

- 1. What is the brand name of your company's middleware system?
- 2. What is the latest version of your named middleware system; what year was this version first released to market?
- 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 middleware system perform or support?
- 6. If you answered "other," explain briefly.
- 7. On what operating system is your middleware system based?
- 8. How does your middleware support user control and configuration?
- 9. Briefly describe any automated or connectivity 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?

| Alere Informatics | Apex Healthware LLC Clinical Software Solut | | |
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| Charlottesville, Va (877) 971-7953; www.rals.com | San Antonio, Tex (210) 757-0002; www.apexhealthware.com | Queen Creek, Ariz (480) 888-9447; clin1.net | |
| Alere remote automated laboratory system (RALS) | Apex Connector | CLIN1 LMS | |
| Alere RALS-Web3 Version 5.8, 2015. | Version 5.0, 2015. | Version 1.3, 2015. | |
| SGS ISO 13485, 2003; SGS EN ISO 13485, 2012. | n/a | n/a | |
| Captures patient information, including patient and operator ID, for testing done at the point of care (POC), and transfers that data to the electronic health record; for bidirectional devices, the system can send a wide range of information to the device, including operator lists and device configuration. | Interface lab instruments to laboratory information sytems (LIS) or electronic health records. | Laboratory analyzer and point-of-care result processing to third-party vendors | |
| automated reflex/rerun testing billing and reimbursement management communications and data validation data communication data consolidation orders management physician communication point-of-care data management quality systems management real-time information management sample and results tracking systems data integration other | □ automated reflex/rerun testing □ billing and reimbursement management □ communications and data validation ■ data communication □ orders management □ physician communication □ point-of-care data management □ quality systems management □ real-time information management □ sample and results tracking □ systems data integration □ other | ■ automated reflex/rerun testing ■ billing and reimbursement managen □ communications and data validation ■ data communication ■ orders management ■ physician communication ■ point-of-care data management ■ quality systems management ■ real-time information management ■ sample and results tracking ■ systems data integration □ other | |
| Windows. | Windows 7 Professional. | Windows. | |
| Single-system control of POC data management; bidirectional support for applicable devices permits Alere to send certified operators and device configurations to connected devices; features single-system management. | This a "black box" solution; generally there is no user interaction once is it configured and tested. | Includes administrative system configu tion settings for user setup, with a unic user ID and password. | |
| Web-based, open connectivity for POC testing, including direct-to-device interfacing; connectivity is vendor-neutral and available to leading hospital glucose meters and many non-glucose devices; all system functionality on one screen; immediate and remote access to RALS data; review and release results to the LIS directly from units. | n/a | Interfacing for orders and results with other vendors' systems for facilities that do not require a full laboratory informat system; user-friendly and easy to use; quality solution and investment value frair and reasonable cost. | |
| 4 hours. | 1 hour of remote Web-based training. | 3 to 5 days. | |
| Customer support and Interfacing hours available 7 am-7 pm ET; questions outside of business hours are relayed to an on-call call technician responder; questions can also be submitted online through the Alere informatics Web site at www.rals.com. | Monday to Friday, 8 am-5 pm CST. | 24/7/365 with a service agreement. | |
| Multiple levels of authority to tailor system access; at-a-glance and operator management status; flagged results require review prior to LIS upload; integrated operator compliance and competency testing; ability to enter a wide range of manual or lateral-flow test results directly into RALS and then to the patient record. | Recommended for the Abaxis Piccolo when interfaced to the Sunquest LIS. | Integratable with other vendors' system for immediate access to lab results; generates barcoded labels; can also be used as an intermediary between two more third-party systems (such as orderivate health information, and results) custom programming available. | |

| Orchard Software Corp | Siemens Healthcare Diagnostics Inc | Sysmex America Inc | Telcor Inc |
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| Carmel, Ind (800) 856-1948; www.orchardsoft.com | Tarrytown, NY (914) 631-8000; siemens.com/healthcare | Lincolnshire, III (800) 379-7639; www.sysmex.com | Lincoln, Neb (866) 489-1207; www.telcor.com |
| Orchard Trellis | Siemens CentraLink data mangement system | Sysmex WAM | Telcor QML |
| Version 2.0, 2012. | Version 15.0.3, 2001. | Version 5.02, 2015. | Version 2.3.16, 2015. |
| n/a | n/a | FDA MDDS Class 1 medical device, 2012. | ONC HIT certification, 2014. |
| Connecting point-of-care (POC) testing devices to the laboratory information system or electronic medical record. | Provides centralized management and control of lab testing; permits customizing and streamlining workflows across automation, systems, and information technology to efficiently deliver timely and accurate results. | Hematology information management tool that consolidates data from multiple laboratory analyzers, performs complex rules-based functions, and communicates this information to laboratory information systems. | Manage point-of-care (POC) operations. |
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| Management of personnel certification and competency; POC quality control. | Automated clinical decision management, hematology workflow, patient moving averages. | | POC operator certification and competency management. |
| Windows. | Windows 2008. | Red Hat Linux. | Windows 2008 and 2012. |
| System administrators create and control testing menus, devices, and personnel certifications. | Configurable and customizable upon request and in alignment with laboratory standard operating procedures. | A project manager, clinical application consultant, and interface integration product manager are available during installation; on-demand e-learning and virtual instructor-led courses; rule and database set up to customer configuration; consultation and ongoing management of rules upon request. | Hundreds of user-accessible configurations; installed on single server, optional distributed processing across multiple servers; optional database; high availability. |
| Provides the ability to interface POC devices remotely; system administrators can easily manage QC, personnel certification, and POC testing menus. | Supports connectivity to Aptio automation, third parties, and Siemens instrumentation. | Has multisite and multi-LIS capabilities; permits subsite rules where needed for added flexibility; manages Sysmex automation systems in regard to rack/ smear management and sorting/archiving of samples. | Sample ID validation via admission, discharge, transfer, and orders interfaces; solicited and unsolicited result interfaces; operator interfaces to devices for operator lockout; LMS interfaces for operator competency and automatic recertification. |
| System administrator training can take place remotely in a couple of hours. | 4 hours; e-learning available. | 4 hours. | Two 2-hour sessions. |
| Phone, e-mail, and Web support are available 24/7/365. | 24/7 remote support; onsite support. | 24/7 technical assistance center; customer resource center Web site; online help and technical document library. | 24/7/365. |
| A cost-effective solution that provides electronic connectivity to manage POC testing; helps improve patient care and enhance POC value by ensuring real-time electronic capture of results in the electronic health record, allowing providers prompt access to results for quick diagnosis and treatment. | Comprehensive results-management and autoverification rules and integrated quality control package; highly customizable workflow scenarios; robust and mature multidisciplinary data management and networking system. | Rules customized to customer specifications; automated testing tools with instrument emulator and final report output; hematology-specific middleware with smear and pathology management features; fully supported middleware for implementation and testing; system and database management included in product offering; onsite go live support. | Only open POC system not owned and managed by a device vendor; first LMS interface; single version philosophy; all product enhancements included at no additional cost; multiple simultaneous result interfaces to multiple LIS and EMR systems; multiple time zones; most connected device types; only POC middleware with orders interface; perpetual license. |