	Blood Bank Inform	-	
Part 1 of 5	Blood Bank Computer Systems Brian Forbis bforbis@bbcsinc.com 1002 15th St. SW, Suite 120	Cerner Corp. Jennifer Walker jennifer.walker@cerner.com 2800 Rockcreek Parkway	Haemonetics Software Solutions Scott Dustin scott.dustin@haemonetics.com 4925 Robert J. Mathews Parkway, Suite 100
See accompanying article on page 12 See captodayonline.com/productguides for an interactive version of guide	Auburn, WA 98001 888-738-2227 www.bbcsinc.com	Kansas City, M0 64117 816-201-2854 www.cerner.com	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* Last major product release for version of product featured Total number of contracts for sites operating blood bank system •Contracts for U.S. hospitals with donor and transfusion services •Contracts for U.S. hospitals with transfusion services only •Contracts for U.S. regional blood centers with donor services only •Contracts for U.S. regional blood centers with donor and transfusion services	1987/July 2012 July 2012 30 1 0 21 5	1986/July 2012 January 2012 388 <sup>†</sup>      	1996/June 2012 June 2012 26 14 0 4 2
Contracts for foreign hospitals and regional blood centers	0	70 <sup>†</sup> (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 Eat (for colorder year 2011)	2 (hospitals with donor service only)
Number of contracts signed between June 2011–June 2012 Total number of sites operating blood bank system Number of sites that went live between June 2011–June 2012 Installations not yet live (hospitals/regional blood centers/others) Percentage of installations that are standalone blood bank systems	123 1 1 (0/1/0) 100%	52 <sup>†</sup> (for calendar-year 2011) 388 48 34 (34/0/0) 0	4 14 3 17 (10/4/3) 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           •Versions of product in field covered by FDA 510(k) clearance           •Versions of product that did not require FDA 510(k) clearance	12 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 0	2 Cerner Classic PathNet, Cerner Millennium PathNet 0	4 2.0, 2.1, 2.2, 2.3 0
Range in number of user workstations in live sites (average)	10–200 (average, 40)	_	6–40 (average, 15)
Server platforms PC or workstation platforms Software programming language(s) Operating system(s) Databases and tools	IBM iSeries IBM-compatible workstation, PCs RPG 400, Java OS/400 IBM DB2	IBM, Hewlett-Packard Microsoft Windows locally or via Citrix thin client Java, Visual Basic, C++, C#, Visual C HP-UX, AIX, VMS Oracle	 Windows C# Windows Oracle, Crystal Reports
Features (listed as percentage of live installs or based on availability)         •Biometric ID of donors and/or patients         •Full support of ISBT 128 unit labeling         •Bar-code reading of donor and unit information         •Unit inventory         •Autologous and directed unit tracking         •Direct entry of test results         •Crossmatch results         •Electronic crossmatch decisionmaking         •Antigen typing         •Integrated bedside check for transfusion using positive patient ID         •Track all steps in production of product         •Print donor unit labels—bar coded         •Interface with blood irradiator or centrifuges         •Centralized transfusion service capability         •Donor questionnaire         •Mobile scheduling         •Laptop-based mobile donor registration module         •Source or recovered plasma management         •Accounts receivable         •Management reports         •Ad hoc report writer         •Quality control management         •Collection managem	installed instal	available but not tracked 100% 100% 100% 100% 100% 100% 99% >50% 99% >50% 99% not available available available through partnership with a third party available through partnership	
Provide LOINC dictionary for each new installation Other vendors to which software has a lab system-related interface	no Haemonetics Software Solutions, Ortho Clinical	yes Haemonetics Software Solutions	no 
	Diagnostics		
User group Source code Methods by which users can tailor blood bank system in their own setting	yes (meets via Webinar and in person) no ad hoc query tools, user-defined interfaces, dictionary settings, BBCS configuration options	yes (meets via Webinar and in person) no user programming, ad hoc query tools, user-defined interfaces, dictionary settings, others	yes (meets via Webinar and in person) escrow user programming, ad hoc query tools, user-defined interfaces, table settings
Cost for software modifications to comply with federal regs and laws 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**	standard (no charge) 	standard (no charge)    	standard (no charge) — — — —
Distinguishing features (supplied by company) *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	<ul> <li>over 25 years of consistent client-driven design</li> <li>provides an entirely integrated, real-time, fully customizable electronic questionnaire module capable of utilizing touch-screen/tablet technology, supporting a fully paperless donor room</li> <li>controls within BBCS applications allow managers to be more effective by minimizing distractions and controlling risk</li> </ul>	<ul> <li>positive patient ID capabilities at the patient bedside, from specimen collection to transfusion administration</li> <li>increased efficiencies through such capabilities as mother-baby linking, online secondary review of results, QC specific to blood bank workflows, etc.</li> <li>support for blood bank within a single lab information system and electronic medical record architecture</li> </ul>	<ul> <li>extensive safety checks throughout system with a commitment to compliance</li> <li>open workflow with extensive user-defined, table-based rules</li> <li>Service 360 commitment to ensure quality customer implementation and support experience</li> </ul>

	Blood bank inform	ation systems	
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 <sup>†</sup>	Horizon Blood Bank <sup>†</sup>	Blood Bank System–6.0
First ever/Most recent blood bank system installation* Last major product release for version of product featured Total number of contracts for sites operating blood bank system •Contracts for U.S. hospitals with donor and transfusion services	1996/July 2012 March 2012 353 19	2004/June 2012 March 2011 113 0	1981/June 2012 January 2011 81 <sup>†</sup>
•Contracts for U.S. hospitals with transfusion services only •Contracts for U.S. regional blood centers with donor services only •Contracts for U.S. regional blood centers with donor and transfusion services •Contracts for foreign hospitals and regional blood centers	312 0 10 9 (Botswana, Puerto Rico, Canada, Guam, Ethiopia)	110 0 0 3 (Canada)	— — — 5 <sup>†</sup> (Canada)
•Contracts for other sites Number of contracts signed between June 2011–June 2012 Total number of sites operating blood bank system	3 (regional donor centers with transfusion only) 47 444	0 0 174	— (acute care, behavioral health, critical access, long-term care, rehabilitation, others) 1 <sup>†</sup> 118
Number of sites that went live between June 2011–June 2012 Installations not yet live (hospitals/regional blood centers/others) Percentage of installations that are standalone blood bank systems	46 59 (59/0/0) 100%	17 13 (13/0/0) 0	53 61 (60/0/1) 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 •Versions of product in field covered by FDA 510(k) clearance •Versions of product that did not require FDA 510(k) clearance	6 SafeTrace Tx 3.4, 3.4.1, 3.5. 3.5.1, 3.6, 3.7 O	5 SafeTrace Tx 3.2, 3.3, 3.4, 3.5, 3.6 O	1 Meditech 6.0 O
Range in number of user workstations in live sites (average)	1–105 (average, 7)	1–7 (average, 2)	—
Server platforms PC or workstation platforms	Windows-based servers, Intel based (determined by Oracle) Windows	Windows-based servers Windows	minimal 64-bit 2 GHz+ dual core processors operating Microsoft Windows Server 2003/2008 Standard Edition Windows PCs with 2 GHz or higher Intel or equivalent
Software programming language(s) Operating system(s)	Delphi Windows	Delphi Windows	processor and minimum 2 GB RAM Meditech-developed programming language 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 •Full support of ISBT 128 unit labeling •Bar-code reading of donor and unit information •Unit inventory •Autologous and directed unit tracking •Direct entry of test results •Crossmatch results •Electronic crossmatch decisionmaking •Antigen typing •Integrated bedside check for transfusion using positive patient ID •Track all steps in production of product •Print donor unit labels—bar coded •Interface with blood irradiator or centrifuges	not available 100% 100% 100% 100% 100% 100% 70% 100% available via a third party 100% installed installed	not available installed installed installed installed installed installed installed installed installed installed installed installed installed installed installed	installed 100% 100% 100% 100% 100% installed installed installed installed installed
Centralized transfusion service capability     Onor recruitment and management     Donor questionnaire     Mobile scheduling     Laptop-based mobile donor registration module     Source or recovered plasma management     Accounts receivable     Management reports     Ad hoc report writer     Quality control management     Collection management	100% available via Haemonetics' eDonor available via Haemonetics' ElDorado Donor Doc available via Haemonetics' Hemasphere available via Haemonetics' ElDorado Donor available via Haemonetics' ElDorado Donor available via a third party 100% available via a third party installed available via Haemonetics' ElDorado Donor	installed available via a third party available via a third party installed installed installed available via company's LIS	100% installed installed installed installed installed 100% 100% 
Interfaces to automated donor infectious disease testing instruments Interfaces to automated ABO/Rh/antibody screening instruments Electronic interface to bedside patient ID system from other vendors Languages (other than English) offered on system Recommended tools to help clients validate their systems System available via ASP or cloud-based data center	no yes yes none validation guidelines, templates and test plan for critical control checks, validation services through Haemonetics' PeopleMed subsidiary yes	no yes no none validation services and guidelines from recommended third party yes	yes yes no Spanish in development testing scripts available on company Web site through Meditech validation guides no
System provides indexed field in each test definition for LOINC code Provide LOINC dictionary for each new installation	no no	no no	yes 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 Source code Methods by which users can tailor blood bank system in their own setting	yes (meets via Webinar and in person) escrow ad hoc query tools, user-defined interfaces, table settings	yes (in person only) escrow ad hoc query tools, dictionary settings	yes (meets via Webinar and in person) escrow 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 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**	standard (no charge) 		standard (no charge) — — — — —
Distinguishing features (supplied by company)	<ul> <li>extensive safety checks throughout system with a commitment to compliance</li> <li>patents for Patient-At-A-Glance bar, antigen-antibody identification, and central transfusion service functionality</li> </ul>	<ul> <li>extensive safety checks throughout system with a commitment to compliance</li> <li>patents for Patient-At-A-Glance bar, antigen-antibody identification, and central transfusion service functionality</li> </ul>	<ul> <li>integrated component of Meditech EHR, providing a seamless exchange of data across the continuum</li> <li>features centralized access to common routines and reports via roles-based desktops</li> <li>blood bank and patient care and patient safety solu-</li> </ul>
*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	Service 360 commitment to ensure quality customer implementation and support experience <sup>†</sup> also marketed by McKesson as Horizon Blood Bank	• Service 360 commitment to ensure quality customer implementation and support experience <sup>†</sup> also marketed by Haemonetics as SafeTrace Tx	tions fully integrated, fostering the sharing of blood bank unit and patient data between the products <sup>†</sup> sites, not contracts
abulation does not represent an endorsement by the College of A	morican Pathologists		

Bar determine transformed and bar		Blood bank inform		
Base of Approximate System         Bool Cale System         Bool Ca	Part 3 of 5	Paul Berthiaume pberthiaume@meditech.com Meditech Circle Westwood, MA 02090	Paul Berthiaume pberthiaume@meditech.com Meditech Circle Westwood, MA 02090	Steve Sedlock steve.sedlock@mediware.com John Van Blaricum john.vanblaricum@mediware.com 11711 W. 79th St., Lenexa, KS 66214
International sector of a sector of production of a sector of a se				
Interpretation for the state of the state				
Ladius in the handle is and production of the second secon	Last major product release for version of product featured Total number of contracts for sites operating blood bank system •Contracts for U.S. hospitals with donor and transfusion services •Contracts for U.S. hospitals with transfusion services only •Contracts for U.S. regional blood centers with donor services only	November 2009 232 <sup>†</sup> 	January 2012	257 21 222 6
Induct of signabulance data sign	<ul> <li>Contracts for foreign hospitals and regional blood centers</li> </ul>	- (acute care, behavioral health, critical access,	- (acute care, behavioral health, critical access,	
	Number of contracts signed between June 2011–June 2012 Total number of sites operating blood bank system Number of sites that went live between June 2011–June 2012 Installations not yet live (hospitals/regional blood centers/others) Percentage of installations that are standalone blood bank systems	2† 548 22 38 (36/0/2)	2† 680 5 59 (54/0/5)	419 12 93 (25/0/68)
Waise apack informed many many balances of part of the sector of the	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
Answer pristantism     Animal cal for as programmers with 20 MBA     Answer with 20 Results     Answer with 20 Results <t< td=""><td></td><td>Meditech client/server</td><td>Meditech Magic</td><td>3.0</td></t<>		Meditech client/server	Meditech Magic	3.0
Reversation platers of the series of the ser	Range in number of user workstations in live sites (average)	_	_	2–50 (average, 7)
Revended properties in standingModeral Watcher (2003) Standing definition being standing)Moderal definition being standing of the standing	Server platforms			Windows, ASP browser based
besome programming language of the series of a standard series of the se	PC or workstation platforms		Windows 2003/2008 Standard Edition	Microsoft compatible
Balance and the second secon	Software programming language(s) Operating system(s)	processor and minimum 2 GB RAM Meditech-developed programming language servers: Windows 2003/2008 SE; clients: Windows 2000	processor with minimum 2 GB RAM Meditech self-developed programming language	Visual Basic, C++ Com, Microsoft .Net, C#
	Databases and tools	Protessional, XP, XP Tablet, Vista, 7 Meditech Database Management System	Meditech Database Management System	Microsoft SQL 2008, 2005, 2000
<ul> <li>Benefinding door and actimution</li> <li>Boyse of the set of</li></ul>	· · · · · · · · · · · · · · · · · · ·			
-Andergo und dende und transform10%10%Indiad-Portego transform10%10%10%10%-Portego transform-Ended10%10%10%-Portego transform-Ended10%10%10% <trr>-Portego transform&lt;</trr>				
Once of point set reads10% 				
-Percent on construct decision with decisi	Direct entry of test results	100%	100%	installed
<ul> <li>Heinstein besides deck for transformering poetling po</li></ul>				
Teck all pais in production of production				
interface 	Track all steps in production of product	100%	100%	available via Mediware LifeTrak
-Door groundsminner -Door gro				
<ul> <li>-Door gestomain</li> <li>-Door settomain</li> <li>- Stated in bisladd</li> <li>- Stated in bisladd</li></ul>				
-1-ptop-based models door registration module Source encovered lisers managementInstalled insta	Donor questionnaire	installed	installed	available via Mediware LifeTrak
-Account receivableinstalledinstalledinstalledinstalledHongsment required with100%100%100%100%100%100%100%				
*Mone genut reports * 0.00 for output management100% <br< td=""><td></td><td></td><td></td><td></td></br<>				
•• unity management— instance— instanceinstanceinstance•• objection infractions disease testing instruments infractions disease testing instruments infractions disease testing instruments instructions	Management reports	100%	100%	installed
Interfaces to automated door infectious disease testing instruments       yes       yes       yes       yes         Interfaces to automated door infectious disease testing instruments       provides       yes       yes       yes         Encommented tools to hep cleints validate thar systems       spectra validate on company Web site through       validation scripts         System routilise validate on company Web site through       wes       yes       no         System routilise validate on company Web site through       wes       yes       no         System routilise validate on company Web site through       mo       no       no         System provides indexed field in each test definition for LDINC code       yes       no       no       no         Other vendors to which software has a lab system-rotated interface       -       -       Contents validate on company Web site through       yes (no percent site walidate on company Web site through interfaces on an on on       no       no         Storte group       yes (meets via Webinar and in person)       yes (no person vibines and person)       yes (no person vibin sector)		100% —	100% —	
Interfaces to automated ABO/RN/antibody screening instruments Encoursion indexed possible to bediade patient to bediade their systemsyes me Spanish in development testing scripts available on company Web site through Neditable validation guides yesyes 	Collection management	installed	installed	available via Mediware LifeTrak
Recommended tools to help elients validable mer company Web site througe in testing scripts available on company Web site througe in testing scripts available on company Web site througe in testing scripts available on company Web site througe in testing scripts available on company Web site througe in testing scripts available on company Web site througe in testing scripts available on company Web site througe in testing scripts available on company Web site througe in testing scripts available on company Web site througe in testing scripts available on company Web site througe in testing scripts available on company Web site througe in testing scripts available on company Web site througe in testing scripts available on company Web site througe in testing scripts available on company Web site througe in testing scripts available on company Web site througe in testing scripts available on company Web site througe in testing scripts available on company Web site througe in testing scripts available on company Web site througe in the site definition for LOINC code provides indexed field line acht test definition for LOINC code on no	Interfaces to automated donor infectious disease testing instruments Interfaces to automated ABO/Rh/antibody screening instruments Electronic interface to bedside patient ID system from other vendors	yes	yes	yes
Nedflich väldation guidesMedflich väldation guidesMedflich väldation guidesveSystem avoides indexed field in each test definition for LDNC codeyesnonoProvide LDNC dictionary for each new installation	Languages (other than English) offered on system Recommended tools to help clients validate their systems	testing scripts available on company Web site through	testing scripts available on company Web site through	
Provide LDNC dictionary for each new installationnonoOther vendors to which software has a lab system-related interface	System available via ASP or cloud-based data center	-	-	yes
User group       yes (meets via Webinar and in person)       yes (meets via Webinar and via Webinar and via Webinar and via Webinar and vis webinar and vis on curves oblic and system installation, and trainare       yes (meets via Webinar and vin via responde via v	System provides indexed field in each test definition for LOINC code Provide LOINC dictionary for each new installation	-	-	no
Source code Methods by which users can tailor blood bank system in their own setting       escrow al toc query tools, user-defined interfaces, dictionary settings, customer-defined screens, nules-based logic       escrow al hoc query tools, user-defined interfaces, dictionary settings, customer-defined screens, nules-based logic       escrow al hoc query tools, user-defined interfaces, dictionary settings, customer-defined screens, nules-based logic       escrow al hoc query tools, user-defined interfaces, dictionary settings, customer-defined screens, nules-based logic       escrow al hoc query tools, user-defined interfaces, dictionary settings, customer-defined screens, nules-based logic       escrow al hoc query tools, user-defined interfaces, dictionary settings, customer-defined screens, nules-based logic       escrow al hoc query tools, user-defined interfaces, dictionary settings, customer-defined screens, nules-based logic       escrow al hoc query tools, user-defined interfaces, dictionary settings, customer-defined screens, nules-based logic       escrow al hoc query tools, user-defined interfaces, dictionary settings, customer-defined screens, nules-based logic         Cost for software modifications to comply with federal regs and laws Total cost for smallest blood bank system installation** Total cost for largest standalone blood bank system installation** Total incremental cost for largest blood bank configuration installed**       standard (no charge)       =          - <t< td=""><td></td><td></td><td></td><td>others; any vendor that is HL7 compliant</td></t<>				others; any vendor that is HL7 compliant
own setting       settings, customer-defined screens, desktop preferences, nues-based logic       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)       -         -       -       -       -       -       -         Total cost for smallest standalone blood bank system installation**       -       -       -       -         Total cost for smallest blood bank configuration installed**       -       -       -       -       -         Total cost for largest standalone blood bank system installation**       -	Source code	escrow	escrow	escrow
Total cost for smallest standalone blood bank system installation**	Methods by which users can tailor blood bank system in their own setting	settings, customer-defined screens, desktop preferences,		customization of test screens, truth tables, orders,
Total cost for largest standalone blood bank system installation**       -       -       -       -         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       • integrated desktops       • integrated, fostering the sharing of blood bank and nursing solution fully integrated, fostering the sharing of blood bank and nursing solution fully integrated, fostering the sharing of blood bank and nursing solution fully integrated, fostering the sharing of blood bank in patient simultaneously       • integrated with Knowledge Trak for documentation contracts         * 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       • tsites, not contracts       • tsites, not contracts	Cost for software modifications to comply with federal regs and laws	standard (no charge)	standard (no charge)	standard (no charge)
Distinguishing features (supplied by company) <ul> <li>integrated component of Meditech EHR, providing a seamless exchange of data across the continuum.</li> <li>features centralized access to common routines and reports via roles-based desktops</li> <li>blood bank and patient care and patient safety solutions fully integrated, fostering the sharing of blood bank and nursing solution fully integrated, fostering the sharing of blood bank unit and patient data between the products</li> </ul> <ul> <li>integrated with InSight, a dynamic and visual performance-management system.</li> <li>integrated component of Meditech EHR, providing a seamless exchange of data across the continuum.</li> <li>features electronic crossmatching, which saves retratice desktops.</li> <li>blood bank and patient care and patient safety solution fully integrated, fostering the sharing of blood bank transfusion information</li> <li>blood bank and patient data between the products</li> <li>integrated with Knowledge Trak for documentation control and compliance monitoring</li> <li>integrated with InSight, a dynamic and visual performance-management system, with 15 at time of issue; multiple users can access same oblood bank and nursing solution fully integrated, fostering the sharing of blood bank transfusion information</li> <li>integrated with Knowledge Trak for documentation control and compliance monitoring</li> </ul>	Total cost for largest standalone blood bank system installation** Total incremental cost for smallest blood bank configuration installed**	_ _ _		
**total cost includes hardware, software, installation, and training Note: a dash in lieu of an answer means company did not answer question or question is not applicable <sup>†</sup> sites, not contracts <sup>†</sup> sites, not contracts	Distinguishing features (supplied by company)	<ul> <li>a seamless exchange of data across the continuum</li> <li>features centralized access to common routines and reports via roles-based desktops</li> <li>blood bank and patient care and patient safety solu- tions fully integrated, fostering the sharing of blood</li> </ul>	<ul> <li>a seamless exchange of data across the continuum</li> <li>features electronic crossmatching, which saves critical testing time</li> <li>blood bank and nursing solution fully integrated, fostering the sharing of blood bank</li> </ul>	<ul> <li>performance-management system</li> <li>more than 60 safety checks throughout system, with 15 at time of issue; multiple users can access same patient simultaneously</li> <li>integrated with Knowledge Trak for documentation</li> </ul>
	**total cost includes hardware, software, installation, and training Note: a dash in lieu of an answer means company did not answer	†sites, not contracts	†sites, not contracts	
	Tabulation does not represent an endorsement by the College of A			

nerdsResults		Blood bank inform	ation systems	
Handbard and a set of a cale in a ca		Michael Anania michael.anania@mediware.com John Van Blaricum john.vanblaricum@mediware.com 11711 W. 79th St., Lenexa, KS 66214	Gerald Choder gchoder@netlims.com 300 Frank W. Burr Blvd. Teaneck, NJ 07666	Rachel Stratman sales@psychesystems.com 25 Birch St., Building B, Unit 200 Milford, MA 01757
Distribution for some of particulation of the source of		LifeTrak	AutoFusion	Systematic Blood Bank (SBB)
Interface Particulation Particulation Particulation Particulation Particulation ParticulationInterface Particulation Particulation ParticulationInterface Particulation ParticulationInterface Particulation ParticulationInterface Particulation ParticulationInterface Particulation ParticulationInterface Particulation 	Last major product release for version of product featured Total number of contracts for sites operating blood bank system •Contracts for U.S. hospitals with donor and transfusion services •Contracts for U.S. hospitals with transfusion services only •Contracts for U.S. regional blood centers with donor services only •Contracts for U.S. regional blood centers with donor and transfusion services •Contracts for foreign hospitals and regional blood centers	April 2011 16 8 0 7 0	August 2009 3 0 0 0 0	2001 20 0 20 0 0 0
yserse sowie	Number of contracts signed between June 2011–June 2012 Total number of sites operating blood bank system Number of sites that went live between June 2011–June 2012 Installations not yet live (hospitals/regional blood centers/others)	1 89 1 30 (1/1/28)	15 0	4 20 0 4 (4/0/0)
Notes and particular discrete stype with stype and		340/60	110/15	48/10
Automa of the statistic of the statist or based on an abability of the statist or based on any statistic of the statistic or based on any statistic	•Versions of product in field covered by FDA 510(k) clearance	3.02, 4.6.0	3.02.03	Systematic Blood Bank 3.0
Provide program biology of the biol biol biology of the biol 	Range in number of user workstations in live sites (average)	7–340 (average, 100)	8–37 (average, 22)	1–100 (average, 13)
energy energy is any cardial is any cardia	PC or workstation platforms Software programming language(s) Operating system(s)	Microsoft compatible Oracle Forms and Reports Linux	Hewlett-Packard, IBM, Dell C++ Windows XP, 2000	PCs Visual Basic, Fortran any (supports all operating systems)
Interfaces to automated A&D/RIVantibody screening instruments becoming instruments Languages (ther than English) offered on system from their ease notes, training, scripts, validation services system available of bedy clients validation guidelines system available of bedy clients validation guidelines system available of bedy clients validation for LONC code provide LONC dictionary for each new installation on source code provide LONC dictionary for each new installation on setting or each new installation for LONC code provide LONC dictionary for each new installation on setting or each new installation or each n	<ul> <li>Biometric ID of donors and/or patients</li> <li>Biometric ID of donors and/or patients</li> <li>Full support of ISBT 128 unit labeling</li> <li>Bar-code reading of donor and unit information</li> <li>Unit inventory</li> <li>Autologous and directed unit tracking</li> <li>Direct entry of test results</li> <li>Crossmatch results</li> <li>Electronic crossmatch decisionmaking</li> <li>Antigen typing</li> <li>Integrated bedside check for transfusion using positive patient ID</li> <li>Track all steps in production of product</li> <li>Print donor unit labels—bar coded</li> <li>Interface with blood irradiator or centrifuges</li> <li>Centralized transfusion service capability</li> <li>Donor recruitment and management</li> <li>Donor questionnaire</li> <li>Mobile scheduling</li> <li>Laptop-based mobile donor registration module</li> <li>Source or recovered plasma management</li> <li>Accounts receivable</li> <li>Management reports</li> <li>Ad hoc report writer</li> <li>Quality control management</li> </ul>	100% 100% 81% 94% installed available via Mediware HCLL available via Mediware HCLL installed available via Mediware HCLL or third party 94% 94% available in 2013 available in 2013 available via Mediware HCLL 94% 94% 60% 40% 94% not available 100% available via a third party 100%	100% 100% installed 100% 100% available but not installed 100% available but not installed 100% 50% not available available but not installed 50% 50% not available 50% available but not installed available but not installed available but not installed 100%	100% 100% 100% 100% 100% 100% 100% 100%
Provide LONC dictionary for each new installationnoinnoOther vendors to which software has a lab system-related interfaceGenerMcKesson, Sunquest, SCC Soft Computer, Orchand-User group Source code whethouts system in their own settingyes (in person only) escrow and hoc query tools, supports a published API for receiving and sending datano escrow user programming, a hoc query tools, user-defined interfacesyes (meets via Webinar and in person) yes rogramming, user-defined interfacesCost for software modifications to comply with federal regs and laws Total cost for smallest standatione blood bank system installation************************************	Interfaces to automated ABO/Rh/antibody screening instruments Electronic interface to bedside patient ID system from other vendors Languages (other than English) offered on system Recommended tools to help clients validate their systems	yes no — release notes, training, scripts, validation services	yes no Hebrew audit trail, ad hoc reporting, automated scheduled reports, automated alerts, user alerts followup, control screens	no  software validation guidelines
User group Source code Methods by which users can tailor blood bank system in their own setting wom setting cost for software modifications to comply with federal regs and laws Total cost for smallest standation blood bank system installation** Total cost for smallest standations blood bank system installation** Total incremental cost for largest blood bank system installed** Total incremental cost for largest blood bank system installed** Distinguishing features (supplied by company) * supports blood center and nore testing services systems that feature full integration, more * supports blood center stand group and experiment blood center technology staff that are dedicated to understanding and meeting the needs of largest standation, from extremely large and distributed organizations to regional blood centers and blood center stand group and system that requires * supports blood collection and testing for any size organizations for eigenial blood centers and blood centers and community hospitals				
Source code Methods by which users can tailor blood bank system in their own setting         escrow a hoc query tools, supports a published API for receiving and sending data         escrow margement tools, style sheets, reporting tools         yes         user programming, user-defined interfaces           Cost for software modifications to comply with federal regs and laws Total cost for largest standatione blood bank system installation** Total cost for smallest standatone blood bank system installation** Total cost for smallest blood bank configuration installed**         standard (no charge)         stondard (no charge)         standard (no charge)         s	Other vendors to which software has a lab system-related interface	Cerner	McKesson, Sunquest, SCC Soft Computer, Orchard	-
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, \$3,500)       \$40,000 (annual maintenance fee, \$300)         Total incremental cost for smallest blood bank configuration installed**        \$575,000 (annual maintenance fee, \$3,000)       \$30,000 (annual maintenance fee, \$300)       \$40,000 (annual maintenance fee, \$3,000)         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       • graphical, user-friendly, simple interface       • complete, affordable blood bank system for the small to mid-sized blood bank         • 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 for any size organization, from extremely large and distributed organizations to regional blood centers and community hospitals       • 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       • securely host alastin tervice       • securely host alastin tervice       • a securely host alastin tervice	Source code Methods by which users can tailor blood bank system in their	escrow ad hoc query tools, supports a published API for	escrow user programming, ad hoc query tools, user-defined interfaces, dictionary settings, configuration	yes
<ul> <li>bigher level of automation and decision support increase productivity and safety</li> <li>bigher level of automation and decision support increase productivity and safety</li> <li>isser-level configuration, setup, and user logic engine integration provide unparalleled customizability</li> <li>a securely hosted, Web-deployed system that requires integration provide unparalleled customizability</li> <li>a securely hosted, Web-deployed system that requires integration provide unparalleled customizability</li> <li>bigher level of automation and decision support increase productivity and safety</li> <li>a securely hosted, Web-deployed system that requires integration provide unparalleled customizability</li> <li>bigher level of automation and decision support increase productivity and safety</li> <li>a securely hosted, Web-deployed system that requires integration provide unparalleled customizability</li> <li>bigher level of automation and decision support</li> <li>a securely hosted, Web-deployed system that requires integration provide unparalleled customizability</li> <li>bigher level of automation, setup, and user logic engine</li> <li>bigher level of automation, setup, and user logic engine</li> <li>bigher level of automation, setup, and user logic engine</li> <li>a securely hosted, Web-deployed system that requires</li> <li>a desting instrumentation, from extremely large and distributed organizations to regional blood centers and community hospitals</li> <li>bigher level of automation and decision support</li> <li>bigher level of automation and decision support</li> <li>a securely hosted, Web-deployed system that requires</li> <li>bigher level of automation, and training</li> <li>bigher level of automation, and training</li> <li>bigher level of automation, and training</li> <li>bigher level of automation and decision support</li> <li>bigher level of automation, and training</li> <li>bigher level of autom</li></ul>	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**	_	\$200,000 (annual maintenance fee, \$3,500) \$575,000 (annual maintenance fee, \$9,500) \$150,000 (annual maintenance fee, \$3,000)	\$10,000 (annual maintenance fee, \$200) \$40,000 (annual maintenance fee, \$800) \$30,000 (annual maintenance fee, \$600)
**total cost includes hardware, software, installation, and training Note: a dash in lieu of an answer means company did not answer	Distinguishing features (supplied by company)	<ul> <li>testing services systems that feature full integration with recruitment/retention products, Web ordering, testing instrumentation, more</li> <li>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</li> <li>supports blood collection and testing for any size organization, from extremely large and distributed organizations to regional blood centers and</li> </ul>	<ul> <li>higher level of automation and decision support increase productivity and safety</li> <li>user-level configuration, setup, and user logic engine</li> </ul>	small to mid-sized blood bank • flexible and easy to use • a securely hosted, Web-deployed system that requires
	**total cost includes hardware, software, installation, and training Note: a dash in lieu of an answer means company did not answer		<sup>†</sup> now marketing product in the U.S.	

Pert 5 of 3     S25 Std Computer Bille Values assistantic Bille Values assistantic Description (SS Std Computer) Bille Values assistantic Std Description Std Description (SS Std Computer) Bille Values assistantic Std Description Std Description	Dubai, Abu Dhabi)
Set caption         Sol Tach Bab Drive Glearwater, F. 33780         Sol Tach Bab Drive Clearwater, F. 33780         Sol Tach Bab Drive Sol Tach Bab Drive Clearwater, F. 33780         Sol Tach Bab Drive Sol Tach Bab Drive	Dubai, Abu Dhabi)
DescriptionDescriptionDescriptionText 278-00DescriptionDescriptionText 278-00DescriptionText 2870DescriptionText 2871DescriptionText 2871DescriptionText 2871DescriptionText 2871DescriptionText 2871DescriptionText 2871DescriptionDescriptionText 2871DescriptionText 2871DescriptionText 2871DescriptionText 2871DescriptionText 2871DescriptionText 2871DescriptionText 2871Description <t< td=""><td>od Donor modules Dubai, Abu Dhabi) Dolonger ), v7.0, v7.1 ++, Visual Basic,</td></t<>	od Donor modules Dubai, Abu Dhabi) Dolonger ), v7.0, v7.1 ++, Visual Basic,
See captodyceffic confyrobadguides for an interactive version of guide         727-789-010         www.suftcomputer.com         727-789-010         www.suftcomputer.com           Nume of blood bank system         SoftBank II         SoftBank II         SoftBank II         SoftBank II         SoftBank II         SoftBank III         SoftBank III         SoftBank III         SoftBank IIII         SoftBank IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	od Donor modules Dubai, Abu Dhabi) Dolonger ), v7.0, v7.1 ++, Visual Basic,
Name of block bank system         SoftBank II         SoftDator         Surguest Laboratory Block Bank and Block           First every/Most near block bank system         1992/Line 2012         199         10         0         0         10	od Donor modules Dubai, Abu Dhabi) Dolonger ), v7.0, v7.1 ++, Visual Basic,
First ever/Most react blood bank system installation*     1982/Ame 2012     1982/Ame 2012     1982/Ame 2012       Last major product reliase for vorsion of product featured     1982/Ame 2012     January 2009     August 2011       Charlance for US. hospitals with means and reactions are vices of product featured     16     30.4       -Contracts for US. hospitals with means and reactions are vices of the contrast for US. hospitals with means with doorn and transtation are vices of the contrast with doorn and transtation are vices of the contrast with doorn are vices of the contrast with door	Dubai, Abu Dhabi) D longer ), v7.0, v7.1 ++, Visual Basic,
Last insign product release for version of product featured dury 2010 dury 2019 dury 2	) longer ), v7.0, v7.1 ++, Visual Basic,
Last major product networks for version of product featured Lidd number of contracts for US contrats for U	) longer ), v7.0, v7.1 ++, Visual Basic,
-Contracts for U.S. hospitals with donor and transfusion services only         16         30+           -Contracts for U.S. neglinal bind netrisolision services only         0         1         0           -Contracts for U.S. neglinal bind centers with donor and transfusion services         0         0         0           -Contracts for U.S. neglinal bind centers with donor and transfusion services         9         0         0         0           -Contracts for University hospital stand regional blood centers         9         0         0         0         0           -Contracts for other sites         0         0         0         0         0         0           -Contracts for other sites         0         0         0         0         0         0           Number of other sites         0         0         0         0         0         0           Precentage of instations that are site standame blood back system         570         63         500+         11         10+ (00/tr)         14         14         10/10         14         14         10/10         14         14         10/10         14         14         10/10         14         11         10         0	) longer ), v7.0, v7.1 ++, Visual Basic,
<ul> <li>*-Ontracts for U.S. hospitals with transfusion services only</li> <li>0</li> <li>0</li> <li>*-Ontracts for U.S. regional blood centers with donor and</li> <li>0</li> <li>*-Ontracts for U.S. regional blood centers with donor and</li> <li>0</li> <li>*-Ontracts for U.S. regional blood centers with donor and</li> <li>0</li> <li>*-Ontracts for U.S. regional blood centers with donor and</li> <li>0</li> <li>*-Ontracts for U.S. regional blood centers with donor and</li> <li>0</li> <li>*-Ontracts for U.S. regional blood centers</li> <li>9 (Canada, Jamaica)</li> <li>2 (Canada, Jamaica)</li> <li>10+ (Bernuda, Canada, Ireland, UAE, UK.</li> <li>*-Ontracts for U.S. regional blood centers</li> <li>9 (Canada, Jamaica)</li> <li>2 (Canada, Jamaica)</li> <li>10+ (Bernuda, Canada, Ireland, UAE, UK.</li> <li>*-Ontracts for U.S. regional blood centers</li> <li>9 (Canada, Jamaica)</li> <li>11/10/0</li> <li>11/10/0</li> <li>11/10/0</li> <li>14 (14/00)</li> <li>11/10/0</li> <li>15/10/0</li> <li>15/10/0</li> <li>15/10/0</li> <li>16/10/0</li> <li>16/10/0</li></ul>	) longer ), v7.0, v7.1 ++, Visual Basic,
••Ontrasts for U.S. regional block centers with donor services only       0       1       0         ••Ontrasts for U.S. regional block centers with donor and       0       0       0         ••Contrasts for Ureign hospitals and regional block centers       9       (Ganada, Jamaica)       10+ (Bermuda, Ganada, Ireland, UAE, UK, 0         ••Contrasts for orders bisse       0       0       0       0         ••Contrasts for orders bisse       0       0       0         ••Contrasts for orders bisse       0       0       0         ••Contrasts for orders bisse       0       0       0         ••Contrasts for orders at subset       0       0       0         ••Contrast for Use worders bisse       0       0       0         ••Contrast for Use worders bisse       0       0       0         ••Contrast for Use subset       10+ (Bermuda, Ganada, Ireland, UAE, UK       0         ••Contrast for Use subset       11       10+ (Bermuda, Ganada, Ireland, UAE, UK       0         ••Contrast for Use subset       14       14/00       11       10+ (Dettees)         ••Contrast for Use subset       1.586/77       1.586/77       62/       62/         ••Versions of product In fiel coverage       9       3.4.4.4.5       80 <td< td=""><td>) longer ), v7.0, v7.1 ++, Visual Basic,</td></td<>	) longer ), v7.0, v7.1 ++, Visual Basic,
•Contracts for U.S. regional blood centers with donor and translusion services       0       0         •Contracts for foreign hospitals and regional blood centers       9 (Ganada, Jamaica)       2 (Ganada, Jamaica)       10+ (Bermuda, Ganada, Ireland, UAE, UK, UK, UCAT, Contracts Sign Fording blood bank system         •Contracts for foreign hospitals and regional blood centers       9 (Ganada, Jamaica)       2 (Ganada, Jamaica)       0         •Contracts for foreign hospitals and regional blood centers       9 (Ganada, Jamaica)       2 (Ganada, Jamaica)       0         •Contracts for there sites       0       0       0       0         •Contracts for their sites       0       0       0       0         •Nonder of sites that went live between June 2011 - June 2012       28       28       17         •Installations noty their (hospitalis and conschores)       4/5	) longer ), v7.0, v7.1 ++, Visual Basic,
• Outscats for foreign hospitals and regional blood centers       9 (Canada, Jamaica)       10+ (Bernuda, Canada, Ieland, UKE, UK, VC, VC, VC, VC, VC, VC, VC, VC, VC, VC	) longer ), v7.0, v7.1 ++, Visual Basic,
-Contracts for other states       0       0         Number of contracts signed behaves June 2011.       7       2          Total number of sites operating blood bank system       570       63       500+         Number of sites that went the behaves June 2012.       7       28       28       28         Installations not yet the (hospitals/regional blood bank systems       4%        0         No. of employees in entrice company/Dedicated solely to blood bank       1,586/77       1,586/77       620/         No. of employees in entrice company/Dedicated solely to blood bank       1,586/77       620/          No. of employees in entrice company/Dedicated solely to blood bank       1,586/77       620/          Versions of product in field covered by FDA 510(k) clearance       9       3       4.3, 4.4, 4.5       Blood Bank and Blood Donor v6.0.1 (n cancellabe), v6.4         Versions of product that did not require FDA 510(k) clearance       0       0           Versions of product that did not require FDA 510(k) clearance       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 System p (Power P7)       IBM Power, HP Integrity       Ded, chech, chech & Sort, M, Standard C/C <t< td=""><td>) longer ), v7.0, v7.1 ++, Visual Basic,</td></t<>	) longer ), v7.0, v7.1 ++, Visual Basic,
Total number of sites operating blood bank system57063500-Number of sites that well the between June 2011 2 282817Installations not yet live (hospital/regional blood centers/others)14 (14/00)11 (1/0/0)14 (14/0/0)Percentage of installations that are standalone blood bank systems4%	), v7.0, v7.1 ++, Visual Basic,
Number of sites that went live between June 2011 - June 2012       28       28       17         Installations of prof two (hospitalis/regional blood beners/ohens)       14 (14/0/0)       14 (14/0/0)       14 (14/0/0)         Percentage of installations that are standatione blood bank systems       4%	), v7.0, v7.1 ++, Visual Basic,
Installations nut 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       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       3       6         •Versions of product that did not require FDA 510(k) clearance       0       23.2, 25, 25.1       0       0       available), 6.4       available), 6.4         •Versions of product that did not require FDA 510(k) clearance       0       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 System PO's workstation: Windows XP, Visa, 7       Device, Cache, Cache, Script, M, Stander O/C Visader Cache, Cache, Cache, Script, M, Stander O/C Visader Cache, Cache, Script, M, Stander O/C Visader Cache, Cache, Cache, Script, M, Stander O/C Visader Cac	), v7.0, v7.1 ++, Visual Basic,
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       11,21,22,23,23 with SoftScape,23.1 with DMSI, 232,25,25.1       3,4,4,4.5       Blood Bank and Blood Donor v6.0.1 (n availabile), v6.4         •Versions of product that did not require FDA 510(k) clearance       0       v6.1, v6.2, v6.3, v6.3, v6.4, v6.4, 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       Dell, Hewiett-Packard Windows       Ce++, Net         Software programming language(s)       C, c++, NS. Net       Server: IBM AIX (Unix); workstation: Windows XP, Vista, 7       Server: IBM AIX (Unix); workstation: Windows XP, Vista, 7       Oracle       Oracle         Potabases and tools       Oracle       not available       not available       not available         Features (listed as percentage of live installes on based on availability)	), v7.0, v7.1 ++, Visual Basic,
systems development, installation, support           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 (n available), v6.4           •Versions of product that did not require FDA 510(k) clearance         0         v6.1, v6.2, v6.3 (compatible with v6.0.1 (compatible w	), v7.0, v7.1 ++, Visual Basic,
systems development, installation, support           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 (n available), v6.4           •Versions of product that did not require FDA 510(k) clearance         0         v6.1, v6.2, v6.3 (compatible with v6.0.1 (compatible w	), v7.0, v7.1 ++, Visual Basic,
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         3         4.3, 4.4, 4.5         Blood Bank and Blood Donor v6.0.1 (n 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 (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         C, C++, .Net         Caché, Caché Script, M, Standard C/C           Vursions of product in information         server: IBM AIX (Unix); workstation: Windows XP, Vista, 7         AIX, HP-UX, OpenVMS (existing client InterSystems Caché           Potarbing system(s)         server: IBM AIX (Unix); workstation: Windows XP, Vista, 7         ora available         not available           • Features (listed as percentage of live installs or based on availability)         not available         not available         not available           • Full support of ISBT 128 unit tabeling         60%         100%         100%         100%           • Bar	), v7.0, v7.1 ++, Visual Basic,
•Versions of product in field covered by FDA 510(k) clearance       19.1, 21, 22, 23, 23 with SoftScape, 23.1 with DMSI, 232, 25, 25.1       4.3, 4.4, 4.5       Blood Bank and Blood Donor v6.0.1 (n available), v6.4         •Versions of product that did not require FDA 510(k) clearance       0       v6.1, v6.2, v6.3, compatible with v6.0.1 (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       Dell, hewlett-Packard Windows         Software programming language(s)       c, C++, MS. Net       C, C++, Net       Caché Script, M, Standard C/C         Visual C+-, Active X       Server: IBM ALX (Unix); workstation: Windows XP, Vista, 7       AX, HP-UX, OpenVMX (existing client InterSystems Caché         Databases and tools       oracle       not available       not available         Features (listed as percentage of live installs or based on availabilit)       not available       not available       not available         •Unstructurer       00%       100%       100%       100%       100%       00%         •Ustal c+-packing of donor and unit information       100%       100%       100%       100%       100%       100%	), v7.0, v7.1 ++, Visual Basic,
23.2, 25, 25.1       0       available), v6.4         • Versions of product that did not require FDA 510(k) clearance       0       v6.1, v6.2, v6.3 (compatible with v6.0.1 (compatible with v6.0.1 (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++, Net       Caché Script, M, Standard C/C       Visual C++, Active X         Operating system(s)       server: IBM ALX (Unix); workstation: Windows XP, Vista, 7       server: IBM ALX (Unix); workstation: Windows XP, Vista, 7       Visual C++, Active X         Detabases and tools       Oracle       oracle       not available       not available         • Features (listed as percentage of live installs or based on availability)       • not available       not available       not available         • Biometric ID of donors and/or patients       not available       not available       not available       not available         • G9%       100%       100%       100%       100%       100%       100%         • Unit inventory       100%	), v7.0, v7.1 ++, Visual Basic,
• Versions of product that did not require FDA 510(k) clearance       0       v6.1, v6.2, v6.3 (compatible with v6.0.1 (compatible with v6.0.1 (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       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 client InterSystems Caché         Features (listed as percentage of live installs or based on availability)       not available       not available       not available         • Full support of ISBT 128 unit labeling       60%       100%       100%       100%         • Bar-oode reading of donor and unit information       100%       100%       100%       100%         • Oracle       100%       100%       100%       100%       100%         • Direct entry of test results       100%       100%       100%       100%         • Crossmatch results	++, Visual Basic,
Range in number of user workstations in live sites (average)       2-100+ (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       Dell, HewletH-Packard Windows         Software programming language(s)       C, C++, MS. Net       C, C++, Net       Caché, Cach, Caché, Script, M, Standard C/C         Visual C++, Active X       server: IBM AIX (Unix); workstation: Windows XP, Vista, 7       server: IBM AIX (Unix); workstation: Windows XP, Vista, 7       visual C++, Active X         Detraing system(s)       server: IBM AIX (Unix); workstation: Windows XP, Vista, 7       server: IBM AIX (Unix); workstation: Windows XP, Vista, 7       visual C++, Active X         Peatures (listed as percentage of live installs or based on availability)       oracle       not available       not available         • Full support of ISBT 128 unit labeling       60%       100%       100%       100%         • Bar-code reading of donor and unit information       100%       100%       100%       100%         • Unit inventory       100%       100%       100%       100%       100%         • Direct entry of test results       100%       100%       100%       100%       100%         • Crossmatch results       100%       20%	++, Visual Basic,
Server platforms     IBM System p (Power P7)     IBM System p (Power P7)     IBM System p (Power P7)       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       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 client InterSystems Caché       Peatures (listed as percentage of live installs or based on availability)     oracle     oracle     not available       *Fourters (listed as percentage of live installs or based on availability)     end available     not available     not available       *Full support of ISBT 128 unit labeling     60%     100%     100%     100%       *Unit inventory     100%     100%     100%     100%       *Orace     100%     100%     100%     100%       *Orace     100%     100%     100%     100%	
Server platforms     IBM System p (Power P7)     IBM System p (Power P7)     IBM System p (Power P7)       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       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 client InterSystems Caché       Peatures (listed as percentage of live installs or based on availability)     oracle     oracle     not available       *Fourters (listed as percentage of live installs or based on availability)     end available     not available     not available       *Full support of ISBT 128 unit labeling     60%     100%     100%     100%       *Unit inventory     100%     100%     100%     100%       *Orace     100%     100%     100%     100%       *Orace     100%     100%     100%     100%	
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         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 client UnterSystems Caché         Databases and tools       Oracle       oracle       Intel-based PCs         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%       100%       installed         •Bar-code reading of donor and unit information       100%       100%       100%       00%         •Unit inventory       100%       100%       100%       100%       100%         •Direct entry of test results       100%       100%       100%       100%       100%         •Direct entry of test results       100%       100%       20%       20%       20%         •Antiologous and directed unit tracking       100%       available via SCC's SoftBank       20%       20%         •Antigen typing       100% <t< td=""><td></td></t<>	
Software programming language(s)C, C++, MS .NetC, C++, .NetCaché, Caché Script, M, Standard C/C Visual C++, Active XOperating system(s) Databases and toolsserver: IBM AIX (Unix); workstation: Windows XP, Vista, 7 Oracleserver: IBM AIX (Unix); workstation: Windows XP, Vista, 7 OracleAIX, HP-UX, OpenVMS (existing client InterSystems CachéFeatures (listed as percentage of live installs or based on availability)•oraclenot available not available•Biometric ID of donors and/or patients •Fall support of ISBT 128 unit labeling •Bar-code reading of donor and unit information •Unit inventorynot available 100%not available 100%•Bar-code reading of donor and unit information •Unit inventory100%100%100%•Autologous and directed unit tracking •Direct entry of test results •Crossmatch results100%100%100%•Crossmatch decisionmaking •Crossmatch decisionmaking70%available via SCC's SoftBank •Autigen typing20%	
Operating system(s) Databases and tools         server: IBM AIX (Unix); workstation: Windows XP, Vista, 7 Oracle         server: IBM AIX (Unix); workstation: Windows XP, Vista, 7 Oracle         Visual C++, Active X AIX, HP-UX, OpenVMS (existing client InterSystems Caché           Features (listed as percentage of live installs or based on availability)         •<	
Operating system(s) Databases and toolsserver: IBM AIX (Unix); workstation: Windows XP, Vista, 7 Oracleserver: IBM AIX (Unix); workstation: Windows XP, Vista, 7 OracleAIX, HP-UX, OpenVMS (existing client InterSystems CachéFeatures (listed as percentage of live installs or based on availability) </td <td>s only)</td>	s only)
Databases and toolsOracleOracleInterSystems CachéFeatures (listed as percentage of live installs or based on availability) <td></td>	
•Biometric ID of donors and/or patientsnot availablenot availablenot available•Full support of ISBT 128 unit labeling60%100%installed•Bar-code reading of donor and unit information100%100%100%•Unit inventory100%100%100%•Autologous and directed unit tracking100%100%100%•Direct entry of test results100%100%100%•Crossmatch results100%100%100%•Electronic crossmatch decisionmaking70%available via SCC's SoftBank20%•Antigen typing100%100%100%	
•Biometric ID of donors and/or patientsnot availablenot availablenot available•Full support of ISBT 128 unit labeling60%100%installed•Bar-code reading of donor and unit information100%100%100%•Unit inventory100%100%100%•Autologous and directed unit tracking100%100%100%•Direct entry of test results100%100%100%•Crossmatch results100%100%100%•Electronic crossmatch decisionmaking70%available via SCC's SoftBank20%•Antigen typing100%100%100%	
•Full support of ISBT 128 unit labeling60%100%installed•Bar-code reading of donor and unit information100%100%100%•Unit inventory100%100%100%•Autologous and directed unit tracking100%100%100%•Direct entry of test results100%100%100%•Crossmatch results100%100%100%•Electronic crossmatch decisionmaking70%available via SCC's SoftBank20%•Antigen typing100%100%100%	
•Unit inventory100%100%•Autologous and directed unit tracking100%100%•Direct entry of test results100%100%•Direct entry of test results100%100%•Crossmatch results100%available via SCC's SoftBank100%•Electronic crossmatch decisionmaking70%available via SCC's SoftBank20%•Antigen typing100%100%100%	
•Autologous and directed unit tracking100%100%•Direct entry of test results100%100%•Crossmatch results100%available via SCC's SoftBank100%•Electronic crossmatch decisionmaking70%available via SCC's SoftBank20%•Antigen typing100%100%100%	
•Direct entry of test results100%100%•Crossmatch results100%available via SCC's SoftBank100%•Electronic crossmatch decisionmaking70%available via SCC's SoftBank20%•Antigen typing100%100%100%	
•Electronic crossmatch decisionmaking         70%         available via SCC's SoftBank         20%           •Antigen typing         100%         100%         100%	
•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%	
•Centralized transfusion service capability     10%     10%     available via SCC's SoftBank     100%	
Operative and management 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     available via SCC's SoftDonor or 90% not available	
Source or recovered plasma management     10%     100%     installed	
•Accounts receivable 95% 100% 90%	
•Management reports         100%         100%           •Ad hoc report writer         100%         100%	
•Quality control management     100%     100%     100%     100%     100%     100%     100%     100%     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 yes yes	
Electronic interface to bedside patient ID system from other vendors yes (CareFusion) no 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 critical control points, test cases, electronic screen capture notes with links to test cases, electronic screen capture consulting service	on, training,
System available via ASP or cloud-based data center — — ves no	
System provides indexed field in each test definition for LOINC code no no yes	
Provide LOINC dictionary for each new installation no yes	
Other vendors to which software has a lab system-related interface Cerner, CPSI, Allscripts, Epic, GE Healthcare, Cerner, CPSI, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, GE Healthcare, Healthland, Cerner, McKesson, Siemens, Epic, Allscripts, Epic, Allscripts, Epic, GE Healthcare, Healthland, Healthland, Healthland, Healthland, Healthl	ripts, others
Healthland, HealthWorks, HMS, Keane, McKesson, HealthWorks, HMS, Keane, McKesson, Meditech,	
Meditech, QuadraMed, Siemens, others QuadraMed, Siemens, Sunquest, 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	
Methods by which users can tailor blood bank system in their ad hoc query tools, dictionary settings	
own setting	s, user-defined
Cost for software modifications to comply with federal regs and laws standard (no charge) standard (no charge) standard (no charge)	s, user-defined
	s, user-defined
Total cost for smallest standalone blood bank system installation** \$105,000 (annual maintenance fee, \$500) \$105,000 (annual maintenance fee, \$500)	s, user-defined
Total cost for largest standalone blood bank system installation** \$420,000 (annual maintenance fee, \$4,000) \$420,000 (annual maintenance fee, \$4,000) -	s, user-defined
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)       —	s, user-defined
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)       \$55,000 (annual maintenance fee, \$2,500)       —	s, user-defined
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**       \$420,000 (annual maintenance fee, \$500)       \$55,000 (annual maintenance fee, \$500)          Total incremental cost for largest blood bank configuration installed**       \$55,000 (annual maintenance fee, \$2,500)       \$55,000 (annual maintenance fee, \$2,500)          Distinguishing features (supplied by company)       • supports user workflow       • user-defined test algorithms can automatically order       • by combining Sunquest Laboratory,	s, user-defined ırds, grids, logic Collection
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**       \$420,000 (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)       \$55,000 (annual maintenance fee, \$2,500)          Distinguishing features (supplied by company)       • supports user workflow       • user-defined test algorithms can automatically order       • by combining Sunquest Laboratory, Manager, Blood Bank, and Transfusion	s, user-defined ırds, grids, logic Collection on Manager,
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 largest blood bank configuration installed**       \$420,000 (annual maintenance fee, \$500)       \$55,000 (annual maintenance fee, \$2,500)           Distinguishing features (supplied by company)       • supports user workflow       • user-defined test algorithms can automatically order required, repeat, and confirmatory tests, assign errors, omissions; safety features present user with exception where a description of the problem is       • 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       • by combining Sunquest Laboratory, Manager, Blood Bank, and Transfusion deferrals, generate notification letters, update unit status, and set a biohazard flag	s, user-defined ards, grids, logic
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**       \$420,000 (annual maintenance fee, \$500)       \$55,000 (annual maintenance fee, \$500)       \$55,000 (annual maintenance fee, \$2,500)       —       —         Total incremental cost for largest blood bank configuration installed**       \$000 (annual maintenance fee, \$2,500)       \$55,000 (annual maintenance fee, \$2,500)       \$250,000 (annual maintenance fee, \$2,500)       —       #       #       #       #       #	s, user-defined ards, grids, logic Collection on Manager, d
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 largest blood bank configuration installed**       \$420,000 (annual maintenance fee, \$500)       \$55,000 (annual maintenance fee, \$500)       \$55,000 (annual maintenance fee, \$5,000)          Distinguishing features (supplied by company)       • supports user workflow       • supports user workflow       • user-defined test algorithms can automatically order reguined, repeat, and confirmatory tests, assign 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       • user-defined donor database search capability increases of targeted recruiting efforts, including effectiveness of targeted recruiting efforts, including efforts, including       • full integration with LIS for reporting maintenance, and confirmed recruiting efforts, including	s, user-defined ards, grids, logic Collection on Manager, d
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 largest blood bank configuration installed***       \$420,000 (annual maintenance fee, \$500)       \$55,000 (annual maintenance fee, \$2,500)       \$55,000 (annual maintenance fee, \$2,500)       —         Distinguishing features (supplied by company)       • supports user workflow       • user-defined test algorithms can automatically order required, repeat, and confirmatory tests, assign errors, omissions; safety features present user with exception where a description of the problem is entered and the user can proceed; exception       • user-defined test algorithms can automatically order required, repeat, and confirmatory tests, assign deferrals, generate notification letters, update unit satus, and set a biohazard flag       • by combining Sunquest Laboratory, Manager, Blood Bank, and Transfusic clients can create a closed-loop blood satus, and the user can proceed; exception	s, user-defined ards, grids, logic Collection on Manager, d , inquiry, I business
Total cost for largest standalone blood bank system installation**       \$420,000 (annual maintenance fee, \$4,000)       \$420,000 (annual maintenance fee, \$4,000)	s, user-defined ards, grids, logic Collection on Manager, d , inquiry, I business
Total cost for largest standalone blood bank system installation**       \$420,000 (annual maintenance fee, \$4,000)       \$420,000 (annual maintenance fee, \$4,000)	s, user-defined ards, grids, logic Collection on Manager, d , inquiry, I business
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 largest blood bank configuration installed**       \$420,000 (annual maintenance fee, \$500)       \$55,000 (annual maintenance fee, \$500)       \$55,000 (annual maintenance fee, \$2,500)	s, user-defined ards, grids, logic Collection on Manager, d , inquiry, I business