Blood bank information systems

Part 1 of 5	Blood Bank Computer Systems	Cerner Corp.	Haemonetics Software Solutions
See accompanying article on page 12 *See* captodayonline.com/productguides *for an interactive version of guide*	**Brian Forbis** bforbis@bbcsinc.com 1002 15th St. SW, Suite 120 Auburn, WA 98001 888-738-2227 www.bbcsinc.com	**Jennifer Walker** jennifer.walker@cerner.com 2800 Rockcreek Parkway Kansas City, MO 64117 816-201-2854 www.cerner.com	**Scott Dustin** scott.dustin@haemonetics.com 4925 Robert J. Mathews Parkway, Suite 100 El Dorado Hills, CA 95762 916-404-8415 www.haemonetics.com
Name of blood bank system	**Blood Bank Control System Primary Application (BBCSP)**	**Cerner Millennium PathNet Blood Bank Transfusion**	**ElDorado Donor**
First ever/Most recent blood bank system installation*	1987/July 2012	1986/July 2012	1996/June 2012
Last major product release for version of product featured	July 2012	January 2012	June 2012
Total number of contracts for sites operating blood bank system	30	388†	26
•Contracts for U.S. hospitals with donor and transfusion services	1	—	14
•Contracts for U.S. hospitals with transfusion services only	0	—	0
•Contracts for U.S. regional blood centers with donor services only	21	—	4
•Contracts for U.S. regional blood centers with donor and transfusion services	5	—	2
•Contracts for foreign hospitals and regional blood centers	0	70† (Australia, Canada, England, Guam, Saudi Arabia, Singapore, Egypt, United Arab Emirates)	4 (Egypt, Puerto Rico, Guam, Dubai)
•Contracts for other sites	3 (2 medical research facilities; 1 hospital with donor service only)	0	2 (hospitals with donor service only)
Number of contracts signed between June 2011–June 2012	1	52† (for calendar-year 2011)	4
Total number of sites operating blood bank system	123	388	14
Number of sites that went live between June 2011–June 2012	1	48	3
Installations not yet live (hospitals/regional blood centers/others)	1 (0/1/0)	34 (34/0/0)	17 (10/4/3)
Percentage of installations that are standalone blood bank systems	100%	0	100%
No. of employees in entire company/Dedicated solely to blood bank systems development, installation, support	30/25	10,072 (as of January 2012)/420	2,374/338
Number of different versions of this software installed	12	2	4
•Versions of product in field covered by FDA 510(k) clearance	BBCSP 5.2.2, 5.3, 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.5, 5.3.6, 5.3.7, 5.3.8, 5.4, 5.4.1	Cerner Classic PathNet, Cerner Millennium PathNet	2.0, 2.1, 2.2, 2.3
•Versions of product that did not require FDA 510(k) clearance	0	0	0
Range in number of user workstations in live sites (average)	10–200 (average, 40)	—	6–40 (average, 15)
Server platforms	IBM iSeries	IBM, Hewlett-Packard	—
PC or workstation platforms	IBM-compatible workstation, PCs	Microsoft Windows locally or via Citrix thin client	Windows
Software programming language(s)	RPG 400, Java	Java, Visual Basic, C++, C#, Visual C	C#
Operating system(s)	OS/400	HP-UX, AIX, VMS	Windows
Databases and tools	IBM DB2	Oracle	Oracle, Crystal Reports
Features (listed as percentage of live installs or based on availability)			
•Biometric ID of donors and/or patients	installed	available but not tracked	—
•Full support of ISBT 128 unit labeling	installed	100%	100%
•Bar-code reading of donor and unit information	installed	100%	100%
•Unit inventory	installed	100%	100%
•Autologous and directed unit tracking	installed	100%	100%
•Direct entry of test results	installed	100%	100%
•Crossmatch results	installed	99%	available via Haemonetics' SafeTrace Tx
•Electronic crossmatch decisionmaking	installed	>50%	available via Haemonetics' SafeTrace Tx
•Antigen typing	installed	99%	100%
•Integrated bedside check for transfusion using positive patient ID	not available	1%	available via Haemonetics' BloodTrack
•Track all steps in production of product	installed	99%	100%
•Print donor unit labels—bar coded	installed	99%	100%
•Interface with blood irradiator or centrifuges	not available	not available	—
•Centralized transfusion service capability	installed	available	available via Haemonetics' SafeTrace Tx
•Donor recruitment and management	installed	available through partnership with a third party	available via Haemonetics' eDonor
•Donor questionnaire	installed	available through partnership with a third party	available via Haemonetics' Donor Doc
•Mobile scheduling	installed	available through partnership with a third party	available via Haemonetics' Hemasphere/eDonor
•Laptop-based mobile donor registration module	installed	available through partnership with a third party	installed
•Source or recovered plasma management	installed	available through partnership with a third party	installed
•Accounts receivable	installed	15%	installed
•Management reports	installed	100%	100%
•Ad hoc report writer	installed	100%	available via Haemonetics' ElDorado Donor Report Server
•Quality control management	installed	25%	available via Haemonetics' ElDorado Control
•Collection management	installed	100%	100%
Interfaces to automated donor infectious disease testing instruments	yes	yes	yes
Interfaces to automated ABO/Rh/antibody screening instruments	yes	yes	yes
Electronic interface to bedside patient ID system from other vendors	no	no	no
Languages (other than English) offered on system	none	German, French, Spanish	none
Recommended tools to help clients validate their systems	validation protocols, flow charts, risk mitigation online portal, installation and verification instructions, others	certification guidelines, design and build instructions and online help files for end-users, blood bank validation services for organizations that want to outsource their validation activities	validation templates and validation test plan for safety critical control checks, validation services through Haemonetics' PeopleMed subsidiary
System available via ASP or cloud-based data center	yes	yes	yes
System provides indexed field in each test definition for LOINC code	no	yes	no
Provide LOINC dictionary for each new installation	no	yes	no
Other vendors to which software has a lab system-related interface	Haemonetics Software Solutions, Ortho Clinical Diagnostics	Haemonetics Software Solutions	—
User group	yes (meets via Webinar and in person)	yes (meets via Webinar and in person)	yes (meets via Webinar and in person)
Source code	no	no	escrow
Methods by which users can tailor blood bank system in their own setting	ad hoc query tools, user-defined interfaces, dictionary settings, BBCS configuration options	user programming, ad hoc query tools, user-defined interfaces, dictionary settings, others	user programming, ad hoc query tools, user-defined interfaces, table settings
Cost for software modifications to comply with federal regs and laws	standard (no charge)	standard (no charge)	standard (no charge)
Total cost for smallest standalone blood bank system installation**	—	—	—
Total cost for largest standalone blood bank system installation**	—	—	—
Total incremental cost for smallest blood bank configuration installed**	—	—	—
Total incremental cost for largest blood bank configuration installed**	—	—	—
Distinguishing features (supplied by company)	• over 25 years of consistent client-driven design • provides an entirely integrated, real-time, fully customizable electronic questionnaire module capable of utilizing touch-screen/tablet technology, supporting a fully paperless donor room • controls within BBCS applications allow managers to be more effective by minimizing distractions and controlling risk	• positive patient ID capabilities at the patient bedside, from specimen collection to transfusion administration • increased efficiencies through such capabilities as mother-baby linking, online secondary review of results, QC specific to blood bank workflows, etc. • support for blood bank within a single lab information system and electronic medical record architecture	• extensive safety checks throughout system with a commitment to compliance • open workflow with extensive user-defined, table-based rules • Service 360 commitment to ensure quality customer implementation and support experience

*based on July 2012 survey deadline
**total cost includes hardware, software, installation, and training
Note: a dash in lieu of an answer means company did not answer question or question is not applicable

†sites, not contracts

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Part 2 of 5	Haemonetics Software Solutions Scott Dustin scott.dustin@haemonetics.com 4925 Robert J. Mathews Parkway, Suite 100 El Dorado Hills, CA 95762 916-404-8415 www.haemonetics.com	McKesson Joseph R. Stabile joseph.stabile@mckesson.com 5995 Windward Parkway Alpharetta, GA 30005 404-338-4363 www.mckesson.com/laboratory	Medical Information Technology Paul Berthiaume pberthiaume@meditech.com Meditech Circle Westwood, MA 02090 781-821-3000 www.meditech.com
See captodayonline.com/productguides *for an interactive version of guide*			
Name of blood bank system	SafeTrace Tx[†]	Horizon Blood Bank[†]	Blood Bank System–6.0
First ever/Most recent blood bank system installation*	1996/July 2012	2004/June 2012	1981/June 2012
Last major product release for version of product featured	March 2012	March 2011	January 2011
Total number of contracts for sites operating blood bank system	353	113	81[†]
•Contracts for U.S. hospitals with donor and transfusion services	19	0	—
•Contracts for U.S. hospitals with transfusion services only	312	110	—
•Contracts for U.S. regional blood centers with donor services only	0	0	—
•Contracts for U.S. regional blood centers with donor and transfusion services	10	0	—
•Contracts for foreign hospitals and regional blood centers	9 (Botswana, Puerto Rico, Canada, Guam, Ethiopia)	3 (Canada)	5[†] (Canada)
•Contracts for other sites	3 (regional donor centers with transfusion only)	0	— (acute care, behavioral health, critical access, long-term care, rehabilitation, others)
Number of contracts signed between June 2011–June 2012	47	0	1[†]
Total number of sites operating blood bank system	444	174	118
Number of sites that went live between June 2011–June 2012	46	17	53
Installations not yet live (hospitals/regional blood centers/others)	59 (59/0/0)	13 (13/0/0)	61 (60/0/1)
Percentage of installations that are standalone blood bank systems	100%	0	0
No. of employees in entire company/Dedicated solely to blood bank systems development, installation, support	2,374/338	44,000/328 (from Haemonetics Software Solutions)	3,830/202 (for all LIS-related applications)
Number of different versions of this software installed	6	5	1
•Versions of product in field covered by FDA 510(k) clearance	SafeTrace Tx 3.4, 3.4.1, 3.5. 3.5.1, 3.6, 3.7	SafeTrace Tx 3.2, 3.3, 3.4, 3.5, 3.6	Meditech 6.0
•Versions of product that did not require FDA 510(k) clearance	0	0	0
Range in number of user workstations in live sites (average)	1–105 (average, 7)	1–7 (average, 2)	—
Server platforms	Windows-based servers, Intel based (determined by Oracle)	Windows-based servers	minimal 64-bit 2 GHz+ dual core processors operating Microsoft Windows Server 2003/2008 Standard Edition
PC or workstation platforms	Windows	Windows	Windows PCs with 2 GHz or higher Intel or equivalent processor and minimum 2 GB RAM
Software programming language(s)	Delphi	Delphi	Meditech-developed programming language
Operating system(s)	Windows	Windows	servers: Windows 2003/2008 SE; clients: Windows 2000 Professional, XP, XP Tablet, Vista, 7
Databases and tools	Oracle, Crystal Reports	Oracle	Meditech Database Management System
Features (listed as percentage of live installs or based on availability)			
•Biometric ID of donors and/or patients	not available	not available	installed
•Full support of ISBT 128 unit labeling	100%	installed	100%
•Bar-code reading of donor and unit information	100%	installed	100%
•Unit inventory	100%	installed	100%
•Autologous and directed unit tracking	100%	installed	100%
•Direct entry of test results	100%	installed	100%
•Crossmatch results	100%	installed	100%
•Electronic crossmatch decisionmaking	70%	installed	installed
•Antigen typing	100%	installed	installed
•Integrated bedside check for transfusion using positive patient ID	available via a third party	not available	installed
•Track all steps in production of product	100%	installed	100%
•Print donor unit labels—bar coded	installed	installed	installed
•Interface with blood irradiator or centrifuges	installed	installed	installed
•Centralized transfusion service capability	100%	installed	100%
•Donor recruitment and management	available via Haemonetics' eDonor	available via a third party	installed
•Donor questionnaire	available via Haemonetics' ElDorado Donor Doc	available via a third party	installed
•Mobile scheduling	available via Haemonetics' Hemasphere	available via a third party	installed
•Laptop-based mobile donor registration module	available via Haemonetics' ElDorado Donor	available via a third party	installed
•Source or recovered plasma management	available via Haemonetics' ElDorado Donor	available via a third party	installed
•Accounts receivable	available via a third party	available via a third party	installed
•Management reports	100%	installed	100%
•Ad hoc report writer	available via a third party	installed	100%
•Quality control management	installed	installed	—
•Collection management	available via Haemonetics' ElDorado Donor	available via company's LIS	installed
Interfaces to automated donor infectious disease testing instruments	no	no	yes
Interfaces to automated ABO/Rh/antibody screening instruments	yes	yes	yes
Electronic interface to bedside patient ID system from other vendors	yes	no	no
Languages (other than English) offered on system	none	none	Spanish in development
Recommended tools to help clients validate their systems	validation guidelines, templates and test plan for critical control checks, validation services through Haemonetics' PeopleMed subsidiary	validation services and guidelines from recommended third party	testing scripts available on company Web site through Meditech validation guides
System available via ASP or cloud-based data center	yes	yes	no
System provides indexed field in each test definition for LOINC code	no	no	yes
Provide LOINC dictionary for each new installation	no	no	no
Other vendors to which software has a lab system-related interface	McKesson, Cerner, Siemens, GE, CPSI, Meditech, Keane, SCC Soft Computer, Sysmex, Allscripts, Orchard, Sunquest, Quality Software Systems	Siemens, Meditech, Epic, Cerner (all interface to McKesson Horizon Lab or Paragon and then to Horizon Blood Bank)	—
User group	yes (meets via Webinar and in person)	yes (in person only)	yes (meets via Webinar and in person)
Source code	escrow	escrow	escrow
Methods by which users can tailor blood bank system in their own setting	ad hoc query tools, user-defined interfaces, table settings	ad hoc query tools, dictionary settings	ad hoc query tools, user-defined interfaces, dictionary settings, customer-defined screens, desktop preferences, rules-based logic
Cost for software modifications to comply with federal regs and laws	standard (no charge)	—	standard (no charge)
Total cost for smallest standalone blood bank system installation**	—	—	—
Total cost for largest standalone blood bank system installation**	—	—	—
Total incremental cost for smallest blood bank configuration installed**	—	—	—
Total incremental cost for largest blood bank configuration installed**	—	—	—
Distinguishing features (supplied by company)	• extensive safety checks throughout system with a commitment to compliance • patents for Patient-At-A-Glance bar, antigen-antibody identification, and central transfusion service functionality • Service 360 commitment to ensure quality customer implementation and support experience	• extensive safety checks throughout system with a commitment to compliance • patents for Patient-At-A-Glance bar, antigen-antibody identification, and central transfusion service functionality • Service 360 commitment to ensure quality customer implementation and support experience	• integrated component of Meditech EHR, providing a seamless exchange of data across the continuum • features centralized access to common routines and reports via roles-based desktops • blood bank and patient care and patient safety solutions fully integrated, fostering the sharing of blood bank unit and patient data between the products

*based on July 2012 survey deadline
**total cost includes hardware, software, installation, and training
Note: a dash in lieu of an answer means company did not answer question or question is not applicable

[†]also marketed by McKesson as Horizon Blood Bank　　[†]also marketed by Haemonetics as SafeTrace Tx　　[†]sites, not contracts

Blood bank information systems

Part 3 of 5	Medical Information Technology	Medical Information Technology	Mediware Information Systems
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See captodayonline.com/productguides *for an interactive version of guide*	Westwood, MA 02090	Westwood, MA 02090	11711 W. 79th St., Lenexa, KS 66214
	781-821-3000 www.meditech.com	781-821-3000 www.meditech.com	913-307-1000 www.mediware.com
Name of blood bank system	Blood Bank System–client/server	Blood Bank System–Magic	HCLL Transfusion
First ever/Most recent blood bank system installation*	1981/July 2012	1981/June 2012	1980/May 2012
Last major product release for version of product featured	November 2009	January 2012	—
Total number of contracts for sites operating blood bank system	232†	306†	257
•Contracts for U.S. hospitals with donor and transfusion services	—	—	21
•Contracts for U.S. hospitals with transfusion services only	—	—	222
•Contracts for U.S. regional blood centers with donor services only	—	—	6
•Contracts for U.S. regional blood centers with donor and transfusion services	—	—	2
•Contracts for foreign hospitals and regional blood centers	20† (Bahamas, Canada)	37† (Canada, Bahamas, Ireland, United Kingdom)	6 (Ireland, Saudi Arabia, Singapore, Canada)
•Contracts for other sites	— (acute care, behavioral health, critical access, long-term care, rehabilitation, others)	— (acute care, behavioral health, critical access, long-term care, rehabilitation, others)	0
Number of contracts signed between June 2011–June 2012	2†	2†	12
Total number of sites operating blood bank system	548	680	419
Number of sites that went live between June 2011–June 2012	22	5	12
Installations not yet live (hospitals/regional blood centers/others)	38 (36/0/2)	59 (54/0/5)	93 (25/0/68)
Percentage of installations that are standalone blood bank systems	0	0	80%
No. of employees in entire company/Dedicated solely to blood bank systems development, installation, support	3,830/202 (for all LIS-related applications)	3,830/202 (for all LIS-related applications)	340/60
Number of different versions of this software installed	1	1	14
•Versions of product in field covered by FDA 510(k) clearance	Meditech client/server	Meditech Magic	3.0
•Versions of product that did not require FDA 510(k) clearance	0	0	2.93, 3.1, 3.2, 3.3, 3.4, 4.0, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7
Range in number of user workstations in live sites (average)	—	—	2–50 (average, 7)
Server platforms	minimal dual P4s or Xeon processors with 2 GB RAM; Microsoft Windows 2003/2008 Standard Edition	server with 2 GB RAM, LAN card, disk array, Microsoft Windows 2003/2008 Standard Edition	Windows, ASP browser based
PC or workstation platforms	Windows PCs with 2 GHz or higher Intel or equivalent processor and minimum 2 GB RAM	Intel-based PC, 1 GHz or higher Intel or equivalent processor with minimum 2 GB RAM	Microsoft compatible
Software programming language(s)	Meditech-developed programming language	Meditech self-developed programming language	Visual Basic, C++ Com, Microsoft .Net, C#
Operating system(s)	servers: Windows 2003/2008 SE; clients: Windows 2000 Professional, XP, XP Tablet, Vista, 7	Windows 2003, Server 2008 Standard Edition	Windows 2008, 2003
Databases and tools	Meditech Database Management System	Meditech Database Management System	Microsoft SQL 2008, 2005, 2000
Features (listed as percentage of live installs or based on availability)			
•Biometric ID of donors and/or patients	installed	installed	not available
•Full support of ISBT 128 unit labeling	100%	100%	installed
•Bar-code reading of donor and unit information	100%	100%	installed
•Unit inventory	100%	100%	installed
•Autologous and directed unit tracking	100%	100%	installed
•Direct entry of test results	100%	100%	installed
•Crossmatch results	100%	100%	installed
•Electronic crossmatch decisionmaking	installed	installed	installed
•Antigen typing	installed	installed	installed
•Integrated bedside check for transfusion using positive patient ID	installed	installed	available via a third party
•Track all steps in production of product	100%	100%	available via Mediware LifeTrak
•Print donor unit labels—bar coded	installed	installed	available via Mediware LifeTrak
•Interface with blood irradiator or centrifuges	installed	installed	not available
•Centralized transfusion service capability	100%	100%	installed
•Donor recruitment and management	installed	installed	available via Mediware LifeTrak
•Donor questionnaire	installed	installed	available via Mediware LifeTrak
•Mobile scheduling	installed	installed	available via Mediware LifeTrak
•Laptop-based mobile donor registration module	installed	installed	available via Mediware LifeTrak
•Source or recovered plasma management	installed	installed	available via Mediware LifeTrak
•Accounts receivable	installed	installed	not available
•Management reports	100%	100%	installed
•Ad hoc report writer	100%	100%	installed
•Quality control management	—	—	installed
•Collection management	installed	installed	available via Mediware LifeTrak
Interfaces to automated donor infectious disease testing instruments	yes	yes	yes
Interfaces to automated ABO/Rh/antibody screening instruments	yes	yes	yes
Electronic interface to bedside patient ID system from other vendors	no	no	no
Languages (other than English) offered on system	Spanish in development	Spanish in development	—
Recommended tools to help clients validate their systems	testing scripts available on company Web site through Meditech validation guides	testing scripts available on company Web site through Meditech validation guides	validation scripts
System available via ASP or cloud-based data center	no	no	yes
System provides indexed field in each test definition for LOINC code	yes	yes	no
Provide LOINC dictionary for each new installation	no	no	no
Other vendors to which software has a lab system-related interface	—	—	Epic, McKesson, Sunquest, Invision, Cerner, Meditech, others; any vendor that is HL7 compliant
User group	yes (meets via Webinar and in person)	yes (meets via Webinar and in person)	yes (in person only)
Source code	escrow	escrow	escrow
Methods by which users can tailor blood bank system in their own setting	ad hoc query tools, user-defined interfaces, dictionary settings, customer-defined screens, desktop preferences, rules-based logic	ad hoc query tools, user-defined interfaces, dictionary settings, customer-defined screens, rules-based logic	ad hoc query tools; configurator module for customization of test screens, truth tables, orders, billing, and forms
Cost for software modifications to comply with federal regs and laws	standard (no charge)	standard (no charge)	standard (no charge)
Total cost for smallest standalone blood bank system installation**	—	—	—
Total cost for largest standalone blood bank system installation**	—	—	—
Total incremental cost for smallest blood bank configuration installed**	—	—	—
Total incremental cost for largest blood bank configuration installed**	—	—	—
Distinguishing features (supplied by company)	• integrated component of Meditech EHR, providing a seamless exchange of data across the continuum • features centralized access to common routines and reports via roles-based desktops • blood bank and patient care and patient safety solutions fully integrated, fostering the sharing of blood bank unit and patient data between the products	• integrated component of Meditech EHR, providing a seamless exchange of data across the continuum • features electronic crossmatching, which saves critical testing time • blood bank and nursing solution fully integrated, fostering the sharing of blood bank transfusion information	• integrated with InSight, a dynamic and visual performance-management system • more than 60 safety checks throughout system, with 15 at time of issue; multiple users can access same patient simultaneously • integrated with Knowledge Trak for documentation control and compliance monitoring

based on July 2012 survey deadline
**total cost includes hardware, software, installation, and training*
Note: a dash in lieu of an answer means company did not answer question or question is not applicable

†*sites, not contracts*   †*sites, not contracts*

Blood bank information systems

Part 4 of 5 See captodayonline.com/productguides *for an interactive version of guide*	**Mediware Information Systems** **Michael Anania** michael.anania@mediware.com **John Van Blaricum** john.vanblaricum@mediware.com 11711 W. 79th St., Lenexa, KS 66214 913-307-1000 www.mediware.com	**NetLims NJ LLC** **Gerald Choder** gchoder@netlims.com 300 Frank W. Burr Blvd. Teaneck, NJ 07666 201-894-5300 www.netlims.com	**Psyche Systems Corp.** **Rachel Stratman** sales@psychesystems.com 25 Birch St., Building B, Unit 200 Milford, MA 01757 508-473-1500 www.psychesystems.com
Name of blood bank system	**LifeTrak**	**AutoFusion**	**Systematic Blood Bank (SBB)**
First ever/Most recent blood bank system installation*	1980/June 2012	2001/July 2012	1987/June 2011
Last major product release for version of product featured	April 2011	August 2009	2001
Total number of contracts for sites operating blood bank system	16	3	20
•Contracts for U.S. hospitals with donor and transfusion services	8	0	0
•Contracts for U.S. hospitals with transfusion services only	0	0	20
•Contracts for U.S. regional blood centers with donor services only	7	0	0
•Contracts for U.S. regional blood centers with donor and transfusion services	0	0	0
•Contracts for foreign hospitals and regional blood centers	0	3 (Israel)[†]	0
•Contracts for other sites	1 (donor testing)	0	0
Number of contracts signed between June 2011–June 2012	1	0	4
Total number of sites operating blood bank system	89	15	20
Number of sites that went live between June 2011–June 2012	1	0	0
Installations not yet live (hospitals/regional blood centers/others)	30 (1/1/28)	3 (3/0/0)	4 (4/0/0)
Percentage of installations that are standalone blood bank systems	31%	0	85%
No. of employees in entire company/Dedicated solely to blood bank systems development, installation, support	340/60	110/15	48/10
Number of different versions of this software installed	7	4	1
•Versions of product in field covered by FDA 510(k) clearance	3.02, 4.6.0	3.02.03	Systematic Blood Bank 3.0
•Versions of product that did not require FDA 510(k) clearance	3.1.1, 3.4.0, 4.4.0, 4.6.2, 4.7.0	3.02.06, 3.02.07, 3.01 MS	0
Range in number of user workstations in live sites (average)	7–340 (average, 100)	8–37 (average, 22)	1–100 (average, 13)
Server platforms	Intel based, Linux	Hewlett-Packard, IBM, Dell	none (hosted/Web deployed)
PC or workstation platforms	Microsoft compatible	Hewlett-Packard, IBM, Dell	PCs
Software programming language(s)	Oracle Forms and Reports	C++	Visual Basic, Fortran
Operating system(s)	Linux	Windows XP, 2000	any (supports all operating systems)
Databases and tools	Oracle	Microsoft SQL, Oracle	proprietary
Features (listed as percentage of live installs or based on availability)			
•Biometric ID of donors and/or patients	not available	not available	not available
•Full support of ISBT 128 unit labeling	100%	100%	100%
•Bar-code reading of donor and unit information	100%	100%	100%
•Unit inventory	81%	100%	100%
•Autologous and directed unit tracking	94%	installed	100%
•Direct entry of test results	installed	100%	100%
•Crossmatch results	available via Mediware HCLL	100%	100%
•Electronic crossmatch decisionmaking	available via Mediware HCLL	available but not installed	100%
•Antigen typing	installed	100%	100%
•Integrated bedside check for transfusion using positive patient ID	available via Mediware HCLL or third party	available but not installed	available but not installed
•Track all steps in production of product	94%	100%	100%
•Print donor unit labels—bar coded	94%	50%	not available
•Interface with blood irradiator or centrifuges	available in 2013	not available	not available
•Centralized transfusion service capability	available via Mediware HCLL	available but not installed	100%
•Donor recruitment and management	94%	50%	not available
•Donor questionnaire	94%	50%	not available
•Mobile scheduling	60%	not available	not available
•Laptop-based mobile donor registration module	40%	50%	not available
•Source or recovered plasma management	94%	available but not installed	not available
•Accounts receivable	not available	available but not installed	not available
•Management reports	100%	100%	100%
•Ad hoc report writer	available via a third party	installed	100%
•Quality control management	100%	70%	100%
•Collection management	94%	100%	not available
Interfaces to automated donor infectious disease testing instruments	yes	no	yes
Interfaces to automated ABO/Rh/antibody screening instruments	yes	yes	—
Electronic interface to bedside patient ID system from other vendors	no	no	no
Languages (other than English) offered on system	—	Hebrew	—
Recommended tools to help clients validate their systems	release notes, training, scripts, validation services	audit trail, ad hoc reporting, automated scheduled reports, automated alerts, user alerts followup, control screens	software validation guidelines
System available via ASP or cloud-based data center	yes	no	yes
System provides indexed field in each test definition for LOINC code	no	yes	no
Provide LOINC dictionary for each new installation	no	no	no
Other vendors to which software has a lab system-related interface	Cerner	McKesson, Sunquest, SCC Soft Computer, Orchard	—
User group	yes (in person only)	no	yes (meets via Webinar and in person)
Source code	escrow	escrow	yes
Methods by which users can tailor blood bank system in their own setting	ad hoc query tools, supports a published API for receiving and sending data	user programming, ad hoc query tools, user-defined interfaces, dictionary settings, configuration management tools, style sheets, reporting tools	user programming, user-defined interfaces
Cost for software modifications to comply with federal regs and laws	standard (no charge)	standard (no charge)	standard (no charge)
Total cost for smallest standalone blood bank system installation**	—	$200,000 (annual maintenance fee, $3,500)	$10,000 (annual maintenance fee, $200)
Total cost for largest standalone blood bank system installation**	—	$575,000 (annual maintenance fee, $9,500)	$40,000 (annual maintenance fee, $800)
Total incremental cost for smallest blood bank configuration installed**	—	$150,000 (annual maintenance fee, $3,000)	$30,000 (annual maintenance fee, $600)
Total incremental cost for largest blood bank configuration installed**	—	$450,000 (annual maintenance fee, $7,500)	$70,000 (annual maintenance fee, $1,500)
Distinguishing features (supplied by company)	• provides comprehensive blood center and donor testing services systems that feature full integration with recruitment/retention products, Web ordering, testing instrumentation, more • supported by a team of proven and experienced blood center technology staff that are dedicated to understanding and meeting the needs of blood center and testing services • supports blood collection and testing for any size organization, from extremely large and distributed organizations to regional blood centers and community hospitals	• graphical, user-friendly, simple interface • higher level of automation and decision support increase productivity and safety • user-level configuration, setup, and user logic engine integration provide unparalleled customizability	• complete, affordable blood bank system for the small to mid-sized blood bank • flexible and easy to use • a securely hosted, Web-deployed system that requires no additional hardware investments

based on July 2012 survey deadline
**total cost includes hardware, software, installation, and training*
Note: a dash in lieu of an answer means company did not answer question or question is not applicable

[†]now marketing product in the U.S.

Blood bank information systems

Part 5 of 5	SCC Soft Computer Ellie Vahman sales@softcomputer.com 5400 Tech Data Drive Clearwater, FL 33760 727-789-0100 www.softcomputer.com	SCC Soft Computer Ellie Vahman sales@softcomputer.com 5400 Tech Data Drive Clearwater, FL 33760 727-789-0100 www.softcomputer.com	Sunquest Information Systems Auna Emery auna.emery@sunquestinfo.com 250 S. Williams Blvd. Tucson, AZ 85711 877-239-6337 www.sunquestinfo.com
See captodayonline.com/productguides *for an interactive version of guide*			
Name of blood bank system	SoftBank II	SoftDonor	Sunquest Laboratory Blood Bank and Blood Donor modules
First ever/Most recent blood bank system installation*	1992/June 2012	1992/June 2012	1985/July 2012
Last major product release for version of product featured	July 2010	January 2009	August 2011
Total number of contracts for sites operating blood bank system	189	19	400+
•Contracts for U.S. hospitals with donor and transfusion services	16	16	30+
•Contracts for U.S. hospitals with transfusion services only	164	0	400+
•Contracts for U.S. regional blood centers with donor services only	0	1	0
•Contracts for U.S. regional blood centers with donor and transfusion services	0	0	0
•Contracts for foreign hospitals and regional blood centers	9 (Canada, Jamaica)	2 (Canada, Jamaica)	10+ (Bermuda, Canada, Ireland, UAE, UK, Dubai, Abu Dhabi)
•Contracts for other sites	0	0	0
Number of contracts signed between June 2011–June 2012	7	2	—
Total number of sites operating blood bank system	570	63	500+
Number of sites that went live between June 2011–June 2012	28	28	17
Installations not yet live (hospitals/regional blood centers/others)	14 (14/0/0)	1 (1/0/0)	14 (14/0/0)
Percentage of installations that are standalone blood bank systems	4%	—	0
No. of employees in entire company/Dedicated solely to blood bank systems development, installation, support	1,586/77	1,586/77	620/—
Number of different versions of this software installed	9	3	6
•Versions of product in field covered by FDA 510(k) clearance	19.1, 21, 22, 23, 23 with SoftScape, 23.1 with DMSI, 23.2, 25, 25.1	4.3, 4.4, 4.5	Blood Bank and Blood Donor v6.0.1 (no longer available), v6.4
•Versions of product that did not require FDA 510(k) clearance	0	0	v6.1, v6.2, v6.3 (compatible with v6.0.1), v7.0, v7.1 (compatible with v6.4)
Range in number of user workstations in live sites (average)	2–100+ (average, 8)	3–15 (average, 6)	10–100+ (average, 20+)
Server platforms	IBM System p (Power P7)	IBM System p (Power P7)	IBM Power, HP Integrity
PC or workstation platforms	Intel-based PCs	Intel-based PCs	Dell, Hewlett-Packard Windows
Software programming language(s)	C, C++, MS .Net	C, C++, .Net	Caché, Caché Script, M, Standard C/C++, Visual Basic, Visual C++, Active X
Operating system(s)	server: IBM AIX (Unix); workstation: Windows XP, Vista, 7	server: IBM AIX (Unix); workstation: Windows XP, Vista, 7	AIX, HP-UX, OpenVMS (existing clients only)
Databases and tools	Oracle	Oracle	InterSystems Caché
Features (listed as percentage of live installs or based on availability)			
•Biometric ID of donors and/or patients	not available	not available	not available
•Full support of ISBT 128 unit labeling	60%	100%	installed
•Bar-code reading of donor and unit information	100%	100%	100%
•Unit inventory	100%	100%	100%
•Autologous and directed unit tracking	100%	100%	100%
•Direct entry of test results	100%	100%	100%
•Crossmatch results	100%	available via SCC's SoftBank	100%
•Electronic crossmatch decisionmaking	70%	available via SCC's SoftBank	20%
•Antigen typing	100%	100%	100%
•Integrated bedside check for transfusion using positive patient ID	10%	available via SCC's SoftID.Tx when used with SoftBank II	2%
•Track all steps in production of product	100%	100%	100%
•Print donor unit labels—bar coded	80%	available via a third party	installed
•Interface with blood irradiator or centrifuges	10%	available via SCC's SoftBank	not available
•Centralized transfusion service capability	10%	available via SCC's SoftBank	100%
•Donor recruitment and management	available via SCC's SoftDonor	100%	installed
•Donor questionnaire	available via SCC's SoftDonor	100%	not available
•Mobile scheduling	available via SCC's SoftDonor	50%	not available
•Laptop-based mobile donor registration module	available via SCC's SoftDonor	90%	not available
•Source or recovered plasma management	10%	100%	installed
•Accounts receivable	95%	100%	90%
•Management reports	100%	100%	100%
•Ad hoc report writer	100%	100%	100%
•Quality control management	100%	80%	100%
•Collection management	100% (specimen collection)	100% (reference lab interface)	50%
Interfaces to automated donor infectious disease testing instruments	no	yes	no
Interfaces to automated ABO/Rh/antibody screening instruments	yes	yes	yes
Electronic interface to bedside patient ID system from other vendors	yes (CareFusion)	no	no
Languages (other than English) offered on system	French	none	—
Recommended tools to help clients validate their systems	critical control points, test case instructions, release notes with links to test cases, electronic screen capture	critical control points, test case instructions, release notes with links to test cases, electronic screen capture	client testing guidelines, documentation, training, consulting service
System available via ASP or cloud-based data center	—	yes	no
System provides indexed field in each test definition for LOINC code	no	no	yes
Provide LOINC dictionary for each new installation	no	no	yes
Other vendors to which software has a lab system-related interface	Cerner, CPSI, Allscripts, Epic, GE Healthcare, Healthland, HealthWorks, HMS, Keane, McKesson, Meditech, QuadraMed, Siemens, others	Cerner, CPSI, Allscripts, Epic, GE Healthcare, Healthland, HealthWorks, HMS, Keane, McKesson, Meditech, QuadraMed, Siemens, Sunquest, others	Cerner, McKesson, Siemens, Epic, Allscripts, others
User group	yes (meets via Webinar and in person)	yes (meets via Webinar and in person)	yes (meets via Webinar and in person)
Source code	escrow	escrow	escrow
Methods by which users can tailor blood bank system in their own setting	ad hoc query tools, dictionary settings	ad hoc query tools, dictionary settings	user programming, ad hoc query tools, user-defined interfaces, dictionary settings, keyboards, grids, logic
Cost for software modifications to comply with federal regs and laws	standard (no charge)	standard (no charge)	standard (no charge)
Total cost for smallest standalone blood bank system installation**	$105,000 (annual maintenance fee, $500)	$105,000 (annual maintenance fee, $500)	—
Total cost for largest standalone blood bank system installation**	$420,000 (annual maintenance fee, $4,000)	$420,000 (annual maintenance fee, $4,000)	—
Total incremental cost for smallest blood bank configuration installed**	$55,000 (annual maintenance fee, $500)	$55,000 (annual maintenance fee, $500)	—
Total incremental cost for largest blood bank configuration installed**	$250,000 (annual maintenance fee, $2,500)	$250,000 (annual maintenance fee, $2,500)	—
Distinguishing features (supplied by company)	• supports user workflow • safety features to warn user of inconsistencies, errors, omissions; safety features present user with exception where a description of the problem is entered and the user can proceed; exception available for manager/supervisor review • integrated SoftID.Tx module for positive patient identification during bedside transfusion	• user-defined test algorithms can automatically order required, repeat, and confirmatory tests, assign deferrals, generate notification letters, update unit status, and set a biohazard flag • detailed donor database search capability increases effectiveness of targeted recruiting efforts, including search by antigen, blood type, and donation procedure • all significant steps in donation process are documented, including history review, questionnaire, physical exam, more	• by combining Sunquest Laboratory, Collection Manager, Blood Bank, and Transfusion Manager, clients can create a closed-loop blood administration system • full integration with LIS for reporting, inquiry, maintenance, quality assurance, and business intelligence dashboards • multi-facility capacity, including unit inventory tracking and management

*based on July 2012 survey deadline
**total cost includes hardware, software, installation, and training
Note: a dash in lieu of an answer means company did not answer question or question is not applicable