

- What is the brand name of your company's laboratory information system (LIS) or laboratory information management system (LIMS)?
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- 3. Specify the authorizing agency, type, and year of the product's regulatory authorizations or certified compliance with voluntary standards.
- 4. What is the intended use or primary function of the product?

5. Which of the following functions or capabilities does your system perform or support?

- $\label{eq:constraint} \textbf{6. If you answered "other," explain briefly.}$
- 7. On what operating system is your LIS or LIMS based?
- 8. What database system does your LIS or LIMS use?
- 9. Briefly describe any automated features or options that pertain to the product.
- 10. What is the typical training time for the product?
- 11. What types of technical support are available?
- 12. What capabilities, features, or accessories distinguish this product from others on the market?

AgileBio LLC	Apex Healthware LLC	Aspyra LLC
San Diego (347) 368-1315; www.labcollector.com	San Antonio, Tex (210) 757-0002; www.apexhealthware.com	Jacksonville, Fla (818) 449-9000, ext.671; www.apyra.com/ laboratory-solutions
AgileBio LabCollector	Apex LIS	Aspyra CyberLab
Version 5.19, 2015.	Version 5.0, 2015	Version 7.3, 2014.
n/a	n/a	ISO 13485:2003, 2005; MU II certified, 2014.
Analytics, biobanking, production, and research and development (R&D).	Lab orders and results processing.	Fully functional LIS that can be used for patient admission, discharge, and transfer, scheduling patient orders, result capture and retrieval, and laboratory management; marketed for use in clinical laboratory settings, including hospitals, reference labs, specialty labs, and veterinary labs.
 bar coding and label printing business intelligence component charge capture and billing electronic review and documentation of QC integrated client services module inventory management LOINC codes medical necessity checking (ie, ICD and CPT checking) online test-utilization guidelines patient portal patient scheduling scanning images or documents specimen storage staff scheduling trending of results voice recognition Web access for order entry and access to results wide area network environments other 	 bar coding and label printing business intelligence component charge capture and billing electronic review and documentation of QC integrated client services module inventory management LOINC codes medical necessity checking (ie, ICD and CPT checking) online test-utilization guidelines patient portal patient scheduling scanning images or documents specimen storage staff scheduling trending of results voice recognition Web access for order entry and access to results wide area network environments other 	 bar coding and label printing business intelligence component charge capture and billing electronic review and documentation of QC integrated client services module inventory management LOINC codes medical necessity checking (ie, ICD and CPT checking) online test-utilization guidelines patient portal spatient scheduling scanning images or documents specimen storage staff scheduling trending of results voice recognition Web access for order entry and access to results wide area network environments other
Linux, MacOS, Windows.	Windows.	Windows.
MySQL.	Microsoft SQL.	Microsoft SQL.
n/a	Consolidates results data from lab instruments and outside labs into a single report.	Report distribution; medical necessity vali- dation; system and instrument interfacing; order entry decision support by insurance payor; result response rules; standing order processing; ask-at-order-entry questions.
1 day.	Varies; onsite and webinar.	Initial training is 4 days onsite proceeded by three to five Web training sessions, depending on scope of the project; implementation is typically 3 to 6 months.
E-mail, phone, onsite, remote, Web ticket.	Standard: Monday to Friday, 8 am–6 pm CST; premium: Monday to Friday, 8 am–8 pm CST.	24/7 support available by phone and e-mail.
Easily customized interface with custom fields; workflow design; R&D labbook capable.	More than 200 parameters provide flexibility in customizing workflow; optimized cost/benefit breakdown.	Ability for growth from one to 500 users without change in platform; robust standing order module; multiple language results reporting; template-based customiz- able patient reports by client, distribution (e-mail, fax, network/remote printer, PDF sFTP), sample type, and site; cloud-based server options; MU II certification, SQL management report library.

Clinical Software Solutions	CompuGroup Medical	Genologics, an Illumina company	McKesson
Queen Creek, Ariz (480) 888-9447; clin1.net	Phoenix (800) 359-0911; www.cgm.com/us	Vancouver, British Columbia, Canada (250) 483-7011; www.genologics.com	Alpharetta, Ga (404) 338-3239; mckesson.com/laboratory
CLIN1 LIS	CGM Labdaq	Clarity LIMS	McKesson Lab LIS
Version 11.3, 1987.	Version 4.11, 2014.	Clarity LIMS, 2013.	Version 15, 2015.
n/a	n/a	n/a	ONC HIT certification, 2012, 2013, and 2014.
Laboratory information system.	An advanced LIS solution designed to help labs manage and grow their business; turnaround time monitors and multiple tools help users assess performance, recognize opportunities for growth, and customize reports.	Management of samples, workflows, and data from next-generation sequencing (NGS).	A computerized software application intended to store, retrieve, and process laboratory data for clinical use; automates laboratory processes that support clinical test reporting to assist in delivering patient care.
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		NGS management.	
Windows.	Windows 2012 R2.	Linux, Windows 7+, Mac OS X+.	Linux.
Sybase and Microsoft SQL.	Oracle.	Oracle, PostgreSQL.	Oracle.
Offers performance to handle large patient databases and high sample accession rates; includes such standard automation features as label printing, report printing, loadlists, interfacing for orders and results, and Web portal ordering and reporting.	Rules and user-defined roles can be automated; reports can be automated through scheduling, and auto-verification can automate the release of results.	Automated data entry, quality control.	Helps automate the entire testing process, including specimen ordering and routing, medical necessity checking, and results reporting and tracking; additional modules that assist in automation include specimen collection and outreach.
3 to 5 days.	Can range from one to several weeks, depending on the scope of the project.	1 to 2 days.	5 weeks for super users (includes application training, expert rule build, file build, microbiology build, report writing, and system administration); 2 weeks for end-users.
24/7/365 with a service agreement.	Standard support is offered 8 am–11 pm ET; 24/7 support is also available.	E-mail, phone, Web.	24/7 support; customer portal to knowledge base; user group message boards; monthly customer focus calls.
Interfacing with other vendors' systems, including electronic health records, electronic medical records, reference labs, and public health labs; simplified and cost effective; custom programming available; document scanning built in for chain of custody, consent forms, gels, and graphs.	Intuitive system minimizes training of users, enabling quick adoption; offers the highest security standards and protection for users; user-defined rules improve workflow while minimizing errors; HL7 interfaces to electronic health records, billing software, and reference laboratories; supports complete integration of laboratory data to ensure compliance with new regulations; quality control module aligns with quality assessment planning.	Full Illumina equipment integration and integrations with other manufacturers' instruments; easy to use, configure, and adopt; different editions enable the LIMS to grow with the needs of labs; the applica- tion programming interface enables labs to integrate the LIMS with LIS, electronic medical records, or other in-lab systems or instruments.	Highly customizable, intuitive, user friendly, and easy-to-manage LIS; can easily integrate and interface to multiple other systems; public health reporting module to automate reporting to state public health agencies.



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Orchard Software Corp	Psyche Systems Corp	Xifin Inc
Carmel, Ind (800) 856-1948; www.orchardsoft.com	Milford, Mass (508) 473-1500; www.psychesystems.com	San Diego (919) 605-5245; www.xifin.com
Orchard Harvest LIS	Psyche NucleoLIS	Xifin LIS Anywhere
Version 10.0, 1994.	Version 1, 2015.	Version 2.8, 2004.
ICSA Lab certification as ONC EHR module, 2015.	n/a	SOC1, SOC2, CAP, CLIA; years n/a.
Laboratory information system.	Molecular laboratory information management system.	Molecular, next-generation sequencing, pharmacogenomics.
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Can support patient portal and client services using the optional Orchard Copia solution.		
Windows.	Windows.	Cloud-based system accessed via standard Web browsers (Chrome, Internet Explorer, etc).
4th Dimension.	Microsoft SQL.	Microsoft SQL.
Supports automated results delivery, synoptic data mining, business analytics, and rules-based decision support technology.	Autocomment generation is possible by utilizing rule setup; rapid accessioning using predefined default settings; ability to clone library entities; auto label printing.	Integration with labs' medical devices allows for automated integration of results; system can be configured to auto-release normal results; batch processing (accessioning, instrumentation, results) allows for a more streamlined workflow.
System administrator training is a 1-week, classroom-based course.	4 days onsite.	2 to 3 days for each user category.
Phone, e-mail, and Web support are available 24/7/365.	Monday to Friday standard business hours; off-hours support is also available for application, interface, and general support.	Phone support: Monday to Friday, 6 am–7 pm PST; online support: 24/7.
Includes many features capable of handling a variety of lab workflows and business situations, such as business intelligence, integration, microbiology, quality control and quality assurance support, pathology support, point-of-care testing, positive patient identification, sample tracking, user-defined rules, and workflow management.	Report distribution monitoring window for maintenance; secure e-mail distribution of reports; result entry in one window for all profiles ordered on a case; patient history displayed as PDF report and individual results; attach images at the profile and constituent level for reporting; dynamic reporting allows the user to order any combination of profiles on a case and report them as a cohesive entity.	Cost-effective Web-based SaaS solution; no major hardware or software purchases or upgrade fees; Xifin provides an integrated suite of products including LIS/ LIMS, revenue cycle management, and business intelligence; Xifin has a complete suite of tailored modules and logic-driven reports, including comprehensive summary reporting.