	Blood Bank Computer Systems	Cerner Corp.
Part 1 of 10	Brian Forbis bforbis@bbcsinc.com	Brooke Spicer brooke.spicer@cerner.com
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	Auburn, WA 98001	Kansas City, MO 64117
See accompanying article on page 12	253-333-0046 www.bbcsinc.com	816-201-7766 www.cerner.com
Name of blood bank custom	Blood Bank Control System	PathNet Millennium Blood Bank Transfusion
Name of blood bank system	blood balik collifol system	Paulivet willelillium blood balik translusion
First ever/most recent blood bank system installation	1987/May 2008	1997/June 2008
Last major product release (for product featured)	March 2008	November 2006
Total number of contracts for operational sites	29	_
Contracts for U.S. hospitals with donor and transfusion service	2	_
Contracts for U.S. hospitals with transfusion service only	0	_
Contracts for U.S. regional blood centers with donor service only	22	_
Contracts for U.S. regional blood centers with donor and transfusion service	4	_
Contracts for centralized transfusion services in the U.S.	0	_
Contracts for foreign hospitals and regional blood centers	0	_
•Contracts for other sites	1 (National Institutes of Health)	_
Number of contracts signed between June 2007–June 2008	1	_
Total number of sites operational	120	_
Installs not yet live (hospitals/regional blood centers/others)	5 (0/5/0)	_
Number of sites that went live between June 2007–June 2008	1	_
Percentage of installations that are stand-alone systems	100%	_
Chaff to develop finatell and assument/atheast in autima commens.	17/11/0	
Staff to develop/install and support/other* in entire company	17/11/3	_
Staff to develop/install and support/other* in blood bank systems	_	_
Number of different versions of software installed	2	4
Versions of product in field covered by FDA 510(k) clearance	Blood Bank Control System 5.0, 4.4	2005.01, 2005.02, 2007, 2008VN1
Versions of product that did not require FDA 510(k) clearance	0	0
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Range in number of interactive workstations in live sites (average)	10–200 (average, 40)	not tracked
Central hardware or services type	IBM iSeries	HP, IBM
Workstations or PC platform	IBM-compatible workstations, PCs	Microsoft Windows locally or via Citrix thin client
Software programming language(s)	RPG 400, Java	Java, Visual Basic, C++, Visual C
Operating system(s)	OS/400	HP-UX, AIX, VMS
Databases and tools	IBM DB2	Oracle
Feeburgs (lighted on wavesydays of live installs and an extend on a collection)		
Features (listed as percentage of live installs or based on availability)	FOR/	Secretarille d
•Full support of ISBT 128 unit labeling	52%	installed
Bar-code reading of donor and unit information	100%	installed
•Unit inventory	100% 100%	installed
•Autologous and directed unit tracking		installed installed
Direct entry of test results Crosematch results	100% 17%	
Crossmatch results Electronic crossmatch decision making	3%	installed installed
Antigen typing	100%	installed
Handheld devices for positive patient ID	not available	installed
•Integrated bedside check for transfusion	not available	installed
•Track all steps in production of product	100%	installed
Print donor unit labels—bar coded	3%	installed
•Interface with automated instruments	100%	installed
•Interface with blood irradiator or centrifuges	not available	installed
Centralized transfusion service capability	7%	installed
Donor recruitment and management/donor questionnaire	installed/21%	available through company's LIS or via third party (both features)
Mobile scheduling	installed	available through company's LIS or via third party
•Laptop-based mobile donor registration module	installed	available through company's LIS or via third party
Source or recovered plasma management	100%	available through company's LIS or via third party
Accounts receivable	100%	installed
Management reports/ad hoc report writer	100%/100%	installed/installed
Quality control management/collection management	100%/100%	installed/installed
Out on a second and the Timber of the Control of th	······································	(
System provides standard HL7 interface?	yes (version 2.x-configurable)	yes (versions 2.3, 2.3.1)
Interfaces to automated donor infectious disease testing instruments	uni-directional to Ortho, Immucor, Abbott, Olympus, IDM	_
Interfaces to automated ARO/Rh/antihody coroning instruments	uni-directional to Ortho Immusor Abbott Olympus	hi-directional to Ortho Immusor DiaMod
Interfaces to automated ABO/Rh/antibody screening instruments	uni-directional to Ortho, Immucor, Abbott, Olympus	bi-directional to Ortho, Immucor, DiaMed
FDA E40/IA) commenced into force to be detailed until 1100 1100	no	
I FUA DIU(K)-approved interface to bedside patient II) system?		no
FDA 510(k)-approved interface to bedside patient ID system? Languages (other than English) offered on system	<u>-</u>	no German, Spanish, French
FDA 510(k)-approved interface to bedside patient ID system? Languages (other than English) offered on system Tools to help clients validate their systems	— validation protocols, flow charts, management guides, validation	
Languages (other than English) offered on system	_	German, Spanish, French
Languages (other than English) offered on system	— validation protocols, flow charts, management guides, validation	German, Spanish, French
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution?	— validation protocols, flow charts, management guides, validation	German, Spanish, French
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support	German, Spanish, French certification guidelines, design and build support guides
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC	German, Spanish, French certification guidelines, design and build support guides yes
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based	German, Spanish, French certification guidelines, design and build support guides yes fixed fee
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet	German, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet	German, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner)	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code?	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner)	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner)	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code?	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner)	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation?	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner) no no Cerner, IDM, Mediware, Meditech	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor yes yes —
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group?	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner) no no Cerner, IDM, Mediware, Meditech yes (meets in person annually)	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor yes yes yes (meets via Internet and in person)
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code?	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner) no no Cerner, IDM, Mediware, Meditech yes (meets in person annually) escrow	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor yes yes yes meets via Internet and in person) escrow
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code? Can user modify screens?	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner) no no Cerner, IDM, Mediware, Meditech yes (meets in person annually) escrow no	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor yes yes yes yes yes yes yes yes
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code?	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner) no no Cerner, IDM, Mediware, Meditech yes (meets in person annually) escrow	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor yes yes yes meets via Internet and in person) escrow
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner) no no Cerner, IDM, Mediware, Meditech yes (meets in person annually) escrow no	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor yes yes yes yes yes yes yes yes
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code? Can user modify screens? User-defined report writer/custom programming?	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner) no no Cerner, IDM, Mediware, Meditech yes (meets in person annually) escrow no	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor yes yes yes yes yes yes yes yes
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner) no no Cerner, IDM, Mediware, Meditech yes (meets in person annually) escrow no yes/yes — —	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor yes yes yes yes — yes (meets via Internet and in person) escrow yes yes/no — —
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner) no no Cerner, IDM, Mediware, Meditech yes (meets in person annually) escrow no	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor yes yes yes yes yes yes yes yes
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner) no no Cerner, IDM, Mediware, Meditech yes (meets in person annually) escrow no yes/yes • complete blood center management package from recruiting to transfusion	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor yes yes yes (meets via Internet and in person) escrow yes yes/no integrated module of the Cerner Millennium suite of laboratory and patient care solutions
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner) no no Cerner, IDM, Mediware, Meditech yes (meets in person annually) escrow no yes/yes • complete blood center management package from recruiting to transfusion • self-registration and customizable online questionnaire capable of	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor yes yes yes yes (meets via Internet and in person) escrow yes yes/no • integrated module of the Cerner Millennium suite of laboratory and
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner) no no Cerner, IDM, Mediware, Meditech yes (meets in person annually) escrow no yes/yes • complete blood center management package from recruiting to transfusion	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor yes yes yes yes (meets via Internet and in person) escrow yes yes/no • integrated module of the Cerner Millennium suite of laboratory and patient care solutions • all data stored in a single data model; no interfaces required
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance Distinguishing features (supplied by vendor)	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner) no no Cerner, IDM, Mediware, Meditech yes (meets in person annually) escrow no yes/yes • complete blood center management package from recruiting to transfusion • self-registration and customizable online questionnaire capable of touch screen integration supporting a paperless donor room	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor yes yes yes yes (meets via Internet and in person) escrow yes yes/no integrated module of the Cerner Millennium suite of laboratory and patient care solutions all data stored in a single data model; no interfaces required between modules
Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	validation protocols, flow charts, management guides, validation guide documents, risk mitigation online portal, 24/7 client support yes transaction based browser based, requires software be installed on a client PC operates over the Internet 3 by a third party (blood bank or IBM Business Partner) no no Cerner, IDM, Mediware, Meditech yes (meets in person annually) escrow no yes/yes • complete blood center management package from recruiting to transfusion • self-registration and customizable online questionnaire capable of touch screen integration supporting a paperless donor room • system is highly configurable to fit the needs of large and small	german, Spanish, French certification guidelines, design and build support guides yes fixed fee requires software be installed on a client PC, Citrix thin client requires use of a VPN or other dedicated connection by vendor yes yes yes yes (meets via Internet and in person) escrow yes yes/no integrated module of the Cerner Millennium suite of laboratory and patient care solutions all data stored in a single data model; no interfaces required between modules blood bank users with appropriate security have access within the

	dank information systems	
	GE Healthcare	Haemonetics Corp.
Part 2 of 10	Janet Landsberg janet.landsberg@med.ge.com	Mary Wortley wortley@haemonetics.com
	3100 Steeles Ave. East, Suite 900	400 Wood Rd.
Con accompanying orbids on nove 10	Markham, Ontario, L3R 8T3 Canada	Braintree, MA 02184
See accompanying article on page 12	905-413-9032 www.gehealthcare.com	781-356-9732 www.haemonetics.com
Name of blood bank system	Centricity Laboratory	Symphony
First avar/most recent blood hour avatem installation	1996/2008	1001/0000
First ever/most recent blood bank system installation Last major product release (for product featured)	2008	1991/2008 2008
Total number of contracts for operational sites	11	4
Contracts for U.S. hospitals with donor and transfusion service	0	0
Contracts for U.S. hospitals with transfusion service only	1	0
•Contracts for U.S. regional blood centers with donor service only	0	4
Contracts for U.S. regional blood centers with donor and transfusion service Contracts for centralized transfusion services in the U.S.	0	0
Contracts for foreign hospitals and regional blood centers	10	0
•Contracts for other sites	0	0
Number of contracts signed between June 2007–June 2008	0	2
Total number of sites operational	20	40 (0 (40 (0))
Installs not yet live (hospitals/regional blood centers/others) Number of sites that went live between June 2007–June 2008	1 (1/0/0) 0	10 (0/10/0) 3
Percentage of installations that are stand-alone systems	0	10%
Staff to develop/install and support/other* in entire company Staff to develop/install and support/other* in blood bank systems	46,000 (total)	78/65/84
Stan to develop/instan and support/other" in blood bank systems		28/20/34
Number of different versions of software installed	4	2
Versions of product in field covered by FDA 510(k) clearance Versions of product the highest product in FDA 510(k) clearance	3.3, 4.0	Prelude 1.3, Symphony 2.1
Versions of product that did not require FDA 510(k) clearance	2.4, 3.2	0
Range in number of interactive workstations in live sites (average)	2-10 (average, 6)	3-50+ (average, 15)
Central hardware or services type	Unix-based platforms	_
Workstations or PC platform	PCs with Windows 2000, XP	Windows XP
Software programming language(s)	C, C++, Unify Vision	Java
Operating system(s)	C, C++, UNITY VISION Unix	Java Windows server 2003
Databases and tools	Unify DataServer database, Unify Development tool kit	Oracle
Englished on payontage of live installe or board or conflict title?		
Features (listed as percentage of live installs or based on availability) •Full support of ISBT 128 unit labeling	installed	100%
Bar-code reading of donor and unit information	installed	100%
•Unit inventory	100%	100%
Autologous and directed unit tracking	100%	100%
• Direct entry of test results	100%	100%
Crossmatch results Electronic crossmatch decision making	100% installed	not available not available
Antigen typing	installed	not available
Handheld devices for positive patient ID	available via third party	not available
•Integrated bedside check for transfusion	available via third party	not available
•Track all steps in production of product	not available	100%
Print donor unit labels—bar coded Interface with automated instruments	installed installed	100% 100%
•Interface with blood irradiator or centrifuges	not available	100%
Centralized transfusion service capability	installed	not available
Donor recruitment and management/donor questionnaire	not available/not available	not available/100%
Mobile scheduling A party based making denomination module.	not available	not available
Laptop-based mobile donor registration module Source or recovered plasma management	not available not available	100% not available
•Accounts receivable	not available	not available
Management reports/ad hoc report writer	100%/100%	100%/not available
Quality control management/collection management	not available/not available	not available/not available
System provides standard HL7 interface?	vas (varsians 2.2.2.3)	no
Interfaces to automated donor infectious disease testing instruments	yes (versions 2.2, 2.3)	no
Interfaces to automated ABO/Rh/antibody screening instruments	bi-directional to Ortho, Immucor, Olympus, DiaMed, Wadiana	-
FDA 510/k)-approved interface to hadelide nations ID custom?	no	70
FDA 510(k)-approved interface to bedside patient ID system? Languages (other than English) offered on system	no none	no
Tools to help clients validate their systems	validation checklists that cover setup, testing, and verification; internal	product user manuals, configuration worksheets, training classes and
	test case manual used for FDA validation available on request	materials, complete product validation guide, post go-live consultation
Complete blood hank ACP calution?	no.	Voo
Complete blood bank ASP solution? Method of charging for ASP service	no 	yes fixed fee
Client software required	_	requires software be installed on a client PC
ASP information conduit	_	requires use of a VPN or other dedicated connection
Client contracts supported from data center not operated by client	_	
How data center is operated		
System provides indexed field in each test definition for LOINC code?	yes	no
Provide LOINC dictionary for each new installation?	no	no
Information system interfaces	Cerner, Meditech, Siemens, GE, McKesson, others	BBCS, Cerner, Mak-System, Mediware, Wyndgate, Systec
User group?	yes (meets via Internet at least quarterly; in person annually)	yes (meets in person annually)
Source code? Can user modify screens?	escrow yes	escrow no
User-defined report writer/custom programming?	yes yes/no	yes/yes
	,	
Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance	_	_
Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance		_
Distinguishing features (supplied by vendor)	• fully integrated with other laboratory disciplines in a single relational	• commitment to the entire blood management market—from donor to
	database	patients through software, services, and devices
	full security control over data access; extensive audit tracking	commitment to continually refresh product and release new modules authorize authorize have and financial stability.
	 multi-site capabilities that allow numerous blood banks to maintain inventory and information individually 	extensive customer base and financial stability
	months y and information materiality	
*other=sales, marketing, administration, other company functions Note: a dash in lieu of an answer means company did not answer question or question is not applicable		
Proto, a day in nou of an arrower means company did not answer quesdon or question is not applicable		

	Mak-System Corp.	Mak-System Corp.
Part 3 of 10	Stéphane Sajot sales.us@mak-system.net	Stéphane Sajot sales.us@mak-system.net
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See accompanying article on page 12	Des Plaines, IL 60018 847-803-4863 www.mak-system.net	Des Plaines, IL 60018 847-803-4863 www.mak-system.net
See accompanying at ucie on page 12	047-003-4003 WWW.IIIAK-SYSTEIII.IIET	047-003-4003 www.mak-system.net
Name of blood bank system	eProgesa	Patient Health Software (PHS) Transfusion Service, Hemovigilance Lab [†]
	4004/11 4 0000	4004/11 0000
First ever/most recent blood bank system installation	1984/July 2008	1984/July 2008
Last major product release (for product featured) Total number of contracts for operational sites	January 2008 53	June 2007 489
Contracts for U.S. hospitals with donor and transfusion service	00 N	1
Contracts for U.S. hospitals with transfusion service only	0	Ö
Contracts for U.S. regional blood centers with donor service only	0	0
Contracts for U.S. regional blood centers with donor and transfusion service	0	1
Contracts for centralized transfusion services in the U.S.	0	1
Contracts for foreign hospitals and regional blood centers	53	486
•Contracts for other sites	0	0
Number of contracts signed between June 2007–June 2008	16	55
Total number of sites operational	49	480
Installs not yet live (hospitals/regional blood centers/others) Number of sites that went live between June 2007–June 2008	17 (8/9/0)	7 (6/1/0) 57
Percentage of installations that are stand-alone systems	100%	100%
1 of contago of motamations that are stand alone systems	10070	100/0
Staff to develop/install and support/other* in entire company	145/116/72	145/116/72
Staff to develop/install and support/other* in blood bank systems	145/116/72	145/116/72
Number of different versions of software installed		
Number of different versions of software installed •Versions of product in field covered by FDA 510(k) clearance	 5.0	
Versions of product the field covered by PDA 510(k) clearance Versions of product that did not require FDA 510(k) clearance	—	— (i lio)
· · · · · · · · · · · · · · · · · · · ·		
Range in number of interactive workstations in live sites (average)	10-3,000 (average, 45)	3–2,000 (average, 35)
Central hardware or services type	Sun, IBM, HP, Wintel	Unix, Windows, Linux
Workstations or PC platform	no restrictions	PC, Windows XP, 2000
0.4	0.0 8.5 1	Delaki Isaa
Software programming language(s)	C, C++, Pro-5, Java	Delphi, Java
Operating system(s) Databases and tools	Unix-Linux Oracle, C-ISAM	Microsoft Windows Oracle
Databases and tools	oraolo, o-tokin	OTUOIG
Features (listed as percentage of live installs or based on availability)		
•Full support of ISBT 128 unit labeling	installed	installed
Bar-code reading of donor and unit information	installed	installed
•Unit inventory	installed	installed
•Autologous and directed unit tracking	installed	installed
• Direct entry of test results	installed	installed
•Crossmatch results	installed	installed
Electronic crossmatch decision making Antigen typing	installed installed	installed installed
Antigen typing Handheld devices for positive patient ID	moulicu	installed —
•Integrated bedside check for transfusion	_	installed
•Track all steps in production of product	installed	installed
Print donor unit labels—bar coded	installed	_
•Interface with automated instruments	installed	installed
•Interface with blood irradiator or centrifuges	installed	installed
Centralized transfusion service capability	_	installed
Donor recruitment and management/donor questionnaire	installed/installed	_
Mobile scheduling Al onton based mobile depar registration module.	installed	_
Laptop-based mobile donor registration module Source or recovered plasma management	installed	
Source or recovered plasma management Accounts receivable	installed installed	— installed
Management reports/ad hoc report writer	installed/—	installed/installed
•Quality control management/collection management	installed/installed	installed/—
System provides standard HL7 interface?	yes (version 2.x)	yes (version 2.x)
Interfaces to automated donor infectious disease testing instruments	uni- and bi-directional to Ortho, Immucor, Abbott, Olympus, DiaMed	_
Interfaces to automated ARO/Rh/antihody coroning instruments	_	uni- and hi-directional to Ortho Immusor Abbott Olympus Dicklad
Interfaces to automated ABO/Rh/antibody screening instruments		uni- and bi-directional to Ortho, Immucor, Abbott, Olympus, DiaMed, Grifols
FDA 510(k)-approved interface to bedside patient ID system?	_	—
Languages (other than English) offered on system	all languages (German, French, Arabic, Farsi, Finnish, Chinese, etc.)	all languages (German, French, Arabic, Farsi, Finnish, Chinese, etc.)
Tools to help clients validate their systems	IQ, PQ, OQ, risk analysis, user guides, hazard analysis, training	user guides, hazard analysis, training manuals, data conversion,
	modules	validation scenario samples, IQ, PQ, OQ, risk analysis
Ornelds blood band 100 1 11 0		
Complete blood bank ASP solution?	yes	yes fixed for production based
Method of charging for ASP service Client software required	fixed fee browser based	fixed fee, production based requires software be installed on a client PC
ASP information conduit	requires use of a VPN or other dedicated connection	operates over the Internet, requires use of a VPN or other dedicated
135. Information contains	. oqunoo uoo on u sa is on otinon uounouteu oonineotioni	connection
Client contracts supported from data center not operated by client	3	2
How data center is operated	by a third party	by a third party
Custom provides independ field in each test definition for LOBIO and a		Von
System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation?		yes —
1 101140 Lonio alononaly for each new installation:		
Information system interfaces	_	_
internation of cross states and the contract of the contract o		
User group?	yes (meets in person twice a year)	yes (meets in person twice a year)
User group? Source code?	yes (meets in person twice a year) escrow	escrow
User group? Source code? Can user modify screens?	escrow —	escrow no
User group? Source code?		escrow
User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance	escrow —	escrow no
User group? Source code? Can user modify screens? User-defined report writer/custom programming?	escrow —	escrow no
User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	escrow —	escrow no yes/yes — —
User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance	escrow —	escrow no yes/yes • elaborate communication capabilities with Progesa blood bank
User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	escrow —	escrow no yes/yes • elaborate communication capabilities with Progesa blood bank software and eProgesa
User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	escrow —	escrow no yes/yes • elaborate communication capabilities with Progesa blood bank software and eProgesa • abundant functionality, including hemovigilance features and
User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	escrow —	escrow no yes/yes • elaborate communication capabilities with Progesa blood bank software and eProgesa
User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance Distinguishing features (supplied by vendor)	escrow —	escrow no yes/yes • elaborate communication capabilities with Progesa blood bank software and eProgesa • abundant functionality, including hemovigilance features and transfusion documentation at bedside
User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	escrow —	escrow no yes/yes • elaborate communication capabilities with Progesa blood bank software and eProgesa • abundant functionality, including hemovigilance features and transfusion documentation at bedside

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See accompanying article on page 12	847-803-4863 www.mak-system.net	Alpharetta, GA 30005 404-338-4363 www.mckesson.com/laboratory
ood doodinpairying drawe on page 12	on decision within an option more	101 000 1000 WWW.monocom.com/wabshatory
Name of blood bank system	Progesa	Horizon Blood Bank
First ever/most recent blood bank system installation	1984/—	2004/June 2008
Last major product release (for product featured)		summer 2008
Total number of contracts for operational sites	625	49
Contracts for U.S. hospitals with donor and transfusion service	1	0
Contracts for U.S. hospitals with transfusion service only Contracts for U.S. regional blood centers with donor service only	0 5	46 0
Contracts for U.S. regional blood centers with donor and transfusion service	0	0
•Contracts for centralized transfusion services in the U.S.	0	0
Contracts for foreign hospitals and regional blood centers	619	3 (Canada)
•Contracts for other sites	0	0
Number of contracts signed between June 2007–June 2008	0	14
Total number of sites operational Installs not yet live (hospitals/regional blood centers/others)	624 17 (8/9/0)	80 23 (23/0/0)
Number of sites that went live between June 2007–June 2008	— (0/9/0)	9
Percentage of installations that are stand-alone systems	100%	0
Object to develop the develop the development of th	445 (440)70	04 F00 (b-b-) (
Staff to develop/install and support/other* in entire company Staff to develop/install and support/other* in blood bank systems	145/116/72 145/116/72	31,500 (total for McKesson Corp.) 40/34/19 [†]
otali to actorpy motali and capport otalici in shock saint of como	170/110/12	1010-1110
Number of different versions of software installed	7.	3
Versions of product in field covered by FDA 510(k) clearance Versions of product the did not require FDA 510(k) clearance	4.4	Safe Trace Tx 3.2, 3.3, 3.4
Versions of product that did not require FDA 510(k) clearance	-	0
Range in number of interactive workstations in live sites (average)	10-1,400 (average, 100)	1–6 (average, 2)
Central hardware or services type	Sun, IBM, HP, Wintel	Intel- and Unix-based servers
Workstations or PC platform	no restrictions	PCs
Software programming language(s)	C, C++, Pro-5, Java	Delphi, SQL, Crystal Reports
Operating system(s)	Unix-Linux	Microsoft Windows XP Professional, Windows 2003 (Unix optional)
Databases and tools	Oracle, C-ISAM	Oracle
Costumes (listed as parameters of live installs as based on sucilability)		
Features (listed as percentage of live installs or based on availability) •Full support of ISBT 128 unit labeling	installed	installed
Bar-code reading of donor and unit information	installed	installed
•Unit inventory	installed	installed
Autologous and directed unit tracking	installed	installed
• Direct entry of test results	installed	installed
• Crossmatch results	installed	installed
•Electronic crossmatch decision making •Antigen typing	installed installed	installed installed
Handheld devices for positive patient ID	-	available through company's LIS
•Integrated bedside check for transfusion	_	available in 2009
•Track all steps in production of product	installed	installed
Print donor unit labels—bar coded Interfere with out-material instruments.	installed	installed
•Interface with automated instruments •Interface with blood irradiator or centrifuges	installed installed	installed installed
Centralized transfusion service capability	_	available via third party
Donor recruitment and management/donor questionnaire	installed/installed	available via third party/available via third party
•Mobile scheduling	installed	available via third party
•Laptop-based mobile donor registration module •Source or recovered plasma management	installed installed	available via third party available via third party
•Accounts receivable	installed	available via third party
Management reports/ad hoc report writer	installed/installed	installed/installed
•Quality control management/collection management	installed/installed	installed/available through company's LIS
System provides standard HL7 interface?	yes (version 2.x)	yes (version 2.2 and higher)
Interfaces to automated donor infectious disease testing instruments	uni- and bi-directional to Ortho, Immucor, Abbott, Olympus, DiaMed	— — — — — — — — — — — — — — — — — — —
Interfaces to automated ABO/Rh/antibody screening instruments	uni- and bi-directional to Ortho, Immucor, Abbott, Olympus, DiaMed	uni- and bi-directional to Ortho, Immucor, Olympus
FDA 510(k)-approved interface to bedside patient ID system?	_	no
Languages (other than English) offered on system	all languages (German, French, Arabic, Farsi, Finnish, Chinese, etc.)	-
Tools to help clients validate their systems	user guides, hazard analysis, training manuals, data conversion, IQ,	validation services and guidelines available for purchase from
	PQ, OQ, risk analysis	recommended third parties
Complete blood bank ASP solution?	no	yes
Method of charging for ASP service	_	fixed fee, transaction based
Client software required	_	browser based, requires software be installed on a client PC
ASP information conduit	_	operates over the Internet, requires use of a VPN or other dedicated
Client contracts supported from data center not operated by client	_	connection 0
How data center is operated	_	_
		no.
System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation?	_	no no
Information system interfaces	_	McKesson
User group?	yes (meets in person twice a year)	yes (meets in person annually)
Source code?	escrow	escrow
Can user modify screens?	no	no .
User-defined report writer/custom programming?	_	yes/no
Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance	_	_
Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	_	_
Distinguishing features (supplied by vendor)	modules fully integrated from donor to patient	numerous safety features, including Patient-At-A-Glance Bar
	abundant functionality	 patented CTS feature as part of the "Method and System for
	highly customizable through parameters	Managing Blood Products"
		Wyndgate's Service 360 commitment to ensure quality implementation and support experience.
		implementation and support experience
*other=sales, marketing, administration, other company functions		software for Horizon Blood Bank supplied by Wyndgate Technologies
Note: a dash in lieu of an answer means company did not answer question or question is not applicable		†from Wyndgate Technologies (software supplier)

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See accompanying article on page 12	781-821-3000 www.meditech.com	781-821-3000 www.meditech.com
Name of blood bank system	Blood Bank System—Client/Server	Blood Bank System—Magic
First ever/most recent blood bank system installation	1981/June 2008	1981/February 2008
Last major product release (for product featured)	2008	2007
Total number of contracts for operational sites •Contracts for U.S. hospitals with donor and transfusion service	267	410
Contracts for U.S. hospitals with transfusion service	_	_
Contracts for U.S. regional blood centers with donor service only	_	_
Contracts for U.S. regional blood centers with donor and transfusion service Contracts for centralized transfusion services in the U.S.		
Contracts for foreign hospitals and regional blood centers	_	_
Contracts for other sites		_
Number of contracts signed between June 2007–June 2008 Total number of sites operational	42 253	9 413
Installs not yet live (hospitals/regional blood centers/others)	27 (27/0/0)	7 (7/0/0)
Number of sites that went live between June 2007–June 2008	_	_
Percentage of installations that are stand-alone systems	_	_
Staff to develop/install and support/other* in entire company Staff to develop/install and support/other* in blood bank systems	648/1,584/519 18+/115+/6+	648/1,584/519 18+/115+/6+
Start to develop/install and support/other in blood bank systems	10+/113+/0+	10+/113+/0+
Number of different versions of software installed	2 Manic client/server	2 Magic client/corver
Versions of product in field covered by FDA 510(k) clearance Versions of product that did not require FDA 510(k) clearance	Magic, client/server 0	Magic, client/server 0
Range in number of interactive workstations in live sites (average)	_	_
Central hardware or services type	Hewlett-Packard, Dell, EMC, IBM	Hewlett-Packard, Dell, EMC, IBM
Workstations or PC platform	Hewlett-Packard, Dell, EMC, IBM Hewlett-Packard, Dell, EMC, IBM	Hewlett-Packard, Dell, EMG, IBM Hewlett-Packard, Dell, EMC, IBM
Software programming language(s)	Magic	Magic
Operating system(s)	Windows 2000, XP (client), Windows 2000, 2003 (server)	Windows 2000, 2003, XP (client), Magic (server)
Databases and tools	Magic, SQL server 2005	Magic, SQL server 2005
Features (listed as percentage of live installs or based on availability)		
•Full support of ISBT 128 unit labeling	installed	100%
Bar-code reading of donor and unit information Unit inventory	100% 100%	100% 100%
Autologous and directed unit tracking	100%	100%
Direct entry of test results	100%	100%
Crossmatch results Electronic crossmatch decision making	100% not available	100% not available
•Antigen typing	installed	installed
Handheld devices for positive patient ID Integrated bedside check for transfusion	installed	installed
Track all steps in production of product	installed installed	installed 100%
Print donor unit labels—bar coded	installed	installed
Interface with automated instruments Interface with blood irradiator or centrifuges	installed not available	installed not available
Centralized transfusion service capability	installed	100%
Donor recruitment and management/donor questionnaire	installed/installed	installed/installed
Mobile scheduling Laptop-based mobile donor registration module	installed installed	installed installed
Source or recovered plasma management	installed	installed
•Accounts receivable	installed	installed
Management reports/ad hoc report writer Quality control management/collection management	100%/100% installed/installed	100%/100% installed/installed
System provides standard HL7 interface? Interfaces to automated donor infectious disease testing instruments	yes (version 2.4) —	yes (version 2.4) —
	uni directional to Orthe Immunes	uni directional to Ortho Immuser
Interfaces to automated ABO/Rh/antibody screening instruments	uni-directional to Ortho, Immucor	uni-directional to Ortho, Immucor
FDA 510(k)-approved interface to bedside patient ID system?	inherent in Meditech software	via Meditech
Languages (other than English) offered on system Tools to help clients validate their systems	Spanish in progress comprehensive user manual that is reviewed with customers during	Spanish in progress comprehensive user manual that is reviewed with customers during
Some same talled and operation	training	training
Complete blood bank ASP solution?	no	no
Method of charging for ASP service		_
Client software required	_	_
ASP information conduit	_	_
Client contracts supported from data center not operated by client	-	-
How data center is operated		
System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation?	yes no	yes no
Information system interfaces	Cerner, Siemens, McKesson, others	Cerner, Siemens, McKesson, others
User group? Source code?	yes (meets via Internet and in person) yes	yes (meets via Internet and in person)
Can user modify screens?	yes	yes yes
User-defined report writer/custom programming?	yes/no	yes/no
Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance	-	-
Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	_	_
Distinguishing features (supplied by vendor)	over 38 years' experience developing and implementing LISs seamless exchange of data across departments and facilities	over 38 years' experience developing and implementing LISs seamless exchange of data across departments and facilities
	regardless of care setting • software developed 100% by in-house staff	regardless of care setting • software developed 100% by in-house staff
*other=sales, marketing, administration, other company functions		
Note: a dash in lieu of an answer means company did not answer question or question is not applicable		
abulation does not represent an endorsement by the College of American Pathologists.		

Perf 6 of 10 See Accompanying article on page 12 See Accompanying article on page 1	
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Time of Bioloc bank system First corrivant recent blood bank system sealisation 1900/2008 1900/2008 1004 1006 marker of controls the graph of the standard of the standar	
First ever/mort moest blood bank system installation Last major product relations for private features of product relations everlee - Contracts for U.S. hospisals with florar and transfusions service 2 - Contracts for U.S. hospisals with florar service only 5 - Contracts for U.S. hospisals with florar service only 6 - Contracts for the control blood contraw with own service only 7 - Contracts for the control blood contraw with own service only 7 - Contracts for the control blood contraw with own service only 7 - Contracts for the private blood service with own service only 7 - Contracts for the private blood service with own service only 7 - Contracts for the private blood service with own service 8 - Contracts for the private blood service with own service only 8 - Contracts for the private blood service with own service only 9 - Contracts for the private blood service with own service only 9 - Contracts for the private blood service with own service only 9 - Contracts for the private blood service with own service or service with the private of service service on service with the private service of service with the private service on service with the private service on service with the private service on service with the service of service with the service with the service of service with the service with the service of service with the service with service service with the service with service service with service service with service service w	
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Last miley product feetings (fee product features) 99 12 12 12 13 14 15 15 16 15 16 17 15 16 16 16 16 16 16 16 16 16	
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-Contracts for LS. Shoppithal with transfusion service only 5 2 2 2 - Contracts for LS. Englesial blood centers with floors extres only 5 2 2 2 - Contracts for LS. Englesial blood centers with floors and transfusion service 2 2 0 0 1 (donor teating) Blood centers with floors and transfusion service 2 0 0 1 (donor teating) Blood centers with floors and transfusion service 2 0 0 1 (donor teating) Blood centers and the contract is for the cities and transfusion service 2 2 0 1 (donor teating) Blood centers of the special blood centers and the contract is for the cities 2 0 0 1 (donor teating) Blood centers and the contract is for the cities 2 0 0 1 (donor teating) Blood centers and the contract is for the cities 2 0 0 1 (donor teating) Blood centers and the contract is for the cities 2 0 0 1 (donor teating) Blood centers and the contract is for the cities 2 0 0 1 (donor teating) Blood centers and the contract is for the cities 2 0 0 0 1 (donor teating) Blood centers and the cities 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
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Contracts for Carolinaries Variations services in the LSS 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
-Contracts for derivation and regional blood centers 2 0 1 (donor testing)	
Contracts for other sites	
Incident marker of airse operational Incident marker of airse operational Incident marker of airse plant vent live between June 2007—June 2008 Incident of siles that went live between June 2007—June 2008 Incident of siles that went live between June 2007—June 2008 Incident of siles that went live between June 2007—June 2008 Incident of siles that went live between June 2007—June 2008 Incident of siles that went live between June 2007—June 2008 Incident of airse plant of siles that went live between June 2007—June 2008 Incident of airse plant and support/other in entire company Incident of airse plant and assignment of the look bank systems Incident of airse plant and assignment of airse plant and support of the Indicated by the Incident of airse plant and systems Incident of airse plant and assignment of airse plant and airse plant airse plant and airse plant ai	
Installan to tyst live (hospitalin regional blood centers/others) Mumber of sites that work until to belowers all persons 2079—the 2008 Percentage of installations that are stand-alone systems S879,	
Number of affects that vivent live between June 2007—June 2008 Self to develop/install and support/other* in entire company AS0054 Self to develop/install and support/other* in motire company AS0054 AS	
Staff to develop/install and support/other* in entire company Staff to develop/install and support/other* in blood bank systems 27/57/16 27/57/1	
Signific developinistal and support/other in blood bank systems 2757/16 Number of different versions of software installed **Versions of product in field covered by FUA 510(p) clearance **Versions of product the field not require FUA 510(p) clearance **Versions of product the field not require FUA 510(p) clearance **Versions of product the field not require FUA 510(p) clearance **Versions of product the field not require FUA 510(p) clearance **Versions of product the field not require FUA 510(p) clearance **Versions of product the field not require FUA 510(p) clearance **Versions of product the field not require FUA 510(p) clearance **Versions of product in field covered by FUA 510(p) clearance **Versions of product in field covered by FUA 510(p) clearance **Versions of product in field covered by FUA 510(p) clearance **Versions of PUA 510(p) clearance **Versions of	
Aumbier of different versions of software installed - Versions of product fin field covered by FIA 510(b) clearance - Versions of product fin field covered by FIA 510(b) clearance - MCLL 2.5.1, 2.9.2, 2.5.3, 2.9.4; Denor 1.1.1, 1.1.2, 1.1.3, 1.1.4 - Sange in number of interactive workstations in live altes (average) - Central hardware or services type - Microsoft compatible - Microsoft very programming language(s) - Operating system(s) - Software programming language(s) - Operating system(s) - Software programming language(s) - Operating system(s) - Software programming language(s) - Operating system(s) - Wissulf Basic, C.++- Com, Microsoft Met, C++ - Wissulf Basic, C.+ Com, Microsoft Met, C+ Wissulf Basic, C.+ Com, Microsoft Met, C-+ Wissulf Basic, C.+	
- Versions of product in field covered by FIA 510(k) charance HCL 2.81, 2.92, 2.93, 2.94; Denor 1.1.1, 1.1.2, 1.1.3, 1.1.4 2.03, 3.02 Range in number of interactive workstations in live sites (everage) Carntral hardware or sarviosis type Microsoft compatible Microsoft compatible Microsoft compatible Microsoft compatible Microsoft Denor Compatible Microsoft Denor Compatible Microsoft Denor Compatible Microsoft Denor Compatible Microsoft July, IP-UX Microsoft July, IP-UX Microsoft July, Illux AS Oracle Denarling system(s) Denarling system(s) Denarling system(s) Microsoft Denor Compatible Microsoft Denor Compatible Microsoft Denor Compatible Microsoft Denor Compatible Microsoft July, Illux AS Oracle Features (listed as percentage of live installs or based on availability) **Full support of ISE 1720 and Inabatise Features (listed as percentage of live installs or based on availability) **Full support of ISE 1720 and Inabatise **Init Inventory	
West and product that did not require FDA 510(i) clearance 2-50 (everage, 8) 7-300 (everage, 100)	
Range in number of interactive workstations in the sites (average) Certar Individure or services type Microsoft compatible Software programming language(s) Operating system(s) Software programming language(s) Usual Basis, C ++ Com, Microsoft Met, C++ Windows X7 (2000, 2003 HP-UK, Linux, AS Oracle Features (listed as percentage of live instalis or based on availability) *-Pull support of ISST 1/25 unit tabeling Installed Ins	
Central hardware or services type Microsoft compatible Microsoft services Microsoft Jet, C++ Oracle forms and reports, Pro*C Operating system(s) Windows Nr. 2000, 2005 Microsoft Jet, C++ Oracle forms and reports, Pro*C Oracle forms and pro*C Oracle forms and pro*C Oracle forms and an	
Workstations or PC platform	
Software programming language(e) Operating system(s) Defaulting system(s	
Operating system(s) Databases and tools Databases and tools Databases and tools Features (fisted as percentage of live installs or based on availability) Features (fisted as percentage of live installs or installed	
Databases and tools	
Features (tisted as percentage of live installs or based on availability) -Full support of ISST 128 unit labeling -Bar-cober reading of donor and unit information installed -Bar-cober reading of donor and unit information installed -Installed -Instal	
Full support of ISBT 128 unit labeling -Bar-coder eading of donor and unit information -Unit inventory -Autologous and directed unit tracking -Unit inventory -Autologous and directed unit tracking -Unit inventory -Autologous and directed unit tracking -Installed -	
### Packer and unit information installed inst	
- Autologous and directed unit tracking - Direct entry of test results - Crossmatch results - Electronic crossmatch decision making - Electronic crossmatch decision making - Installed - Crossmatch decision making - Installed - Install	
Pirect entry of test results	
Crossmatch results Flectronic crossmatch decision making installed installe	
Antigen typing installed available unto installed ———————————————————————————————————	
Handheld devices for positive patient ID Integrated bedside check for transfusion Installed Inst	
eIntegrated bedside check for transfusion Track all steps in production of product Installed Ins	
Print donor unit labels—bar coded Installed In	
Interface with automated instruments Installed Interface with blood irradiator or centrifuges Individual of transfusion service capability Installed Install	
Centralized transfusion service capability Donor recruitment and management/donor questionnaire Mobile scheduling Laptop-based mobile donor registration module Linstalled Linstal	
Obnor recruitment and management/donor questionnaire Mobile scheduling Laptop-based mobile donor registration module Laptop-based mobile donor registration module Source or recovered plasma management Accounts receivable Accounts receivable Management reports/ad hoc report writer Management reports/ad hoc report writer Management reports/ad hoc report writer Management/collection management Management/collection	
Mobile scheduling	
*Source or recovered plasma management not available installed — *Accounts receivable installed — *Management reports/ad hor report writer installed/installed installed/installed installed/installed installed/installed installed/installed *Quality control management/collection management installed/installed installed/installed System provides standard HL7 interface? yes (versions 2.3–2.5) yes (versions 2.03 and above) uni-directional to Ortho, Immucor, Abbott, Olympus, DiaMed Interfaces to automated donor infectious disease testing instruments uni-directional to Ortho, Immucor, Biotest uni-directional to Ortho, Immucor, Olympus, DiaMed, Biotest FDA 510(k)-approved interface to bedside patient ID system? via Mediware BloodSafe TX no Languages (other than English) offered on system none — Tools to help clients validate their systems validation scripts release notes Complete blood bank ASP solution? no no	
•Accounts receivable •Management reports/ad hoc report writer •Quality control management/collection management •Quality control management/collection management System provides standard HL7 interface? Interfaces to automated donor infectious disease testing instruments Interfaces to automated ABO/Rh/antibody screening instruments FDA 510(k)-approved interface to bedside patient ID system? Languages (other than English) offered on system Tools to help clients validate their systems Complete blood bank ASP solution? Installed installed/installed installed	
Ouality control management/collection management installed/installed installed/installed System provides standard HL7 interface? Interfaces to automated donor infectious disease testing instruments Interfaces to automated ABO/Rh/antibody screening instruments Interfaces to	
System provides standard HL7 interface? Interfaces to automated donor infectious disease testing instruments Interfaces to automated ABO/Rh/antibody screening instruments uni-directional to Ortho, Immucor, Abbott, Olympus, DiaMed, Biotest FDA 510(k)-approved interface to bedside patient ID system? Languages (other than English) offered on system none validation scripts release notes Complete blood bank ASP solution? no	
Interfaces to automated donor infectious disease testing instruments Interfaces to automated ABO/Rh/antibody screening instruments uni-directional to Ortho, Immucor, Biotest uni-directional to Ortho, Immucor, Olympus, DiaMed, Biotest FDA 510(k)-approved interface to bedside patient ID system? Languages (other than English) offered on system none Tools to help clients validate their systems validation scripts no no no	
FDA 510(k)-approved interface to bedside patient ID system? Languages (other than English) offered on system Tools to help clients validate their systems validation scripts release notes Complete blood bank ASP solution? no no	l, others
Languages (other than English) offered on system Tools to help clients validate their systems release notes Complete blood bank ASP solution? no no	t
Languages (other than English) offered on system Tools to help clients validate their systems release notes Complete blood bank ASP solution? no no	
Complete blood bank ASP solution? no no	
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l ·	
Method of charging for ASP service — — — — — — — — — — — — — — — — — — —	
ASP information conduit — — —	
Client contracts supported from data center not operated by client — — — —	
How data center is operated — — —	
System provides indexed field in each test definition for LOINC code? no no no Provide LOINC dictionary for each new installation? no no	
Information system interfaces to HL7-compliant systems Cerner via HL7	
User group? yes (meets via Internet quarterly; in person annually) yes (meets in person annually)	
Source code? ges (inects via internet quarterly, in person annually)	
Can user modify screens? User-defined report writer/custom programming? yes yes/no no/no	
Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance \$30.774k/\$58k/\$71.26k/\$1.221k to \$35.789k/\$150k/\$72.99k/\$2.908k \$15k/\$75k/—/\$2.085k to \$250k/\$400k/—/\$35.415k \$41.742k/\$70k/\$82.335k/\$1.625k to \$46.757k/\$162k/\$84.065k/— — \$30.774k/\$58k/\$71.26k/\$1.221k to \$35.789k/\$150k/\$72.99k/\$2.908k \$15k/\$75k/—/\$2.085k to \$250k/\$400k/—/\$35.415k \$41.742k/\$70k/\$82.335k/\$1.625k to \$46.757k/\$162k/\$84.065k/— — \$30.774k/\$58k/\$71.26k/\$1.221k to \$35.789k/\$150k/\$72.99k/\$2.908k \$15k/\$75k/—/\$2.085k to \$250k/\$400k/—/\$35.415k \$41.742k/\$70k/\$82.335k/\$1.625k to \$46.757k/\$162k/\$84.065k/—	
Distinguishing features (supplied by vendor) • support every step of the blood management process, from recruitment to final disposition • new Biologicare software allows the tracking of tissues and bones from when they are received to final disposition • 25-year+ proven track record with solutions designed by blood bankers • support every step of the blood management process, from to final disposition • new Biologicare software allows the tracking of tissues and from when they are received to final disposition • 25-year+ proven track record with solutions designed by blood bankers • support every step of the blood management process, from to final disposition • new Biologicare software allows the tracking of tissues and from when they are received to final disposition • 25-year+ proven track record with solutions designed by blood bankers • support every step of the blood management process, from to final disposition • new Biologicare software allows the tracking of tissues and from when they are received to final disposition • 25-year+ proven track record with solutions designed by blood bankers • support every step of the blood management process, from to final disposition • new Biologicare software allows the tracking of tissues and from when they are received to final disposition • 25-year+ proven track record with solutions designed by blood bankers • support every step of the blood management process, from to final disposition • new Biologicare software allows the tracking of tissues and from when they are received to final disposition • 25-year+ proven track record with solutions designed by blood bankers	recruitmen

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Part 7 of 10	Avi Allerhand avi@netlims.com	Rachel Stratman sales@psychesystems.com
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See accompanying article on page 12	201-894-5300 www.netlims.com	800-345-1514 www.psychesystems.com
Name of blood bank system	AutoFusion	Systematic Blood Bank
First ever/most recent blood bank system installation	2002/—	1987/April 2008
Last major product release (for product featured)	January 2007	2001
Total number of contracts for operational sites	3	16
Contracts for U.S. hospitals with donor and transfusion service	0	0
Contracts for U.S. hospitals with transfusion service only Contracts for U.S. regional blood centers with donor service only	0	16
Contracts for U.S. regional blood centers with donor and transfusion service	0	0
Contracts for centralized transfusion services in the U.S.	0	0
Contracts for foreign hospitals and regional blood centers	3	0
•Contracts for other sites	0	0
Number of contracts signed between June 2007–June 2008 Total number of sites operational	3 24	4 11
Installs not yet live (hospitals/regional blood centers/others)	8	5 (5/0/0)
Number of sites that went live between June 2007–June 2008	_	3
Percentage of installations that are stand-alone systems	4%	75%
Staff to develop/install and support/other* in entire company	55/37/13	13/16/12
Staff to develop/install and support/other* in blood bank systems	6/5/3	3/5/2
Number of different versions of software installed	3 Auto-Function 2 00	1 Contempt Dead Beat 9
Versions of product in field covered by FDA 510(k) clearance Versions of product that did not require FDA 510(k) clearance	AutoFusion 3.02	Systematic Blood Bank 3.0
		•
Range in number of interactive workstations in live sites (average)	8–37 (average, 22)	1–100 (average, 13)
Central hardware or services type	Wintel (HP, IBM, Dell)	hosted/Web deployed
Workstations or PC platform	Wintel (HP, IBM, Dell)	PCs
Software programming language(s)	Cu	Vicual Racio Fortran
Software programming language(s) Operating system(s)	C++ Windows	Visual Basic, Fortran any
Databases and tools	Microsoft SQL, Oracle	proprietary
	,	
Features (listed as percentage of live installs or based on availability)	1000/	1009/
Full support of ISBT 128 unit labeling Bar-code reading of donor and unit information	100% 100%	100% 100%
Unit inventory	100%	100%
Autologous and directed unit tracking	60%	100%
Direct entry of test results	100%	100%
•Crossmatch results	100%	100%
Electronic crossmatch decision making Antison turing	80% 100%	100%
Antigen typing Handheld devices for positive patient ID	not available	100% available but not installed
•Integrated bedside check for transfusion	not available	available but not installed
Track all steps in production of product	100%	100%
Print donor unit labels—bar coded	50%	not available
•Interface with automated instruments	100%	10%
Interface with blood irradiator or centrifuges Centralized transfusion service capability	80% 100%	not available 100%
Donor recruitment and management/donor questionnaire	50%/50%	not available/not available
Mobile scheduling	not available	not available
Laptop-based mobile donor registration module	not available	not available
•Source or recovered plasma management	80%	not available
Accounts receivable Management reports/ad hoc report writer	available but not installed 100%/50%	not available 100%/100%
Quality control management/collection management	80%/100%	100%/not available
quality control management	33/3/100/3	Too / Williams
System provides standard HL7 interface?	yes (version 2.3)	yes (version 2.3.1)
Interfaces to automated donor infectious disease testing instruments	bi-directional to Abbott, Olympus	— uni-directional to Immuser
Interfaces to automated ABO/Rh/antibody screening instruments	uni-directional to Wadiana; bi-directional to Olympus	uni-directional to Immucor
FDA 510(k)-approved interface to bedside patient ID system?	no	no
Languages (other than English) offered on system	_	_
Tools to help clients validate their systems	full software testing document for validation	software validation guidelines
Complete blood bank ASP solution?	no	yes
Method of charging for ASP service	<u> </u>	fixed fee
Client software required	_	browser based, requires software be installed on a client PC
ASP information conduit	-	operates over the Internet
Client contracts supported from data center not operated by client	_	_
How data center is operated	_	by vendor
System provides indexed field in each test definition for LOINC code?	VAS	no
Provide LOINC dictionary for each new installation?	yes no	no no
•		
Information system interfaces	to HL7-compliant systems	CPSI, Psyche Systems, Meditech, Siemens, McKesson, Cerner, Misys,
		others
User group?	no	yes (meets via Internet periodically; in person bi-annually)
Source code?	escrow	escrow
Can user modify screens?	yes	-,
User-defined report writer/custom programming?	yes/yes	yes/no
Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance	\$150k-\$450k (for software)	\$0/\$10k/\$2.5k/\$.2k to \$1k/\$40k/\$5k/\$.8k
Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	\$125k-\$375k (for software)	\$0/\$30k/\$10k/\$.6k to \$5k/\$70k/\$15k/\$1.5k
Distinguishing features (grantied burneday)	a full integration with all other laborated and for	a complete offendable bleed hard control for the control of
Distinguishing features (supplied by vendor)	full integration with all other lab modules and free choice of database on same database	 complete, affordable blood bank system for the small to mid-size blood bank
	highly customizable and open system on all levels	flexible and easy to use
	unique user interface to provide unparalleled ease of use and safety	securely hosted, Web-deployed system that requires no additional
		hardware investment
*other=sales, marketing, administration, other company functions Note: a dash in lieu of an answer means company did not answer question or question is not applicable		

	SCC Soft Computer	SCC Soft Computer
Part 8 of 10	Ellie Vahman ellie@softcomputer.com 5400 Tech Data Drive	Ellie Vahman ellie@softcomputer.com 5400 Tech Data Drive
	Clearwater, FL 33760	Clearwater, FL 33760
See accompanying article on page 12	727-789-0100 www.softcomputer.com	727-789-0100 www.softcomputer.com
Name of blood bank system	SoftBank II	SoftDonor
First ever/most recent blood bank system installation	1992/June 2008	1992/May 2008
Last major product release (for product featured)	May 2008	<u> </u>
Total number of contracts for operational sites •Contracts for U.S. hospitals with donor and transfusion service	169 13	11 10
Contracts for U.S. hospitals with transfusion service only	146	0
Contracts for U.S. regional blood centers with donor service only	5	0
Contracts for U.S. regional blood centers with donor and transfusion service Contracts for centralized transfusion services in the U.S.	0	0
Contracts for foreign hospitals and regional blood centers	5	1
Contracts for other sites Number of contracts signed between June 2007–June 2008	0 7	0
Total number of sites operational	223	24
Installs not yet live (hospitals/regional blood centers/others)	27 (27/0/0)	5 (5/0/0)
Number of sites that went live between June 2007–June 2008 Percentage of installations that are stand-alone systems	17 3%	3
		<u> </u>
Staff to develop/install and support/other* in entire company Staff to develop/install and support/other* in blood bank systems	725/304/224 32/20/15	725/304/224 32/20/15
Number of different versions of software installed	6	2
Versions of product in field covered by FDA 510(k) clearance	19.1, 21, 22, 23, 23 with SoftScape, 23.1 with DMSI (Oracle)	4.3, 4.4
Versions of product that did not require FDA 510(k) clearance	0	0
· · · · · · · · · · · · · · · · · · ·		
Range in number of interactive workstations in live sites (average)	1–90+ (average, 8)	3–8 (average, 8)
Central hardware or services type Workstations or PC platform	IBM pSeries PC	IBM pSeries PC
Software programming language(s)	C, C++, .Net	C, C++, .Net
Operating system(s) Databases and tools	IBM AIX (Unix) RDM, Oracle	IBM AIX (Unix) RDM, Oracle
Features (listed as percentage of live installs or based on availability)	·	<u> </u>
Full support of ISBT 128 unit labeling	70%	installed
Bar-code reading of donor and unit information	100%	100%
•Unit inventory •Autologous and directed unit tracking	100% 100%	100% 100%
Direct entry of test results	100%	100%
•Crossmatch results	100%	available via SoftBank
Electronic crossmatch decision making Antigen typing	70% 100%	available via SoftBank 100%
Handheld devices for positive patient ID	available via SoftID	available via SoftID
Integrated bedside check for transfusion Track all steps in production of product	available fourth quarter 2008	available via SoftBank
Print donor unit labels—bar coded	100% (component productions) 30% (component labels)	100% 100%
•Interface with automated instruments	10%	100%
Interface with blood irradiator or centrifuges Centralized transfusion service capability	available fourth quarter 2008 10%	available via SoftBank available via SoftBank
Donor recruitment and management/donor questionnaire	available via SoftDonor (both features)	100%/100%
•Mobile scheduling	available via SoftDonor	50%
Laptop-based mobile donor registration module Source or recovered plasma management	available via SoftDonor 20%	90% 100%
•Accounts receivable	95%	100%
Management reports/ad hoc report writer Quality control management/collection management	100%/100% 059//100%/ (appairmen collection)	100%/100% 50%/100%
	95%/100% (specimen collection)	
System provides standard HL7 interface? Interfaces to automated donor infectious disease testing instruments	yes (versions 2–2.7) —	yes (versions 2–2.7) bi-directional to Abbott
Interfaces to automated ABO/Rh/antibody screening instruments	uni- and bi-directional to Ortho, Immucor	_
FDA 510(k)-approved interface to bedside patient ID system? Languages (other than English) offered on system	no French	<u> </u>
Tools to help clients validate their systems	critical control points and instructions on how to write test cases	critical points and instructions on how to write test cases with
	with electronic screen capture	electronic screen capture
Complete blood bank ASP solution?	yes	yes
Method of charging for ASP service Client software required	fixed fee requires software be installed on a client PC	fixed fee requires software be installed on a client PC
ASP information conduit	operates over the Internet	operates over the Internet
Client contracts supported from data center not operated by client How data center is operated	1 by vendor	0 by vendor
·	•	
System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation?	no no	no no
Information system interfaces	Meditech, McKesson, Siemens, IDX, Cerner, CPSI, QuadraMed, Epic,	Meditech, McKesson, Siemens, IDX, Cerner, CPSI, QuadraMed, Epic,
	Eclipsys, others	Eclipsys, others
User group?	yes (meets in person annually)	yes (meets in person annually)
Source code? Can user modify screens?	escrow no	escrow no
User-defined report writer/custom programming?	yes/yes	yes/yes
Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance	\$25k/\$30k/\$50k/\$.45k to \$50k/\$125k/\$80k/\$1.875k	\$25k/\$30k/\$50k/\$.45k to \$50k/\$125k/\$80k/\$1.875k
Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	\$40k/\$215k/\$150k/\$4.59k to \$400k/\$2.5m/\$1.1m/\$35k	\$40k/\$215k/\$150k/\$4.59k to \$400k/\$2.5m/\$1.1m/\$35k
*other=sales, marketing, administration, other company functions	system warns user of inconsistencies, errors, omissions and presents user with an exception to describe problem before user can proceed; exception sent to manager for review user-definable worksheet allows for the resulting of patient, unit, and crossmatch tests in a batch mode emergency issue feature combines select and issue tasks to provide blood products in a time-saving manner during emergency or trauma	 powerful, user-defined test algorithms can automatically order required repeat tests and confirmatory tests detailed donor database search capability increases effectiveness of targeted recruiting efforts, including search by antigen profile all significant steps in donation process are documented, including history review, questionnaire, physical exam, phlebotomy
Note: a dash in lieu of an answer means company did not answer question or question is not applicable	situations	

Biood bank information systems			
	Sunquest Information Systems	Wyndgate Technologies	
Part 9 of 10	Sylvia Rothrock sylvia.rothrock@sunquestinfo.com	Scott Dustin dustins@wyndgate.com	
	250 S. Williams Blvd.	4925 Robert J Mathews Parkway, Suite 100	
	Tucson, AZ 85711	El Dorado Hills, CA 95762	
See accompanying article on page 12	877-239-6337 www.sunquestinfo.com	916-404-8400 www.wyndgate.com	
News of bland hards week	Our month shows by 10 10 10 10 10 10 10	FIDens de Denses	
Name of blood bank system	Sunquest Laboratory Blood Bank and Blood Donor modules [†]	ElDorado Donor	
First ever/most recent blood bank system installation	1985/2008	1996/—	
Last major product release (for product featured)	2007	February 2008	
Total number of contracts for operational sites	344	0 (received FDA 510[k] clearance in February)	
Contracts for U.S. hospitals with donor and transfusion service	37	—	
Contracts for U.S. hospitals with transfusion service only	294	_	
Contracts for U.S. regional blood centers with donor service only	0	_	
Contracts for U.S. regional blood centers with donor and transfusion service	0	_	
Contracts for centralized transfusion services in the U.S.	0	_	
Contracts for foreign hospitals and regional blood centers	13	_	
•Contracts for other sites	0	_	
Number of contracts signed between June 2007–June 2008	7	1	
Total number of sites operational	400+		
Installs not yet live (hospitals/regional blood centers/others)	9 (9/0/0)	1 (1/0/0)	
Number of sites that went live between June 2007–June 2008	6	_	
Percentage of installations that are stand-alone systems	0		
Staff to develop/install and support/other* in entire company	305/256/113	43/70/73	
Staff to develop/install and support/other* in blood bank systems	_	34/61/48	
Number of different versions of software installed	2	1	
Number of different versions of software installed Versions of product in field covered by FDA 510(k) clearance	2 Blood Bank and Blood Donor v6.0.1 distributed with Laboratory v6.1, v6.2	1 ElDorado Donor	
Versions of product in field covered by FDA 510(k) clearance Versions of product that did not require FDA 510(k) clearance	Blood Bank and Blood Donor v6.0.1 distributed with Laboratory v6.1, v6.2 Blood Bank and Blood Donor v6.0.2 distributed with Laboratory v6.3	0	
		-	
Range in number of interactive workstations in live sites (average)	5+-100+ (average, 20)	_	
Central hardware or services type	IBM pSeries, HP Integrity	Windows	
Workstations or PC platform	Dell, HP Windows	Windows	
Coffuere measurements for successful	ANCI Chandoud M. Cooké Covint Otomboulous CO. 17 15 17	0	
Software programming language(s)	ANSI Standard M, Caché Script, Standard C/C++, Visual Basic, Visual	C++	
(Inerating system(s)	C++, Active X	Windows	
Operating system(s) Databases and tools	AIX, HP UX, OpenVMS InterSystems Caché	Windows Oracle	
Features (listed as percentage of live installs or based on availability)			
•Full support of ISBT 128 unit labeling	100%	available but not installed	
Bar-code reading of donor and unit information	100%	available but not installed	
•Unit inventory	100%	available but not installed	
Autologous and directed unit tracking	100%	available but not installed	
•Direct entry of test results	100%	available but not installed	
•Crossmatch results	100%	available via SafeTrace Tx	
•Electronic crossmatch decision making	10%	available via SafeTrace Tx	
•Antigen typing	100%	available but not installed	
Handheld devices for positive patient ID	22%	_	
•Integrated bedside check for transfusion	available in 2008 (pending FDA 510[k] clearance)	— available but not installed	
•Track all steps in production of product	100%	available but not installed available but not installed	
Print donor unit labels—bar coded Interface with automated instruments	11% 13%	not available	
•Interface with automated installients •Interface with blood irradiator or centrifuges	not available	not available	
Centralized transfusion service capability	100%	—	
Donor recruitment and management/donor questionnaire	15%/not available	available via third party/available via ElDorado Donor Doc	
Mobile scheduling	not available	available via third party	
•Laptop-based mobile donor registration module	not available	not available	
Source or recovered plasma management	installed	not available	
•Accounts receivable	100% (charge capture)	available via third party	
Management reports/ad hoc report writer	100%/100%	available but not installed/not available	
•Quality control management/collection management	100%/installed	available but not installed/available but not installed	
	/ : 00.00		
System provides standard HL7 interface? Interfaces to automated donor infectious disease testing instruments	yes (versions 2.3–3.0) uni-directional to Ortho, Immucor, Abbott, Olympus, DiaMed;		
interfaces to automateu uonor inicotious discase testing historiellis	bi-directional to Ortho		
Interfaces to automated ABO/Rh/antibody screening instruments	uni-directional to Ortho, Immucor, Abbott, Olympus, DiaMed;	_	
	bi-directional to Ortho		
FDA 510(k)-approved interface to bedside patient ID system?	no (pending FDA 510[k] clearance)	no	
Languages (other than English) offered on system	none	none	
Tools to halp clients validate their systems			
Tools to help clients validate their systems	client testing guidelines, documentation, training and consulting services		
TOUIS TO HELP CHEMIS VAHUATE THEIR SYSTEMS	client testing guidelines, documentation, training and consulting services	validation templates and validation test plan for safety critical contro checks	
	client testing guidelines, documentation, training and consulting services	checks	
Complete blood bank ASP solution? Method of charging for ASP service			
Complete blood bank ASP solution?		yes	
Complete blood bank ASP solution? Method of charging for ASP service		yes fixed fee, transaction based operates over the Internet, requires use of a VPN or other dedicated	
Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit		yes fixed fee, transaction based operates over the Internet, requires use of a VPN or other dedicated connection	
Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client		yes fixed fee, transaction based — operates over the Internet, requires use of a VPN or other dedicated connection 0	
Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit		yes fixed fee, transaction based operates over the Internet, requires use of a VPN or other dedicated connection	
Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code?	no	yes fixed fee, transaction based — operates over the Internet, requires use of a VPN or other dedicated connection 0 by a third party (Hemo-Net)	
Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated	no 	yes fixed fee, transaction based — operates over the Internet, requires use of a VPN or other dedicated connection 0 by a third party (Hemo-Net)	
Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code?	no	yes fixed fee, transaction based — operates over the Internet, requires use of a VPN or other dedicated connection 0 by a third party (Hemo-Net)	
Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces	no no no Epic, McKesson, Meditech, Siemens, Eclipsys, Cerner, GE, others	yes fixed fee, transaction based — operates over the Internet, requires use of a VPN or other dedicated connection 0 by a third party (Hemo-Net) no no	
Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group?	no	yes fixed fee, transaction based — operates over the Internet, requires use of a VPN or other dedicated connection 0 by a third party (Hemo-Net) no no yes (meets via Internet; in person annually)	
Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code?	no no no Epic, McKesson, Meditech, Siemens, Eclipsys, Cerner, GE, others	yes fixed fee, transaction based — operates over the Internet, requires use of a VPN or other dedicated connection 0 by a third party (Hemo-Net) no no	
Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group?	no	yes fixed fee, transaction based — operates over the Internet, requires use of a VPN or other dedicated connection 0 by a third party (Hemo-Net) no no no yes (meets via Internet; in person annually) escrow	
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Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance	no	yes fixed fee, transaction based operates over the Internet, requires use of a VPN or other dedicated connection by a third party (Hemo-Net) no no no yes (meets via Internet; in person annually) escrow no no/yes —	
Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code? Can user modify screens? User-defined report writer/custom programming?	no	yes fixed fee, transaction based operates over the Internet, requires use of a VPN or other dedicated connection by a third party (Hemo-Net) no no no yes (meets via Internet; in person annually) escrow no no/yes	
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Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	no	yes fixed fee, transaction based operates over the Internet, requires use of a VPN or other dedicated connection to by a third party (Hemo-Net) no no no yes (meets via Internet; in person annually) escrow no no/yes extensive safety checks throughout system with an outstanding commitment to compliance open workflow and extensive user-defined, table-based rules	
Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	no	yes fixed fee, transaction based operates over the Internet, requires use of a VPN or other dedicated connection by a third party (Hemo-Net) no no none yes (meets via Internet; in person annually) escrow no no/yes extensive safety checks throughout system with an outstanding commitment to compliance open workflow and extensive user-defined, table-based rules Service 360 commitment to ensure quality implementation and	
Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	no Description Description Epic, McKesson, Meditech, Siemens, Eclipsys, Cerner, GE, others yes (meets via Internet quarterly; in person quarterly) escrow no yes/yes \$70k/\$208k/\$100k/18% for SW ^{††} to \$180k/\$908k/\$180k/18% for SW ^{††} \$0 ^{†††} /\$50k/\$58k/18% for SW ^{††} to \$0 ^{†††} /\$790k/\$77k/18% for SW ^{††} • full integration with LIS for reporting, inquiry, maintenance, and QA • full multi-facility capability, incl. unit inventory tracking, management • service and interoperability excellence †company did not indicate whether answers apply to both or one of the modules	yes fixed fee, transaction based — operates over the Internet, requires use of a VPN or other dedicated connection 0 by a third party (Hemo-Net) no no none yes (meets via Internet; in person annually) escrow no no/yes — — extensive safety checks throughout system with an outstanding commitment to compliance open workflow and extensive user-defined, table-based rules	
Complete blood bank ASP solution? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated System provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation? Information system interfaces User group? Source code? Can user modify screens? User-defined report writer/custom programming? Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance Distinguishing features (supplied by vendor)	no	yes fixed fee, transaction based operates over the Internet, requires use of a VPN or other dedicated connection by a third party (Hemo-Net) no no none yes (meets via Internet; in person annually) escrow no no/yes extensive safety checks throughout system with an outstanding commitment to compliance open workflow and extensive user-defined, table-based rules Service 360 commitment to ensure quality implementation and	

	ank information systems	
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See accompanying article on page 12	916-404-8400 www.wyndgate.com	916-404-8400 www.wyndgate.com
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Name of blood bank system	SafeTrace	SafeTrace Tx
First ever/most recent blood bank system installation	1996/May 2008	1996/June 2008
Last major product release (for product featured)	February 2006	June 2006
Total number of contracts for operational sites	56	247
Contracts for U.S. hospitals with donor and transfusion service Contracts for U.S. hospitals with transfusion service only	15 0	15 [†] 213 [†]
Contracts for U.S. regional blood centers with donor service only	23	_
Contracts for U.S. regional blood centers with donor and transfusion service	9	9†
Contracts for centralized transfusion services in the U.S. Contracts for foreign beautiful and regional blood centers.	0	19 [†] 7 [†]
Contracts for foreign hospitals and regional blood centers Contracts for other sites	4 (hospital donor services)	0
Number of contracts signed between June 2007–June 2008	3	30
Total number of sites operational	261	257
Installs not yet live (hospitals/regional blood centers/others)	9 (3/5/1)	100 (95/2/3)
Number of sites that went live between June 2007–June 2008 Percentage of installations that are stand-alone systems	13 	55
Staff to develop/install and support/other* in entire company Staff to develop/install and support/other* in blood bank systems	43/70/73 34/61/48	43/70/73 34/61/48
Stan to develop/instan and support/other in blood bank systems	34/01/40	34/01/40
Number of different versions of software installed	-	_
Versions of product in field covered by FDA 510(k) clearance Versions of product that did not require FDA 510(k) clearance	_	_
		1 10F (quarage 6.1)
Range in number of interactive workstations in live sites (average)		1–105 (average, 6+)
Central hardware or services type Workstations or PC platform	Unix-based servers, Sun, HP, IBM PCs	Intel- and Unix-based servers PCs
·		
Software programming language(s)	Delphi, PL/SQL, .Net, C, 4GL	Delphi, SQL, Crystal Reports
Operating system(s) Databases and tools	Unix Oracle	Windows XP Professional, Windows 2003 (Unix optional) Oracle
Features (listed as percentage of live installs or based on availability)	100%	100%
Full support of ISBT 128 unit labeling Bar-code reading of donor and unit information	100% 100%	100% 100%
Unit inventory	100%	100%
Autologous and directed unit tracking	100%	100%
Direct entry of test results Grecomatch results	100%	100%
Crossmatch results Electronic crossmatch decision making	available via SafeTrace Tx available via SafeTrace Tx	100% 45%
Antigen typing	100%	100%
Handheld devices for positive patient ID	_	available through business partners
•Integrated bedside check for transfusion	-	available through business partners
Track all steps in production of product Print dans with labels they and add	100%	100%
Print donor unit labels—bar coded Interface with automated instruments	100% 100%	installed 20%
•Interface with blood irradiator or centrifuges	not available	installed
Centralized transfusion service capability	_	100%
Donor recruitment and management/donor questionnaire	100%/available via ElDorado Donor Doc	—/available via ElDorado Donor Doc
Mobile scheduling Laptop-based mobile donor registration module	100% installed	available via SafeTrace available via SafeTrace
Source or recovered plasma management	100%	available via SafeTrace
Accounts receivable	available via third party	not available
•Management reports/ad hoc report writer	100%/100%	100%/installed
Quality control management/collection management	not available/100%	installed/—
System provides standard HL7 interface?	no	yes (versions 2.1, 2.2, 2.3)
Interfaces to automated donor infectious disease testing instruments	uni-directional to Ortho, Immucor, Abbott, Olympus, DiaMed, Hitachi;	_
Interfaces to automated ABO/Rh/antibody screening instruments	bi-directional to Gambro uni-directional to Ortho, Immucor, Olympus	uni- and bi-directional to Ortho, Immucor
FDA 510(k)-approved interface to bedside patient ID system?	no	no
Languages (other than English) offered on system		
Tools to help clients validate their systems	validation guidelines, templates, and validation test plan for safety critical control checks	validation guidelines, templates, and validation test plan for safety critical control checks
Complete blood bank ASP solution?	yes	yes
Method of charging for ASP service Client software required	fixed fee, transaction based browser based	fixed fee, transaction based browser based
ASP information conduit	operates over the Internet, requires use of a VPN or other dedicated	operates over the Internet, requires use of a VPN or other dedicated
	connection	connection
Client contracts supported from data center not operated by client	9 by a third party (Home Not)	3 hy a third party (Home-Not)
How data center is operated	by a third party (Hemo-Net)	by a third party (Hemo-Net)
System provides indexed field in each test definition for LOINC code?	no	no
Provide LOINC dictionary for each new installation?	no .	no
Information system interfaces	SafeTrace Tx	McKesson, Cerner, Siemens, GE, CPSI, Meditech, Keane, IDX, SCC, CIS TDS, Aspyra, Sysmex, Misys, Orchard, Meditech, Quality Software Systems, others
User group?	yes (meets via Internet; in person annually)	yes (meets via Internet; in person annually)
Source code?	escrow	escrow
Can user modify screens?	no vec/vec	no ves/ves
User-defined report writer/custom programming?	yes/yes	yes/yes
Cost for smallest & largest stand-alone HW/SW/install & training/monthly maintenance Cost for smallest & largest integrated HW/SW/install & training/monthly maintenance	_	_
	a ovtonciju ogfatu akaalia thrauskaut avotom with av	e autonojuo cafetu abaaka thuaushaut custam with
Distinguishing features (supplied by vendor)	extensive safety checks throughout system with an outstanding commitment to compliance open workflow and extensive user-defined, table-based rules Service 360 commitment to ensure quality implementation and support experience	extensive safety checks throughout system with an outstanding commitment to compliance open workflow and extensive user-defined, table-based rules Service 360 commitment to ensure quality implementation and support experience.
*other=sales, marketing, administration, other company functions	արիու լ գտիգլ լգլլըգ	support experience
Note: a dash in lieu of an answer means company did not answer question or question is not applicable		Threakdown reflects contracts that fit more than one category

†breakdown reflects contracts that fit more than one category

Note: a dash in lieu of an answer means company did not answer question or question is not applicable