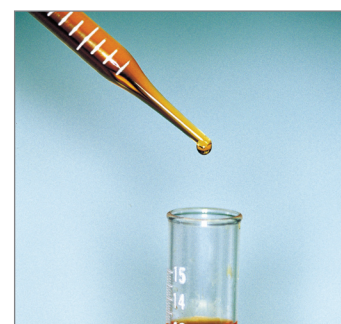
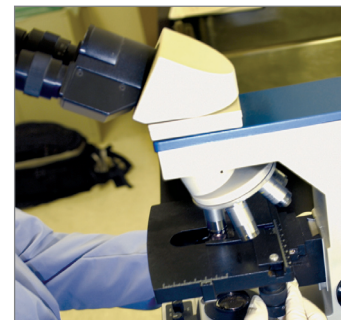
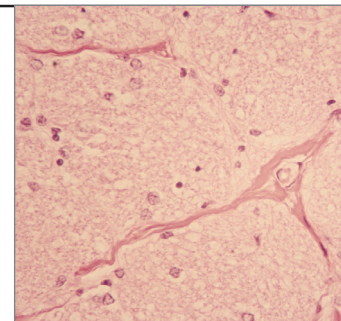


## Anatomic pathology computer systems

Part 1 of 13	Aspyra Bill Blair sales@aspyra.com 26115-A Mureau Rd. Calabasas, CA 91302 800-437-9000 www.aspyra.com
See accompanying article on page 12	
Name of anatomic pathology system	CyberPath
First ever AP system installation	2000
Most recent AP system installation (based on survey deadline of Dec. 2007)	2007
No. of contracts for sites operating AP system (H/IL/C or GP/FI/OS)*	15 (10/2/2/1 in Singapore/0)
• No. of contracts that went live in 2007	0
• No. of contracts not yet live/No. of these contracts signed in 2007	1/1
No. of sites operating AP system	15
Percentage of installations that have stand-alone AP systems	0
Staff to develop-install and support-other**	
• In entire company	30-50-25
• In LIS division (including AP)	15-30-20
• In AP systems only	4-7-12
No. of user workstations in sites operating system	2-250 (avg., 150)
Range in No. of surgical pathology cases per year in sites operating system	3,000-200,000
Range in No. of gynecologic cytology cases per year in sites operating syst.	3,000-15,000
Programming language(s)	Dialog, C, MicroFocus Cobol, Visual Basic
Databases and tools used	Microsoft SQL
Word processor(s) used	Microsoft Word
Operating system(s)	Windows, Linux
Features (listed as a percentage of live installs or based on availability)	
• Surgical pathology information system	100%
• Cytology information system	30%
• Autopsy information system	100%
• Autopsy measurements and organ weights	100%
• Specimen log-in/specimen tracking and retrieval	100%/available but not installed
• Entry of block IDs/specimen labels	30%/100%
• Histology slide labels/bar-coded slide labels	100%/100%
• Histology worksheets	100%
• Word processing—vendor specific	0
• Voice entry of gross description/back-end batch voice to text	100%
• Gross and microscopic images integrated in reports	100%
• Electronic signature	100%
• Remote printing of completed reports	100%
• Direct fax reports	100%
• Web-based remote inquiry of reports	40%
• Physician Web access for order entry	35%
• Natural language search capability	available in 2008
• Multi-site or multi-facility-wide area network	35%
• Sound-alike retrieval of patient history	available in 2008
• Tumor registry reports/management reports	100%/100%
• Reports sufficient to comply with CLIA '88 regulations	100%
• Comprehensive billing and accounts receivable	not available
• Interface to external billing system	80%
• HIS interface: A/D/T	80%
• HIS interface: result reporting/incoming clinical results	80%/100%
• Partin tables or Gleason score calculations	available in 2008
• Synoptic reporting	available in 2008
• Client services module	40%
• Consult management and reporting	30%
Software provides indexed field in each test definition for LOINC code?	yes
Provide LOINC dictionary for each new installation?	no
Routine results encoded in SNOMED (in version earlier than SNOMED CT)?	no
Routine results encoded in SNOMED CT?	yes (at 25% of sites)
AP system uses autoencoder to create SNOMED codes?	no
Percentage of installed sites that represent cases in free text	75%
No. of installations that use AP system to automatically electronically transfer tumor diagnoses to a tumor registry	NAACCR vol. V ePath standard for e-pathology reporting available but not installed/2 in older NAACCR standard (HL7)
Complete AP application service provider solution?	no
Method of charging for ASP service	—
Client software required	—
ASP information conduit	—
Client contracts supported from data center not operated by client	—
How data center is operated	—
Other information systems interfaced	McKesson, IDX, QuadraMed, Siemens, Meditech, NextGen, Misys, others
Voice-recognition products or partners system uses	Dragon NaturallySpeaking
Histology and cytology devices interfaced	none
User interface in language other than English?	no
Source code?	escrow
User group?	yes (meets in person every 1 to 1½ years)
User can modify screens?	no
Cost (hardware/software/installation and training/monthly maintenance)	
• Smallest stand-alone system	—
• Largest stand-alone system	—
Base price of integrated system, excluding AP configuration	—
• Incremental cost to add smallest AP configuration	—
• Incremental cost to add largest AP configuration	—
Distinguishing features (supplied by vendor)	<ul style="list-style-type: none"> <li>• Windows platform with MS SQL database for easy data mining</li> <li>• flexible workflow options with system decision support rules</li> <li>• customized patient reports with incorporated images</li> </ul>

\*H=U.S. hospitals, IL=independent labs in U.S.,  
C or GP=clinics or group practices in U.S., FI=foreign installations, OS=other sites  
\*\*other=sales, marketing, administration, and other company functions



## Experience the CAP difference

- Established fields of anatomic and clinical pathology
- New technologies
- Laboratory management

To fill your Pathology, Laboratory Medicine or Laboratory Management positions, advertise in CAP TODAY classifieds for the best results. Call

**1-800-983-7737**

## Anatomic pathology computer systems

Part 2 of 13	<b>Cerner CoPathPlus</b> Jay Johnson jay.johnson@cerner.com 2 University Office Park, 51 Sawyer Rd. Waltham, MA 02453 781-434-2230 www.cerner.com	<b>Cerner Corp.</b> Jared Blankenship jared.blankenship@cerner.com 2800 Rockcreek Parkway Kansas City, MO 64117 816-201-0696 www.cerner.com
See accompanying article on page 12		
<b>Name of anatomic pathology system</b>	<b>Cerner CoPathPlus Anatomic Pathology System</b>	<b>Cerner Millennium PathNet Anatomic Pathology</b>
First ever AP system installation	1982	1982
Most recent AP system installation (based on survey deadline of Dec. 2007)	2007	2007
No. of contracts for sites operating AP system (H/IL/C or GP/FI/OS)*	194 (160/27/0/7 in Canada, Saudi Arabia/0)	153 (141/2/1/9/0)
• No. of contracts that went live in 2007	8	17
• No. of contracts not yet live/No. of these contracts signed in 2007	4/4	47/12
No. of sites operating AP system	290	318
Percentage of installations that have stand-alone AP systems	100%	16%
Staff to develop-install and support-other**		
• In entire company	1,590-2,287-3,542	1,590-2,287-3,542
• In LIS division (including AP)	73-118-39	73-118-39
• In AP systems only	15-45-10	0
No. of user workstations in sites operating system	1-1,000 (avg., 50)	10-400 (avg., 10-20)
Range in No. of surgical pathology cases per year in sites operating system	3,000-7,350,000	5,000-100,000
Range in No. of gynecologic cytology cases per year in sites operating syst.	2,000-1,000,000	2,500-100,000
Programming language(s)	Powerbuilder, C++	Visual C++, Visual Basic, Java
Databases and tools used	Microsoft SQL, Sybase	Oracle
Word processor(s) used	Microsoft Word, TxFText Control	Microsoft Word, Visual Writer
Operating system(s)	Windows 98, 2000, 2003, XP, AIX, Unix	Open VMS, AIX, Windows 2000, NT, XP
Features (listed as a percentage of live installs or based on availability)		
• Surgical pathology information system	99.5%	100%
• Cytology information system	100%	90%
• Autopsy information system	75%	80%
• Autopsy measurements and organ weights	75%	80%
• Specimen log-in/specimen tracking and retrieval	100%/2%	100%/100%
• Entry of block IDs/specimen labels	100%/50%	100%/82%
• Histology slide labels/bar-coded slide labels	90%/30%	installed/installed
• Histology worksheets	99%	installed
• Word processing—vendor specific	40%	82%
• Voice entry of gross description/back-end batch voice to text	15%	5%
• Gross and microscopic images integrated in reports	20%	20%
• Electronic signature	99%	100%
• Remote printing of completed reports	2%	80%
• Direct fax reports	95%	80%
• Web-based remote inquiry of reports	10%	5%
• Physician Web access for order entry	1%	5%
• Natural language search capability	100%	100%
• Multi-site or multi-facility-wide area network	95%	40%
• Sound-alike retrieval of patient history	not available	100%
• Tumor registry reports/management reports	100%/100%	100%/100%
• Reports sufficient to comply with CLIA '88 regulations	100%	90%
• Comprehensive billing and accounts receivable	not available	5%
• Interface to external billing system	95%	80%
• HIS interface: A/D/T	95%	100%
• HIS interface: result reporting/incoming clinical results	95%/3%	100%/100%
• Partin tables or Gleason score calculations	5%	not available
• Synoptic reporting	30%	9%
• Client services module	2%	installed
• Consult management and reporting	95%	not available
Software provides indexed field in each test definition for LOINC code?	no	no
Provide LOINC dictionary for each new installation?	no	yes
Routine results encoded in SNOMED (in version earlier than SNOMED CT)?	yes (at 90% of sites)	yes
Routine results encoded in SNOMED CT?	yes (at 10% of sites)	no
AP system uses autoencoder to create SNOMED codes?	yes	yes
Percentage of installed sites that represent cases in free text	40%	not tracked
No. of installations that use AP system to automatically electronically transfer tumor diagnoses to a tumor registry	5 in NAACCR vol. V ePath standard for e-pathology reporting and 25 in nonstandard data feed	not tracked
Complete AP application service provider solution?	no	yes
Method of charging for ASP service	—	fixed fee
Client software required	—	requires software be installed on a client PC
ASP information conduit	—	requires use of a private, dedicated circuit
Client contracts supported from data center not operated by client	—	—
How data center is operated	—	by vendor
Other information systems interfaced	Cerner, McKesson, Meditech, Siemens, Epic, SCC Soft Computer	Cerner, Eclipsys, Epic, McKesson, IDX, Siemens, TDS
Voice-recognition products or partners system uses	Dragon NaturallySpeaking	Dragon Medical Suite voice recognition
Histology and cytology devices interfaced	Shur/Mark, Thermo Shandon, Leica, Sakura, Dako, General Data cassette and slide labeling devices, Ventana staining device	Shur/Mark, Thermo Shandon cassette and slide labelers
User interface in language other than English?	no	yes (German)
Source code?	escrow	escrow
User group?	yes (meets via Internet and in person)	yes (meets via Internet quarterly)
User can modify screens?	yes	yes
Cost (hardware/software/installation and training/monthly maintenance)		
• Smallest stand-alone system	—	—
• Largest stand-alone system	—	—
Base price of integrated system, excluding AP configuration	—	—
• Incremental cost to add smallest AP configuration	—	—
• Incremental cost to add largest AP configuration	—	—
Distinguishing features (supplied by vendor)	<ul style="list-style-type: none"> <li>• accession-to-storage tissue tracking in CoPath with advanced bar-coding/tracking system</li> <li>• Web-based report availability</li> <li>• CoPath's integrated imaging and synoptic reporting systems</li> </ul>	<ul style="list-style-type: none"> <li>• more than 25 years in the industry with proven scalability and performance</li> <li>• comprehensive integrated single system for all lab departments</li> <li>• continued innovations—that is, genomics, laboratory outreach solutions, patented synoptic reporting</li> </ul>
*H=U.S. hospitals, IL=independent labs in U.S., C or GP=clinics or group practices in U.S., FI=foreign installations, OS=other sites **other=sales, marketing, administration, and other company functions		

## Anatomic pathology computer systems

Part 3 of 13	<b>Clinical Information Systems</b> Angela Woolley sales@cislab.com 18805 Willamette Drive West Linn, OR 97068 800-869-0680 www.cislab.com	<b>Computer Trust Corp.</b> David Liberman, MD info@ctcsurge.com 1 State St. Boston, MA 02109-3507 617-557-9264 www.ctcsurge.com
<i>See accompanying article on page 12</i>		
<b>Name of anatomic pathology system</b>	<b>CISLab CPS</b>	<b>WinSurge</b>
First ever AP system installation	1988	1989
Most recent AP system installation (based on survey deadline of Dec. 2007)	November 2007	fourth quarter 2007
No. of contracts for sites operating AP system (H/IL/C or GP/FI/OS)*	20 (1/18/1/0/0)	81 (34/47/0/0/0)
• No. of contracts that went live in 2007	1	5
• No. of contracts not yet live/No. of these contracts signed in 2007	1/1	2/2
No. of sites operating AP system	20	97
Percentage of installations that have stand-alone AP systems	60%	100%
Staff to develop-install and support-other**		
• In entire company	6-6-1	confidential
• In LIS division (including AP)	6-6-1	confidential
• In AP systems only	6 total	confidential
No. of user workstations in sites operating system	1-100+ (avg., 15)	5-3,000 (median, 30)
Range in No. of surgical pathology cases per year in sites operating system	2,500-115,000	5,000-300,000
Range in No. of gynecologic cytology cases per year in sites operating syst.	3,000-300,000	0-250,000
Programming language(s)	Delphi, Cobol, C++, ASP, Visual Basic	Visual Basic, Caché, SQL
Databases and tools used	Interbase, Microsoft SQL, C-ISAM, Access	Object Caché, SQL, Crystal Reports, Microsoft Word Document Templates
Word processor(s) used	WordPerfect tools, Microsoft Word	Word, Rich Text, plain text
Operating system(s)	Windows, Unix	Windows, Unix (user's choice)
Features (listed as a percentage of live installs or based on availability)		
• Surgical pathology information system	100%	100%
• Cytology information system	100%	85%
• Autopsy information system	5%	65%
• Autopsy measurements and organ weights	100%	65%
• Specimen log-in/specimen tracking and retrieval	100/available but not installed	100%/100%
• Entry of block IDs/specimen labels	100%/100%	100%/100%
• Histology slide labels/bar-coded slide labels	100%/100%	100%/40%
• Histology worksheets	100%	100%
• Word processing—vendor specific	5%	100%
• Voice entry of gross description/back-end batch voice to text	5%	25%
• Gross and microscopic images integrated in reports	5%	80%
• Electronic signature	100%	85%
• Remote printing of completed reports	100%	60%
• Direct fax reports	100%	78%
• Web-based remote inquiry of reports	20%	60%
• Physician Web access for order entry	20%	45%
• Natural language search capability	not available	100%
• Multi-site or multi-facility-wide area network	1%	75%
• Sound-alike retrieval of patient history	not available	100%
• Tumor registry reports/management reports	100%/ 100%	100%/100%
• Reports sufficient to comply with CLIA '88 regulations	100%	100%
• Comprehensive billing and accounts receivable	50%	50%†
• Interface to external billing system	50%	35%
• HIS interface: A/D/T	10%	35%
• HIS interface: result reporting/incoming clinical results	10%/10%	33%/installed
• Partin tables or Gleason score calculations	10%	30%
• Synoptic reporting	0	100%
• Client services module	100%	100%
• Consult management and reporting	installed	100%
Software provides indexed field in each test definition for LOINC code?	yes	yes
Provide LOINC dictionary for each new installation?	no	no
Routine results encoded in SNOMED (in version earlier than SNOMED CT)?	no	yes (at 10% of sites)
Routine results encoded in SNOMED CT?	yes (at 5% of sites)	yes (at 3% of sites)
AP system uses autoencoder to create SNOMED codes?	no	yes
Percentage of installed sites that represent cases in free text	95%	90%
No. of installations that use AP system to automatically electronically transfer tumor diagnoses to a tumor registry	all in nonstandard data feed	NAACCR vol. V ePath standard for e-pathology reporting available to all sites/40% in older NAACCR standard
Complete AP application service provider solution?	yes	no
Method of charging for ASP service	transaction based	—
Client software required	browser based	—
ASP information conduit	operates over the Internet	—
Client contracts supported from data center not operated by client	0	—
How data center is operated	—	—
Other information systems interfaced	Medical Manager, McKesson, Dairyland, PCN, Reynolds & Reynolds, Praxis, LabCorp, GE, others	Cerner, McKesson, Misys, Meditech, Siemens, TDS, HDS, Per-Sé, IDX, others
Voice-recognition products or partners system uses	DragonSpeak	Dragon NaturallySpeaking Professional (integrated directly into WinSurge)
Histology and cytology devices interfaced	none	slide engravers, cassette writers, slide labelers, microscope cameras/Twain, Zebra bar-code labelers, high-speed scanners, others
User interface in language other than English?	no	user defines language for captions, headers, queries, various reports
Source code?	escrow	escrow
User group?	no	no
User can modify screens?	no	yes
Cost (hardware/software/installation and training/monthly maintenance)		
• Smallest stand-alone system	\$5k/\$7.5k/\$3k/\$0.35k	\$10k/\$25k/\$10k/\$0.5k
• Largest stand-alone system	\$100k/\$100k/\$20k/\$2.5k	\$100k/\$2.5m/\$1.5m/\$35k
Base price of integrated system, excluding AP configuration	\$7.5k-\$150k	0
• Incremental cost to add smallest AP configuration	\$5k/\$7.5k/\$3k/\$0.35k	\$10k/\$25k/\$10k/\$0.5k
• Incremental cost to add largest AP configuration	—/\$50k-\$100k/\$5k-\$20k/\$2.5k	\$100k/\$2.5m/\$1.5m/\$35k
Distinguishing features (supplied by vendor)	<ul style="list-style-type: none"> <li>provides client/server point-and-click access for pathology and cytology</li> <li>easy to learn and use at a reasonable cost</li> <li>easily integrated into an existing network environment</li> </ul>	<ul style="list-style-type: none"> <li>puts you in control of your lab</li> <li>fast return on investment</li> <li>exceptional client satisfaction and ease of use for over 15 years</li> </ul>
*H=U.S. hospitals, IL=independent labs in U.S., C or GP=clinics or group practices in U.S., FI=foreign installations, OS=other sites **other=sales, marketing, administration, and other company functions		
†charge capture automatic with manual edit option		

## Anatomic pathology computer systems

Part 4 of 13	<b>Cortex Medical Management Systems</b> Judith Krebs/Stan Gordon jkrebbs@cortexmed.com/sgordon@cortexmed.com 2107 Elliott Ave., Suite 201 Seattle, WA 98121 800-278-4645 www.cortexmed.com	<b>EasyPath Software</b> Selig Leyser, MD Seligl@comcast.net 2551 103rd S.E. Beaux Arts, WA 98004 425-455-9012 http://homepage.mac.com/seligl/easypath/
<i>See accompanying article on page 12</i>		
<b>Name of anatomic pathology system</b>	<b>The Gold Standard</b>	<b>EasyPath</b>
First ever AP system installation	1986	1992
Most recent AP system installation (based on survey deadline of Dec. 2007)	2007	2002
No. of contracts for sites operating AP system (H/IL/C or GP/FI/OS)*	44 (14/27/3/0/0)	8 (6/1/1/0/0)
• No. of contracts that went live in 2007	2	0
• No. of contracts not yet live/No. of these contracts signed in 2007	0	0
No. of sites operating AP system	55	8
Percentage of installations that have stand-alone AP systems	66%	100%
Staff to develop-install and support-other**		
• In entire company	4-3-3	1.5-0.5-0
• In LIS division (including AP)	4-3-3	—
• In AP systems only	4-3-3	1.5-0.5-0
No. of user workstations in sites operating system	1–63 (avg., 12)	5–12 (avg., 5)
Range in No. of surgical pathology cases per year in sites operating system	50–70,000	1,500–60,000
Range in No. of gynecologic cytology cases per year in sites operating syst.	50–120,000	200–60,000
Programming language(s)	Visual Basic	4th Dimension
Databases and tools used	Microsoft SQL server	4D, 4D Tools
Word processor(s) used	Microsoft Word	4D Write (fully integrated)
Operating system(s)	Windows 2000, XP, 2003	Windows 98, XP, Macintosh OS 9, X
Features (listed as a percentage of live installs or based on availability)		
• Surgical pathology information system	100%	100%
• Cytology information system	92%	100%
• Autopsy information system	50%	100%
• Autopsy measurements and organ weights	50%	100%
• Specimen log-in/specimen tracking and retrieval	100%/100%	100%/ 100%
• Entry of block IDs/specimen labels	80%/10%	100%/8%
• Histology slide labels/bar-coded slide labels	80%/20%	8%/0
• Histology worksheets	95%	100%
• Word processing—vendor specific	0	100%
• Voice entry of gross description/back-end batch voice to text	10%	100%
• Gross and microscopic images integrated in reports	40%	30%
• Electronic signature	95%	30%
• Remote printing of completed reports	30%	100%
• Direct fax reports	60%	100%
• Web-based remote inquiry of reports	35%	0
• Physician Web access for order entry	not available	0
• Natural language search capability	100%	100%
• Multi-site or multi-facility-wide area network	25%	100%
• Sound-alike retrieval of patient history	0	30%
• Tumor registry reports/management reports	80%/100%	40%/ 100%
• Reports sufficient to comply with CLIA '88 regulations	100%	100%
• Comprehensive billing and accounts receivable	35%	50%
• Interface to external billing system	18%	0
• HIS interface: A/D/T	43%	0
• HIS interface: result reporting/incoming clinical results	27%/41%	20%/0
• Partin tables or Gleason score calculations	10%	30%
• Synoptic reporting	70%	0
• Client services module	not available	0
• Consult management and reporting	100%	100%
Software provides indexed field in each test definition for LOINC code?	no	no
Provide LOINC dictionary for each new installation?	no	no
Routine results encoded in SNOMED (in version earlier than SNOMED CT)?	yes (at 5% of sites)	yes (at 100% of sites)
Routine results encoded in SNOMED CT?	no	no
AP system uses autoencoder to create SNOMED codes?	no	no
Percentage of installed sites that represent cases in free text	95%	0
No. of installations that use AP system to automatically electronically transfer tumor diagnoses to a tumor registry	10 in nonstandard data feed	all in nonstandard data feed
Complete AP application service provider solution?	yes	no
Method of charging for ASP service	fixed fee	—
Client software required	requires software be installed on a client PC	—
ASP information conduit	operates over the Internet	—
Client contracts supported from data center not operated by client	4	—
How data center is operated	by a third party (Ad Host)	—
Other information systems interfaced	3M, 4Medica, Meditech, Orchard, SCC Soft Computer, Cerner, Misys, others	Meditech, CoPath
Voice-recognition products or partners system uses	Dragon	any that can integrate with text or WP field
Histology and cytology devices interfaced	Ventana and Leica in development	camera
User interface in language other than English?	no	yes (customized)
Source code?	escrow	escrow
User group?	yes (via Internet at least monthly and in person annually)	no
User can modify screens?	no	yes
Cost (hardware/software/installation and training/monthly maintenance)		
• Smallest stand-alone system	n/a/\$50k/\$21k/\$0.9k	\$1k/\$10k/0/0
• Largest stand-alone system	n/a/\$200k/\$42k/\$3.6k	\$6k/\$15k/\$1k/0
Base price of integrated system, excluding AP configuration	n/a	\$4k
• Incremental cost to add smallest AP configuration	n/a/\$2.5k/\$1.4k/\$0.05k	\$1k/\$10k/\$1k/0
• Incremental cost to add largest AP configuration	n/a/\$1.5k/\$1.4k/\$0.03k	\$6k/\$15k/\$2k/0
Distinguishing features (supplied by vendor)	<ul style="list-style-type: none"> <li>• SuperCase reflex testing for linking HPV cases to gynecologic cases</li> <li>• 25 years of business experience specifically in the area of anatomic pathology</li> <li>• ASP subscription rental service available using the same AP system offered to customers who purchase the software</li> </ul>	<ul style="list-style-type: none"> <li>• economical but powerful and easy to use</li> <li>• low cost to install, set up, and maintain</li> <li>• written by a practicing pathologist with a professional programmer; easily customized</li> </ul>
*H=U.S. hospitals, IL=independent labs in U.S., C or GP=clinics or group practices in U.S., FI=foreign installations, OS=other sites **other=sales, marketing, administration, and other company functions		

## Anatomic pathology computer systems

Part 5 of 13	eTeleNext Joseph Nollar sales@etelenext.com 28570 Marguerite Parkway, Suite 222 Mission Viejo, CA 92692 949-365-0952 www.etelenext.com	GE Healthcare Barbara Mullarky barbara.mullarky@ge.com 3100 Steeles Ave. East, #900 Markham, Ontario Canada L3R 8T3 520-722-9734 www.gehealthcare.com
See accompanying article on page 12		
Name of anatomic pathology system	AP Anywhere	Centricity Laboratory Anatomic Pathology and Cytology
First ever AP system installation	2004	1991
Most recent AP system installation (based on survey deadline of Dec. 2007)	December 2007	2007
No. of contracts for sites operating AP system (H/IL/C or GP/FI/OS)*	13 (0/12/0/0/1) <sup>†</sup>	23 (11/0/0/12 in United Kingdom, Australia, Qatar/0)
• No. of contracts that went live in 2007	2	2
• No. of contracts not yet live/No. of these contracts signed in 2007	2/2	1/0
No. of sites operating AP system	13	33
Percentage of installations that have stand-alone AP systems	90%	2%
Staff to develop-install and support-other**		
• In entire company	9-4-2	45,000 total
• In LIS division (including AP)	9-4-2	44-49-7
• In AP systems only	8-3-1	not available
No. of user workstations in sites operating system	1-80 (avg., 35)	2-50 (avg., 25)
Range in No. of surgical pathology cases per year in sites operating system	3,000-75,000	5,000-250,000
Range in No. of gynecologic cytology cases per year in sites operating syst.	3,000-75,000	1,000-75,000
Programming language(s)	C++ .Net	C, C++, Unify Vision
Databases and tools used	SQL	Unify DataServer database, Unify Development tool kit
Word processor(s) used	Microsoft Word	Microsoft Word
Operating system(s)	Windows	Unix
Features (listed as a percentage of live installs or based on availability)		
• Surgical pathology information system	100%	100%
• Cytology information system	100%	100%
• Autopsy information system	100%	50%
• Autopsy measurements and organ weights	100%	50%
• Specimen log-in/specimen tracking and retrieval	100%/100%	100%/100%
• Entry of block IDs/specimen labels	100%/100%	100%/100%
• Histology slide labels/bar-coded slide labels	100%/100%	100%/100%
• Histology worksheets	100%	75%
• Word processing—vendor specific	100%	installed
• Voice entry of gross description/back-end batch voice to text	0	5%
• Gross and microscopic images integrated in reports	100%	installed
• Electronic signature	100%	100%
• Remote printing of completed reports	100%	100%
• Direct fax reports	100%	75%
• Web-based remote inquiry of reports	100%	10%
• Physician Web access for order entry	50%	available but not installed
• Natural language search capability	100%	installed
• Multi-site or multi-facility-wide area network	60%	75%
• Sound-alike retrieval of patient history	50%	not available
• Tumor registry reports/management reports	available but not installed/100%	20%/100%
• Reports sufficient to comply with CLIA '88 regulations	100%	100%
• Comprehensive billing and accounts receivable	35%	90%
• Interface to external billing system	50%	80%
• HIS interface: A/D/T	10%/20%	100%
• HIS interface: result reporting/incoming clinical results	20%	100%/10%
• Partin tables or Gleason score calculations	65%	not available
• Synoptic reporting	75%	40%
• Client services module	100%	installed
• Consult management and reporting	90%	100%
Software provides indexed field in each test definition for LOINC code?	yes	yes
Provide LOINC dictionary for each new installation?	no	no
Routine results encoded in SNOMED (in version earlier than SNOMED CT)?	no	yes (at 100% of sites)
Routine results encoded in SNOMED CT?	yes	no
AP system uses autoencoder to create SNOMED codes?	yes	yes
Percentage of installed sites that represent cases in free text	0	n/a
No. of installations that use AP system to automatically electronically transfer tumor diagnoses to a tumor registry	none	5 in Edifact via FTP and 3 in nonstandard data feed
Complete AP application service provider solution?	yes	no
Method of charging for ASP service	fixed fee	—
Client software required	browser based	—
ASP information conduit	operates over the Internet	—
Client contracts supported from data center not operated by client	1	—
How data center is operated	by vendor	—
Other information systems interfaced	Cortex, GE Healthcare, Misys, Meditech, Cerner	GE, McKesson, Siemens, Meditech, Per-Sé, Cerner, Eclipsys, Compucare
Voice-recognition products or partners system uses	none	Philips SpeechMagic, Dragon NaturallySpeaking
Histology and cytology devices interfaced	Beckman Coulter, BD, ChromaVision ACIS, Trestle, Aperio, others	Shur/Mark, Lam, Leica, Twain-compatible cameras
User interface in language other than English?	no	no
Source code?	escrow	escrow
User group?	yes (meets via Internet)	yes (meets via Internet quarterly and in person annually)
User can modify screens?	yes	yes
Cost (hardware/software/installation and training/monthly maintenance)		
• Smallest stand-alone system	\$20k/\$152k/\$5k/\$2k	\$50k/\$160k/\$225k/\$3.3k
• Largest stand-alone system	\$100k/\$299k/\$30k/\$4.5k	\$500k/\$750k/\$600k/\$62.5k
Base price of integrated system, excluding AP configuration	—	\$975k
• Incremental cost to add smallest AP configuration	—	—/\$33k/\$52k/\$0.525k
• Incremental cost to add largest AP configuration	—	—/\$250k/\$125k/\$3.75k
Distinguishing features (supplied by vendor)	<ul style="list-style-type: none"> <li>• product branded for client</li> <li>• client-controlled, user-defined custom report builder, including images, graphs, etc.</li> <li>• LIS fully Web enabled</li> </ul>	<ul style="list-style-type: none"> <li>• designed for multi-site laboratory, IDN environment</li> <li>• fully integrated with all clinical modules in a single database</li> <li>• image storage with inclusion in reports and presentation materials</li> </ul>
*H=U.S. hospitals, IL=independent labs in U.S., C or GP=clinics or group practices in U.S., FI=foreign installations, OS=other sites **other=sales, marketing, administration, and other company functions	<sup>†</sup> BridgeLabs	

## Anatomic pathology computer systems

Part 6 of 13	<b>Impac Medical Systems</b> Rick Callahan sales@impac.com 100 Mathilda Place, 5th floor Sunnyvale, CA 94086 888-464-6722 www.impac.com	<b>McKesson Corp.</b> Joseph Stabile joseph.stabile@mckesson.com 5995 Windward Parkway Alpharetta, GA 30005 404-338-6000 www.mckesson.com/laboratory
See accompanying article on page 12		
<b>Name of anatomic pathology system</b>	<b>PowerPath</b>	<b>Horizon Anatomic Pathology†</b>
First ever AP system installation Most recent AP system installation (based on survey deadline of Dec. 2007) No. of contracts for sites operating AP system (H/IL/C or GP/FI/OS)* • No. of contracts that went live in 2007 • No. of contracts not yet live/No. of these contracts signed in 2007 No. of sites operating AP system Percentage of installations that have stand-alone AP systems Staff to develop-install and support-other** • In entire company • In LIS division (including AP) • In AP systems only	1986 December 2007 211 (160/33/14/4 in Canada/0) 14 —/13 423 100% 130-131-212 17-37-19 12-20-12	— — 1 pilot site (1/0/0/0) — — 1 (pilot site) 0 total: 31,500 McKesson/9,000 McKesson Provider Technologies 80 total —
No. of user workstations in sites operating system Range in No. of surgical pathology cases per year in sites operating system Range in No. of gynecologic cytology cases per year in sites operating syst.	52–400 (avg., 15–30) 1,500–150,000 5,000–350,000	15 not tracked not tracked
Programming language(s) Databases and tools used Word processor(s) used Operating system(s)	C++, .Net, Borland Delphi Microsoft SQL Microsoft Word Windows	Java, .Net Framework, C++ Oracle 10g Microsoft Word Windows, Linux, HP-UX, AIX
<b>Features (listed as a percentage of live installs or based on availability)</b> • Surgical pathology information system • Cytology information system • Autopsy information system • Autopsy measurements and organ weights • Specimen log-in/specimen tracking and retrieval • Entry of block IDs/specimen labels • Histology slide labels/bar-coded slide labels • Histology worksheets • Word processing—vendor specific • Voice entry of gross description/back-end batch voice to text • Gross and microscopic images integrated in reports • Electronic signature • Remote printing of completed reports • Direct fax reports • Web-based remote inquiry of reports • Physician Web access for order entry • Natural language search capability • Multi-site or multi-facility-wide area network • Sound-alike retrieval of patient history • Tumor registry reports/management reports • Reports sufficient to comply with CLIA '88 regulations • Comprehensive billing and accounts receivable • Interface to external billing system • HIS interface: A/D/T • HIS interface: result reporting/incoming clinical results • Partin tables or Gleason score calculations • Synoptic reporting • Client services module • Consult management and reporting	100% 100% 100% installed 100%/2% 100%/100% 100%/100% 100% 100% installed 30% 100% 100% 100% 18% not available 100% 100% 100% 100%/100% 100% 100% 100% 98% 98%/available but not installed 100% installed 100% 85%	installed installed installed installed installed/installed installed/installed installed/installed installed available in December 2008 installed installed installed installed available in 2009 installed available but not installed installed installed/installed installed not available installed installed installed/installed available in December 2008 installed not available installed installed
Software provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation?	no no	no no
Routine results encoded in SNOMED (in version earlier than SNOMED CT)? Routine results encoded in SNOMED CT? AP system uses autoencoder to create SNOMED codes? Percentage of installed sites that represent cases in free text	yes yes no not tracked	no yes no 0 (free text diagnoses encoded)
No. of installations that use AP system to automatically electronically transfer tumor diagnoses to a tumor registry	2 in NAACCR vol. V ePath standard for e-pathology reporting	not available
Complete AP application service provider solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated	no — — — — —	no — — — — —
Other information systems interfaced Voice-recognition products or partners system uses Histology and cytology devices interfaced User interface in language other than English?	Eclipsys, Cerner, Misys, Siemens, McKesson, Meditech, SCC Soft Computer, IDX, others Dragon NaturallySpeaking, Voicebrook Shur/Mark, Shandon, Leica, Sakura, Ventana, General Data no	McKesson Star HIS under development available on request no
Source code? User group? User can modify screens?	escrow yes (meets in person via 1 annual conference and regional conferences through year) yes	escrow yes (meets in person annually) no
<b>Cost (hardware/software/installation and training/monthly maintenance)</b> • Smallest stand-alone system • Largest stand-alone system Base price of integrated system, excluding AP configuration • Incremental cost to add smallest AP configuration • Incremental cost to add largest AP configuration	— — — — —	— — — — —
Distinguishing features (supplied by vendor)	• advanced materials processing module enhances patient safety with expanded use of bar-code technology to track case materials from accessioning to sign-out • case-centric workflow enables users to see pertinent details about a case • outstanding customer satisfaction	• task-based design • pathologist console (includes virtual slide tray) that allows the pathologist to navigate to any function with a single click to view patient history and clinical results, add orders, sign reports, request a consult, etc. • extensive use of bar coding and industry standard embedded tools
*H=U.S. hospitals, IL=independent labs in U.S., C or GP=clinics or group practices in U.S., FI=foreign installations, OS=other sites **other=sales, marketing, administration, and other company functions		†product expected to be commercially available first quarter 2008; answers based on pilot site



## Anatomic pathology computer systems

Part 8 of 13	MediSolution 110 Cremazie Blvd. West Montreal, Quebec, Canada 800-361-4187 www.medisolution.com	Netlims NJ LLC Avi Allerhand avi@netlims.com 111 Town Square Place, Suite 700 Jersey City, NJ 07310 201-894-5300 www.netlims.com
See accompanying article on page 12		
Name of anatomic pathology system	TD-Synergy Anatomic Pathology	AutoAP
First ever AP system installation	1974	2000
Most recent AP system installation (based on survey deadline of Dec. 2007)	November 2007	2007
No. of contracts for sites operating AP system (H/IL/C or GP/FI/OS)*	180 (1/1/0/178 in Canada, France, United Kingdom, others/0)	11 (0/3/0/8 in India, Israel/0)
• No. of contracts that went live in 2007	2	1
• No. of contracts not yet live/No. of these contracts signed in 2007	4/4	2/2
No. of sites operating AP system	180	13
Percentage of installations that have stand-alone AP systems	40%	0
Staff to develop-install and support-other**		
• In entire company	445 total	55-37-13
• In LIS division (including AP)	79-11-13	—
• In AP systems only	6-not indicated-not indicated	8-6-0
No. of user workstations in sites operating system	3-112 (avg., 45)	10-60 (avg., 25)
Range in No. of surgical pathology cases per year in sites operating system	5,000-65,000	1,200-40,000
Range in No. of gynecologic cytology cases per year in sites operating syst.	2,500-150,000	2,000-15,000
Programming language(s)	C++	C++, Java, Visual Basic, ASP, .Net
Databases and tools used	SQL, Oracle	Microsoft SQL, Oracle, Caché
Word processor(s) used	Microsoft Word	Microsoft Word
Operating system(s)	Windows, Linux, Unix	Windows, Linux, Unix
Features (listed as a percentage of live installs or based on availability)		
• Surgical pathology information system	100%	100%
• Cytology information system	90%	100%
• Autopsy information system	75%	100%
• Autopsy measurements and organ weights	installed	100%
• Specimen log-in/specimen tracking and retrieval	75%/20%	100%/100%
• Entry of block IDs/specimen labels	100%/100%	100%/100%
• Histology slide labels/bar-coded slide labels	100%/100%	33%/33%
• Histology worksheets	85%	100%
• Word processing—vendor specific	—	100%
• Voice entry of gross description/back-end batch voice to text	15%	installed
• Gross and microscopic images integrated in reports	—	100%
• Electronic signature	95%	100%
• Remote printing of completed reports	100%	66%
• Direct fax reports	100%	100%
• Web-based remote inquiry of reports	20%	100%
• Physician Web access for order entry	installed	66%
• Natural language search capability	25%	available but not installed
• Multi-site or multi-facility-wide area network	45%	33%
• Sound-alike retrieval of patient history	not available	100%
• Tumor registry reports/management reports	57%/100%	100%/100%
• Reports sufficient to comply with CLIA '88 regulations	30%	100%
• Comprehensive billing and accounts receivable	40%	70%
• Interface to external billing system	10%	30%
• HIS interface: A/D/T	58%	80%
• HIS interface: result reporting/incoming clinical results	10%/installed	100%/installed
• Partin tables or Gleason score calculations	5%	not available
• Synoptic reporting	75%	available but not installed
• Client services module	—	100%
• Consult management and reporting	100%	100%
Software provides indexed field in each test definition for LOINC code?	yes	yes
Provide LOINC dictionary for each new installation?	no	no
Routine results encoded in SNOMED (in version earlier than SNOMED CT)?	yes (at 10% of sites)	yes
Routine results encoded in SNOMED CT?	yes (at 50% of sites)	yes
AP system uses autoencoder to create SNOMED codes?	yes	no
Percentage of installed sites that represent cases in free text	40%	0
No. of installations that use AP system to automatically electronically transfer tumor diagnoses to a tumor registry	—	—
Complete AP application service provider solution?	no	no
Method of charging for ASP service	—	—
Client software required	—	—
ASP information conduit	—	—
Client contracts supported from data center not operated by client	—	—
How data center is operated	—	—
Other information systems interfaced	MediSolution, SCC Soft Computer, Keane, McKesson, Misys, GE Healthcare, Meditech, others	Siemens, IDX, Eagle, Cerner, SCC Soft Computer, Misys, Xifin
Voice-recognition products or partners system uses	Dragon NaturallySpeaking, any Microsoft Word-compatible product	Dragon NaturallySpeaking
Histology and cytology devices interfaced	Shur/Mark, SurgiPath, Fisher Scientific cassette printers, Ventana stainers	Leica
User interface in language other than English?	yes (in French, Spanish, German, Italian, Korean, Chinese)	yes (in any language)
Source code?	escrow	escrow
User group?	yes (meets in person biannually)	no
User can modify screens?	yes	yes
Cost (hardware/software/installation and training/monthly maintenance)		
• Smallest stand-alone system	\$20k/\$50k/\$15k/\$0.833k	\$30k/\$120k/\$30k/\$2.25k
• Largest stand-alone system	\$50k/\$300k/\$40k/\$5k	\$150k/\$500k/\$90k/\$6k
Base price of integrated system, excluding AP configuration	\$280k	—
• Incremental cost to add smallest AP configuration	—/\$3k/—/—	—
• Incremental cost to add largest AP configuration	—	—
Distinguishing features (supplied by vendor)	<ul style="list-style-type: none"> <li>complete online history, including images and retrospective review</li> <li>ongoing development of new functionalities (ThinPrep, HPV, rule-based logic, etc.)</li> <li>positive sample ID with bar codes for efficient paperless workflow</li> </ul>	<ul style="list-style-type: none"> <li>one database for all disciplines—AP, microbiology, general lab</li> <li>easily tailored for any environment and work procedure</li> <li>advanced technology—database choice, document management, Web, Windows integration</li> </ul>
*H=U.S. hospitals, IL=independent labs in U.S., C or GP=clinics or group practices in U.S., FI=foreign installations, OS=other sites **other=sales, marketing, administration, and other company functions		



## Anatomic pathology computer systems

Part 9 of 13	NetSoft William Hughes sales@netsoftusa.com 2156 W. Park Court, Suite E Stone Mountain, GA 30087 866-463-8763 www.netsoftusa.com	Novovision Hina Kharbey sales@novovision.com 301 N. Harrison St., Suite 384 Princeton, NJ 08540 877-668-6123 www.novovision.com
<i>See accompanying article on page 12</i>		
Name of anatomic pathology system	IntelliPath	NovoPath
First ever AP system installation	2001	1999
Most recent AP system installation (based on survey deadline of Dec. 2007)	December 2007	December 2007
No. of contracts for sites operating AP system (H/IL/C or GP/FI/OS)*	51 (6/34/10/1 in Canada/0)	81 (6/55/20/0/0)
• No. of contracts that went live in 2007	8	—
• No. of contracts not yet live/No. of these contracts signed in 2007	1/1	3/3
No. of sites operating AP system	70	130
Percentage of installations that have stand-alone AP systems	100%	100%
Staff to develop-install and support-other**		
• In entire company	5-5-3	8-8-3
• In LIS division (including AP)	—	—
• In AP systems only	—	—
No. of user workstations in sites operating system	1–50 (avg., 11)	3–400 (avg., 25)
Range in No. of surgical pathology cases per year in sites operating system	3,500–240,000	3,500–275,000
Range in No. of gynecologic cytology cases per year in sites operating syst.	12,000–65,000	1,500–750,000
Programming language(s)	Clarion, C++, .Net	Microsoft Visual Studio Platform
Databases and tools used	Pervasive SQL	SQL server, Oracle
Word processor(s) used	integrated	user's choice (Microsoft Word, Acrobat Reader)
Operating system(s)	Windows 2000, XP, Vista	Microsoft Windows or Web browser based
Features (listed as a percentage of live installs or based on availability)		
• Surgical pathology information system	100%	100%
• Cytology information system	20%	100%
• Autopsy information system	10%	100%
• Autopsy measurements and organ weights	10%	100%
• Specimen log-in/specimen tracking and retrieval	100%/100%	100%/100%
• Entry of block IDs/specimen labels	100%/100%	100%/100%
• Histology slide labels/bar-coded slide labels	100%/5%	100%/100%
• Histology worksheets	90%	100%
• Word processing—vendor specific	100%	not available
• Voice entry of gross description/back-end batch voice to text	5%	100%
• Gross and microscopic images integrated in reports	25%	100%
• Electronic signature	100%	100%
• Remote printing of completed reports	20%	100%
• Direct fax reports	95%	100%
• Web-based remote inquiry of reports	35%	70%
• Physician Web access for order entry	2%	30%
• Natural language search capability	100%	100%
• Multi-site or multi-facility-wide area network	25%	25%
• Sound-alike retrieval of patient history	installed	100%
• Tumor registry reports/management reports	100%/100%	100%/100%
• Reports sufficient to comply with CLIA '88 regulations	100%	100%
• Comprehensive billing and accounts receivable	45%	15%
• Interface to external billing system	35%	100%
• HIS interface: A/D/T	15%	50%
• HIS interface: result reporting/incoming clinical results	15%/10%	50%/50%
• Partin tables or Gleason score calculations	5%	40%
• Synoptic reporting	5%	40%
• Client services module	5%	100%
• Consult management and reporting	100%	100%
Software provides indexed field in each test definition for LOINC code?	no	no
Provide LOINC dictionary for each new installation?	no	no
Routine results encoded in SNOMED (in version earlier than SNOMED CT)?	no	no
Routine results encoded in SNOMED CT?	no	no
AP system uses autoencoder to create SNOMED codes?	yes	no
Percentage of installed sites that represent cases in free text	85%	0
No. of installations that use AP system to automatically electronically transfer tumor diagnoses to a tumor registry	3 in NAACCR vol. V ePath standard for e-pathology reporting/10 in nonstandard data feed	2 in NAACCR format/15 in nonstandard data feed
Complete AP application service provider solution?	yes	yes
Method of charging for ASP service	transaction based	browser based
Client software required	requires software be installed on a client PC	requires software be installed on a client PC
ASP information conduit	operates over the Internet	operates over the Internet
Client contracts supported from data center not operated by client	—	2
How data center is operated	by a third party	by vendor
Other information systems interfaced	Cerner, Medical Manager, Misys, IDX, Meditech, others	McKesson, Invision, Eclipsys, CPSI, others
Voice-recognition products or partners system uses	Dragon NaturallySpeaking	Dragon NaturallySpeaking
Histology and cytology devices interfaced	Thermo Electron slide labeler, Shur/Mark, Shandon, Leica, General Data	Ventana (beta)
User interface in language other than English?	no	no
Source code?	escrow	escrow
User group?	yes (meets in person)	no
User can modify screens?	yes	yes
Cost (hardware/software/installation and training/monthly maintenance)		
• Smallest stand-alone system	—	—
• Largest stand-alone system	—	—
Base price of integrated system, excluding AP configuration	—	—
• Incremental cost to add smallest AP configuration	—	—
• Incremental cost to add largest AP configuration	—	—
Distinguishing features (supplied by vendor)	<ul style="list-style-type: none"> <li>• all modules, including billing and word processing, fully integrated</li> <li>• full-featured, robust system with scalable pricing</li> <li>• superior customer care</li> </ul>	<ul style="list-style-type: none"> <li>• integrated document-management solution for paperless workflow</li> <li>• reflex testing for HPV and other molecular tests</li> <li>• interfaces to most endoscopy software and major vendors' electronic medical records</li> </ul>
*H=U.S. hospitals, IL=independent labs in U.S., C or GP=clinics or group practices in U.S., FI=foreign installations, OS=other sites **other=sales, marketing, administration, and other company functions		

## Anatomic pathology computer systems

Part 10 of 13	Orchard Software Kerry Foster kfoster@orchardsoft.com 701 Congressional Blvd., Suite 360 Carmel, IN 46032 800-856-1948 www.orchardsoft.com	PathLogix Corp. Jerry Grayson jerry@pathlogix.com 470 Nautilus St., Suite 306 La Jolla, CA 92037 888-454-5000 www.pathlogix.com
<i>See accompanying article on page 12</i>		
<b>Name of anatomic pathology system</b>	<b>Orchard Pathology</b>	<b>PathLogix</b>
First ever AP system installation	2006	1988
Most recent AP system installation (based on survey deadline of Dec. 2007)	November 2007	December 2007
No. of contracts for sites operating AP system (H/IL/C or GP/FI/OS)*	16 (5/8/3/0/0)	86 (6/80/0/0/0)
• No. of contracts that went live in 2007	9	5
• No. of contracts not yet live/No. of these contracts signed in 2007	6/6	—
No. of sites operating AP system	20	86
Percentage of installations that have stand-alone AP systems	0	75%
Staff to develop-install and support-other**		
• In entire company	25-68-37	—
• In LIS division (including AP)	n/a	—
• In AP systems only	n/a	—
No. of user workstations in sites operating system	4-7 (avg., 5)	1-40 (avg., 5)
Range in No. of surgical pathology cases per year in sites operating system	not tracked	1,000-60,000
Range in No. of gynecologic cytology cases per year in sites operating syst.	not tracked	1,000-40,000
Programming language(s)	4D, Java, C++, HTML	SQL, Visual Basic, C++
Databases and tools used	4D, SQL	SQL server, Access, commonly used Internet tools
Word processor(s) used	customized-various options available	Microsoft Word
Operating system(s)	Windows 2000, XP Professional, Windows Server 2003 Standard Edition	Windows, Vista
Features (listed as a percentage of live installs or based on availability)		
• Surgical pathology information system	100%	100%
• Cytology information system	90%	100%
• Autopsy information system	installed	—
• Autopsy measurements and organ weights	installed	—
• Specimen log-in/specimen tracking and retrieval	100%/100%	100%/100%
• Entry of block IDs/specimen labels	100%/100%	100%/100%
• Histology slide labels/bar-coded slide labels	installed/50%	100%/100%
• Histology worksheets	100%	100%
• Word processing—vendor specific	100%	100%
• Voice entry of gross description/back-end batch voice to text	20%	100%
• Gross and microscopic images integrated in reports	40%	100%
• Electronic signature	100%	100%
• Remote printing of completed reports	50%	100%
• Direct fax reports	installed	100%
• Web-based remote inquiry of reports	50%	20%
• Physician Web access for order entry	50%	20%
• Natural language search capability	available but not installed	100%
• Multi-site or multi-facility-wide area network	installed	100%
• Sound-alike retrieval of patient history	not available	installed
• Tumor registry reports/management reports	installed/100%	100%/100%
• Reports sufficient to comply with CLIA '88 regulations	100%	100%
• Comprehensive billing and accounts receivable	not available	available first quarter 2008
• Interface to external billing system	80%	100%
• HIS interface: A/D/T	100%	installed
• HIS interface: result reporting/incoming clinical results	80%/100%	installed/installed
• Partin tables or Gleason score calculations	100%	100%
• Synoptic reporting	100%	installed
• Client services module	installed	100%
• Consult management and reporting	100%	100%
Software provides indexed field in each test definition for LOINC code?	yes	no
Provide LOINC dictionary for each new installation?	no	no
Routine results encoded in SNOMED (in version earlier than SNOMED CT)?	no	—
Routine results encoded in SNOMED CT?	yes	—
AP system uses autoencoder to create SNOMED codes?	no	—
Percentage of installed sites that represent cases in free text	100%	100%
No. of installations that use AP system to automatically electronically transfer tumor diagnoses to a tumor registry	not tracked	available but not installed
Complete AP application service provider solution?	no	yes
Method of charging for ASP service	—	transaction based
Client software required	—	requires software be installed on a client PC
ASP information conduit	—	operates over the Internet
Client contracts supported from data center not operated by client	—	2
How data center is operated	—	by a third party (selected by customer)
Other information systems interfaced	McKesson, Misys, IDX, Siemens, Cerner, Dairyland, QuadraMed, Meditech, GE, Experior, others	systems interfaced with HL7
Voice-recognition products or partners system uses	Dragon NaturallySpeaking	products interfaced with Microsoft Word
Histology and cytology devices interfaced	Nikon, Ventana immunostainers	slide labels, cameras, extensive histology support features, complete cytology module
User interface in language other than English?	no	no
Source code?	escrow	—
User group?	yes (meets in person biannually and via Internet on an unlimited basis)	—
User can modify screens?	yes	yes
Cost (hardware/software/installation and training/monthly maintenance)		
• Smallest stand-alone system	\$8k/\$50k/\$28k/10%	—/\$3k/0/\$0.1k
• Largest stand-alone system	\$25k/\$100k/\$42k/10%	—/\$20k/0/\$0.3k
Base price of integrated system, excluding AP configuration	\$79k	—
• Incremental cost to add smallest AP configuration	\$3k/\$30k/\$13k/10%	—/\$3k/0/\$0.1k
• Incremental cost to add largest AP configuration	\$25k/\$85k/\$42k/10%	—/\$20k/0/\$0.3k
Distinguishing features (supplied by vendor)	<ul style="list-style-type: none"> <li>fully integrated clinical, molecular, AP, reference lab results via a single database for combining results onto a single patient report</li> <li>advanced rules-based decision-support technology</li> <li>experts in integration, installation, service, and technical support</li> </ul>	<ul style="list-style-type: none"> <li>Internet option with customer report retrieval, online requisitions, others</li> <li>features that help clients with marketing and customer service</li> <li>flexibility and unlimited scalability</li> </ul>
<p>*H=U.S. hospitals, IL=independent labs in U.S., C or GP=clinics or group practices in U.S., FI=foreign installations, OS=other sites **other=sales, marketing, administration, and other company functions</p>		

## Anatomic pathology computer systems

Part 11 of 13	PathView Systems Ltd. Michael Mihalik mike@pathview.com 5923 E. FM 455 Anna, TX 75409 800-798-3540 www.pathview.com	Psyche Systems Corp. James Gearheart sales@psychesystems.com 321 Fortune Blvd. Milford, MA 01757 800-345-1514 www.windopath.com
<i>See accompanying article on page 12</i>		
<b>Name of anatomic pathology system</b>	<b>Progeny</b>	<b>WindoPath</b>
First ever AP system installation	1990	1986
Most recent AP system installation (based on survey deadline of Dec. 2007)	April 2006	December 2007
No. of contracts for sites operating AP system (H/IL/C or GP/FI/OS)*	1 (0/0/1/0/0)	132 (43/40/5/44 in Italy, Germany, Austria/0)
• No. of contracts that went live in 2007	0	6
• No. of contracts not yet live/No. of these contracts signed in 2007	1/1	2/2
No. of sites operating AP system	2	130
Percentage of installations that have stand-alone AP systems	100%	93%
Staff to develop-install and support-other**		
• In entire company	2-1-1	15-19-6
• In LIS division (including AP)	2-1-0	15-19-6
• In AP systems only	2-1-1	9-12-4
No. of user workstations in sites operating system	30	1-43 (avg., 10)
Range in No. of surgical pathology cases per year in sites operating system	44,000	1,000-75,000
Range in No. of gynecologic cytology cases per year in sites operating syst.	46,000	0-235,000+
Programming language(s)	InterSystems Caché ObjectScript, Visual Basic	Visual Basic, Visual Basic .Net, Small Talk
Databases and tools used	InterSystems Caché	Microsoft SQL server 7.0, 2000, BrioQuery report writing, Rightfax
Word processor(s) used	Microsoft Word 2003	integrated, nonproprietary
Operating system(s)	Windows XP, Windows server 2003	Windows NT, 95, 98, 2000, XP
Features (listed as a percentage of live installs or based on availability)		
• Surgical pathology information system	100%	100%
• Cytology information system	100%	85%
• Autopsy information system	100%	100%
• Autopsy measurements and organ weights	100%	100%
• Specimen log-in/specimen tracking and retrieval	100%/100%	100%/installed
• Entry of block IDs/specimen labels	100%/100%	100%/100%
• Histology slide labels/bar-coded slide labels	100%/100%	100%/100%
• Histology worksheets	100%	100%
• Word processing—vendor specific	not available	100%
• Voice entry of gross description/back-end batch voice to text	installed	25%
• Gross and microscopic images integrated in reports	100%	100%
• Electronic signature	100%	100%
• Remote printing of completed reports	100%	100%
• Direct fax reports	100%	100%
• Web-based remote inquiry of reports	100%	35%
• Physician Web access for order entry	available in 2008	5%
• Natural language search capability	100%	100%
• Multi-site or multi-facility-wide area network	100%	30%
• Sound-alike retrieval of patient history	not available	100%
• Tumor registry reports/management reports	100%/100%	100%/100%
• Reports sufficient to comply with CLIA '88 regulations	100%	100%
• Comprehensive billing and accounts receivable	not available	not available
• Interface to external billing system	100%	100%
• HIS interface: A/D/T	100%	70%
• HIS interface: result reporting/incoming clinical results	100%/100%	70%/5%
• Partin tables or Gleason score calculations	not available	available but not installed
• Synoptic reporting	available but not installed	installed
• Client services module	—	installed
• Consult management and reporting	100%	100%
Software provides indexed field in each test definition for LOINC code?	no	yes
Provide LOINC dictionary for each new installation?	yes	no
Routine results encoded in SNOMED (in version earlier than SNOMED CT)?	no	escrow
Routine results encoded in SNOMED CT?	no	yes (at 8% of sites)
AP system uses autoencoder to create SNOMED codes?	no	yes
Percentage of installed sites that represent cases in free text	100%	92%
No. of installations that use AP system to automatically electronically transfer tumor diagnoses to a tumor registry	1 in nonstandard data feed	5 in NAACCR vol. V ePath standard for e-pathology reporting
Complete AP application service provider solution?	no	yes
Method of charging for ASP service	—	fixed fee
Client software required	—	browser based
ASP information conduit	—	operates over the Internet
Client contracts supported from data center not operated by client	—	9
How data center is operated	—	by vendor
Other information systems interfaced	Epic, proprietary, client-developed LIS	Psyche Systems, Siemens, McKesson, Meditech, Misys, Cerner, others
Voice-recognition products or partners system uses	Dragon NaturallySpeaking, other products that integrate with Microsoft Word	Dragon NaturallySpeaking
Histology and cytology devices interfaced	Thermo Shandon cassette labelers, Lanier dictation system, Ventana Benchmark (2008), Cytac (Hologic) imager (2008)	CAS analyzer, Ventana Benchmark, Digene HPV, Leica
User interface in language other than English?	no	yes (any language)
Source code?	escrow	yes
User group?	no	yes (meets via Internet monthly and in person biannually)
User can modify screens?	no	yes
Cost (hardware/software/installation and training/monthly maintenance)		
• Smallest stand-alone system	—	\$5k/\$23k/\$12k/\$1k
• Largest stand-alone system	—	\$50k/\$272k/\$30k/\$8.1k
Base price of integrated system, excluding AP configuration	—	—
• Incremental cost to add smallest AP configuration	—	—
• Incremental cost to add largest AP configuration	—	—
Distinguishing features (supplied by vendor)	<ul style="list-style-type: none"> <li>• pervasive use of bar coding on requisitions, cassettes, and slides allows hands-free processing throughout case workflow</li> <li>• comprehensive and extensive specimen tracking</li> <li>• ongoing management consultation part of support package</li> </ul>	<ul style="list-style-type: none"> <li>• easy to use; customized to fit the lab's specific needs/specialty</li> <li>• dynamic customizable reports, both final and statistical analysis, with the ability to define outputs based on physician preferences</li> <li>• interfaces to instruments and devices</li> </ul>
<p>*H=U.S. hospitals, IL=independent labs in U.S., C or GP=clinics or group practices in U.S., FI=foreign installations, OS=other sites **other=sales, marketing, administration, and other company functions</p>		

## Anatomic pathology computer systems

Part 12 of 13	<b>SCC Soft Computer</b> Ellie Vahman ellie@softcomputer.com 5400 Tech Data Drive Clearwater, FL 33760 727-789-0100 www.softcomputer.com	<b>Small Business Computers of New England</b> Gene Calvano gene_calvano@sbcne.com 25 Lowell St., Suite 401 Manchester, NH 03101 800-647-2263/603-695-9090 www.apeasy.com
<i>See accompanying article on page 12</i>		
<b>Name of anatomic pathology system</b>	<b>SoftPath</b>	<b>AP Easy</b>
First ever AP system installation Most recent AP system installation (based on survey deadline of Dec. 2007) No. of contracts for sites operating AP system (H/IL/C or GP/FI/OS)* • No. of contracts that went live in 2007 • No. of contracts not yet live/No. of these contracts signed in 2007 No. of sites operating AP system Percentage of installations that have stand-alone AP systems Staff to develop-install and support-other** • In entire company • In LIS division (including AP) • In AP systems only	1993 October 2007 154 (132/9/4/9 in Canada/0) 13 10/7 236 2% 725-304-224 517-242-212 119-54-49	1989 December 2007 255 (44/173/32/6 in Canada, Ireland, New Zealand, others/0) 21 2/2 255 100% 2-4-1 2-4-1 2-4-1
No. of user workstations in sites operating system Range in No. of surgical pathology cases per year in sites operating system Range in No. of gynecologic cytology cases per year in sites operating syst.	3–100 (avg., 15) 1,000–85,000 25–125,000	1–53 (avg., 8) 1,000–50,000 2,000–75,000
Programming language(s) Databases and tools used Word processor(s) used Operating system(s)	C, C++, .Net, Java Oracle, XML, SQL Microsoft Word, Rich Text Editor, Text Control (synoptic) server: IBM AIX (Unix); clients: Windows 2000 XP, Vista	FileMaker Pro FileMaker Pro integrated with FileMaker Pro Windows 2000, XP
<b>Features (listed as a percentage of live installs or based on availability)</b> • Surgical pathology information system • Cytology information system • Autopsy information system • Autopsy measurements and organ weights • Specimen log-in/specimen tracking and retrieval • Entry of block IDs/specimen labels • Histology slide labels/bar-coded slide labels • Histology worksheets • Word processing—vendor specific • Voice entry of gross description/back-end batch voice to text • Gross and microscopic images integrated in reports • Electronic signature • Remote printing of completed reports • Direct fax reports • Web-based remote inquiry of reports • Physician Web access for order entry • Natural language search capability • Multi-site or multi-facility-wide area network • Sound-alike retrieval of patient history • Tumor registry reports/management reports • Reports sufficient to comply with CLIA '88 regulations • Comprehensive billing and accounts receivable • Interface to external billing system • HIS interface: A/D/T • HIS interface: result reporting/incoming clinical results • Partin tables or Gleason score calculations • Synoptic reporting • Client services module • Consult management and reporting	100% 100% 100% installed 100%/installed 100%/100% 100%/installed 100% installed installed installed 100% 100% 100% 100% 5% available but not installed 100% 55% 100% installed/100% 100% 30% 60% 95% 85%/15% available in June 2008 installed installed installed	100% 100% installed installed 100%/100% 100%/100% 100%/installed 100% not available installed 100% 100% installed installed 20% 2% 100% installed 100%/100% 100% 15% 85% 5% 30%/available but not installed installed installed installed 100%
Software provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation?	no no	no no
Routine results encoded in SNOMED (in version earlier than SNOMED CT)? Routine results encoded in SNOMED CT? AP system uses autoencoder to create SNOMED codes? Percentage of installed sites that represent cases in free text	yes (at 10% of sites) yes (at 40% of sites) yes 60%	no no no 100%
No. of installations that use AP system to automatically electronically transfer tumor diagnoses to a tumor registry	NAACCR vol. V ePath standard for e-pathology reporting available but not installed/4 in delimited format coded for Fla., NY, NH state requirements	32 in NAACCR vol. V ePath standard for e-pathology reporting
Complete AP application service provider solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated	yes — requires software be installed on a client PC requires use of a private, dedicated circuit 1 by vendor	no — — — —
Other information systems interfaced Voice-recognition products or partners system uses Histology and cytology devices interfaced User interface in language other than English?	Cerner, Siemens, McKesson, IDX, QuadraMed, Eclipsys, Keane, SCC Soft Computer, CPSI, others Web services (XML) based interfacing designed for voice-recognition and dictation systems† cassette markers/writers, slide labelers, immunostainers yes (French)	Misys, CPSI, Medisys, A4, eClinicalWorks, Cerner, Orchard, others Windows packages supporting FileMaker Pro slide labelers, cassette markers no
Source code? User group? User can modify screens?	escrow yes (meets in person annually) yes	yes no no
<b>Cost (hardware/software/installation and training/monthly maintenance)</b> • Smallest stand-alone system • Largest stand-alone system Base price of integrated system, excluding AP configuration • Incremental cost to add smallest AP configuration • Incremental cost to add largest AP configuration	\$30k/\$30k/\$50k/\$0.45k \$100k/\$500k/\$75k/\$9k \$250k \$15k/\$30k/\$40k/\$0.45k \$100k/\$375k/\$78k/\$6.75k	\$1k/\$3k/0/0 \$60k/\$27k/\$3k/\$0.25k n/a — —
<b>Distinguishing features (supplied by vendor)</b>	• full integration with SoftLab LIS suite, including cytogenetics, molecular, flow cytometry, HLA • available integrated Web-based module (SoftWeb) for remote ordering/requisitions, results/report viewing, printing • powerful features for high-volume laboratories—online alerts, full system audits, multisite billing	• customized solution with ongoing customized support • low-cost solution for start-up, small, and medium-sized labs • results reporting by Internet portal, faxing reports, and custom lab interfaces to various EMR client software systems
*H=U.S. hospitals, IL=independent labs in U.S., C or GP=clinics or group practices in U.S., FI=foreign installations, OS=other sites **other=sales, marketing, administration, and other company functions	†operates without interface with Dragon NaturallySpeaking installed at the workstation	

## Anatomic pathology computer systems

Part 13 of 13	<b>Sunquest Information Systems</b> Sylvia Rothrock sales@sunquestinfo.com 250 S. Williams Blvd. Tucson, AZ 85711 800-748-0692 www.sunquestinfo.com	<b>WebPathLab</b> Peter Williams peter@webpathlab.com 1004 River Rock Drive, Suite 240 Folsom, CA 95630 916-404-1840 www.webpathlab.com
<i>See accompanying article on page 12</i>		
<b>Name of anatomic pathology system</b>	<b>Sunquest CoPathPlus</b>	<b>WebPathLab</b>
First ever AP system installation	1982	2000
Most recent AP system installation (based on survey deadline of Dec. 2007)	2007	November 2007
No. of contracts for sites operating AP system (H/IL/C or GP/FI/OS)*	290	7 (1/6/0/0/0)
• No. of contracts that went live in 2007	11	3
• No. of contracts not yet live/No. of these contracts signed in 2007	9/9	0
No. of sites operating AP system	500+	11
Percentage of installations that have stand-alone AP systems	1%	100%
Staff to develop-install and support-other**		
• In entire company	380-250-90	6-3-3
• In LIS division (including AP)	365-240-90	6-3-3
• In AP systems only	—	6-3-3
No. of user workstations in sites operating system	5-280 (avg., 40)	8-50
Range in No. of surgical pathology cases per year in sites operating system	10,000-600,000	2,500-18,000
Range in No. of gynecologic cytology cases per year in sites operating syst.	10,000-600,000	—
Programming language(s)	C, Visual Basic, Powerbuilder	ASP .Net 2.0, AJAX, XML
Databases and tools used	Sybase, Powerbuilder	MySQL database
Word processor(s) used	Microsoft Word 2003	integrated into Web-based solution—Native; requires Internet Explorer
Operating system(s)	servers: AIX, Windows 2003; client: Windows XP, 2000	Web browser Windows server 2003
Features (listed as a percentage of live installs or based on availability)		
• Surgical pathology information system	100%	100%
• Cytology information system	90%	expected to be operating in 43% of sites by February 2008
• Autopsy information system	100%	available but not installed
• Autopsy measurements and organ weights	100%	available but not installed
• Specimen log-in/specimen tracking and retrieval	100%/100%	100%/100%
• Entry of block IDs/specimen labels	100%/100%	50%/75%
• Histology slide labels/bar-coded slide labels	100%/80%	100%/available but not installed
• Histology worksheets	installed	100%
• Word processing—vendor specific	100%	100%
• Voice entry of gross description/back-end batch voice to text	20%	not available
• Gross and microscopic images integrated in reports	30%	100%
• Electronic signature	100%	100%
• Remote printing of completed reports	installed	100%
• Direct fax reports	95%	100%
• Web-based remote inquiry of reports	installed	100%
• Physician Web access for order entry	installed	100%
• Natural language search capability	100%	not available
• Multi-site or multi-facility-wide area network	35%	100%
• Sound-alike retrieval of patient history	not available	not available
• Tumor registry reports/management reports	95%/100%	43%/100%
• Reports sufficient to comply with CLIA '88 regulations	100%	100%
• Comprehensive billing and accounts receivable	installed	100%
• Interface to external billing system	95%	100%
• HIS interface: A/D/T	95%	100%
• HIS interface: result reporting/incoming clinical results	90%/installed	100%/100%
• Partin tables or Gleason score calculations	not available	not available
• Synoptic reporting	installed	not available
• Client services module	not available	available
• Consult management and reporting	90%	100%
Software provides indexed field in each test definition for LOINC code?	no	no
Provide LOINC dictionary for each new installation?	no	no
Routine results encoded in SNOMED (in version earlier than SNOMED CT)?	yes (at 80% of sites)	no
Routine results encoded in SNOMED CT?	no	no
AP system uses autoencoder to create SNOMED codes?	yes	no
Percentage of installed sites that represent cases in free text	20%	—
No. of installations that use AP system to automatically electronically transfer tumor diagnoses to a tumor registry	NAACCR vol. V ePath standard for e-pathology reporting available/12 in older NAACCR standard (volume II)	6 in older NAACCR standard (Florida Cancer Data System, Texas Tumor Registry)
Complete AP application service provider solution?	no	yes
Method of charging for ASP service	—	fixed fee
Client software required	—	browser based
ASP information conduit	—	operates over the Internet
Client contracts supported from data center not operated by client	—	—
How data center is operated	—	by vendor
Other information systems interfaced	Epic, McKesson, Cerner, Siemens, GE, others	Meditech, EpicCare, Opus
Voice-recognition products or partners system uses	Nuance Dragon NaturallySpeaking	none
Histology and cytology devices interfaced	cassette and slide engravers, Ventana stainers, Apollo PathPACS imaging	none
User interface in language other than English?	fields can be customized	yes (Spanish, German, Chinese)
Source code?	escrow	escrow
User group?	yes (meets in person annually, with quarterly regional meetings, and via Internet as set by region)	no
User can modify screens?	yes	yes
Cost (hardware/software/installation and training/monthly maintenance)		
• Smallest stand-alone system	—	0/\$18k/0/\$0.25k per pathologist
• Largest stand-alone system	—	0/\$70k/0/\$0.25k per pathologist
Base price of integrated system, excluding AP configuration	—	0
• Incremental cost to add smallest AP configuration	—	0/—/0/\$0.25k per pathologist
• Incremental cost to add largest AP configuration	—	0/—/0/\$0.25k per pathologist
Distinguishing features (supplied by vendor)	<ul style="list-style-type: none"> <li>outstanding support, usability, and client satisfaction</li> <li>integration with Sunquest LIS; flexibility for all disciplines</li> <li>enhanced structured reporting module and imaging</li> </ul>	<ul style="list-style-type: none"> <li>100% Web based; provides universally secure access and increased efficiency</li> <li>increases referring clinician satisfaction by providing online requisition, online reporting, online data mining of all reports, and complete interface with any HL7-capable EMR system</li> <li>complete integrated billing solution reduces billing cycle to as low as seven days and maximizes cash flow</li> </ul>
<p>*H=U.S. hospitals, IL=independent labs in U.S., C or GP=clinics or group practices in U.S., FI=foreign installations, OS=other sites **other=sales, marketing, administration, and other company functions</p>		