

# With AP systems, sharing (data) is caring—and a trend

Anne Ford

Call it the “Huh?” heard ‘round the world: Just last month, Google spent \$3.2 billion to acquire Nest Labs, a manufacturer of thermostats and smoke and carbon monoxide detectors. As Brandon Willis, director of technology at Pathagility, puts it, “Who knew Google would want a company that makes *home thermostats*?”

But the Internet-search giant’s decision makes all kinds of sense when you consider that Nest Labs’ products do much more than heat a home or beep when someone burns toast. The company’s smoke and carbon monoxide detector, for example, texts homeowners if it goes off or if its

batteries are low. If it detects carbon monoxide, it disables the gas furnace to boot. Its thermostat learns whether and by how much a homeowner’s temperature preferences fluctuate from day to night and adjusts itself accordingly. It even knows to lower the temperature when no one’s home.

It may sound Jetsons-esque, but so-called smart homes—in which multiple appliances wirelessly communicate with one another in what some are calling the “Internet of things”—are moving from the stuff of sci-fi movies into reality. And that’s why Google wanted to gain a foothold.

Willis sees Google’s acquisition as just one piece of a larger trend that affects multiple industries, a trend he characterizes as “all in-

formation all the time, at your fingertips.”

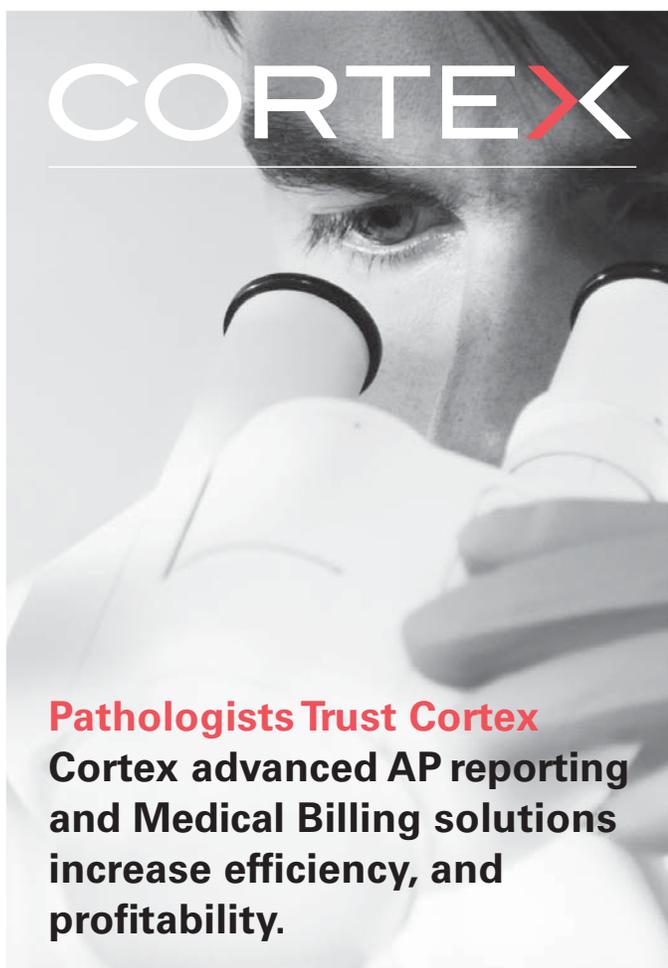
“We see this trend as well” in the anatomic pathology systems marketplace, he says. “Our clients express a desire for greater abilities between loosely coupled systems to uniformly share information that may be relevant to results published to physicians, patients, and other health care or insurance providers. The desire is for these traditionally siloed systems to share information in ways that uncover the value that otherwise would be trapped in them.”

Matt Klein, president and lead developer of Small Business Computers of New England, agrees. “The biggest trend in this market, as we see it, is data exchange,” he says. “Between meaningful use requirements and clinicians’ desire to access lab results directly from their EMR, the need for interfaces that exchange data is ever present.”

Then, too, Willis says, that data “must be presented in a way that allows —continued on 38

Product  
Guide

Anatomic pathology computer systems, pages 41–58



**CORTEX**

**Pathologists Trust Cortex**  
Cortex advanced AP reporting and Medical Billing solutions increase efficiency, and profitability.

**Proven.** 30 year focus on Anatomic Pathology  
**Intuitive.** Seamless integration, easy to use  
**Scalable.** Customized, modular design  
**Powerful.** Gives you the competitive edge  
**Reliable.** Fast, knowledgeable service

Ask about our hosted/rental software options for smaller practices. To learn how Cortex can help you, call us at 800.278.4645, Ext. 1 or visit our website [www.cortexmed.com](http://www.cortexmed.com)

## HLA testing

continued from 34

president of ASHI and founded a series of online continuing education lectures called Current Topics in Histocompatibility and Transplantation. She invited Dr. Liwski to give a talk about the optimized flow crossmatch in November 2012. Professionals from more than 80 labs signed up for Dr. Liwski’s talk. That level of interest in the Halifax protocol was manifest at the Georgetown lab.

“All the techs in our lab got very excited about it,” Dr. Rosen-Bronson says. The following month, the team at the Georgetown lab started doing the Halifax protocol alongside the traditional flow crossmatch procedure. They did parallel testing in 50 cases.

“We had 100 percent concordance between our old protocol and the new protocol,” says Olga Timofeeva, PhD, a director-in-training at the lab. “Based on patients’ antibody profiles, we expected to have 21 positive T-cell crossmatches, and both protocols resulted in 21 positive crossmatches. In the B-cell tests, both protocols gave us the same results.”

And the team shaved an hour off the time it took to run the flow crossmatch assay, says Dong Li, MD, also a director-in-training at the lab. Those hours add up. The Georgetown lab does, on average, about 90 crossmatches every month, Dr. Li says.

“If you asked anybody, ‘Do you want to go back to the old crossmatch?’ Nobody would say yes.”

What is especially nice about the Halifax protocol, adds Dr. Rosen-Bronson, is that adoption is fairly painless.

“The beauty of it is, it’s not a different instrument,” she says. “It’s the same reagents, the same number of well plates. It’s just adjustments to the incubation time and temperature, centrifuges, and things like that.”

This kind of assay-optimization work is important, yet often goes undone, Dr. Rosen-Bronson says.

“In a clinical lab setting, most labs don’t have the time to do those optimization studies. They don’t have the time and the manpower to tweak all those assays,” she says.

That was the situation for Leslie Husbands, CHT(ABHI), and her colleagues at the Oklahoma University Medical Center HLA lab.

“We’d had our flow validation done for years,” Husbands says. “It worked, and we were so overwhelmed with all the other stuff we needed to do that we didn’t have time to bring on and do the validation for the new protocol. It’s just one of those things we never got to.”

In April 2013, Husbands signed on as group lead technologist at Diagnostic Laboratory of Oklahoma, a joint venture between Quest Diagnostics and Integris Health. With a new lab came the opportunity to start from scratch in many areas, including the optimized flow crossmatch.

“We didn’t want to do everything the same. We wanted to do it better and faster,” Husbands says. The Halifax protocol is a “huge timesaver,” she adds. The lab’s HLA testing section is not yet open, but the plan, Husbands says, is to use the optimized flow crossmatch.

“It’s going to be our gold standard,” she says.

The Halifax protocol is likely to be particularly attractive to higher-volume HLA labs, Georgetown’s Dr. Rosen-Bronson says.

“The big labs especially should like this protocol, because they’re running a lot of crossmatches every day,” she says. “It’s convenient for them. It’s those busy labs that should definitely adopt this protocol.” □

Kevin B. O’Reilly is CAP TODAY senior editor.

## AP systems

continued from 36

multiple audiences to filter through it and find what they are most concerned with quickly and efficiently. An interface must highlight important data points without overwhelming the user. Providers don't want to pore over dozens of pages, attempting to glean the most critical information from a mountain of verbiage."

Those twin concerns—sharing information and sharing it in a clear, concise manner—are addressed in many of the products and features highlighted in this month's anatomic pathology systems product guide.

For its part, Pathagility has continued to en-

hance its delivery options via its hub-and-spokes data architecture, Willis says. "One example of this is our FilePath software, which allows laboratories to instantly, securely, and bidirectionally transfer data, reports, and results to any office, doctor, or partner with a minimal on-site infrastructure footprint." This year, he says, the company is focusing on producing clearer reports and a more streamlined user interface.

At Xifin, the big news of last summer—the company's acquisition of PathCentral—has been followed by the rebranding of PathCentral's AP Anywhere LIS as the Xifin LIS Anywhere platform. Company director Joseph Nollar says the platform's functionality has been extended with updates to its advanced esoteric reporting modules for IHC, flow cytometry, FISH, molecular,

cytogenetics, CGH, copy number variation, and constitutional microarrays. "We've also introduced a new PCR module," says Nollar, "which allows for revenue sharing of PCR cases. Laboratories perform the technical component, and client pathologists perform the professional component."

As for the year ahead, he adds, Xifin intends to release an integrated clinical pathology module that will "elegantly join clinical pathology and anatomic pathology to allow for more comprehensive reporting capabilities." For example, he says, "if a laboratory is performing a comprehensive bone marrow assessment, it will be able to review the clinical results as well as the flow results in a single screen."

Meanwhile, Computer Trust has added a module to its WinSurge anatomic pathology system, which, says company president David Liberman, MD, "we anticipate will, along with products like it, be deemed standard-of-care by regulators within the next three to five years." The addition: a comprehensive specimen-tracking and positive patient identification module, called WinsTrack, that integrates tracking with histology data entry at each step, thereby "dramatically streamlining workflow operations for the histology staff," Dr. Liberman says.

This year, he adds, Computer Trust plans to launch an executive dashboard called WinsAlerts, which is intended to allow senior laboratory leaders to add and adjust their own workflow rules, error checking, and automation, as well as monitor trends, patterns, and historical runs. The company is also planning to beta test touchscreen devices for the lab and explore the possibility of allowing WinSurge users to connect to clinicians via smartphones and tablets.

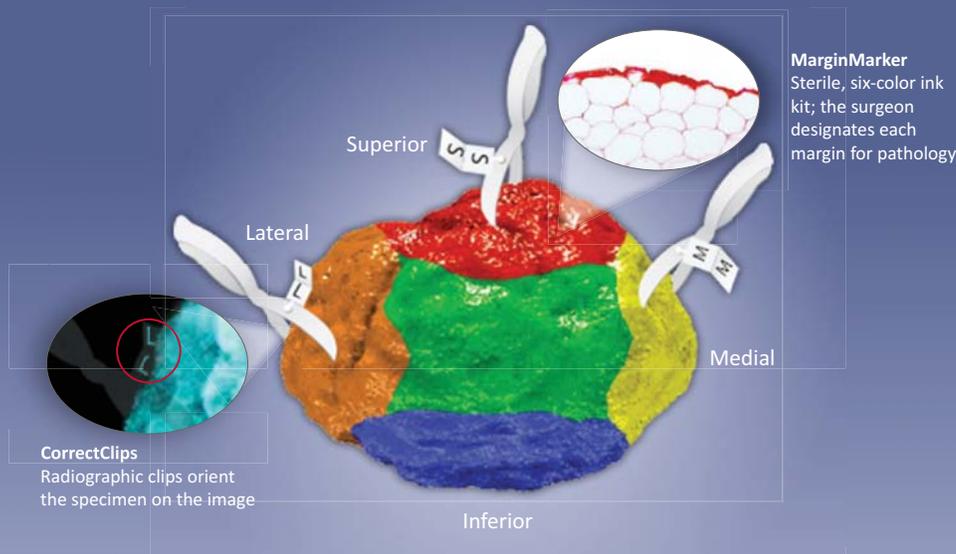
Among the anatomic pathology-related developments at NovoPath is a new gynecology molecular cytology module. Intended to allow laboratories to create and distribute reports for widely used molecular tests, such as HPV, GC/CT, and HSV, the module lets users propagate batched cases for reporting specimen results generated from instruments that are not connected to NovoPath via an HL7 interface. NovoPath sales and marketing vice president Rick Callahan calls the module "truly innovative" for its support of batched secondary reflex testing for genotype HPV and similar assays. "It also supports individual configurations of a lab's client-specific reflex testing," he adds.

Within the next year, says Callahan, NovoPath will launch version 9.0 of its NovoPath anatomic pathology system. "NovoPath 9.0 will feature tight integration with clinical lab systems to create a seamless lab information flow across multiple lab specialties and beyond," he explains. It will also provide modular ONC certification for meaningful use stage two.

—continued on 40

# MarginMarker® & CorrectClips®

## The New Standard for Tissue Orientation®



### Eliminate Error in Margin Analysis

In cancer surgery, the single most important predictor of local recurrence is the tissue margins.<sup>1</sup> Research shows discordance rates as high as 52% in the identification of specimen margins.<sup>2-3</sup> Re-excision rates exceed 20% in breast surgery.<sup>4</sup>

Vector Surgical's MarginMarker and CorrectClips can result in:

- 50% fewer unnecessary re-excisions
- Fewer delays of critical adjuvant therapy
- More accurate re-excisions
- Lower cancer recurrence
- Improved cosmesis

View Surgeon Demonstrations | Request a Sample | [www.vectorsurgical.com](http://www.vectorsurgical.com) | +1 (262) 798-7970



## AP systems

continued from 38

Orchard Software saw several additions to its Orchard Pathology information system in 2013, among them an automatic case-assignment feature that tracks ordering locations, filters potential pathologist assignments according to state licensure, checks case loads, and auto-assigns cases to pathologists who have lighter workloads. Another new feature—historical alerts—establishes filters that notify users of cases that are significant, concurrent, historical, or any combination

of those three. For example, if a cervical biopsy is ordered, a historical alert will notify the pathologist that a Pap test was ordered within a specified date range.

The year ahead will bring Orchard Pathology users the ability to automatically calculate cold ischemia, formalin fixation times, and frozen section turnaround times. But Orchard's medical director, Michael D. Glant, MD, predicts bigger changes for the company as well.

"Orchard Pathology will evolve into a system that is more of a diagnostic information system," he says. "As a result, it will have a very sophisticated, structured, granular data set that will work in concert with all users and available data to develop and automate best practice standards. There's a core of data tables being implemented that will facilitate automation, as well as highly structured and appropriately granular data for data mining and interoperability between the LIS and EHR or other outside systems."

Users of the LigoLab Agile AP/LIS, says LigoLab business development executive Sureh Avunjian, can expect to see enhanced clinical quality control and business intelligence modules soon. The quality control module will auto-calculate errors, make selective adjustments, and intuitively alert users when manual involvement is necessary. It's an example of the company's recent efforts "toward transforming LigoLab from a packaged application to a fully configurable information system platform," he says. "These platform features empower laboratory administrators to create new workflow processes or modify existing ones using an intuitive user interface without any need of custom programming."

PathView Systems' Progeny product underwent a slew of improvements last year, among them automated case assignment; automated billing enhancements, such as no-bill diagnostic codes; and default specimen- and pathologist-based result-entry templates. This year,

says vice president of sales Michael Mihalik, "we anticipate helping our clients and prospects adapt to a very dynamic market, driven by the Affordable Care Act, CMS meaningful use mandates, and other coding and reimbursement changes. Towards that end, we foresee developments in EHR/EMR interfaces, billing support, ICD, and LOINC coding."

Another vendor that saw many enhancements to a core product in 2013 was Small Business Computers of New England. The company, says Klein, added numerous features to its AP Easy information management system, including the ability to store images and documents externally, progressive backups, the ability to specify days that should be omitted from turnaround time calculations, and an option to process cases in batches rather than at sign-out.

The company is now focusing on implementing iOS for gynecology result entry, grossing, sign-out, and report retrieval, Klein adds. It's also working on Web browser support so AP Easy can offer online requisitions, report delivery, and client statistics without the need for middleware.

Meanwhile, Cerner has added to its CoPath-Plus and Millennium PathNet anatomic pathology systems advanced interfaces to third-party tracking systems, enhanced data integration with disparate clinical systems and workflows, and workload distribution for smart assignment of cases to pathologists. This year, Cerner plans to introduce touchscreens for select anatomic pathology workflows, along with venue-driven dashboards and radio-frequency identification for AP specimen tracking.

Carrie Scott, director of sales for Cortex Medical Management Systems, reports that her company has released version 10 of its Gold Standard AP reporting solution. "We've added a security role to control the pathologist 'undo' button after a case has been signed out," she explains. "We've also increased the number of patients stored from 10 million to 1 billion and made many other small changes as suggested by our user group. This spring we'll release ICD-10—since it's a regulatory issue, it takes precedence over any other enhancements to the system." Cortex also plans to add to Gold Standard select Web-based functionality, such as dashboards and pathologist review and sign-out.

Finally, SCC Soft Computer's Ellie Vahman, vice president of sales and marketing, says SCC went live last year with its workflow engine-based SoftPathDx system. The product provides "user-definable workflows that optimize the number of steps in a workflow for each and every type of pathologist, as well as histology staff, without any programming," she explains. SoftPathDx also offers user-definable data fields and screens, which allow the product to be adapted to any type of pathology or genetics laboratory.

CAP TODAY's guide to AP systems includes products from the aforementioned vendors and numerous others. The companies supplied the information listed. Readers interested in a particular product should confirm that it has the stated features and capabilities.

Anne Ford is a writer in Evanston, Ill.



**Used in over 450 Labs!**  
Surgical & Cytology  
Dermatology • Urology • GI  
General Surgical and more...

- Individually Tailored
- Statistical Reporting
- Electronic Sign Out
- Images on Reports
- Order & Result Interfaces
- Fax, Web, E-mail Report Delivery

**Pricing for 1-9 Users (Unlimited available)**  
Surgical/Non GYN Module .....\$4,495  
GYN Cytology Module ..... \$4,495  
E-mail Report Delivery ..... \$1,995

**For complete list of modules & pricing visit us at [www.apeasy.com](http://www.apeasy.com)**

Online demonstrations scheduled by calling:

**800-647-2263**  
**[www.apeasy.com](http://www.apeasy.com)**

See our Product Guide listing, page 54

## WindoPath®

The End-to-End Laboratory LIS Solution

**ONE PRODUCT.**

**ONE DATABASE.**

**IMAGINE THE POSSIBILITIES!**



**Now Available!**  
**WindoPath® V8**

REQUEST A  
DEMO TODAY.



WindoPath®, our award winning, full-featured Laboratory Information Solution is designed with the features, functionality, and workflow pathologists prefer. Psyche's solutions are developed in conjunction with our customers—labs like yours.

**Don't just keep up with innovation—stay on top of it.**



[www.psychesystems.com](http://www.psychesystems.com) / 800.345.1514

See our Product Guide listing, page 50

# Anatomic pathology computer systems

|   |   |   |  |
|---|---|---|--|
| Part 1 of 10<br><br><i>See captodayonline.com/productguides for an interactive version of guide</i>   | AIM Clinical Software Systems<br>D. J. Martin djmartsoft@aimsoftwaresystems.com<br>368 Veterans Highway, Suite 2<br>Commack, NY 11725<br>800-331-4466 ext. 188 www.aimsoftwaresystems.com | Aspyra, LLC<br>Cassie Silletti csilletti@aspyra.com<br>4360 Park Terrace Drive, Suite 100<br>Westlake Village, CA 91361<br>818-449-8671 www.aspyra.com/lab-solutions  | Cerner Corp.<br>Jennifer Walker jennifer.walker@cerner.com<br>2800 Rockcreek Parkway<br>Kansas City, MO 64117<br>816-201-2854 www.cerner.com   |
| Name of anatomic pathology system   | AIMPath   | CyberPath   | Cerner CoPathPlus Anatomic Pathology   |
| First ever/Most recent AP system install (using Dec. 2013 survey deadline)<br>Last major product release for featured AP system<br>No. of contracts for sites operating AP system (hospitals/independent labs/clinics or group practices/other U.S. sites/foreign sites)<br>• No. of contracts that went live in calendar-year 2013<br>• No. of contracts signed in calendar-year 2013<br>No. of sites operating AP system (No. of these sites outside U.S.)<br>Percentage of installations that have standalone AP systems | 2005/July 2013<br>October 2013<br>6 (6/0/0/0)<br>1<br>1<br>6<br>0   | 1995/November 2012<br>October 2012<br>6 (4/0/1/0-1-specialty lab)<br>0<br>0<br>8 (1-Malaysia)<br>0  | 1982/November 2013<br>June 2013<br>572 (517/41/0/0/14-hospitals) <sup>††</sup><br>12 <sup>††</sup><br>18 <sup>††</sup><br>572 (27-Canada, Puerto Rico)<br>95%  |
| No. of employees in firm/In AP systems development, install, support<br>Provide list of client sites to potential customers on request  | 9/4<br>yes (complete list but prospective client must sign a nondisclosure agreement)   | 32/22<br>yes (complete list but prospective client must sign a nondisclosure agreement)   | 13,000+/429<br>yes (partial list; limited list of clients available as a reference)  |
| No. of user workstations in sites operating AP system<br>Range in No. of surgical pathology cases per year in installed sites<br>Range in No. of gynecologic cytology cases per year in installed sites   | 5-12 (mean, 9)<br>2,100-8,501<br>358-908  | 4-5 (mean, 4.5)<br>4,000-8,000<br>6,000-8,000   | 3-1,000+ (mean, 50)<br>2,000-900,000<br>2,000-1,000,000  |
| Programming language(s)<br>Databases and tools used<br>Word processor(s) used<br>Operating system(s)  | Visual Studio<br>DB2<br>Microsoft Word 2010<br>Windows Server 2008, IBM iOS   | Visual Basic<br>SQL, MicroFocus, RightFax<br>Microsoft<br>Microsoft   | PowerBuilder, C++, Visual Basic, C#<br>Sybase Adaptive Server Enterprise, Microsoft SQL server<br>TX Text Control (embedded), Microsoft Word<br>Windows 2008, 2012, XP, 7, Vista, Unix, AIX  |
| Features (listed as a percentage of live installs or based on availability)   |   |   |  |
| • Surgical pathology information system   | 100%  | installed   | 100%   |
| • Cytology information system   | 100%  | installed   | 95%  |
| • Autopsy information system  | 17%   | —   | 75%  |
| • Autopsy measurements and organ weights  | 17%   | —   | not available  |
| • Specimen log-in/Specimen tracking and retrieval   | 100%/100%   | —/installed   | 100%/100%  |
| • Entry of block IDs  | 100%  | installed   | 100%   |
| • Specimen labels   | 100%  | installed   | 90%  |
| • Histology slide labels  | 100%  | installed   | 95%  |
| • Bar-coded slide labels/Bar-coded cassettes  | available but not installed/available but not installed   | installed/—   | 75%/70%  |
| • Linear bar codes/Two-dimensional bar codes  | available but not installed/not available   | —/installed   | 25%/50%  |
| • Histology worksheets  | 100%  | —   | 99%  |
| • Word processing—vendor specific   | 100%  | installed   | 100%   |
| • Voice entry of gross description/Voice entry of final diagnosis   | available but not installed/available but not installed   | installed/installed   | 40%/35%  |
| • Gross and microscopic images integrated in reports  | 100%  | installed   | 60%  |
| • Electronic signature  | 100%  | installed   | 100%   |
| • Remote printing of completed reports  | 100%  | installed   | 1%   |
| • Direct fax reports  | 100%  | installed   | 95%  |
| • Web-based remote inquiry of reports   | 100%  | installed   | 11%  |
| • Physician Web access for order entry  | available but not installed   | installed   | 1%   |
| • Natural language search capability  | available but not installed   | —   | 100%   |
| • Multi-site or multi-facility-wide area network  | available but not installed   | installed   | 95%  |
| • Sound-alike retrieval of patient history  | not available   | —   | not available  |
| • Tumor registry reports/Management reports   | 20%/100%  | installed/installed   | 100%/100%  |
| • Reports sufficient to comply with CLIA '88 regulations  | 100%  | installed   | 100%   |
| • Comprehensive billing and accounts receivable   | 100%  | —   | not available  |
| • Interface to external billing system  | 100%  | installed   | 93%  |
| • Inbound result-reporting interface to receive discrete results from external lab and store them in patient record   | available but not installed   | installed   | 5%   |
| • HIS interface: admissions/discharge/transfer (ADT)  | 100%  | installed   | 97%  |
| • HIS interface: result reporting/HIS interface: incoming clinical results  | 100%/available but not installed  | installed/installed   | 99%/2%   |
| • Partin tables or Gleason score calculations   | available via company's LIS   | installed   | 15%  |
| • Synoptic reporting  | not available   | —   | 40%  |
| • Client services module  | not available   | —   | 3%   |
| • Consult management and reporting  | not available   | installed   | 50%  |
| Percentage of sites using result-reporting interfaces to external systems based on transmission of fully formatted (e.g., PDF or CDA) results   | 100%  | 1%  | 40%  |
| Software provides indexed field in each test definition for LOINC code<br>AP system supports use of SNOMED CT   | no<br>no  | yes<br>yes  | yes<br>yes   |
| System sends cancer diagnoses or surveillance data to tumor registries or public health agencies via computer-to-computer interface   | yes   | no  | yes  |
| Other lab vendors' systems to which software has an interface   | none  | none  | Epic, Eclipsys, Siemens, McKesson, Meditech, Atlas, GE Healthcare, TDS, Keane, Orchard, 4medica, Lifepoint   |
| Voice-recognition products or partners that system uses<br>Histology and cytology devices interfaced to system  | Nuance Dragon Medical<br>cassette writers, slide labelers, thermal label<br>printers, microscope cameras, scanners  | Nuance Dragon NaturallySpeaking Professional<br>none  | Nuance Dragon NaturallySpeaking<br>cassette writers, slide engravers, immunostainers,<br>grossing and microscope cameras, tracking systems   |
| Languages (other than English) offered on system  | Spanish   | none  | —  |
| Client receives copy of source code<br>User group that meets on established schedule  | optional<br>no  | no<br>yes (meets via Webinar and conference call)   | escrow<br>yes (meets in person, via Webinar, and via<br>conference call)   |
| Methods by which users can tailor AP system in their own setting  | on-site study to determine modifications<br>(implementation following customer approval)  | ad hoc query tools, user-defined interfaces, user<br>configurable   | ad hoc query tools, dictionary settings, Cerner<br>CoPathPlus report and Windows painter tools   |
| Total cost for smallest stand-alone AP system installed*<br>Total cost for largest stand-alone AP system installed*<br>Base price of integrated system, excluding AP configuration<br>Total incremental cost for smallest AP configuration installed*<br>Total incremental cost for largest AP configuration installed*<br>AP system available via ASP or cloud-based data center   | \$65,000 (annual maintenance fee, \$9,000)<br>\$150,000+ (annual maintenance fee, \$24,000+)<br>—<br>—<br>—<br>yes  | \$50,000 (annual maintenance fee, \$9,000)<br>\$110,000 (annual maintenance fee, \$19,800)<br>\$20,000<br>\$5,000 (annual maintenance fee, \$3,600)<br>\$110,000 (annual maintenance fee, \$19,800)<br>yes  | —<br>—<br>—<br>—<br>—<br>no  |
| Distinguishing features (supplied by company)   | <ul style="list-style-type: none"> <li>• low initial cost and annual support cost</li> <li>• fast implementation time</li> <li>• user-friendly system</li> </ul>                          | <ul style="list-style-type: none"> <li>• shared database with access to patient's entire history</li> <li>• flexible transcript workflow options with custom result evaluation rule ability</li> <li>• diagrammatical representation of tissue sample for anatomical location of tissue being examined</li> </ul> | <ul style="list-style-type: none"> <li>• imaging, synoptic-reporting, and specimen-tracking solutions integrated into system</li> <li>• whole-slide imaging; Canadian CCO certification; automated pathologist workload distribution/assignment</li> <li>• received December 2011 and 2012 "Best in KLAS" rating for anatomic pathology systems</li> </ul> |

\*total cost includes hardware, software, installation, and training  
Note: a dash in lieu of an answer means company did not answer question or question is not applicable

<sup>†</sup>In the 2013 AP systems guide, Cerner incorrectly listed 771 as its total number of client sites  
<sup>††</sup>sites (not contracts)

## Anatomic pathology computer systems

|   |  |  |   |
|---|--|--|---|
| Part 2 of 10  | Cerner Corp.<br>Jennifer Walker jennifer.walker@cerner.com<br>2800 Rockcreek Parkway<br>Kansas City, MO 64117<br>816-201-2854 www.cerner.com   | Clinical Information Systems<br>Sales Dept. cisupport@aol.com<br>18805 Willamette Drive<br>West Linn, OR 97068<br>503-699-9745 www.cislab.com                          | Computer Trust Corp.<br>David Liberman, MD info@ctcsurge.com<br>1 State St.<br>Boston, MA 02109-3507<br>617-557-9264 ext. 600 www.winsurge.com  |
| <i>See captodayonline.com/productguides for an interactive version of guide</i>   |  |  |   |
| Name of anatomic pathology system   | Cerner Millennium PathNet Anatomic Pathology   | CIS CPS  | WinSurge  |
| First ever/Most recent AP system install (using Dec. 2013 survey deadline)  | 1982/December 2013   | 1988/2013  | 1989/fourth quarter 2013  |
| Last major product release for featured AP system   | January 2012   | 2013   | fourth quarter 2013   |
| No. of contracts for sites operating AP system (hospitals/independent labs/clinics or group practices/other U.S. sites/foreign sites)         | 385 (338/12/0/0/35—hospitals) <sup>†</sup>   | 25 (2/18/0/0/5)  | 100 (36/64/0/0/0)   |
| • No. of contracts that went live in calendar-year 2013   | 55 <sup>†</sup>  | 4  | 5   |
| • No. of contracts signed in calendar-year 2013   | 45 <sup>†</sup>  | 5  | 4   |
| No. of sites operating AP system (No. of these sites outside U.S.)  | 385 (35—Australia, Canada, Egypt, England, Malaysia, Saudi Arabia, Singapore, United Arab Emirates)  | 25 (5—Saipan, Federated States of Micronesia)  | 121   |
| Percentage of installations that have standalone AP systems   | 5%   | 15%  | 100%  |
| No. of employees in firm/In AP systems development, install, support  | 13,000+/429  | 8/8  | —   |
| Provide list of client sites to potential customers on request  | yes (partial list; installed client site must give permission for its name to be provided for reference purposes)  | no (information is confidential)   | yes (partial list, with permission of reference sites)  |
| No. of user workstations in sites operating AP system   | not tracked  | 2–30   | 5–3,000 (mean, 28)  |
| Range in No. of surgical pathology cases per year in installed sites  | 2,000–500,000+   | 500–100,000  | 2,500–300,000   |
| Range in No. of gynecologic cytology cases per year in installed sites  | 2,000–<500,000   | 5,000–100,000  | 0–250,000   |
| Programming language(s)   | Java, C++, Visual C, C#  | Visual Basic, Delphi, Cobol  | Caché, .Net, Visual Basic, SQL  |
| Databases and tools used  | Oracle   | Microsoft SQL  | Object Caché, Crystal Reports, Microsoft Word document templates  |
| Word processor(s) used  | TX Text Control (embedded), Microsoft Word   | proprietary, Microsoft Word  | Microsoft Word, rich text controls, plain text  |
| Operating system(s)   | HP-UX, AIX, VMS  | SCO Unix, Windows  | Windows, Unix (user's choice)   |
| Features (listed as a percentage of live installs or based on availability)   |  |  |   |
| • Surgical pathology information system   | 100%   | 100%   | 100%  |
| • Cytology information system   | 85%  | 100%   | 77%   |
| • Autopsy information system  | 60%  | 10%  | 58%   |
| • Autopsy measurements and organ weights  | 60%  | available but not installed  | 58%   |
| • Specimen log-in/Specimen tracking and retrieval   | 100%/100%  | 100%/installed   | 100%/100%   |
| • Entry of block IDs  | 100%   | installed  | 100%  |
| • Specimen labels   | 100%   | 100%   | 100%  |
| • Histology slide labels  | 100%   | 100%   | 100%  |
| • Bar-coded slide labels/Bar-coded cassettes  | 50%/50%  | 100%/available but not installed   | 62%/42%   |
| • Linear bar codes/Two-dimensional bar codes  | 50%/2%   | available but not installed/available but not installed  | 50%/35%   |
| • Histology worksheets  | 100%   | 100%   | 100%  |
| • Word processing—vendor specific   | 100%   | installed  | 100%  |
| • Voice entry of gross description/Voice entry of final diagnosis   | 25%/25%  | 1%/installed   | 35%/12%   |
| • Gross and microscopic images integrated in reports  | 25%  | installed  | 85%   |
| • Electronic signature  | 100%   | 80%  | 100%  |
| • Remote printing of completed reports  | 1%   | 100%   | 85%   |
| • Direct fax reports  | 100%   | 100%   | 90%   |
| • Web-based remote inquiry of reports   | <10%   | 50%  | 60%   |
| • Physician Web access for order entry  | <10%   | 80%  | 60%   |
| • Natural language search capability  | 100%   | installed  | 100%  |
| • Multi-site or multi-facility-wide area network  | 60%  | installed  | 70%   |
| • Sound-alike retrieval of patient history  | 100%   | not available  | 100%  |
| • Tumor registry reports/Management reports   | 85%/100%   | installed/100%   | 100%/100%   |
| • Reports sufficient to comply with CLIA '88 regulations  | 100%   | 100%   | 100%  |
| • Comprehensive billing and accounts receivable   | <10%   | 80%  | 55% <sup>†</sup>  |
| • Interface to external billing system  | 100%   | 1%   | 60%   |
| • Inbound result-reporting interface to receive discrete results from external lab and store them in patient record                           | available via company's LIS  | installed  | available in June 2014  |
| • HIS interface: admissions/discharge/transfer (ADT)  | 100%   | installed  | 57%   |
| • HIS interface: result reporting/HIS interface: incoming clinical results  | 100%/not tracked   | installed/installed  | 96%/available but not installed   |
| • Partin tables or Gleason score calculations   | 40%  | not available  | 30%   |
| • Synoptic reporting  | 40%  | not available  | 100%  |
| • Client services module  | 40%  | 100%   | 100%  |
| • Consult management and reporting  | 100%   | 100%   | 100%  |
| Percentage of sites using result-reporting interfaces to external systems based on transmission of fully formatted (e.g., PDF or CDA) results | <5%  | 100%   | 45%   |
| Software provides indexed field in each test definition for LOINC code  | yes  | yes  | yes   |
| AP system supports use of SNOMED CT   | yes  | yes  | yes   |
| System sends cancer diagnoses or surveillance data to tumor registries or public health agencies via computer-to-computer interface           | yes  | yes  | yes   |
| Other lab vendors' systems to which software has an interface   | Epic, Eclipsys, Siemens, McKesson, Meditech, GE Healthcare, 4medica, Atlas   | McKesson, Medical Manager, Healthland, MediNotes, eClinicalWorks, others   | Cerner, CPSI, McKesson, Meditech, GE Healthcare, Per Sé, NextGen, HDS, IDX, Siemens, others   |
| Voice-recognition products or partners that system uses   | Nuance Dragon NaturallySpeaking, others  | Nuance Dragon NaturallySpeaking  | Nuance Dragon NaturallySpeaking Professional (special navigation macros available at no extra charge)   |
| Histology and cytology devices interfaced to system   | cassette writers, slide engravers, immunostainers, cameras   | microscopes  | slide engravers, slide writers, cassette writers, microscope cameras/TWAIN, bar-code labelers, others   |
| Languages (other than English) offered on system  | British English, French, German, Spanish   | none (no others requested)   | — (available on request)  |
| Client receives copy of source code   | escrow   | no   | no  |
| User group that meets on established schedule   | yes (meets in person, via Webinar, and via conference call)  | no   | no  |
| Methods by which users can tailor AP system in their own setting  | wraparound programming, ad hoc query tools, user-defined interfaces, dictionary settings   | —  | wraparound programming, ad hoc query tools, user-defined interfaces, dictionary settings, others  |
| Total cost for smallest stand-alone AP system installed*  | —  | \$7,500 (annual maintenance fee, \$6,000)  | \$20,000 (annual maintenance fee, \$6,000)  |
| Total cost for largest stand-alone AP system installed*   | —  | \$150,000 (annual maintenance fee, \$12,000)   | \$3,000,000 (annual maintenance fee, \$600,000)   |
| Base price of integrated system, excluding AP configuration   | —  | \$20,000   | —   |
| Total incremental cost for smallest AP configuration installed*   | —  | \$20,000 (annual maintenance fee, \$6,000)   | —   |
| Total incremental cost for largest AP configuration installed*  | —  | \$150,000 (annual maintenance fee, \$15,000)   | —   |
| AP system available via ASP or cloud-based data center  | yes  | no   | no  |
| Distinguishing features (supplied by company)   | <ul style="list-style-type: none"> <li>• over 30 years of continuous innovation in the laboratory and pathology markets</li> <li>• improved patient safety with tracking of specimens from point of origin to lab; integrated 2D scanning of materials</li> <li>• support for entire patient clinical record within a single system</li> </ul> | <ul style="list-style-type: none"> <li>• high quality; user friendly</li> <li>• willingness to customize</li> <li>• financing and leasing options available</li> </ul> | <ul style="list-style-type: none"> <li>• complete AP LIS with fully integrated bar coding, tracking, imaging, instrument interfaces, more</li> <li>• flexible and configurable; true rules-based system; real-time business intelligence executive dashboard</li> <li>• 30 years of experience; outstanding support; continuous upgrades</li> </ul> |
| *total cost includes hardware, software, installation, and training   |  |  |   |
| Note: a dash in lieu of an answer means company did not answer question or question is not applicable   |  |  |   |
| <sup>†</sup> sites (not contracts)  |  |  |   |
| <sup>†</sup> automatic charge capture and transmission to accounts receivable/billing system  |  |  |   |

Tabulation does not represent an endorsement by the College of American Pathologists.

## Anatomic pathology computer systems

| Part 3 of 10  | Cortex Medical Management Systems<br>Carrie Scott cscott@cortextmed.com<br>2107 Elliott Ave., Suite 207<br>Seattle, WA 98119<br>206-812-6981 www.cortextmed.com  | LigoLab Information Systems<br>Suren Avunjian suren@ligolab.com<br>500 N. Central Ave., Suite 930<br>Glendale, CA 91203<br>800-544-6522 www.ligolab.com   | McKesson<br>Joseph R. Stabile joseph.stabile@mcckesson.com<br>5995 Windward Parkway<br>Alpharetta, GA 30005<br>404-841-6650 www.mckesson.com/laboratory  |
|---|--|---|--|
| <i>See captodayonline.com/productguides for an interactive version of guide</i>   |  |   |  |
| Name of anatomic pathology system   | The Gold Standard  | LigoLab Agile AP/LIS <sup>†</sup>   | NovoPath <sup>†</sup>  |
| First ever/Most recent AP system install (using Dec. 2013 survey deadline)  | 1986/January 2013  | 2006/December 2013  | 2008/December 2013   |
| Last major product release for featured AP system   | June 2013  | November 2013   | January 2012   |
| No. of contracts for sites operating AP system (hospitals/independent labs/clinics or group practices/other U.S. sites/foreign sites)         | 46 (5/39/2/0/0)  | —   | 217 (35/127/54/0/1—hospital) <sup>††</sup>   |
| • No. of contracts that went live in calendar-year 2013   | 2  | 9   | 16 <sup>††</sup>   |
| • No. of contracts signed in calendar-year 2013   | 2  | —   | 19 <sup>††</sup>   |
| No. of sites operating AP system (No. of these sites outside U.S.)  | 47   | —   | 287 (1—Saudi Arabia) <sup>††</sup>   |
| Percentage of installations that have standalone AP systems   | 45%  | —   | 0  |
| No. of employees in firm/In AP systems development, install, support  | 13/5   | 25/17   | 58,000/47  |
| Provide list of client sites to potential customers on request  | yes (partial list upon approval from company's clients)  | yes (complete list but prospective client must sign a nondisclosure agreement)  | yes (partial list based on geography, bed size, case volume, etc.)   |
| No. of user workstations in sites operating AP system   | 2–62   | —   | 2–400 (mean, 26)   |
| Range in No. of surgical pathology cases per year in installed sites  | 4,000–85,000   | 5,000–240,000   | not tracked  |
| Range in No. of gynecologic cytology cases per year in installed sites  | 3,000–60,000   | 15,000–40,000   | not tracked  |
| Programming language(s)   | Visual Basic 6.0   | Java  | Microsoft Visual Studio  |
| Databases and tools used  | Microsoft SQL 2008   | Microsoft SQL, Oracle   | Microsoft SQL, Oracle  |
| Word processor(s) used  | Microsoft Word 2007  | integrated  | Microsoft Word, Acrobat Reader (user's choice)   |
| Operating system(s)   | Microsoft Windows Server 2008 R2 (Windows 2007)  | Windows, Macintosh, Linux, iOS, Android   | Microsoft Windows, Web browser based   |
| Features (listed as a percentage of live installs or based on availability)   |  |   |  |
| • Surgical pathology information system   | 100%   | installed   | installed  |
| • Cytology information system   | 80%  | installed   | installed  |
| • Autopsy information system  | 10%  | installed   | installed  |
| • Autopsy measurements and organ weights  | 10%  | installed   | installed  |
| • Specimen log-in/Specimen tracking and retrieval   | 100%/available in 2014   | installed/installed   | installed/installed  |
| • Entry of block IDs  | installed  | installed   | installed  |
| • Specimen labels   | installed  | installed   | installed  |
| • Histology slide labels  | installed  | installed   | installed  |
| • Bar-coded slide labels/Bar-coded cassettes  | installed/installed  | installed/installed   | installed/installed  |
| • Linear bar codes/Two-dimensional bar codes  | installed/installed  | installed/installed   | installed/installed  |
| • Histology worksheets  | installed  | installed   | installed  |
| • Word processing—vendor specific   | 100%   | installed   | installed  |
| • Voice entry of gross description/Voice entry of final diagnosis   | available via third party (both features)  | installed   | installed  |
| • Gross and microscopic images integrated in reports  | installed  | installed   | installed  |
| • Electronic signature  | installed  | installed   | installed  |
| • Remote printing of completed reports  | installed  | installed   | installed  |
| • Direct fax reports  | 60%  | installed   | installed  |
| • Web-based remote inquiry of reports   | 60%  | installed   | installed  |
| • Physician Web access for order entry  | not available  | installed   | installed  |
| • Natural language search capability  | 100%   | installed   | installed  |
| • Multi-site or multi-facility-wide area network  | installed  | installed   | installed  |
| • Sound-alike retrieval of patient history  | installed  | installed   | installed  |
| • Tumor registry reports/Management reports   | installed/installed  | installed/installed   | installed/installed  |
| • Reports sufficient to comply with CLIA '88 regulations  | installed  | installed   | installed  |
| • Comprehensive billing and accounts receivable   | 75%  | installed   | installed  |
| • Interface to external billing system  | installed  | installed   | installed  |
| • Inbound result-reporting interface to receive discrete results from external lab and store them in patient record                           | installed  | installed   | installed  |
| • HIS interface: admissions/discharge/transfer (ADT)  | installed  | installed   | installed  |
| • HIS interface: result reporting/HIS interface: incoming clinical results  | installed/not available  | installed/installed   | installed/installed  |
| • Partin tables or Gleason score calculations   | installed  | installed   | installed  |
| • Synoptic reporting  | installed  | installed   | installed  |
| • Client services module  | not available  | installed   | installed  |
| • Consult management and reporting  | installed  | installed   | installed  |
| Percentage of sites using result-reporting interfaces to external systems based on transmission of fully formatted (e.g., PDF or CDA) results | 85%  | —   | 50%  |
| Software provides indexed field in each test definition for LOINC code  | no   | yes   | yes  |
| AP system supports use of SNOMED CT   | yes  | earlier versions of SNOMED only   | yes  |
| System sends cancer diagnoses or surveillance data to tumor registries or public health agencies via computer-to-computer interface           | yes  | yes   | yes  |
| Other lab vendors' systems to which software has an interface   | Epic, Cerner, Meditech, eClinicalWorks, Orchard  | Cerner  | Siemens, Cerner, Epic, Meditech, CPSI, GE Healthcare, NextGen, Invision, Eclipsys, HMS   |
| Voice-recognition products or partners that system uses   | Nuance Dragon, Voicebrook  | Nuance Dragon NaturallySpeaking Medical   | Nuance Dragon NaturallySpeaking, Windows speech recognition  |
| Histology and cytology devices interfaced to system   | immunostainers, microscope cameras   | stainers, cassette/slide printers, cameras  | tracking systems, workflow analytical tools, bar-code scanners, labelers, printers, etchers, cameras, others   |
| Languages (other than English) offered on system  | none   | French, Spanish   | Latin languages supported by Windows; customizable to most languages   |
| Client receives copy of source code   | escrow   | escrow  | escrow   |
| User group that meets on established schedule   | yes (meets in person and via conference call)  | yes (meets in person and via Webinar)   | yes (meets in person, via Webinar, and via conference call)  |
| Methods by which users can tailor AP system in their own setting  | wraparound programming, ad hoc query tools, user-defined interfaces, dictionary settings, scripting  | wraparound programming, ad hoc query tools, user-defined interfaces, dictionary settings  | wraparound programming, ad hoc query tools, user-defined interfaces, dictionary settings   |
| Total cost for smallest stand-alone AP system installed*  | \$7,400 (annual maintenance fee, \$9,600)  | \$15,000 (annual maintenance fee, \$30,000)   | —  |
| Total cost for largest stand-alone AP system installed*   | \$99,000+ (annual maintenance fee, \$33,276)   | —   | —  |
| Base price of integrated system, excluding AP configuration   | —  | —   | —  |
| Total incremental cost for smallest AP configuration installed*   | —  | —   | —  |
| Total incremental cost for largest AP configuration installed*  | —  | —   | —  |
| AP system available via ASP or cloud-based data center  | yes  | yes   | yes  |
| Distinguishing features (supplied by company)   | <ul style="list-style-type: none"> <li>• 30+ years specializing in anatomic pathology reporting; integrated medical billing module available</li> <li>• customer service—customers get a response within two hours, during business hours, for support</li> <li>• committed to clients' success</li> </ul> | <ul style="list-style-type: none"> <li>• comprehensive and integrated modules: AP, CP, and molecular workflow, outreach, specimen handling, document imaging, CRM</li> <li>• no capital investment; pay per case; no licensing cost until system is up and running</li> <li>• rapid upgrade program—new features deployed to customers quarterly at no additional cost</li> </ul> | <ul style="list-style-type: none"> <li>• delivery via Android, iPad, iPhone, for increased competitiveness of lab</li> <li>• turnaround time alerts based on client preferences; sophisticated pathology reports; easy to use</li> <li>• enterprise solution for McKesson's best-of-breed LIS, McKesson Lab, and integrated platform, Paragon</li> </ul> |

\*total cost includes hardware, software, installation, and training  
Note: a dash in lieu of an answer means company did not answer question or question is not applicable

<sup>†</sup>formerly LigoLab AP/LIS

<sup>†</sup>software supplied by NovoPath

<sup>††</sup>totals incorporate software sold through NovoPath

# Anatomic pathology computer systems

|   |  |  |  |
|---|--|--|--|
| Part 4 of 10  | Medical Information Technology<br>Paul Berthiaume pberthiaume@meditech.com<br>Meditech Circle<br>Westwood, MA 02090<br>781-821-3000 www.meditech.com   | Medical Information Technology<br>Paul Berthiaume pberthiaume@meditech.com<br>Meditech Circle<br>Westwood, MA 02090<br>781-821-3000 www.meditech.com   | Medical Information Technology<br>Paul Berthiaume pberthiaume@meditech.com<br>Meditech Circle<br>Westwood, MA 02090<br>781-821-3000 www.meditech.com   |
| See captodayonline.com/productguides for an interactive version of guide  |  |  |  |
| Name of anatomic pathology system   | Meditech Anatomical Pathology—client/server  | Meditech Anatomical Pathology—Magic  | Meditech Anatomical Pathology—6.0  |
| First ever/Most recent AP system install (using Dec. 2013 survey deadline)  | 1978/October 2013  | 1978/December 2012   | 1978/October 2013  |
| Last major product release for featured AP system   | January 2013   | December 2012  | October 2012   |
| No. of contracts for sites operating AP system (hospitals/independent labs/clinics or group practices/other U.S. sites/foreign sites)         | 167 (144/—/—/—†-academic teaching, behavioral health, critical access, rehabilitation, others/23)††  | 247 (213/—/—/—†-academic teaching, behavioral health, critical access, rehabilitation, others/34)††  | 75 (69/—/—/—†-academic teaching, behavioral health, critical access, rehabilitation, others/6)††   |
| • No. of contracts that went live in calendar-year 2013   | 4††  | 0  | 15††   |
| • No. of contracts signed in calendar-year 2013   | 0  | 0  | 2††  |
| No. of sites operating AP system (No. of these sites outside U.S.)  | 423 (148—Bahamas, Canada, Ireland, Puerto Rico, United Kingdom, U.S. Virgin Islands)   | 603 (89—Bahamas, Canada, Ireland, Puerto Rico, United Kingdom, U.S. Virgin Islands)  | 121 (23—Bahamas, Canada, Ireland, Puerto Rico, United Kingdom, U.S. Virgin Islands)  |
| Percentage of installations that have standalone AP systems   | 0  | 0  | 0  |
| No. of employees in firm/In AP systems development, install, support  | 3,845/not tracked  | 3,845/not tracked  | 3,845/not tracked  |
| Provide list of client sites to potential customers on request  | —  | —  | —  |
| No. of user workstations in sites operating AP system   | not tracked  | not tracked  | not tracked  |
| Range in No. of surgical pathology cases per year in installed sites  | not tracked  | not tracked  | not tracked  |
| Range in No. of gynecologic cytology cases per year in installed sites  | not tracked  | not tracked  | not tracked  |
| Programming language(s)   | Meditech self-developed programming language   | Meditech self-developed programming language   | Meditech self-developed programming language   |
| Databases and tools used  | Meditech Database Management System  | Meditech Database Management System  | Meditech Database Management System  |
| Word processor(s) used  | Microsoft Word, Rich Text Editor   | Microsoft Word, Rich Text Editor   | Microsoft Word, Rich Text Editor   |
| Operating system(s)   | Microsoft Windows 2003/2008 SE; clients: Windows 2000 Professional, XP, XP Tablet, 7, Vista  | Microsoft Windows 2003/2008 SE; clients: Windows 2000 Professional, XP, XP Tablet, 7, Vista  | Microsoft Windows 2003/2008 SE; clients: Windows 2000 Professional, XP, XP Tablet, 7, Vista  |
| Features (listed as a percentage of live installs or based on availability)   |  |  |  |
| • Surgical pathology information system   | 100%   | 100%   | 100%   |
| • Cytology information system   | 100%   | 100%   | 100%   |
| • Autopsy information system  | 100%   | 100%   | 100%   |
| • Autopsy measurements and organ weights  | installed  | installed  | installed  |
| • Specimen log-in/Specimen tracking and retrieval   | 100%/100%  | 100%/100%  | 100%/100%  |
| • Entry of block IDs  | 100%   | 100%   | 100%   |
| • Specimen labels   | 100%   | 100%   | 100%   |
| • Histology slide labels  | 100%   | 100%   | 100%   |
| • Bar-coded slide labels/Bar-coded cassettes  | 100%/100%  | 100%/100%  | 100%/100%  |
| • Linear bar codes/Two-dimensional bar codes  | 100%/100%  | 100%/100%  | 100%/100%  |
| • Histology worksheets  | 100%   | 100%   | 100%   |
| • Word processing—vendor specific   | 100%   | 100%   | 100%   |
| • Voice entry of gross description/Voice entry of final diagnosis   | installed/installed  | installed/installed  | installed/installed  |
| • Gross and microscopic images integrated in reports  | 100%   | 100%   | 100%   |
| • Electronic signature  | 100%   | 100%   | 100%   |
| • Remote printing of completed reports  | 100%   | 100%   | 100%   |
| • Direct fax reports  | 100%   | 100%   | 100%   |
| • Web-based remote inquiry of reports   | 100%   | 100%   | 100%   |
| • Physician Web access for order entry  | 100%   | 100%   | 100%   |
| • Natural language search capability  | 100%   | 100%   | 100%   |
| • Multi-site or multi-facility—wide area network  | 100%   | 100%   | 100%   |
| • Sound-alike retrieval of patient history  | 100%   | 100%   | 100%   |
| • Tumor registry reports/Management reports   | 100%/100%  | 100%/100%  | 100%/100%  |
| • Reports sufficient to comply with CLIA '88 regulations  | installed  | installed  | installed  |
| • Comprehensive billing and accounts receivable   | installed  | installed  | installed  |
| • Interface to external billing system  | installed  | installed  | installed  |
| • Inbound result-reporting interface to receive discrete results from external lab and store them in patient record                           | installed  | installed  | installed  |
| • HIS interface: admissions/discharge/transfer (ADT)  | installed/installed  | installed/installed  | installed/installed  |
| • HIS interface: result reporting/HIS interface: incoming clinical results  | installed  | installed  | installed  |
| • Partin tables or Gleason score calculations   | installed  | installed  | installed  |
| • Synoptic reporting  | 100%   | 100%   | 100%   |
| • Client services module  | 100%   | 100%   | 100%   |
| • Consult management and reporting  | 100%   | 100%   | 100%   |
| Percentage of sites using result-reporting interfaces to external systems based on transmission of fully formatted (e.g., PDF or CDA) results | not tracked  | not tracked  | not tracked  |
| Software provides indexed field in each test definition for LOINC code  | yes  | yes  | yes  |
| AP system supports use of SNOMED CT   | yes  | yes  | yes  |
| System sends cancer diagnoses or surveillance data to tumor registries or public health agencies via computer-to-computer interface           | yes  | yes  | yes  |
| Other lab vendors' systems to which software has an interface   | Sunquest, McKesson, Siemens, others  | Sunquest, McKesson, Siemens, others  | Sunquest, McKesson, Siemens, others  |
| Voice-recognition products or partners that system uses   | Nuance Dragon NaturallySpeaking, Peter Cohen Associates (PCA)  | Nuance Dragon NaturallySpeaking, Peter Cohen Associates (PCA)  | Nuance Dragon NaturallySpeaking, Peter Cohen Associates (PCA)  |
| Histology and cytology devices interfaced to system   | —  | —  | —  |
| Languages (other than English) offered on system  | Spanish  | none   | Spanish  |
| Client receives copy of source code   | escrow   | escrow   | escrow   |
| User group that meets on established schedule   | yes (meets in person and via Webinar)  | yes (meets in person and via Webinar)  | no   |
| Methods by which users can tailor AP system in their own setting  | ad hoc query tools, user-defined interfaces, dictionary settings, customer-defined screens, desktop preferences, rules-based logic   | ad hoc query tools, user-defined interfaces, dictionary settings, customer-defined screens, desktop preferences, rules-based logic   | ad hoc query tools, user-defined interfaces, dictionary settings, customer-defined screens, desktop preferences, rules-based logic   |
| Total cost for smallest stand-alone AP system installed*  | —  | —  | —  |
| Total cost for largest stand-alone AP system installed*   | —  | —  | —  |
| Base price of integrated system, excluding AP configuration   | —  | —  | —  |
| Total incremental cost for smallest AP configuration installed*   | —  | —  | —  |
| Total incremental cost for largest AP configuration installed*  | —  | —  | —  |
| AP system available via ASP or cloud-based data center  | no   | no   | no   |
| Distinguishing features (supplied by company)   | <ul style="list-style-type: none"> <li>roles-based desktops that streamline pathology workflow</li> <li>supports user-defined searches and statistical analysis of the pathology database</li> <li>can capture and store digital images and added notations</li> </ul> | <ul style="list-style-type: none"> <li>roles-based desktops that streamline pathology workflow</li> <li>supports user-defined searches and statistical analysis of the pathology database</li> <li>can capture and store digital images and added notations</li> </ul> | <ul style="list-style-type: none"> <li>roles-based desktops that streamline pathology workflow</li> <li>supports user-defined searches and statistical analysis of the pathology database</li> <li>can capture and store digital images and added notations</li> </ul> |
| *total cost includes hardware, software, installation, and training   |  |  |  |
| Note: a dash in lieu of an answer means company did not answer question or question is not applicable   |  |  |  |
|   |  | †included in total for hospitals   | †included in total for hospitals   |
|   |  | ††individual application bookings or application licenses  | ††individual application bookings or application licenses  |

## Anatomic pathology computer systems

| Part 5 of 10  | Netlims, LLC<br>Gerald Choder gchoder@netlims.com<br>300 Frank W. Burr Blvd.<br>Teaneck, NJ 07666<br>201-894-5300 www.netlims.com   | NetSoft<br>Bill Hughes sales@netsoftusa.com<br>2795 W. Main St., Building 15<br>Snellville, GA 30078<br>678-325-2909 www.netsoftusa.com  | NovoPath<br>Richard Callahan sales@novopath.com<br>301 N. Harrison St., Suite 384<br>Princeton, NJ 08540<br>877-668-6123 www.novopath.com   |
|---|---|--|---|
| See captodayonline.com/productguides for an interactive version of guide  |   |  |   |
| Name of anatomic pathology system   | AutoAP  | IntelliPath  | NovoPath†   |
| First ever/Most recent AP system install (using Dec. 2013 survey deadline)  | 2000/August 2013  | 2001/November 2013   | 1999/December 2013  |
| Last major product release for featured AP system   | September 2013  | November 2013  | January 2012  |
| No. of contracts for sites operating AP system (hospitals/independent labs/clinics or group practices/other U.S. sites/foreign sites)         | 24 (0/5/0/0/19—hospitals, reference labs)   | 85 (8/54/22/0/1)   | 217 (35/127/54/0/1—hospital)††  |
| • No. of contracts that went live in calendar-year 2013   | 1   | 3  | 16††  |
| • No. of contracts signed in calendar-year 2013   | 0   | 4  | 19††  |
| • No. of sites operating AP system (No. of these sites outside U.S.)  | 24 (19—Israel, India)   | 109 (1—Canada)   | 287 (1—Saudi Arabia)††  |
| Percentage of installations that have standalone AP systems   | 5%  | 100%   | 100%  |
| No. of employees in firm/in AP systems development, install, support  | 120/20  | 9/9  | 47/47   |
| Provide list of client sites to potential customers on request  | yes (complete list but prospective client must sign a nondisclosure agreement)  | yes (partial list)   | yes (partial list)  |
| No. of user workstations in sites operating AP system   | 8–300 (mean, 75)  | 2–50+ (mean, 10)   | 2–400 (mean, 26)  |
| Range in No. of surgical pathology cases per year in installed sites  | 1,200–50,000  | 2,500–275,000  | 2,000–300,000   |
| Range in No. of gynecologic cytology cases per year in installed sites  | 2,000–160,000   | 12,000–75,000  | 1,000–750,000   |
| Programming language(s)   | C++, Java, Visual Basic, ASP, .Net  | Clarion, C++, .Net   | Microsoft Visual Studio   |
| Databases and tools used  | Microsoft SQL, Oracle, Caché  | Pervasive/Actian SQL   | Microsoft SQL, Oracle   |
| Word processor(s) used  | Microsoft Word  | integrated   | Microsoft Word, HTML (user's choice)  |
| Operating system(s)   | Windows, Linux, Unix  | Windows, Apple in Windows emulation  | Microsoft Windows, Web browser based  |
| Features (listed as a percentage of live installs or based on availability)   |   |  |   |
| • Surgical pathology information system   | 95%   | 100%   | 100%  |
| • Cytology information system   | 80%   | 19%  | 100%  |
| • Autopsy information system  | 60%   | 9%   | 100%  |
| • Autopsy measurements and organ weights  | 50%   | 9%   | 100%  |
| • Specimen log-in/Specimen tracking and retrieval   | 95%/100%  | 100%/100%  | 100%/100%   |
| • Entry of block IDs  | 100%  | 100%   | 100%  |
| • Specimen labels   | 90%   | 100%   | 100%  |
| • Histology slide labels  | 90%   | 100%   | 100%  |
| • Bar-coded slide labels/Bar-coded cassettes  | 90%/60%   | 100%/25%   | installed/installed   |
| • Linear bar codes/Two-dimensional bar codes  | 100%/80%  | 85%/15%  | installed/installed   |
| • Histology worksheets  | 100%  | 100%   | 100%  |
| • Word processing—vendor specific   | 100%  | 100%   | 100%  |
| • Voice entry of gross description/Voice entry of final diagnosis   | 50%/20%   | 5%/5%  | installed/installed   |
| • Gross and microscopic images integrated in reports  | 80%   | 30%  | 100%  |
| • Electronic signature  | 100%  | 100%   | 100%  |
| • Remote printing of completed reports  | 75%   | 55%  | 100%  |
| • Direct fax reports  | 90%   | 95%  | 100%  |
| • Web-based remote inquiry of reports   | 70%   | 55%  | installed   |
| • Physician Web access for order entry  | 50%   | 20%  | installed   |
| • Natural language search capability  | 0   | 100%   | 100%  |
| • Multi-site or multi-facility-wide area network  | 30%   | 30%  | 35%   |
| • Sound-alike retrieval of patient history  | 100%  | installed  | 100%  |
| • Tumor registry reports/Management reports   | 100%/100%   | 100%/100%  | 100%/100%   |
| • Reports sufficient to comply with CLIA '88 regulations  | 100%  | 100%   | 100%  |
| • Comprehensive billing and accounts receivable   | 80%   | 35%  | 25%   |
| • Interface to external billing system  | 20%   | 65%  | 100%  |
| • Inbound result-reporting interface to receive discrete results from external lab and store them in patient record                           | 50%   | installed  | installed   |
| • HIS interface: admissions/discharge/transfer (ADT)  | 80%   | 20%  | installed   |
| • HIS interface: result reporting/HIS interface: incoming clinical results  | 80%/80%   | 35%/5%   | installed/installed   |
| • Partin tables or Gleason score calculations   | 100%  | 5%   | installed   |
| • Synoptic reporting  | 80%   | 5%   | installed   |
| • Client services module  | 100%  | 5%   | 100%  |
| • Consult management and reporting  | 80%   | 100%   | 100%  |
| Percentage of sites using result-reporting interfaces to external systems based on transmission of fully formatted (e.g., PDF or CDA) results | 80%   | 55%  | 50%   |
| Software provides indexed field in each test definition for LOINC code  | yes   | no   | yes   |
| AP system supports use of SNOMED CT   | yes   | yes  | yes   |
| System sends cancer diagnoses or surveillance data to tumor registries or public health agencies via computer-to-computer interface           | yes   | yes  | yes   |
| Other lab vendors' systems to which software has an interface   | Cerner, SCC Soft Computer, Sunquest, Xifin, NovoPath  | Cerner, Medical Manager, Allscripts, GE Healthcare, Meditech, eClinicalWorks, NextGen, others  | McKesson, Siemens, Cerner, Epic, Meditech, CPSI, GE Healthcare, NextGen, Invision, Eclipsys, HMS  |
| Voice-recognition products or partners that system uses   | Nuance Dragon   | Nuance Dragon NaturallySpeaking, Voicebrook  | Nuance Dragon NaturallySpeaking, Windows speech recognition   |
| Histology and cytology devices interfaced to system   | cassette writers, slide labelers, microscope cameras  | cassette and slide markers, slide etchers, stainers and immunostainers, software-driven cameras, whole-slide imaging, label printers, others   | tracking systems, workflow analytical tools, bar-code scanners, labelers, printers, etchers, cassette writers, whole-slide image scanners, cameras, others  |
| Languages (other than English) offered on system  | Hebrew  | none   | Latin languages supported by Windows; customizable to most languages  |
| Client receives copy of source code   | escrow  | no   | escrow  |
| User group that meets on established schedule   | yes (meets via conference call)   | yes (meets via conference call)  | yes (meets via Webinar and via conference call)   |
| Methods by which users can tailor AP system in their own setting  | wraparound programming, ad hoc query tools, user-defined interfaces, dictionary settings, XML, XSL  | ad hoc query tools, dictionary settings, software switches   | wraparound programming, ad hoc query tools, user-defined interfaces, dictionary settings  |
| Total cost for smallest stand-alone AP system installed*  | \$175,000 (annual maintenance fee, \$35,000)  | —  | —   |
| Total cost for largest stand-alone AP system installed*   | \$700,000 (annual maintenance fee, \$140,000)   | —  | —   |
| Base price of integrated system, excluding AP configuration   | \$500,000   | —  | —   |
| Total incremental cost for smallest AP configuration installed*   | \$120,000 (annual maintenance fee, \$24,000)  | —  | —   |
| Total incremental cost for largest AP configuration installed*  | \$700,000 (annual maintenance fee, \$140,000)   | —  | —   |
| AP system available via ASP or cloud-based data center  | no  | yes  | yes   |
| Distinguishing features (supplied by company)   | <ul style="list-style-type: none"> <li>Windows-based system with object-oriented design that can run on most hardware/operating systems</li> <li>hundreds of configuration switches enable system to be easily tailored to any environment or work procedure</li> <li>one database for all disciplines and departments</li> </ul> | <ul style="list-style-type: none"> <li>all modules, including billing and word processing, fully integrated in user interface</li> <li>full-featured, robust system customized to client's workflow, with scalable pricing and no hidden fees</li> <li>outstanding customer care with true 24/7/365 support</li> </ul> | <ul style="list-style-type: none"> <li>delivery via Android, iPad, iPhone, for increased competitiveness of lab</li> <li>turnaround time alerts based on client preferences</li> <li>sophisticated pathology reports; easy-to-use, robust solutions for large labs</li> </ul> |
| *total cost includes hardware, software, installation, and training   |   |  |   |
| Note: a dash in lieu of an answer means company did not answer question or question is not applicable   |   |  |   |
|   |   |  | †software also marketed by McKesson   |
|   |   |  | ††totals incorporate software sold through McKesson   |

## Anatomic pathology computer systems

| Part 6 of 10  | Orchard Software<br>Kerry Foster sales@orchardsoft.com<br>701 Congressional Blvd., Suite 360<br>Carmel, IN 46032<br>800-856-1948 www.orchardsoft.com   | Pathagility<br>Mark McQuin mark@pathagility.com<br>10810 Executive Center Drive, Suite 100<br>Little Rock, AR 72211<br>888-222-2792 www.pathagility.com  | PathView Systems<br>Michael Mihalik mike@pathview.com<br>5923 E. FM 455<br>Anna, TX 75409<br>800-798-3540 www.pathview.com  |
|---|--|--|---|
| <i>See captodayonline.com/productguides for an interactive version of guide</i>   |  |  |   |
| Name of anatomic pathology system   | Orchard Pathology  | WorkPath   | Progeny   |
| First ever/Most recent AP system install (using Dec. 2013 survey deadline)<br>Last major product release for featured AP system<br>No. of contracts for sites operating AP system (hospitals/independent labs/clinics or group practices/other U.S. sites/foreign sites)<br>• No. of contracts that went live in calendar-year 2013<br>• No. of contracts signed in calendar-year 2013<br>No. of sites operating AP system (No. of these sites outside U.S.)<br>Percentage of installations that have standalone AP systems | 2006/November 2013<br>March 2012<br>77 (15/30/26/6—molecular medicine, veterinary medicine, genetics, department of health, research/0)<br>6<br>8<br>80<br>20%   | 2008/December 2013<br>December 2013<br>15 (0/11/4/0/0)<br>—<br>4<br>15<br>0  | 1990/June 2011<br>December 2013<br>3 (1/1/1/0/0)<br>0<br>0<br>9<br>100%   |
| No. of employees in firm/In AP systems development, install, support<br>Provide list of client sites to potential customers on request  | 215/71<br>yes (partial list)   | —<br>yes (partial list)  | 5/5<br>yes (complete list, but prospects are asked to not contact clients unless PathView is in final round of selection process)   |
| No. of user workstations in sites operating AP system<br>Range in No. of surgical pathology cases per year in installed sites<br>Range in No. of gynecologic cytology cases per year in installed sites   | 5–55 (mean, 10)<br>8,000–100,000<br>11,000–110,000   | 2–40 (mean, 13)<br>1,000–10,000<br>10,000–50,000   | 25–70 (mean, 35)<br>14,500–70,000<br>14,000–67,000  |
| Programming language(s)<br>Databases and tools used<br>Word processor(s) used<br>Operating system(s)  | 4D, Java, C++, HTML<br>4D, SQL<br>customized word processing<br>Windows XP Professional, Vista, 7, 2008 server, Web browser based  | Python, Java<br>MySQL, PostgreSQL, SQLite, Oracle<br>TinyMCE; others can be incorporated<br>Linux, Windows, Macintosh, BSD, Solaris, others  | InterSystems Caché ObjectScript, .Net, Visual Basic, C#<br>InterSystems Caché, Crystal Reports<br>Microsoft Word 2003–2013<br>Windows 8.1, 7, XP, Server 2008, Server 2003  |
| Features (listed as a percentage of live installs or based on availability)   |  |  |   |
| • Surgical pathology information system   | 100%   | 100%   | 100%  |
| • Cytology information system   | 90%  | 30%  | 100%  |
| • Autopsy information system  | installed  | available but not installed  | 100%  |
| • Autopsy measurements and organ weights  | installed  | available but not installed  | 100%  |
| • Specimen log-in/Specimen tracking and retrieval   | 100%/100%  | 100%/100%  | 100%/100%   |
| • Entry of block IDs  | 100%   | 100%   | 100%  |
| • Specimen labels   | 100%   | 100%   | 100%  |
| • Histology slide labels  | 90%  | 50%  | 100%  |
| • Bar-coded slide labels/Bar-coded cassettes  | 100%/50%   | 25%/25%  | 100%/100%   |
| • Linear bar codes/Two-dimensional bar codes  | 100%/50%   | 25%/25%  | 100%/100%   |
| • Histology worksheets  | 100%   | 50%  | 100%  |
| • Word processing—vendor specific   | 100%   | 100%   | not available   |
| • Voice entry of gross description/Voice entry of final diagnosis   | installed/installed  | 25%/25%  | 100%/100%   |
| • Gross and microscopic images integrated in reports  | 50%  | 100%   | 100%  |
| • Electronic signature  | 100%   | 100%   | 100%  |
| • Remote printing of completed reports  | 80%  | 100%   | 100%  |
| • Direct fax reports  | 100%   | 100%   | 100%  |
| • Web-based remote inquiry of reports   | 80%  | 100%   | 100%  |
| • Physician Web access for order entry  | 80%  | 50%  | available but not installed   |
| • Natural language search capability  | not available  | available but not installed  | 100%  |
| • Multi-site or multi-facility-wide area network  | installed  | 50%  | 100%  |
| • Sound-alike retrieval of patient history  | not available  | available but not installed  | not available   |
| • Tumor registry reports/Management reports   | installed/100%   | 25%/100%   | 100%/100%   |
| • Reports sufficient to comply with CLIA '88 regulations  | 100%   | 100%   | 100%  |
| • Comprehensive billing and accounts receivable   | not available  | available via third party  | not available   |
| • Interface to external billing system  | 90%  | 100%   | 100%  |
| • Inbound result-reporting interface to receive discrete results from external lab and store them in patient record   | —  | 25%  | 100%  |
| • HIS interface: admissions/discharge/transfer (ADT)  | 100%   | 25%  | 100%  |
| • HIS interface: result reporting/HIS interface: incoming clinical results  | 80%/100%   | 25%/25%  | 100%/33%  |
| • Partin tables or Gleason score calculations   | 100%   | 25%  | not available   |
| • Synoptic reporting  | 100%   | 25%  | 67%   |
| • Client services module  | 30%  | 100%   | 100%  |
| • Consult management and reporting  | 100%   | 50%  | 100%  |
| Percentage of sites using result-reporting interfaces to external systems based on transmission of fully formatted (e.g., PDF or CDA) results   | 50%  | 75%  | 100%  |
| Software provides indexed field in each test definition for LOINC code  | yes  | no   | yes   |
| AP system supports use of SNOMED CT   | yes  | no   | yes   |
| System sends cancer diagnoses or surveillance data to tumor registries or public health agencies via computer-to-computer interface   | yes  | yes  | yes   |
| Other lab vendors' systems to which software has an interface   | McKesson, GE Healthcare, Siemens, Cerner, Healthland, QuadraMed, Meditech, Allscripts, Sage, e-MDs, Epic, others   | Cerner, Small Business Computers of New England, Sunquest, others  | Epic, proprietary, client-developed LIS, Cerner, Sunquest, EasyPath, Meditech, Siemens  |
| Voice-recognition products or partners that system uses   | Nuance Dragon NaturallySpeaking, Voicebrook  | Quickscribe  | Nuance Dragon NaturallySpeaking   |
| Histology and cytology devices interfaced to system   | cameras, label printers, slide readers, slide stainers, immunostainers, cassette printers, others  | imagers, cassette writers, screening systems, microscope cameras, slide engravers, immunostainers, bar-code scanners, others   | cassette labelers, dictation systems, slide printers, immunostainers, automated screening systems   |
| Languages (other than English) offered on system  | none   | none   | none  |
| Client receives copy of source code   | escrow   | no   | escrow  |
| User group that meets on established schedule   | yes (meets in person, via Webinar, and via conference call)  | yes (meets via Webinar)  | yes (meets in person and via conference call)   |
| Methods by which users can tailor AP system in their own setting  | wraparound programming, ad hoc query tools, user-defined interfaces, dictionary settings, report creation  | wraparound programming, ad hoc query tools, user-defined interfaces, dictionary settings   | ad hoc query tools, dictionary settings; no need for user to do tailoring as PathView provides service  |
| Total cost for smallest stand-alone AP system installed*  | \$80,000 (annual maintenance fee, 12%)   | \$1,000 monthly (annual maintenance fee included)  | —   |
| Total cost for largest stand-alone AP system installed*   | \$290,000 (annual maintenance fee, 12%)  | \$10,000 monthly (annual maintenance fee included)   | —   |
| Base price of integrated system, excluding AP configuration   | —  | included   | —   |
| Total incremental cost for smallest AP configuration installed*   | \$46,000 (annual maintenance fee, 12%)   | \$1,000+ monthly (annual maintenance fee included)   | —   |
| Total incremental cost for largest AP configuration installed*  | \$200,000 (annual maintenance fee, 12%)  | \$10,000 monthly (annual maintenance fee included)   | —   |
| AP system available via ASP or cloud-based data center  | no   | yes  | no  |
| Distinguishing features (supplied by company)   | <ul style="list-style-type: none"> <li>• single, all-inclusive system that uses same database for clinical, cytology, molecular, AP, and more</li> <li>• image-management tools to link digital images, annotated diagrams, and scanned documents to case worksheets and incorporate them in patient reports</li> <li>• report data is structured for standardization and synoptic reporting and stored in discrete data fields</li> </ul> | <ul style="list-style-type: none"> <li>• software-as-a-service (SaaS)—portability, fast implementation, low total cost of ownership</li> <li>• specialize in generating presentable, marketable custom reports</li> <li>• full menu of integrated connectivity and distribution options, including instrument/device interfacing, EHR interfacing, more</li> </ul> | <ul style="list-style-type: none"> <li>• fast, flexible, and easy to use; easy as a tablet and as functional as you can imagine</li> <li>• built-in material tracking, QA, and QC monitoring throughout; free text, discrete, and synoptic resulting</li> <li>• proprietary workflow engine allows tailoring to support any client and any specimen type</li> </ul> |
| *total cost includes hardware, software, installation, and training<br>Note: a dash in lieu of an answer means company did not answer question or question is not applicable  |  |  |   |

Tabulation does not represent an endorsement by the College of American Pathologists.

# Anatomic pathology computer systems

Online  
Now

Instrument  
and  
software  
system  
product  
guides  
online

CAP TODAY  
INTERACTIVE  
PRODUCT  
GUIDES

Anatomic pathology  
computer systems

Billing/accounts  
receivable systems

Blood bank  
information systems

Laboratory information systems

Laboratory-provider  
links software

Middleware systems

Positive patient  
identification products

Automated immunoassay

Automated molecular platforms

Bedside glucose testing systems

Chemistry analyzers

Coagulation analyzers

Hematology analyzers

In vitro blood gas analyzers

Laboratory automation  
systems and workcells

Next-generation sequencing

GO TO:  
captodayonline.com/  
productguides

|  |   |   |
|--|---|---|
| Part 7 of 10   | PathX, a division of PIMS<br>Chris Hazelwood hazelwoodc@pathxlis.com<br>5755 Hoover Blvd.<br>Tampa, FL 33634<br>866-944-0404 www.pathxlis.com   | Psyche Systems Corp.<br>Lisa-Jean Clifford lj@psychesystems.com<br>25 Birch St., Building B<br>Milford, MA 01757<br>800-345-1514 www.psychesystems.com  |
| <i>See captodayonline.com/productguides for an interactive version of guide</i>  |   |   |
| Name of anatomic pathology system  | PathX   | WindoPath   |
| First ever/Most recent AP system install (using Dec. 2013 survey deadline)   | 2004/December 2013  | 1983/November 2013  |
| Last major product release for featured AP system  | December 2013   | January 2013  |
| No. of contracts for sites operating AP system (hospitals/independent labs/clinics or group practices/other U.S. sites/foreign sites)  | 21 (2/5/14/0/0)   | 247 (60/90/11/0/86)   |
| • No. of contracts that went live in calendar-year 2013  | 7   | 8   |
| • No. of contracts signed in calendar-year 2013  | 7   | 13  |
| No. of sites operating AP system (No. of these sites outside U.S.)   | 31  | 234 (86–Italy, Germany, Austria, Puerto Rico)   |
| Percentage of installations that have standalone AP systems  | 100%  | 27% in U.S./87% international   |
| No. of employees in firm/in AP systems development, install, support   | 72/14   | 45/36   |
| Provide list of client sites to potential customers on request   | yes (partial list; references of current clientele with comparable volumes to that of prospective client)   | yes   |
| No. of user workstations in sites operating AP system  | 1–32  | 1–500 (mean, 25)  |
| Range in No. of surgical pathology cases per year in installed sites   | 6,000–65,000  | 1,000–100,000+  |
| Range in No. of gynecologic cytology cases per year in installed sites   | 750–3,000   | 0–30,000  |
| Programming language(s)  | C#, XAML (WPF)  | Visual Basic, Visual Basic .Net, SmallTalk  |
| Databases and tools used   | Microsoft SQL   | Microsoft SQL Server 7.0, 2000, BrioQuery/Hyperion report writer, RightFax  |
| Word processor(s) used   | Microsoft Word  | integrated, nonproprietary  |
| Operating system(s)  | Windows 8, 7, Vista, XP, Macintosh OS X, Linux  | Windows NT, 95, 98, 2000, XP, 7   |
| Features (listed as a percentage of live installs or based on availability)  |   |   |
| • Surgical pathology information system  | 100%  | 100%  |
| • Cytology information system  | installed   | 85%   |
| • Autopsy information system   | not available   | installed   |
| • Autopsy measurements and organ weights   | not available   | installed   |
| • Specimen log-in/Specimen tracking and retrieval  | 100%/100%   | 100%/installed  |
| • Entry of block IDs   | 100%  | 100%  |
| • Specimen labels  | 100%  | 100%  |
| • Histology slide labels   | 100%  | 90%   |
| • Bar-coded slide labels/Bar-coded cassettes   | installed/installed   | installed/installed   |
| • Linear bar codes/Two-dimensional bar codes   | installed/installed   | installed/installed   |
| • Histology worksheets   | installed   | 100%  |
| • Word processing—vendor specific  | 100%  | 100%  |
| • Voice entry of gross description/Voice entry of final diagnosis  | available via third party/available via third party   | installed/installed   |
| • Gross and microscopic images integrated in reports   | 100%  | 75%   |
| • Electronic signature   | 100%  | 100%  |
| • Remote printing of completed reports   | 100%  | installed   |
| • Direct fax reports   | 100%  | 90%   |
| • Web-based remote inquiry of reports  | 100%  | installed   |
| • Physician Web access for order entry   | installed   | installed   |
| • Natural language search capability   | installed   | 100%  |
| • Multi-site or multi-facility—wide area network   | installed   | installed   |
| • Sound-alike retrieval of patient history   | not available   | 100%  |
| • Tumor registry reports/Management reports  | installed/100%  | installed/100%  |
| • Reports sufficient to comply with CLIA '88 regulations   | 100%  | 100%  |
| • Comprehensive billing and accounts receivable  | available via third party   | available but not installed   |
| • Interface to external billing system   | 100%  | installed   |
| • Inbound result-reporting interface to receive discrete results from external lab and store them in patient record  | 100%  | installed   |
| • HIS interface: admissions/discharge/transfer (ADT)   | 100%  | 80%   |
| • HIS interface: result reporting/HIS interface: incoming clinical results   | 100%/not available  | 80%/35%   |
| • Partin tables or Gleason score calculations  | 100%  | installed   |
| • Synoptic reporting   | not available   | installed   |
| • Client services module   | 100%  | installed   |
| • Consult management and reporting   | 100%  | 100%  |
| Percentage of sites using result-reporting interfaces to external systems based on transmission of fully formatted (e.g., PDF or CDA) results                                | 80%   | 30%   |
| Software provides indexed field in each test definition for LOINC code   | yes   | yes   |
| AP system supports use of SNOMED CT  | no  | yes   |
| System sends cancer diagnoses or surveillance data to tumor registries or public health agencies via computer-to-computer interface  | yes   | yes   |
| Other lab vendors' systems to which software has an interface  | Emdeon, eClinicalWorks, NextGen, NextTech, Aprima, others   | Siemens, McKesson, Meditech, Allscripts, Cerner, Sunquest, others   |
| Voice-recognition products or partners that system uses  | M*Modal, Nuance Dragon  | Nuance Dragon NaturallySpeaking   |
| Histology and cytology devices interfaced to system  | digital slide scanner, immunostainers, cassette printers, microscope cameras, label printers, specimen-tracking systems   | cassette slide labelers, immunohistochemistry stainers, others  |
| Languages (other than English) offered on system   | none  | Spanish, Italian, German, Portuguese; all non-special character languages   |
| Client receives copy of source code  | no  | escrow  |
| User group that meets on established schedule  | yes (meets via Webinar and via conference call)   | yes (meets in person, via Webinar, and via conference call)   |
| Methods by which users can tailor AP system in their own setting   | ad hoc query tools, user-defined interfaces, dictionary settings  | ad hoc query tools, user-defined interfaces, dictionary settings  |
| Total cost for smallest stand-alone AP system installed*   | \$4,500 (annual maintenance fee, \$450)   | \$35,000 (annual maintenance fee, \$4,800)  |
| Total cost for largest stand-alone AP system installed*  | \$29,000 (annual maintenance fee, \$2,900)  | \$1,600,000 (annual maintenance fee, \$15,000)  |
| Base price of integrated system, excluding AP configuration  | —   | —   |
| Total incremental cost for smallest AP configuration installed*  | —   | —   |
| Total incremental cost for largest AP configuration installed*   | —   | —   |
| AP system available via ASP or cloud-based data center   | yes   | yes   |
| Distinguishing features (supplied by company)  | <ul style="list-style-type: none"> <li>• iPhone/iPad/mobile app with user-friendly access to system for case editing, client review, more</li> <li>• multi-path results distribution included in base installation, including EMR interfacing, fax, e-mail, Web site, remote printing</li> <li>• integrated QR bar-coding and OCR for scanning/retrieval/location of patient documents, jars, cassettes, slides, reports</li> </ul> | <ul style="list-style-type: none"> <li>• easy to use; customized to fit the lab's specific needs/specialty at a competitive price</li> <li>• dynamic customizable reports and final results management for operational snapshots</li> <li>• interfaces to HIS, EMR, instruments/devices, others; flow cytometry; cytogenetics; molecular diagnostics; immunohistochemistry</li> </ul> |
| *total cost includes hardware, software, installation, and training<br>Note: a dash in lieu of an answer means company did not answer question or question is not applicable |   |   |

Tabulation does not represent an endorsement by the College of American Pathologists.

## Anatomic pathology computer systems

|  |   |   |  |
|--|---|---|--|
| Part 8 of 10   | <p>SCC Soft Computer<br/>                 Ellie Vahman ellie@softcomputer.com<br/>                 5400 Tech Data Drive<br/>                 Clearwater, FL 33760<br/>                 800-763-8352 www.softcomputer.com</p>  | <p>SimpleLIMS<br/>                 Kannan kannan@simplelims.com<br/>                 330 A St., #55<br/>                 San Diego, CA 92101<br/>                 858-227-4584 www.simplelims.com</p>   | <p>Small Business Computers of New England<br/>                 Matt Klein matt_klein@apeasy.com<br/>                 62 Lowell St., Suite 3<br/>                 Manchester, NH 03101<br/>                 800-647-2263/603-695-9090 www.apeasy.com</p>   |
| See captodayonline.com/productguides for an interactive version of guide   |   |   |  |
| Name of anatomic pathology system  | SoftPath  | AP-SimpleLIMS   | AP Easy  |
| First ever/Most recent AP system install (using Dec. 2013 survey deadline)   | 1993/December 2013  | 2012/November 2013  | 1989/December 2013   |
| Last major product release for featured AP system  | November 2013   | May 2013  | 2008   |
| No. of contracts for sites operating AP system (hospitals/independent labs/clinics or group practices/other U.S. sites/foreign sites)  | 157 (127/10/2/0/18—universities, hospitals, regional health authorities)  | 16 (0/6/0/0/10)   | 477 (49/225/196/0/7—hospitals, independent labs)   |
| • No. of contracts that went live in calendar-year 2013  | 6   | 8   | 28   |
| • No. of contracts signed in calendar-year 2013  | 9   | 8   | 30   |
| No. of sites operating AP system (No. of these sites outside U.S.)   | 492 (78—Canada, Jamaica)  | 16 (10—India)   | 477 (7—Ireland, New Zealand, Canada, Venezuela, Saudi Arabia, Australia)   |
| Percentage of installations that have standalone AP systems  | 3%  | 100%  | 100%   |
| No. of employees in firm/In AP systems development, install, support   | 1,800/250   | 12/8  | 11/9   |
| Provide list of client sites to potential customers on request   | yes (partial list)  | yes (partial list, if client has agreed to disclose)  | yes (partial list, with client approval)   |
| No. of user workstations in sites operating AP system  | 5–100   | 3–80  | 1–118 (mean, 7)  |
| Range in No. of surgical pathology cases per year in installed sites   | 2,000–100,000   | 100–12,000  | 1,000–120,000  |
| Range in No. of gynecologic cytology cases per year in installed sites   | 2,000–100,000   | —   | 1,000–75,000   |
| Programming language(s)  | C, C++, .Net  | Python, PHP   | FileMaker Pro  |
| Databases and tools used   | Oracle  | SQL, NoSQL  | FileMaker Pro  |
| Word processor(s) used   | Microsoft Word, Text Editor (embedded)  | built in  | integrated in FileMaker Pro  |
| Operating system(s)  | Unix (IBM AIX), Microsoft Windows   | browser-based client, Linux servers   | Windows 8, 7, XP, Vista, Macintosh OS X  |
| Features (listed as a percentage of live installs or based on availability)  |   |   |  |
| • Surgical pathology information system  | 100%  | 100%  | 100%   |
| • Cytology information system  | 50%   | 100%  | 100%   |
| • Autopsy information system   | 50%   | —   | installed  |
| • Autopsy measurements and organ weights   | 50%   | —   | installed  |
| • Specimen log-in/Specimen tracking and retrieval  | 100%/100%   | 100%/100%   | 100%/100%  |
| • Entry of block IDs   | 100%  | 100%  | 100%   |
| • Specimen labels  | 100%  | 100%  | 100%   |
| • Histology slide labels   | 100%  | 100%  | 100%   |
| • Bar-coded slide labels/Bar-coded cassettes   | 100%/100%   | 100%/100%   | installed/installed  |
| • Linear bar codes/Two-dimensional bar codes   | 100%/100%   | 100%/100%   | installed/installed  |
| • Histology worksheets   | available but not installed   | 100%  | 100%   |
| • Word processing—vendor specific  | 100%  | 100%  | —  |
| • Voice entry of gross description/Voice entry of final diagnosis  | installed/installed   | —   | installed/installed  |
| • Gross and microscopic images integrated in reports   | installed   | 100%  | 100%   |
| • Electronic signature   | installed   | 100%  | 100%   |
| • Remote printing of completed reports   | installed   | 100%  | installed  |
| • Direct fax reports   | installed   | 20%   | installed  |
| • Web-based remote inquiry of reports  | installed   | 100%  | installed  |
| • Physician Web access for order entry   | installed   | 100%  | installed  |
| • Natural language search capability   | 100%  | 100%  | 100%   |
| • Multi-site or multi-facility-wide area network   | installed   | 100%  | installed  |
| • Sound-alike retrieval of patient history   | installed   | 100%  | 100%   |
| • Tumor registry reports/Management reports  | installed/100%  | 100%/100%   | installed/100%   |
| • Reports sufficient to comply with CLIA '88 regulations   | 100%  | 100%  | 100%   |
| • Comprehensive billing and accounts receivable  | installed   | 100%  | available via third party  |
| • Interface to external billing system   | installed   | 100%  | installed  |
| • Inbound result-reporting interface to receive discrete results from external lab and store them in patient record  | installed   | 100%  | installed  |
| • HIS interface: admissions/discharge/transfer (ADT)   | installed   | 100%  | installed  |
| • HIS interface: result reporting/HIS interface: incoming clinical results   | installed/installed   | 100%/100%   | installed/installed  |
| • Partin tables or Gleason score calculations  | installed   | 100%  | installed  |
| • Synoptic reporting   | installed   | 100%  | installed  |
| • Client services module   | installed   | 100%  | installed  |
| • Consult management and reporting   | installed   | 100%  | 100%   |
| Percentage of sites using result-reporting interfaces to external systems based on transmission of fully formatted (e.g., PDF or CDA) results                                | 100%  | 100%  | 60%  |
| Software provides indexed field in each test definition for LOINC code   | yes   | yes   | no   |
| AP system supports use of SNOMED CT  | yes   | yes   | no   |
| System sends cancer diagnoses or surveillance data to tumor registries or public health agencies via computer-to-computer interface  | yes   | yes   | yes  |
| Other lab vendors' systems to which software has an interface  | Allscripts, Cerner, McKesson, Epic, Siemens, GE Healthcare, QuadraMed, Meditech, Keane, others  | —   | Allscripts, CPSI, Medisys, eClinicalWorks, Orchard, Halfpenny Technologies, McKesson, GE Healthcare, NextTech, MediNotes, others   |
| Voice-recognition products or partners that system uses  | Voicebrook, Nuance Dragon NaturallySpeaking, eScription, TalkStation, others  | Nuance Dragon, Macintosh OS, Chrome voice engine  | Nuance Dragon, others  |
| Histology and cytology devices interfaced to system  | cassette/slide etchers, slide stainers, whole-slide imaging systems, microscope cameras, document scanners, others  | microscopes   | label printers, slide labelers/engravers, cassette markers, digital cameras  |
| Languages (other than English) offered on system   | French  | —   | none   |
| Client receives copy of source code  | escrow  | escrow  | yes  |
| User group that meets on established schedule  | yes (meets in person, via Webinar, and via conference call)   | no  | no   |
| Methods by which users can tailor AP system in their own setting   | wraparound programming, ad hoc query tools, user-defined interfaces, dictionary settings, API/Web services  | user-defined interfaces, dictionary settings  | ad hoc query tools; user-configurable preferences and vendor-provided customization included with annual full-support option   |
| Total cost for smallest stand-alone AP system installed*   | —   | \$10,000 per month (no annual maintenance fee)  | \$6,000 (annual maintenance fee, \$1,000)  |
| Total cost for largest stand-alone AP system installed*  | —   | \$25,000 per month (no annual maintenance fee)  | \$125,000 (annual maintenance fee, \$4,000)  |
| Base price of integrated system, excluding AP configuration  | —   | 0   | —  |
| Total incremental cost for smallest AP configuration installed*  | —   | \$10,000 per month (no annual maintenance fee)  | —  |
| Total incremental cost for largest AP configuration installed*   | —   | \$25,000 per month (no annual maintenance fee)  | —  |
| AP system available via ASP or cloud-based data center   | yes   | yes   | no   |
| Distinguishing features (supplied by company)  | <ul style="list-style-type: none"> <li>• supports centralized accessioning and rules-based auto-routing of testing across all laboratory and genetics disciplines</li> <li>• automated template-based reporting significantly reduces turnaround time for complex multi-discipline reports/interpretations</li> <li>• built-in workflow engine; customizable screens by role; supports high degree of automation</li> </ul> | <ul style="list-style-type: none"> <li>• costing, inventory system lets users know how much profit every test contributes to their bottom line</li> <li>• new feature requests delivered in one week or less</li> <li>• browser-based, state-of-the-art server-side technology</li> </ul> | <ul style="list-style-type: none"> <li>• tailored solution, with ongoing tailoring part of technical support at a fixed price</li> <li>• low-cost, scalable, robust, easy-to-use solution for start-up, small-, and medium-sized labs</li> <li>• clients are assigned dedicated developers that provide direct access to system's functions, features, and capabilities</li> </ul> |
| *total cost includes hardware, software, installation, and training<br>Note: a dash in lieu of an answer means company did not answer question or question is not applicable |   |   |  |

Tabulation does not represent an endorsement by the College of American Pathologists.

## Anatomic pathology computer systems

| Part 9 of 10  | Sunquest Information Systems<br>Auna Emery auna.emery@sunquestinfo.com<br>250 S. Williams Blvd.<br>Tucson, AZ 85711<br>520-570-2000 www.sunquestinfo.com   | Sunquest Information Systems<br>Auna Emery auna.emery@sunquestinfo.com<br>250 S. Williams Blvd.<br>Tucson, AZ 85711<br>520-570-2000 www.sunquestinfo.com  | Technidata America Medical Software<br>Yves Charron yves.charron@technidata-web.com<br>2 E. Congress St., Suite 900<br>Tucson, AZ 85701<br>514-270-7770 ext. 803 www.technidata-web.com       |
|---|--|---|---|
| See captodayonline.com/productguides for an interactive version of guide  |  |   |   |
| Name of anatomic pathology system   | Sunquest CoPathPlus <sup>†</sup>   | Sunquest PowerPath <sup>†</sup>   | TD-Synergy histology/cytology module <sup>†</sup>   |
| First ever/Most recent AP system install (using Dec. 2013 survey deadline)  | 1982/—   | 1982/November 2013  | 1974/December 2013  |
| Last major product release for featured AP system   | September 2013   | December 2012   | June 2013   |
| No. of contracts for sites operating AP system (hospitals/independent labs/clinics or group practices/other U.S. sites/foreign sites)         | 250  | 245 (195/46/0/4)  | 197 (3/1/0/0/193—hospitals, independent labs)   |
| • No. of contracts that went live in calendar-year 2013   | —  | 1   | 1   |
| • No. of contracts signed in calendar-year 2013   | 1  | 2   | 1   |
| No. of sites operating AP system (No. of these sites outside U.S.)  | 550 (installs in Canada, United Kingdom, United Arab Emirates, Ireland, Scotland, Denmark)   | 244   | 204 (201—Canada, France, Greece, Hong Kong, Kuwait, Malaysia, Philippines, Singapore, Taiwan, United Kingdom)   |
| Percentage of installations that have standalone AP systems   | 1%   | 30%   | 45%   |
| No. of employees in firm/In AP systems development, install, support  | 630/500 (included in LIS division)   | 630/500 (included in LIS division)  | 207/120   |
| Provide list of client sites to potential customers on request  | yes (partial list)   | yes (partial list)  | yes (partial list)  |
| No. of user workstations in sites operating AP system   | 5–280 (mean, 40)   | 5–620 (mean, 40)  | 5–200 (mean, 21)  |
| Range in No. of surgical pathology cases per year in installed sites  | 10,000–600,000   | 1,500–150,000   | 5,000–120,000   |
| Range in No. of gynecologic cytology cases per year in installed sites  | 0–600,000  | 5,000–350,000   | 20,000–250,000  |
| Programming language(s)   | C, Visual Basic, PowerBuilder  | C#, .Net, Borland Delphi  | C++, .Net   |
| Databases and tools used  | Sybase, PowerBuilder   | Microsoft SQL   | Microsoft SQL server, Oracle  |
| Word processor(s) used  | Microsoft Word 2003  | Microsoft Word  | Microsoft Word  |
| Operating system(s)   | servers: AIX, Windows 2003; client: Windows XP, 2000   | Windows   | Windows   |
| Features (listed as a percentage of live installs or based on availability)   |  |   |   |
| • Surgical pathology information system   | 100%   | 100%  | 100%  |
| • Cytology information system   | 90%  | installed   | 90%   |
| • Autopsy information system  | 100%   | installed   | 65%   |
| • Autopsy measurements and organ weights  | 100%   | installed   | 10%   |
| • Specimen log-in/Specimen tracking and retrieval   | 100%/20%   | 100%/100%   | 75%/50%   |
| • Entry of block IDs  | 100%   | 100%  | 100%  |
| • Specimen labels   | 100%   | 100%  | 100%  |
| • Histology slide labels  | 80%  | 100%  | 99%   |
| • Bar-coded slide labels/Bar-coded cassettes  | 80%/80%  | installed/50%   | 99%/15%   |
| • Linear bar codes/Two-dimensional bar codes  | 80%/20%  | installed/installed   | 94%/5%  |
| • Histology worksheets  | installed  | 100%  | 85%   |
| • Word processing—vendor specific   | 100%   | 100%  | 100%  |
| • Voice entry of gross description/Voice entry of final diagnosis   | 20%/installed  | installed/installed   | 20%/20%   |
| • Gross and microscopic images integrated in reports  | 30%  | 30%   | installed   |
| • Electronic signature  | 100%   | 100%  | 100%  |
| • Remote printing of completed reports  | installed  | 100%  | 100%  |
| • Direct fax reports  | 95%  | 100%  | 90%   |
| • Web-based remote inquiry of reports   | installed  | 18%   | 30%   |
| • Physician Web access for order entry  | available via company's LIS  | not available   | 15%   |
| • Natural language search capability  | 100%   | 100%  | 100%  |
| • Multi-site or multi-facility-wide area network  | 35%  | 50%   | 50%   |
| • Sound-alike retrieval of patient history  | not available  | 100%  | not available   |
| • Tumor registry reports/Management reports   | installed/100%   | 100%/100%   | 15%/100%  |
| • Reports sufficient to comply with CLIA '88 regulations  | 100%   | 100%  | 30%   |
| • Comprehensive billing and accounts receivable   | available via company's LIS  | 100%  | 45%   |
| • Interface to external billing system  | 95%  | 100%  | 25%   |
| • Inbound result-reporting interface to receive discrete results from external lab and store them in patient record                           | —  | 98%   | available but not installed   |
| • HIS interface: admissions/discharge/transfer (ADT)  | 90%  | 98%   | 90%   |
| • HIS interface: result reporting/HIS interface: incoming clinical results  | 90%/installed  | 8%/1%   | 85%/installed   |
| • Partin tables or Gleason score calculations   | available via third party  | installed   | 10%   |
| • Synoptic reporting  | installed  | 100%  | 35%   |
| • Client services module  | installed  | 85%   | 2%  |
| • Consult management and reporting  | 90%  | —   | 100%  |
| Percentage of sites using result-reporting interfaces to external systems based on transmission of fully formatted (e.g., PDF or CDA) results | 5%   | not tracked   | 15%   |
| Software provides indexed field in each test definition for LOINC code  | yes  | yes   | yes   |
| AP system supports use of SNOMED CT   | yes  | yes   | yes   |
| System sends cancer diagnoses or surveillance data to tumor registries or public health agencies via computer-to-computer interface           | yes  | yes   | yes   |
| Other lab vendors' systems to which software has an interface   | Epic, McKesson, Cerner, Siemens, GE Healthcare, QuadraMed, Allscripts, Meditech, others  | Allscripts, Cerner, Siemens, McKesson, Meditech, GE Healthcare, 4medica, Epic, others   | SCC Soft Computer, Keane, Allscripts, Lawson, Meditech, GE Healthcare, Siemens, QuadraMed   |
| Voice-recognition products or partners that system uses   | Nuance Dragon NaturallySpeaking  | Nuance Dragon NaturallySpeaking, Voicebrook   | Nuance Dragon; any Microsoft Word compatible  |
| Histology and cytology devices interfaced to system   | cassette and slide engravers, stainers, imaging and digital pathology solutions  | cassette engravers, writers, labelers; slide engravers, labelers, etchers; slide stainers/immunostainers; microscope cameras; imagers; label printers; others   | cassette printers, slide engravers, immunostainers, microscope cameras, others  |
| Languages (other than English) offered on system  | none   | none  | French, Spanish, Dutch, German, Italian, Korean, Mandarin, others   |
| Client receives copy of source code   | escrow   | escrow  | escrow  |
| User group that meets on established schedule   | yes (meets in person)  | yes (meets in person and via Webinar)   | yes (meets in person and via Webinar)   |
| Methods by which users can tailor AP system in their own setting  | ad hoc query tools, user-defined interfaces, dictionary settings   | ad hoc query tools, dictionary settings   | wraparound programming, ad hoc query tools, user-defined interfaces, dictionary settings  |
| Total cost for smallest stand-alone AP system installed*  | —  | —   | \$30,000 (annual maintenance fee, \$2,000)  |
| Total cost for largest stand-alone AP system installed*   | —  | —   | \$450,000 (annual maintenance fee, \$75,000)  |
| Base price of integrated system, excluding AP configuration   | —  | —   | \$25,000  |
| Total incremental cost for smallest AP configuration installed*   | —  | —   | \$5,000 (annual maintenance fee, \$2,000)   |
| Total incremental cost for largest AP configuration installed*  | —  | —   | \$425,000 (annual maintenance fee, \$73,000)  |
| AP system available via ASP or cloud-based data center  | —  | no  | no  |
| Distinguishing features (supplied by company)   | <ul style="list-style-type: none"> <li>increases productivity with integration, voice recognition, instrumentation, synoptic reporting</li> <li>comprehensive specimen-management capabilities that ensure high level of safety and efficiency</li> <li>seamless interfaces for interoperability with other systems</li> </ul> | <ul style="list-style-type: none"> <li>exceptional pathologist appeal; compact, fast, and powerful, with excellent ease of use</li> <li>supports clinical results from the LIS and synoptic reporting capabilities for integrated reports</li> <li>offers seamless interfaces for interoperability with other systems, including imaging</li> </ul> | <ul style="list-style-type: none"> <li>integrated synoptic reporting</li> <li>positive sample/slide ID with bar codes for efficient paperless workflow</li> <li>total traceability</li> </ul> |

\*total cost includes hardware, software, installation, and training  
Note: a dash in lieu of an answer means company did not answer question or question is not applicable

<sup>†</sup>formerly Misy CoPathPlus

<sup>†</sup>formerly Elekta Software PowerPath

<sup>†</sup>formerly TD-HC

## Anatomic pathology computer systems

| Part 10 of 10   | VitalAxis<br>Marcus Cognetti sales@vitalaxis.com<br>3811 Terrawood Court<br>Rockville, MD 20853<br>866-441-0268 www.vitalaxis.com  | WebPathLab<br>Peter Williams peter@webpathlab.com<br>101 Parkshore Drive<br>Folsom, CA 95630<br>916-932-2462 www.webpathlab.com  | Xifin (acquired PathCentral)<br>Rick Murphy rmurphy@xifin.com<br>12225 El Camino Real<br>San Diego, CA 92130<br>858-793-5700 www.xifin.com  |
|---|--|--|---|
| See captodayonline.com/productguides for an interactive version of guide  |  |  |   |
| Name of anatomic pathology system   | VitalAxis  | WebPathLab   | AP Anywhere <sup>†</sup>  |
| First ever/Most recent AP system install (using Dec. 2013 survey deadline)  | 2006/November 2013   | 2000/November 2013   | 2004/May 2013   |
| Last major product release for featured AP system   | February 2013  | December 2012  | November 2013   |
| No. of contracts for sites operating AP system (hospitals/independent labs/clinics or group practices/other U.S. sites/foreign sites)         | 51 (3/16/32/0/0)   | 24 (1/21/0/0/2)  | 36 (0/14/20/0/2—private AP and molecular labs)  |
| • No. of contracts that went live in calendar-year 2013   | 14   | 0  | 2   |
| • No. of contracts signed in calendar-year 2013   | 22   | 7  | 2   |
| No. of sites operating AP system (No. of these sites outside U.S.)  | 53   | 30 (2—Mexico)  | 36 (2—China, Holland)   |
| Percentage of installations that have standalone AP systems   | 30%  | 25%  | 100%  |
| No. of employees in firm/In AP systems development, install, support  | 160/88   | 9/8  | 224/22  |
| Provide list of client sites to potential customers on request  | yes (partial list, with restrictions)  | yes (partial list)   | yes (partial list; NDA required)  |
| No. of user workstations in sites operating AP system   | 1–43   | 1–100+ (mean, 50)  | 2–80  |
| Range in No. of surgical pathology cases per year in installed sites  | 2,500–150,000  | 2,500–55,000   | 4,500–223,000   |
| Range in No. of gynecologic cytology cases per year in installed sites  | 500–10,000   | 5,000–25,000   | 4,500–75,000  |
| Programming language(s)   | Microsoft .Net, Java, Silverlight, HTML5   | ASP .Net, AJAX   | C#, .Net  |
| Databases and tools used  | Microsoft SQL server   | MySQL database   | SQL   |
| Word processor(s) used  | none needed (fully programmed reports)   | integrated into Web-based solution—native; requires Internet Explorer Web browser  | vendor specific   |
| Operating system(s)   | Windows, Linux, Macintosh  | Windows Server 2008, 2012  | Windows   |
| Features (listed as a percentage of live installs or based on availability)   |  |  |   |
| • Surgical pathology information system   | 100%   | 100%   | 95%   |
| • Cytology information system   | 38%  | 65%  | 75%   |
| • Autopsy information system  | not available  | 25%  | 20%   |
| • Autopsy measurements and organ weights  | not available  | 25%  | 20%   |
| • Specimen log-in/Specimen tracking and retrieval   | 100%/100%  | 100%/100%  | 100%/100%   |
| • Entry of block IDs  | 100%   | 100%   | 100%  |
| • Specimen labels   | 100%   | 100%   | 100%  |
| • Histology slide labels  | 95%  | 100%   | 95%   |
| • Bar-coded slide labels/Bar-coded cassettes  | 95%/42%  | 100%/available but not installed   | 100%/100%   |
| • Linear bar codes/Two-dimensional bar codes  | 100% (on requisitions)/available   | 25%/100%   | 100%/100%   |
| • Histology worksheets  | available  | 100%   | 95%   |
| • Word processing—vendor specific   | not available  | 100%   | 100%  |
| • Voice entry of gross description/Voice entry of final diagnosis   | 2%/2%  | 15% (via third party)/15% (via third party)  | 15%/15%   |
| • Gross and microscopic images integrated in reports  | 32%  | 100%   | 20%   |
| • Electronic signature  | 100%   | 100%   | 100%  |
| • Remote printing of completed reports  | 60%  | 100%   | 100%  |
| • Direct fax reports  | 65%  | 100%   | 100%  |
| • Web-based remote inquiry of reports   | 100%   | 100%   | 100%  |
| • Physician Web access for order entry  | 90%  | 100%   | 100%  |
| • Natural language search capability  | not available  | 100%   | 100%  |
| • Multi-site or multi-facility-wide area network  | 90%  | 100%   | 100%  |
| • Sound-alike retrieval of patient history  | not available  | —  | 100%  |
| • Tumor registry reports/Management reports   | installed/installed  | 100%/100%  | 50%/100%  |
| • Reports sufficient to comply with CLIA '88 regulations  | installed  | 100%   | 100%  |
| • Comprehensive billing and accounts receivable   | 97%  | 100%   | 100%  |
| • Interface to external billing system  | 12%  | 25%  | 100%  |
| • Inbound result-reporting interface to receive discrete results from external lab and store them in patient record                           | installed  | 45%  | 20%   |
| • HIS interface: admissions/discharge/transfer (ADT)  | 65%  | 100%   | 50%   |
| • HIS interface: result reporting/HIS interface: incoming clinical results  | 55%/installed  | 100%/—   | 80%/75%   |
| • Partin tables or Gleason score calculations   | 100% (for urology)   | 25%  | 50%   |
| • Synoptic reporting  | 100%   | 15%  | 95%   |
| • Client services module  | installed  | —  | 20%   |
| • Consult management and reporting  | installed  | 100%   | 95%   |
| Percentage of sites using result-reporting interfaces to external systems based on transmission of fully formatted (e.g., PDF or CDA) results | 85%  | 85%  | 80%   |
| Software provides indexed field in each test definition for LOINC code  | no   | no   | yes   |
| AP system supports use of SNOMED CT   | no   | no (earlier versions of SNOMED only)   | yes   |
| System sends cancer diagnoses or surveillance data to tumor registries or public health agencies via computer-to-computer interface           | yes  | yes  | yes   |
| Other lab vendors' systems to which software has an interface   | —  | Meditech, Eclipsys, eClinicalWorks, Perot Systems, others  | Cortex, Meditech, Cerner, Sage, GE Healthcare, McKesson, Allscripts, eClinicalWorks, others   |
| Voice-recognition products or partners that system uses   | Nuance Dragon  | Nuance Dragon NaturallySpeaking  | Voicebrock, Nuance Dragon NaturallySpeaking   |
| Histology and cytology devices interfaced to system   | printers, slide writers, slide etchers, others   | label printers, cassette writers, slide engravers, bar-code scanning devices, others   | slide and cassette writers, slide engravers, histology workflow automation tools, immunostainers, others  |
| Languages (other than English) offered on system  | none   | Spanish, Chinese   | Mandarin  |
| Client receives copy of source code   | no   | escrow (at client's request)   | escrow  |
| User group that meets on established schedule   | no   | no   | yes (meets in person)   |
| Methods by which users can tailor AP system in their own setting  | ad hoc query tools, dictionary settings, pivot table reports   | full management of dictionaries, audit log access, others; system configured to customer's needs during installation   | ad hoc query tools, user-defined interfaces, test menus, testing protocols, associated report templates   |
| Total cost for smallest stand-alone AP system installed*  | —  | \$1,999—subscription model (annual maintenance fee, \$3,600 <sup>†</sup> plus \$1 per report)  | \$25,000 <sup>††</sup>  |
| Total cost for largest stand-alone AP system installed*   | —  | \$90,000 (annual maintenance fee, \$3,600 <sup>†</sup> plus \$300 per pathologist, per month)  | \$150,000 <sup>††</sup>   |
| Base price of integrated system, excluding AP configuration   | —  | 0  | \$5,000   |
| Total incremental cost for smallest AP configuration installed*   | —  | 0 (annual maintenance fee, \$3,600 <sup>†</sup> plus \$1 per report or \$3,600 per doctor)   | \$25,000 <sup>††</sup>  |
| Total incremental cost for largest AP configuration installed*  | —  | 0 (annual maintenance fee, \$3,600 <sup>†</sup> plus \$3,600 per doctor)   | \$150,000 <sup>††</sup>   |
| AP system available via ASP or cloud-based data center  | —  | yes  | yes   |
| Distinguishing features (supplied by company)   | <ul style="list-style-type: none"> <li>cloud-based, bar-coded modular system with structured data and synoptic reporting platform with structured data reports</li> <li>interfaced with industry-leading instrumentation out of the box, and interfaces to PMS, PWS, and EMR systems with audit</li> <li>available through capital, ASP, and hybrid billing plus IT for ease of financial acquisition</li> </ul> | <ul style="list-style-type: none"> <li>100% Web based; universally secure access</li> <li>integrated billing solution reduces billing cycle to as low as seven days and maximizes cash flow</li> <li>modular system; customer purchases only required modules as needed, including AP, HL7 engine, online ordering, data mining, more</li> </ul> | <ul style="list-style-type: none"> <li>company provides suite of software tools/services, including LIS, RCM, and business intelligence</li> <li>cost-effective, Web-based SaaS solutions</li> <li>software is never out of date</li> </ul> |
| <i>*total cost includes hardware, software, installation, and training</i>  |  |  |   |
| <i>Note: a dash in lieu of an answer means company did not answer question or question is not applicable</i>                                  |  |  |   |
|   |  | <sup>†</sup> for server maintenance and hosting at HIPAA-compliant data center   | <sup>††</sup> formerly PathCentral AP Anywhere<br><sup>†††</sup> no annual maintenance fee; monthly subscription fee of \$1,200 per pathologist for cloud-hosted software   |

Tabulation does not represent an endorsement by the College of American Pathologists.