billing operations. Bad debt and other costs add up to \$0.84 (5.3%). The remainder is an average pretax profit of \$2.61 (16.5%) per billable test.

These benchmarks indicate that Quest's and LabCorp's pretax profit margin has dropped slightly since 2004, when their average pretax profits were \$2.47, or 18%

of their average billable test. Bad debt has dropped from the 2004 rate of 5% to 4.3% in 2006, but marketing and administrative costs have increased from 18% to 20.2%, rising from \$2.50 per average billable tests to \$3.20 per average billable test.

The actual costs of performing the tests, transportation, and billing services has remained constant at 58%, although in 2004 that came to \$8.22 out of \$14.10; in 2006, it represented \$9.18 out of an average revenue per billable test value of \$15.83. Overall, the average revenue per billable test at Quest and LabCorp has risen by 12.3% since 2004. 🏠



▲ **Bidding War For Biosite**, from page 1

of \$90 per share on April 5. Inverness was among the many companies that expressed interest in Biosite since the company began exploring sale options over a year ago.

Everyone wants a piece of the point-of-care testing market these days, and POC-focused companies have been attracting the attention—and dollars—of industry giants in 2007. Abbott's point-of-care business (the platform formerly known as i-STAT) is among the segments that GE has agreed to acquire for \$8.13 billion. In February, Quest Diagnostics acquired POC test company HemoCue for approximately \$420 million.

Beckman is hungry not only for entrée into the POC testing market but also to fuel its consumables business, which Garrett has called "the single best indicator of the strength of our business." Almost all (99%) of Biosite's 2006 revenues of \$309 million were derived from consumables, namely test kits sold in the United States. Beckman's 2006 revenues totaled \$2.53 billion.

One factor in Beckman's favor is its ongoing relationship with Biosite. In 2003, the two companies began collaborating on an automated version of Biosite's Triage BNP test. More than 70% of hospitals in the United States use Biosite's Triage products, which are heavily weighted toward cardiovascular disease diagnostics. 🏛️

BMJ Study Questions Value Of Opportunistic Chlamydia Screening

Chlamydia screening programs: When will we ever learn? This is the question posed by a new study in the April 7 issue of the *British Medical Journal (BMJ)*. According to Nicola Low, M.D., an epidemiologist at the University of Berne in Switzerland, claims about screening for *Chlamydia trachomatis* are not supported by rigorous research or practice.

Common, curable, and easily diagnosed, chlamydia is a sexually transmitted infection that usually has no symptoms. However, it can cause such severe complications as infertility, ectopic pregnancy, and neonatal infection.

Chlamydia screening of selected groups is currently recommended in a range of healthcare settings in the United States, Canada, and Sweden. A program offering opportunistic chlamydia screening to all sexually active women and men under 25 is due to be implemented in England by 2008.

Unlike proactive screening, which uses population registers to invite people to be screened at regular intervals, opportunistic screening targets people visiting physicians or other health professionals for unrelated reasons. No randomized controlled trial has shown that this type of screening program reduces long-term illness.

According to Low, most studies showing that chlamydia screening is cost effective tend to overestimate the economic savings realized through chlamydia screening. She also points out that the decreases in rates of chlamydia and its complications may be too hastily credited to chlamydia screening programs, pointing out that the simultaneous introduction of HIV prevention efforts may complicate such conclusions.

Low calls for a consistent definition of a chlamydia screening program and believes that the same standards should be applied to all diseases for which screening is in place or is being considered. She concludes that countries implementing or contemplating national chlamydia screening should conduct research to determine if such screening programs do more good than harm at a reasonable cost.

“The diagnosis of sexually transmitted infections continues to increase,” write two physicians in an accompanying editorial in *BMJ*. “Most people who are affected are unlikely to seek sexual health testing and may only be assessed via a proactive approach rather than the opportunistic screening program currently offered.” 🏛️

Illinois Hospital Finds Molecular Testing Cheaper, More Sensitive

Last summer, Decatur Memorial Hospital (DMH), a 340-bed community hospital in central Illinois, opened their molecular diagnostic laboratory. For DMH, “going molecular” has even had some unanticipated benefits, including cost savings.

“Basically our pathologist was driving this,” says John Little, laboratory administrative director at DMH. “He felt that molecular was going to be a large entity in the laboratory in general, the up-and-coming thing. His thought was we’d rather get in now at the ground level and start getting experience, start doing some testing and preparing for the future, getting staff trained and interested.”

Like many laboratories, DMH began testing by switching a traditional test method over to a molecular test method, in this case, chlamydia/gonorrhea (CT/NG). Their original test method utilized Gen-Probe. “It’s a fairly high-volume test for us, and when we looked at the cost breakdown on the molecular side, it was actually cheaper to do the molecular assay with a higher sensitivity than what we were currently performing,” says Little. “Then we looked at reimbursement, and reimbursement was better than with the Gen-Probe method also.”

“When we looked at the cost breakdown on the molecular side, it was actually cheaper to do the molecular assay with a higher sensitivity than what we were currently performing.”

According to Little, DMH was running the Gen-Probe CT/NG test for approximately \$51 per test. When they switched to molecular, it saved about \$5 per test, coming in at around \$46 per test. DMH is currently performing about 150 molecular tests a month, and of the total annual laboratory budget of \$7 million, molecular accounts for \$65,000. DMH’s laboratory employs 67 FTEs, of which only 0.5 FTE is involved in molecular tests.

In addition to CT/NG, the DMH molecular diagnostic laboratory offers Factor V Leiden testing. Within the next year, they plan to create their first “homebrew” test, either viral load for hepatitis, HIV, or herpes testing on spinal fluid. DMH pathologists have also expressed an interest in developing testing on tissue samples.

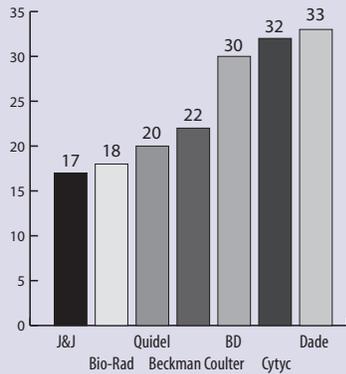
One thing that is a little different about how DMH got started on their molecular lab was the funding. “You’re looking at a lot of equipment to purchase and space to be renovated or created,” says Little. “We had that problem, but fortunately we have a very active auxiliary here in the hospital. We pitched them the idea of helping us fund this, and they gave us the money to purchase the equipment and renovate the space. They were instrumental in really getting us up and off the ground with the whole project.” 🏛️

IVD Stocks Rise 9%; Biosite Spikes 73% On Acquisition News

The 24 stocks in the G-2 Diagnostic Stock Index rose by 9% in the four weeks ended April 5, with 17 stocks up in price, five down, and two unchanged. So far this year, both the S&P 500 and the Nasdaq are up 2%.

Biosite (San Diego, CA) spiked 73% to \$93.11 per share for a market capitalization of \$1.49 billion. At press time, the company was being wooed by potential acquirer Inverness Medical Innovations, as well as Beckman Coulter, which offered to pay \$85 per share for the immunoassay company in late March (see p. 1). Biosite has reportedly been entertaining offers from 10 interested buyers for more than a year.

IVD Company P/E Ratios

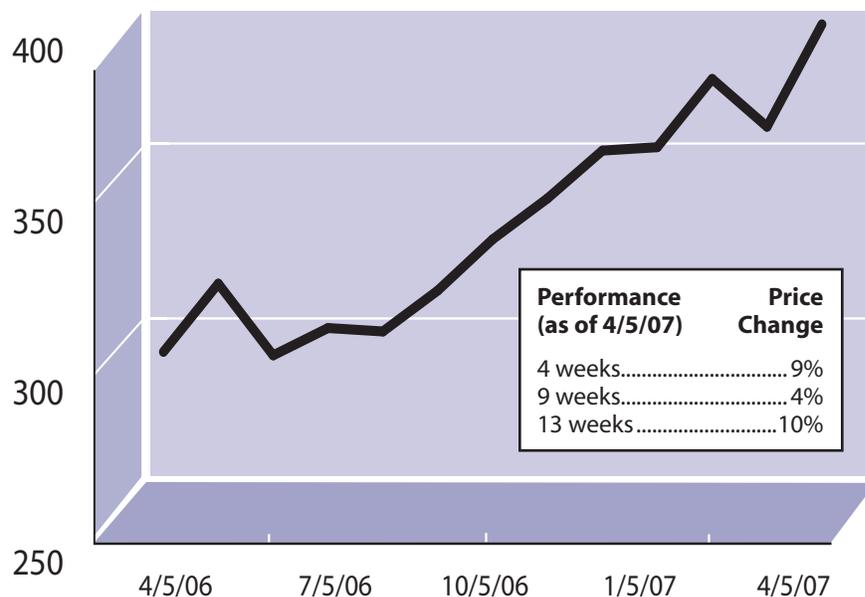


Source: DTTR

Microarray giant **Affymetrix** (Santa Clara, CA) jumped 21% to \$31.06 per share for a market capitalization of \$2.08 billion. In early April, the company launched its GeneChip Human Gene 1.0 ST array to the commercial market. The 28,869 gene-array enables users to get a more accurate view of a gene's overall transcription activity, because it measures the overall expression of all transcripts derived from a gene, not just the terminus known as the 3' end. Affy also recently elected Robert Wayman, formerly the CFO and executive vice president of Hewlett-Packard, to its board of directors.

Meanwhile, analysis of the P/E ratios of IVD companies shows that **Johnson & Johnson**, with a P/E ratio of 17, is currently the least expensive stock, followed by **Bio-Rad** at 18 and **Quidel** at 20. Other companies with a P/E ratio under 35 include **Becton Dickinson** at 30, **Cytyc** at 32, and **Dade** at 33. 🏰

G-2 Diagnostic Stock Index



Source: The G-2 Diagnostic Stock Index is tabulated weekly by DTTR from the average percentage change in the stock price of 24 IVD companies.

UP	Price	% Chg
Abbott Labs	\$57.02	5%
Abaxis	24.76	11
Affymetrix	31.06	21
Becton Dickinson	78.42	5
Bio-Rad	70.92	3
Biosite	93.11	73
Cholestech	17.22	7
Cytyc	34.78	7
Dade	45.57	10
Digene	43.93	5
Immucor	33.76	17
Meridian	28.44	2
Nanogen	1.60	19
OraSure	7.60	2
Quidel	12.46	15
Third Wave	5.48	5
Ventana	43.10	5
UNCHANGED		
Clinical Data	22.20	0
Inverness Medical	14.82	0
DOWN		
Beckman Coulter	63.51	-2
Gen-Probe	48.06	-1
Johnson & Johnson	61.55	-1
Luminex	14.09	-1
Stratagene	8.51	-2

G-2 Insider

From Bench to Bedside: G-2's Inaugural Onco-Molecular Diagnostics Conference . . . The United States market for in vitro cancer diagnostics will exceed \$1 billion this year and is expected to reach \$2.3 billion by 2012. But what are the practical implications of the growth of oncology-driven molecular diagnostics? Find out at Washington G-2 Reports's new onco-molecular diagnostics conference, which will take place from June 6 to 8 at the Sofitel San Francisco Bay Hotel and include a visit to Stanford University's new state-of-the-art clinical laboratories.

Conference attendees will learn from the experts how to best apply novel science to diagnostic testing in the clinical laboratory, including an in-depth look at applying onco-molecular diagnostics as standard of care in the diagnosis of colorectal, lung, prostate, and breast cancer. This is also a unique opportunity to get up to speed on cutting-edge technology such as microarrays, comparative genomic hybridization, and biomarkers.

Pathologists Bruce Patterson, M.D., James Zehnder, M.D., Iris Schrijver, M.D., and other leading Stanford University faculty will discuss how the university integrates with the private sector for breakthroughs in onco-molecular diagnostics and the creation of new revenue streams. Experts such as Paul Landauer, Abbott's health policy and payment director, will discuss the laboratory economics of onco-molecular diagnostics, including coding, reimbursement, and pricing.

For more information, including daily updates to the conference program and faculty, visit www.g2reports.com/onco-molecular. To register, call G-2's customer service department at 1-800-401-5937, ext 2. 🏛️

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- Cepheid 408-541-4191
- Digene 301-944-7000
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217-876-5000
- FDA OIVD 240-276-0450
- Inverness Medical
609-627-8011
- LabCorp 336-584-5171
- Proteogenix 503-494-0908
- Quest Diagnostics
800-222-0446
- Quidel 800-874-1517
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