



Vista Blood Establishment Computer Software  
(VBECS) Version 1.5.0.0

Release Notes Version 8.0

July 2010

Department of Veterans Affairs  
Office of Enterprise Development

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## Revision History

Date	Revision	Description	Author
2/2/09	1.0	Initial version.	BBM team
5/14/09	2.0	<p>Changed globally "has been" to "is".</p> <p>Rearranged CR/DR to all last sentences of any section.</p> <p>Changed the Footer Date to May 2009.</p> <p>Added HD0000000315683 to the User Name Entry, Inactivation, and Display section.</p> <p>Added Enhancements and Modifications, Merge section: CR 2609 and CR 2611.</p> <p>Added Modification: Thaw section.</p> <p>Added Patient Name section.</p> <p>Added Post-Transfusion Data section: CR 2602.</p> <p>Added Database Conversion section: DR 3392.</p> <p>Changed name of User Name Entry and Display section to User Name Entry, Inactivation, and Display.</p> <p>Added VBECS Background Jobs section.</p> <p>Added Database Integrity Report section.</p> <p>Added Reference to the AABB Standards, version 25.0.</p> <p>Appendix A: Added Option: Modification: Thaw and Option: Patient Name.</p> <p>Edited Appendix C. See Appendix C for the detailed changes.</p> <p>Removed references to the internal CR and DR numbers that were never included in a reviewed version of the Known Anomalies and Defects document.</p>	BBM team
8/12/09	3.0	<p>Rearranged the Enhancements and Modifications and Untestable System-Level Corrected Code Requests sections into alphabetical order and renumbered the testing scenarios.</p> <p>Enhancements and Modifications: Changed 1.4.0.0 to 1.5.0.0 if first sentence. Reworded the second and third sentences for clarity.</p> <p>Added Modification Pool and Thaw/Pool, Test Objective 3 and testing scenarios (CR 2621).</p> <p>Patient Name section: added information regarding updated reports (CR 2628). Added a note regarding CR 2454.</p> <p>Added Record Unit Phenotype Testing and Patient Antigen Typing, Test Objective 7 and scenarios (DR 3164, DR 3489).</p> <p>Added Restricted Unit Details section: The Disease Marker Field on the Restricted for Unit Details tab now displays (CR 2663).</p> <p>Additional testing scenario suggestion added for CR 2667.</p> <p>Appendix B, first paragraph changed "are" to "be" in last sentence.</p> <p>Added to Appendix C: Product Codes E5275, E5304, E5305, E5306, E5307, E5308, E6036, E6141 (DR 3464).</p> <p>Global: Changed CCBBA to ICCBBA.</p> <p>Blood Products Table Update: Reworded last sentence of first paragraph and the note.</p> <p>Invalidate Patient ABID Test: Added Remedy ticket HD 000000264047.</p> <p>Database Integrity Report (Success or Failure Message): Rewrote this section and changed the name, it was previously named Database Integrity Report.</p> <p>All Other Database Jobs Failure Message: Added this new</p>	BBM Team

Date	Revision	Description	Author
		<p>section.</p> <p>VBECS User Documents: Expanded the VDL acronym in the second paragraph and reworded the third paragraph.</p> <p>Test Objective 1, Scenario 1: Added REQUIRED SETUP information. Reworded 4<sup>th</sup> and 6<sup>th</sup> sentences in Data section. Updated 1<sup>st</sup> sentence and added 2<sup>nd</sup> sentence to User section. Updated Step 1 in Steps section for clarity.</p> <p>Test Objective 1, Scenario 2: Reworded 1<sup>st</sup> and 2<sup>nd</sup> sentences in Data section. Updated Step 1 in Data section for clarity. Updated all 3 sentences in Expected Outcome section.</p> <p>Test Objective 2, Scenario 1: Reworked Data section for clarity. Changed "Antibody tab" to "Antibodies Identified tab" in Steps 1 and 3 of the Steps section. Reworded Step 4 for clarity.</p> <p>Test Objective 4, Scenario 1: Reworded Step 5 in Steps section for clarity. Added 2 footnotes to Expected Outcome section. Added 2 asterisks to E5621 to indicate it is not currently displaying a THAW target. Reworded second sentence before the table for clarity.</p> <p>Test Objective 5: Changed name from "Patient Name" to "Select Patient Tool". Added a note about testing in three options. Scenario 1: Reworded Data, User and Steps sections for clarity. Scenario 2 Steps section: Added "(In CPRS)" to Step 2. Added a new Step 3.</p> <p>Test Objective 6, Scenario 1: Reworked the Steps section for accuracy. Reworded the Expected Outcome section for clarity.</p> <p>Test Objective 7, Scenario 3: Removed the second instance of "testing" from Step 2 of Steps.</p> <p>Revised VBECS User Documents section.</p> <p>Appendix B Modification Target Unavailable: Added ClearQuest CR number (2587) to first bullet item under "Known problems include".</p> <p>Updated Appendix B to include Product Codes and Modification Type table along with a message to file a Remedy ticket if missing targets are discovered that need to be added to the table.</p> <p>Removed all DR and CR numbers.</p> <p>Merge section: removed the word "displayed" from the second sentence.</p> <p>Modification: Pool and Thaw/Pool section: removed the comma at the end of "B (System Integrity)," in the first cell of the table.</p>	
10/14/09	4.0	<p>Modification: Pool Thaw/Pool: Reworded second sentence in last column of second and third rows of table for clarity.</p> <p>Added Select Unit Improved Response Time section.</p> <p>Appendix A: added Test Objective 8 for CR 2562 (DR 3582).</p> <p>Appendix B: added E0749, E0752, E0755, E0758, E0761, E0764 (DR 3588).</p>	BBM Team

Date	Revision	Description	Author
3/26/10	5.0	<p>Changed the footer date to April 2010, and the version number to 5.0.</p> <p>Patient ABO/Rh Testing: Updated the section (CR 2781).</p> <p>Electronic Crossmatch: Added explanatory text after the described changes (DR 3682).</p> <p>Multidivisional Printer Section: Added to the NOTE: The VBECS administrator must deactivate the division GHOST as a closing action of the patch installation in Production so it no longer displays to the user. See Appendix A: Examples of Test Scenarios Test Objective 10.</p> <p>Appendix A: Test Objective 5: Changed "as described" to "as described and allowed by your VistA environment".</p> <p>Appendix A: Test Objective 9: Added "Alternately, repeat the scenario for Rh interpretation".</p> <p>Appendix A: Added Test Objective 10.</p> <p>Appendix B: Added a 4<sup>th</sup> work around to create and maintain a local policy and procedure for a mapping table between the product code that cannot be modified as there is no target and one that can be modified and provide a target (DR 3728).</p> <p>VBECS User Documents: Corrected the second sentence to read: "Obtain VBECS documents by retrieving the updated guides from the VistA Documentation Library (VDL)."</p>	BBM Team
5/19/10	6.0	<p>References section: Updated AABB Standards and Codabar product code product label codes citations.</p> <p>Appendix A: Test Objective 9: Revised Scenario 2 to test previous VBECS ABO/Rh test as historic record and added Scenario 3 to test a VistA Converted ABO/Rh historic Record, noting CR 2789, and CR 2801.</p>	BBM Team
6/08/10	7.0	<p>Changed the Footer Date to June 2010 and the version number to 7.0.</p> <p>Appendix A: Test Objective 9: Scenario 3, Steps and Expected Outcome: Removed "CR 2801".</p>	BBM Team
7/14/10	8.0	<p>Changed the footer date to July 2010 and version number to 8.0.</p> <p>Related Manuals and Materials, VBECS User Documents: Added anonymous FTP package name VBECS_1_5_DOCS_BUNDLE.zip.</p>	BBM Team

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# Introduction

*VistA Blood Establishment Computer Software (VBECS) Version 1.5.0.0 Release Notes* contains information and examples of test scenarios corresponding to or relating to enhancements and modifications in VBECS.

## New Features and Functions

None

## Enhancements and Modifications

This section lists enhancements and modifications to VBECS 1.4.0.0 software. Some items correspond to items in the Known Defects and Anomalies and have been removed from the version released with VBECS 1.5.0.0. Some corrections have a corresponding test objective in Appendix A: Examples of Test Scenarios.

### Blood Product Table Update

The VBECS blood product table is updated with ICCBBA blood product codes E5825 through and including E6155. One Codabar blood product code (04780) is also included in this update. Detailed information about these updates can be obtained on the ICCBBA website or users can navigate in VBECS using the Tools menu and Blood Products option to view the product codes.

The VBECS blood product table also contains edits to existing product code entries correcting maximum storage time and volumes. See Appendix C: Additional Blood Product Table Changes for details.

Local validation of changes that impact the facility is recommended.

*Note: All product codes listed in the blood product table can be entered into VBECS via Incoming Shipment, but not all may have targets when modified. Refer to Appendix B: Modification Target Unavailable for suggested workarounds if your site receives a blood product that does not have a target for modification.*

### Electronic Crossmatch

When the electronic crossmatch functionality is enabled and database conversion antibody specificity is contained in a patient's VBECS Transfusion Requirements record, the patient is now **ineligible** for electronic crossmatch as required (Remedy Ticket HD0000000269914).

See Appendix A: Examples of Test Scenarios Test Objective 1.

VBECS includes an optional electronic or computer crossmatch (eXM) function. The system's decision table and error messages are detailed in the VBECS User Guide, Table 23: Rules for Electronic and Serologic Crossmatch.

The following documents are relevant to your local risk assessment as you evaluate the use of this option at your facility. These are also relevant to determining the appropriate use of this option as defined by local policy and procedure. The electronic crossmatch is offered to the user when enabled, and the patient/unit match is eligible. The electronic crossmatch is not automatically performed. The user must decide whether or not to perform an electronic crossmatch for each patient specimen and the associated selected units.

- CAP Transfusion Medicine Checklist, 2007

- FDA Draft Guidance for Industry: “Computer Crossmatch” (Electronic Based Testing for the Compatibility between the Donor’s Cell Type and the Recipient’s Serum or Plasma Type) (2007)
- *Guidelines for Implementing the Electronic Crossmatch* (Bethesda, MD: American Association of Blood Banks, 2003)

Table 23 in the User Guide lists the various parameters checked and evaluated, failing any one of these will result in ineligibility for a patient specimen and its selected blood units. Some conditions will disallow electronic crossmatch eligibility permanently, some only for the current specimen. The message displays in Select Unit in the lower right hand area of the window. When the patient is eligible, that too displays.

Parameter Checked by VBECS	Clarifying statements
Current specimen ABO/Rh and Antibody Screen testing must be complete.	The TAS (ABO/Rh and ABS) must be completed prior to selecting any units for the current specimen UID associated with the component order.
Current specimen Antibody Screen interpretation must be negative. VBECS checks only the last Antibody Screen entered.	The TAS ABS test on the current specimen associated with the component order must be negative. VBECS does NOT check any prior ABS tests results.
Patient must have no history of previously identified antibodies, regardless of clinical significance based on system rules or division (or from conversion) of the antibody ID.	The patient must not have a <b>clinically significant</b> antibody specificity in their file entered by database conversion, ABID test or Antibodies Identified (Patients, Special Instructions and Transfusion Requirements) per the various regulatory and accrediting agencies. VBECS disallows eXM when ANY antibody specificity is associated with the patient.
Patient cannot have a persistent antigen negative requirement regardless of the division of the requirement entry.	The patient may not have any antigen negative requirements entered (Patients, Special Instructions and Transfusion Requirements)
The patient’s current ABO/Rh must match the historical record; there must be no previous justifications. An ABO/Rh marked “entered in error” is not considered part of the patient’s record.	The patient must not have a justified ABO/Rh typing result. The patient must not have an unresolved ABO/Rh discrepancy. Invalidated patient ABO/Rh tests are not evaluated.
The patient cannot have a documented instance of current or previous serologic problems, such as a valid Inconclusive ABO/Rh typing.	The patient ABO/Rh typing cannot have an interpretation of Inconclusive for either the ABO or Rh test on the current specimen or past specimen. Generally this will involve the current and one previous as the system will not allow a 3 <sup>rd</sup> test when there is an ABO/Rh discrepancy in place.

Parameter Checked by VBECS	Clarifying statements
<p>There must be at least two valid instances of ABO/Rh typing performed in the same division for the patient. One instance must be a valid ABO/Rh on the current specimen and not “unknown” or “inconclusive”; the other may be from a previous typing episode or a repeat ABO/Rh performed on the current specimen. The patient ABO/Rh interpretations must match in all instances. The user must enter valid forward and reverse typing for the system to use as the second test performed in the division.</p>	<p>The patient must have two normal, valid ABO/Rh typings performed in the same division that are the same.</p> <p>The reflex ABO/Rh test may be one of these tests which is why the reflex test requires entry of a full test, not an abbreviated test.</p> <p>Valid typings from other divisions in a multidivisional database cannot be used as one of the valid typings for electronic crossmatch in any one division, but are used in ABO/Rh discrepancy determination in all divisions.</p>
<p>Selected unit must be ABO compatible based on system rules.</p>	<p>ABO compatible units are only allowed for selection based on system rules. If ABO incompatible units are allowed for selection they will require a serologic crossmatch. This generally applies to OTHER component class products that may require crossmatch due to RBC contamination.</p>
<p>Selected Rh negative units must have ABO and Rh confirmation results entered. The ABO and Rh confirmation interpretation must match the unit ABO/Rh at login.</p>	<p>Unit confirmation testing must be complete and match the unit login information.</p>
<p>Selected Rh positive units must have ABO confirmation results entered. The ABO confirmation interpretation must match the unit ABO at login.</p>	<p>Unit confirmation testing must be complete and match the unit login information.</p>

## Invalidate Patient ABID Test

Invalidation of a patient antibody identification test (ABID) with a specificity that never has an antigen negative requirement now triggers the removal of the antibody in Special Instructions and Transfusion Requirements (Remedy tickets HD 0000000264341 and HD 0000000264047).

See Appendix A: Examples of Test Scenarios Test Objective 2.

## Merge

The Patient Merge window cannot be resized to hide patient information. The redundant display of the controls after clicking the Close button is removed.

Local validation is recommended of the changes described in this section. No examples of possible test scenarios are included as the validation is self-explanatory.

## Modification: Pool and Thaw/Pool

The internal system calculation, that provides a target for modification types that allow the pooling of multiple original products to one target, considers the ICCBBA attribute forms B (System Integrity), C

(Irradiation) and D (Residual Leukocyte Content) and does not consider the E (Altered) attribute forms as found on an original blood unit added to a pool.

ICCBBA Attribute Form Type	Examples	Selecting a target pool product code
B (System Integrity)	Open or Closed	If any one original is open, the target pool is open. *
C (Irradiation)	Irradiated or not irradiated	All originals must be irradiated for the target to be irradiated. When any one original in a pool is NOT irradiated, the system selects a non-irradiated target.
D (Residual Leukocyte Content)	Not leukocyte reduced or leukocyte reduced	All originals must be leukocyte reduced for the target to be leukocyte reduced. When any one original in a pool is NOT leukocyte reduced, the system selects a non-leukocyte reduced target.
E (Altered)	Albumin added                      Plts/Cryo reduced Cryo reduced                            Supernat reduced Plasma added                            Supernat rem Plasma reduced                        Buffy coat removed Plts reduced Plasma reduced/Albumin added RBC reduced by sedimentation Plasma reduced/Plasma added Supernat rem/Plasma added Complement Inactivated	Altered processing information as listed is not used for the selection of a pooled target when present on any or all of the original products.

\*When pooling with a Sterile Connecting Device (SCD), all originals must be closed prior to the pool and the weld must be successful and complete.

See Appendix A: Examples of Test Scenarios Test Objective 3.

### Modification: Thaw

The calculated expiration date, displayed when a single unit of pooled cryoprecipitate is modified using the THAW modification method, is now four (4) hours (Remedy ticket HD0000000319051).

See Appendix A: Examples of Test Scenarios Test Objective 4.

### Multidivisional Reports

A default report printer is defined for each division within a multidivisional configuration (Remedy ticket HD 0000000268596).

NOTE: The VBECS administrator must inactivate the division GHOST as a closing action of the patch installation in Production so it no longer displays to the user.

See Appendix A: Examples of Test Scenarios Test Objective 10.

### Patient Name

VBECS does not allow for the selection or order placement of a patient that may have a blank first or last name. VBECS accepts orders and selection of a patient name per VistA standard conventions where it meets the conditions of a thirty (30) character first name, last name or middle name with a maximum full name of thirty (30) characters, including a comma between the last and first names and a space when a

middle name or initial is included. A message displays to the user when either the first or last name is blank or any name (first, middle, last, or full) exceeds thirty (30) characters. VBECS does not retrieve prefixes and suffixes with the data conversion or support/display them in VistA. A patient name will display all 30 characters in the Patient Search Field as seen in the various patient searches in options. Various reports have been formatted to display the full 30-character name, the Testing Worklist Report, Exception Report, Patient Transfusion Requirements Report, and Patient History Report.

Note: The BTRF and Caution tag continue to display fewer than 30 characters depending on their width. See Appendix A: Examples of Test Scenarios Test Objective 5.

## **Patient ABO/RhTesting**

The patient ABO test and Rh test interpretations are required to be saved together where previously either may have been saved without the other.

See Appendix A: Examples of Test Scenarios Test Objective 9.

## **Patient Medication Profile**

The Patient Medication Profile report is available via the menu option and patient tool bar shortcut button.

Local validation is recommended of the changes described in this section. No examples of possible test scenarios are included as the validation is self-explanatory.

## **Post-Transfusion Data**

Tool tips display when activated by hovering over the disabled ok button. An edited transfusion start date saves and redisplay. All Date/time displays meet the GUI Standard of a single digit month, days, and hours and have a leading zero.

Local validation is recommended of the changes described in this section. No examples of possible test scenarios are included as the validation is self-explanatory.

## **Print Blood Transfusion Record Form**

The Blood Transfusion Record Form (BTRF) prints when the patient has an antibody that never has an antigen negative requirement in their Transfusion Requirements record (Remedy ticket HD 0000000264341).

See Appendix A: Examples of Test Scenarios Test Objective 6.

## **Online Help**

VBECS Online Help is updated with the limitations below.

Limitation added to the Incoming Shipment section, fifth bullet under Limitations and Restrictions; *“The display label that is built when logging a blood product into VBECS does not change volunteer donor to autologous when the donation type is changed.”*

Limitation added to the Post-Transfusion Information section, Limitations and Restrictions; *“VBECS cannot update a unit record to presumed transfused when a user has that unit record open (locked) in Enter Post Transfusion Information. VBECS will attempt to update the unit the next time the presumed transfused background routine runs if the unit remains in an issued status.”*

Local validation is recommended of the changes described in this section. No examples of possible test scenarios are included as the validation is self-explanatory.

## **Restricted Unit Details**

The Disease Marker Field on the Restricted for Unit Details tab in the Unit Selection window used throughout the application now displays an autologous unit's disease marker test information.

Local validation is recommended of the changes described in this section. No examples of possible test scenarios are included as the validation is self-explanatory.

## **Record Unit Phenotyping and Patient Antigen Typing**

The antigen typing test truth tables are updated correcting the system response to the patterns in the specific testing phase selection:

- IS/RT with IS results entered as not tested (X) and RT results entered as positive (P) with a P interpretation,
- IS/RT with IS results entered as positive (P) and RT results entered as not tested (X) with a P interpretation,
- IS/37 with results entered as not tested (X) and 37 results entered as positive (P) with a P interpretation.

The ability to enter reactions or interpretations for antigen typing tests other than weak D as “inconclusive” are removed. The following reaction results have been changed from inconclusive to positive when entered in the antigen typing options: “W,” which the computer interprets as Weak, “F,” which the computer interprets as Mixed Field, and “M,” which the computer interprets as Microscopic. Reaction results and interpretations are positive or negative, with the exception of weak D typing for both unit and patient antigen typing tests.

See Appendix A: Examples of Test Scenarios Test Objective 7.

## **Select Unit Improved Response Time**

System response time improved when one or more users select multiple units for the same patient.

See Appendix A: Examples of Test Scenarios Test Objective 8.

## Untestable System-Level Corrected Code Requests

This section includes changes that may be testable by VBECS system administrators, but not directly by functionality available in VBECS options.

### Automated VBECS Patch Process and Improved Server Cluster Awareness

The VBECS patch installation process is automated. This includes the addition of the success record to the version table. The servers and services have improved cluster awareness and will restart automatically after a failover event.

No examples of test scenarios are included. Documentation of a successful download of this patch is evidence of the success of the automated process.

### Database Conversion

Database Conversion displays warnings at various points to prevent an inadvertent repetition of the database conversion on an in-use database.

No examples of test scenarios are included.

### Database Integrity Report (Success or Failure Message)

When a database weekly integrity job completes successfully or fails, an email with DatabaseIntegrityReport.Log as an attachment is sent to all “email recipients” listed as the Interface Failure Alert Recipient. Also the Database Integrity Report Log is written to the Windows Application Event Log and a copy is saved at this location D:\Program Files\Microsoft SQL Server\MSSQL\BACKUP\

### All Other Database Jobs Failure Messages

When any of the other Database Background Jobs fail, an email is sent to all “email recipients” listed as the Interface Failure Alert Recipient. If the recipients receive no email message, the most probable cause is SMTP server port number 25 is blocked. Failure messages are stored in the user accessible table (VBECSJobMailFailure) in the master database. Contact your local Systems Administrator to unblock the port.

### Merge

This change will require validation only at those sites where the patient DFN is greater than ten digits. The merge option accepts a merge message for a patient with a DFN greater than ten digits. Incorrect error messages no longer display.

Local validation is recommended using a patient with an extended DFN. No examples of test scenarios are included.

### User Name Entry, Inactivation, and Display

VBECS does not allow use of a duplicated DUZ for VBECS user name change (Remedy Ticket HD0000000315683).

A confirmation message displays when the administrator activates or inactivates a VBECS user through the List View in VBECS Administrator Edit Users.

VBECs now displays the user's complete first name throughout the application when the user's ID is incorrectly entered in Active Directory.

Local validation is recommended. No examples of test scenarios are included.

### **Message Log Purges**

VBECs Administrator allows local configuration of the Message Log purge cycle. The Message Log will purge messages as specified locally in VBECs Administrator.

Local validation is recommended. No examples of test scenarios are included.

### **Redesign of the VBECs Manufacture and Distribution Process**

The VBECs distribution process by CD copy is revised to deliver this release and subsequent patches by File Transfer Protocol (FTP) site download.

No examples of test scenarios are included.

### **VBECs Background Jobs**

A detailed listing of all VBECs background jobs on each database is included in the VBECs Technical Manual-Security Guide.

No examples of test scenarios are included.

### **VBECs Workload**

Redundant VBECs workload data generated in VBECs production mirror accounts is cleared upon patch installation, and redundant VBECs workload data no longer generates. This problem did not have any impact on the VistA workload reports and was limited to VBECs internal workload data storage.

No examples of test scenarios are included.

# VistA Software Dependencies

There are no new VistA software dependencies for this patch.

## Related Manuals and Materials

### ***VBECS User Documents***

See each guide's Revision History for details about changes in that document.

Obtain the updated VBECS documents by retrieving them from the VistA Documentation Library (VDL):

- *VistA Blood Establishment Computer Software (VBECS) 1.5.0.0 Patch Installation Guide*
- *VistA Blood Establishment Computer Software (VBECS) 1.5.0.0 User Guide*
- *VistA Blood Establishment Computer Software (VBECS) 1.5.0.0 Technical Manual-Security Guide*
- *VistA Blood Establishment Computer Software (VBECS) 1.5.0.0 Release Notes*
- *VistA Blood Establishment Computer Software (VBECS) Known Defects and Anomalies*

The ANONYMOUS.SOFTWARE directory is at one of the following Office of Information (OI) Field Offices. Sites may retrieve documentation in either ".PDF" or ".DOC" format in one of the following ways:

- 1) The preferred method is to FTP the files from [Download.vista.med.va.gov](http://Download.vista.med.va.gov).
- 2) Sites may also elect to retrieve documentation directly from a specific server as follows:

Albany	<a href="ftp://ftp.fo-albany.med.va.gov">ftp.fo-albany.med.va.gov</a>
Hines	<a href="ftp://ftp.fo-hines.med.va.gov">ftp.fo-hines.med.va.gov</a>
Salt Lake City	<a href="ftp://ftp.fo-slc.med.va.gov">ftp.fo-slc.med.va.gov</a>

<u>File Name</u>	<u>Retrieval format</u>
VBECS_1_5_DOCS_BUNDLE.ZIP	BINARY

The VBECS\_1\_5\_DOCS\_BUNDLE.ZIP file needs to be extracted on your system for use.

### ***Customer Support***

Contact your Information Resource Management (IRM) or Laboratory Automated Data Processing Application Coordinator (ADPAC) if you encounter problems and for training support.

#### **VA Service Desk Primary Contact**

For Information Technology (IT) support, call the VA Service Desk (VASD), 888-596-HELP (4357) (toll free), 24 hours per day, 7 days per week. [Users with access to the VASD-supported request tool (e.g., Remedy) may file a ticket in lieu of calling the VASD.]

#### **VA Service Desk Alternate Contacts**

- During business hours: As an alternate to the toll-free number, call 205-554-4710 (or 205-554-4711 through 205-554-4725), Monday through Friday (excluding holidays), 8:00 a.m. to 7:30 p.m. (Eastern Time).
- Outside of business hours: Call 205-554-3459 (or 205-554-3460 through 205-554-3465, 205-554-3472, 205-554-3475, or 205-554-3482 through 205-554-3485).

- Web site: [http://vaww.va.gov/emc/index.asp?s=6&p=nhd\\_home](http://vaww.va.gov/emc/index.asp?s=6&p=nhd_home) (VHA Enterprise Management Center)
- Email: [vhacionhd@va.gov](mailto:vhacionhd@va.gov).

## References

- AABB Standards for Blood Banks and Transfusion Services, 26<sup>th</sup> edition, November 2009.
- AABB Complete List of Codabar Product Label Codes, December 2008.
- ICCBBA, Product Description Database: Version 3.15.0, 1 JUNE 2008, Version 3.16.0, 1 JULY 2008, Version 3.17.0, 1 AUGUST 2008, Version 3.18.0, 1 SEPTEMBER 2008, and Version 3.19.0, 1 OCTOBER 2008.

# Appendices

## Appendix A: Examples of Test Scenarios

Refer to *Known Defects and Anomalies* for unresolved ClearQuest Code Requests (CRs) and Document Requests (DRs).

*These are examples of possible test scenarios. Each site is responsible for evaluating changes for their intended use and for establishing additional validation test scenarios (as appropriate).*

### Test Scenarios by Function

Each test objective number corresponds to an item in Enhancements and Modifications.

<b>Option: Select Units</b>	
<p><b>Test Objective 1):</b> When a database conversion antibody specificity is contained in a patient's VBECS Transfusion Requirements record, the patient is not eligible for electronic crossmatch.</p> <p><b>REQUIRED SETUP:</b> <i>The electronic crossmatch option must be enabled to perform this objective. This objective does not fully validate the option; please ensure that you have fully validated for electronic crossmatch functionality.</i></p>	
<p><b>Scenario 1:</b> Verify that a patient with a history of an irregular antibody database conversion is not eligible for electronic crossmatch.</p>	
<b>Data</b>	<p>Select a Patient (#1) with an antibody specificity entered in VBECS via database conversion that creates an antigen negative requirement. Place a CPRS Order for a TAS and RBC. Complete the TAS order in VBECS. Make sure that the antibody screen test (ABS) for this specimen is negative and completed. (When the ABS interpretation positive, the message changes.) Make sure there are two previously filed ABO/RH typing results on file for the patient, including this specimen. Ensure that the only disqualifier to electronic crossmatch for this patient is the antibody added by database conversion.</p>
<b>User</b>	<p>No specific user role is required to execute the scenario. An administrator supervisor must have previously enabled the electronic crossmatch option.</p>
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Select the patient in the Blood Units, Select Unit option. Click Add Units.</li> <li>2. Verify that the eXM status message appears stating that the patient is not eligible for electronic crossmatch due to a history of irregular antibodies (Patient not eligible for eXM due to a previous antibody history.)</li> </ol>
<b>Expected Outcome</b>	<p>The electronic crossmatch message in Select Unit states that the patient is not eligible for electronic crossmatch due to a history of irregular antibodies.</p>
<p><b>Scenario 2:</b> Verify that a patient with an antibody specificity added by database conversion requires serologic crossmatch of a red blood cell (or whole blood) unit.</p>	
<b>Data</b>	<p>Using Patient #1 and the previously entered RBC order, select a red cell product that is available (ABO/Rh confirmation is complete) and satisfies the patient's antigen negative requirement. Ensure that the only disqualifier to electronic crossmatch for this patient and unit is the antibody added by database conversion.</p>

Option: Select Units	
<b>User</b>	No specific user role is required.
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Go to Blood Units, Select Unit. Add the unit to the RBC order. Click OK to exit the Select Unit option.</li> <li>2. The system displays a message offering serologic crossmatch. Click OK.</li> <li>3. The testing details window displays. Complete it according to local procedure. Click OK.</li> <li>4. The crossmatch test grid for the select unit(s) is displayed for data entry.</li> </ol>
<b>Expected Outcome</b>	The eXM status message may change as the unit is selected, but <b>never</b> states that the unit or patient is eligible for electronic crossmatch. The system <b>does not</b> display the pop up message offering electronic crossmatch. The system <b>does require</b> and/or allow serologic crossmatch of the unit(s).

Option: Invalidate Patient Testing	
<b>Test Objective 2):</b> Verify that invalidating an ABID test also removes the antibody as an active antibody identified, specifically when that antibody specificity never creates an antigen negative requirement.	
<b>Scenario 1:</b> Create and invalidate an ABID test where an antibody with no possible antigen negative requirement was entered in the ABID test. The list is limited to: <i>Anti-I, Anti-i , Warm auto-antibody, Cold auto-antibody, HTLA (probable), Antibody to Low-Incidence Antigen, Antibody to High-Incidence Antigen.</i>	
<b>Data</b>	<p>Select a patient (#3). Place a CPRS Order for a TAS and RBC. Order a reflex ABID test in VBECS while completing the TAS or directly from the Orders, Order Reflex Test option. Complete the TAS order in VBECS. Make sure that the antibody screen test for this specimen is complete (it may be positive or negative). Complete the ABID test by selecting one of the antibody specificities listed in Test Objective 2 Scenario 1.</p>
<b>User</b>	No specific user role is required.
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Patients, Special Instructions and Transfusion Requirements: Verify that the antibody specificity entered in the ABID test displays on the Antibodies Identified tab.</li> <li>2. Select Patients, Invalidate Test Results: Select the patient's ABID test and invalidate it. (<i>You may choose to add it back to the PTL for use in repeats of this scenario with different specificities. If you choose to rerun this scenario with a different patient, you will need to place new orders.</i>)</li> <li>3. Verify that the antibody specificity no longer displays on the Antibodies Identified tab in Special Instructions and Transfusion Requirements.</li> <li>4. Verify that the antibody specificity no longer displays when the patient is selected for the Recent Orders or any other option where a patient is selected. It will display in Patients, Special Instructions and Transfusion Requirements, Antibodies Identified tab if the Show Inactive Antibodies Identified checkbox is checked.</li> </ol>
<b>Expected Outcome</b>	The antibody specificity is no longer active in the patient's record.

**Option: Modification: Pool and Thaw/Pool**

**Test Objective 3):** Verify that the pooling of units with different ICCBBA attribute forms B (System Integrity), C (Irradiation) and D (Residual Leukocyte Content) and E (Altered) displays the correct target for selection.

**Scenario 1:** Verify that a pooled product from a combination of original products that have different B, C, D, and E displays the correct target for selection.

<b>Data</b>	Multiple units of platelets, apheresis platelets, cryoprecipitate, or apheresis cryoprecipitate available for modification with the following attribute forms conditions:																																																																																					
	<table border="1"> <thead> <tr> <th>Unit #</th> <th>Integrity*</th> <th>Irradiated</th> <th>Leukoreduced</th> <th>Altered</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Closed</td> <td>no</td> <td>no</td> <td>no</td> </tr> <tr> <td>2</td> <td>Closed</td> <td>no</td> <td>no</td> <td>yes</td> </tr> <tr> <td>3</td> <td>Closed</td> <td>no</td> <td>yes</td> <td>no</td> </tr> <tr> <td>4</td> <td>Closed</td> <td>no</td> <td>yes</td> <td>yes</td> </tr> <tr> <td>5</td> <td>Closed</td> <td>yes</td> <td>no</td> <td>no</td> </tr> <tr> <td>6</td> <td>Closed</td> <td>yes</td> <td>no</td> <td>yes</td> </tr> <tr> <td>7</td> <td>Closed</td> <td>yes</td> <td>yes</td> <td>no</td> </tr> <tr> <td>8</td> <td>Closed</td> <td>yes</td> <td>yes</td> <td>yes</td> </tr> <tr> <td>9</td> <td>Open</td> <td>no</td> <td>no</td> <td>no</td> </tr> <tr> <td>10</td> <td>Open</td> <td>no</td> <td>no</td> <td>yes</td> </tr> <tr> <td>11</td> <td>Open</td> <td>no</td> <td>yes</td> <td>no</td> </tr> <tr> <td>12</td> <td>Open</td> <td>no</td> <td>yes</td> <td>yes</td> </tr> <tr> <td>13</td> <td>Open</td> <td>yes</td> <td>no</td> <td>no</td> </tr> <tr> <td>14</td> <td>Open</td> <td>yes</td> <td>no</td> <td>yes</td> </tr> <tr> <td>15</td> <td>Open</td> <td>yes</td> <td>yes</td> <td>no</td> </tr> <tr> <td>16</td> <td>Open</td> <td>yes</td> <td>yes</td> <td>yes</td> </tr> </tbody> </table>	Unit #	Integrity*	Irradiated	Leukoreduced	Altered	1	Closed	no	no	no	2	Closed	no	no	yes	3	Closed	no	yes	no	4	Closed	no	yes	yes	5	Closed	yes	no	no	6	Closed	yes	no	yes	7	Closed	yes	yes	no	8	Closed	yes	yes	yes	9	Open	no	no	no	10	Open	no	no	yes	11	Open	no	yes	no	12	Open	no	yes	yes	13	Open	yes	no	no	14	Open	yes	no	yes	15	Open	yes	yes	no	16	Open	yes	yes	yes
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	* Test using a sterile connecting device, if applicable.																																																																																					
<b>User</b>	No specific user role is required.																																																																																					
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Pool the units by various combinations to display a target.</li> <li>2. Do not complete the modification if you wish to use the units repeatedly. If you save the pool, then you will have to enter multiple units of each condition above to test the various combinations of attribute forms.</li> </ol>																																																																																					
<b>Expected Outcome</b>	<ul style="list-style-type: none"> <li>• Leukocyte reduced target product codes display only when <u>all</u> original units selected for the pool were leukocyte reduced.</li> <li>• Irradiated target product codes display only when <u>all</u> original units selected for the pool were marked irradiated.</li> <li>• Target product codes do not indicate any alteration regardless the status of the original units selected for the pool.</li> <li>• Target products are OPEN if <u>any one</u> original unit selected for the pool was open, even when using a sterile connecting device.</li> </ul>																																																																																					

<b>Option: Modification: Thaw</b>																													
<b>Test Objective 4):</b> Verify that the calculated expiration date displayed when a single unit of pooled cryoprecipitate is modified using the THAW modification method is now four (4) hours.																													
<b>Scenario 1:</b> Create thawed pooled cryoprecipitate and verify that the calculated expiration date/time displayed is four (4) hours after the selected modification time.																													
<b>Data</b>	<p>Enter a blood unit for each of the following product codes in a FROZEN state with an expiration date/time that is at minimum 24 hours in the future to avoid confusion of the calculated times.</p> <p>This is a list of all current original frozen pooled cryoprecipitate product codes.</p> <table> <tr><td>10191</td><td>CRYOPRECIPITATED AHF POOLED</td></tr> <tr><td>10291</td><td>CRYOPRECIPITATED AHF POOLED IRRADIATED</td></tr> <tr><td>11191</td><td>CRYOPRECIPITATED AHF POOLED DONOR RETESTED</td></tr> <tr><td>11291</td><td>CRYOPRECIPITATED AHF POOLED IRRADIATED DONOR RETESTED</td></tr> <tr><td>E3587</td><td>POOLED CRYOPRECIPITATE None/XX/&lt;=-18C</td></tr> <tr><td>E3588</td><td>POOLED CRYOPRECIPITATE None/XX/&lt;=-18C Open</td></tr> <tr><td>E3589</td><td>POOLED CRYOPRECIPITATE None/XX/&lt;=-18C Open Irradiated</td></tr> <tr><td>E3590</td><td>POOLED CRYOPRECIPITATE None/XX/&lt;=-18C Irradiated</td></tr> <tr><td>E5621**</td><td>POOLED CRYOPRECIPITATE None/XX/&lt;=-18C From 5 donors*</td></tr> <tr><td>E5687**</td><td>POOLED CRYOPRECIPITATE None/XX/&lt;-30C ResLeu:&lt;1log6 Quar:&gt;=90d/retested</td></tr> <tr><td>E3583**</td><td>POOLED CRYOPRECIPITATE None/XX/&lt;-30C</td></tr> <tr><td>E3584**</td><td>POOLED CRYOPRECIPITATE None/XX/&lt;-30C Open</td></tr> <tr><td>E3585**</td><td>POOLED CRYOPRECIPITATE None/XX/&lt;-30C Open Irradiated</td></tr> <tr><td>E3586**</td><td>POOLED CRYOPRECIPITATE None/XX/&lt;-30C Irradiated</td></tr> </table> <p>** indicates that these product codes are not currently displaying a THAW target.</p>	10191	CRYOPRECIPITATED AHF POOLED	10291	CRYOPRECIPITATED AHF POOLED IRRADIATED	11191	CRYOPRECIPITATED AHF POOLED DONOR RETESTED	11291	CRYOPRECIPITATED AHF POOLED IRRADIATED DONOR RETESTED	E3587	POOLED CRYOPRECIPITATE None/XX/<=-18C	E3588	POOLED CRYOPRECIPITATE None/XX/<=-18C Open	E3589	POOLED CRYOPRECIPITATE None/XX/<=-18C Open Irradiated	E3590	POOLED CRYOPRECIPITATE None/XX/<=-18C Irradiated	E5621**	POOLED CRYOPRECIPITATE None/XX/<=-18C From 5 donors*	E5687**	POOLED CRYOPRECIPITATE None/XX/<-30C ResLeu:<1log6 Quar:>=90d/retested	E3583**	POOLED CRYOPRECIPITATE None/XX/<-30C	E3584**	POOLED CRYOPRECIPITATE None/XX/<-30C Open	E3585**	POOLED CRYOPRECIPITATE None/XX/<-30C Open Irradiated	E3586**	POOLED CRYOPRECIPITATE None/XX/<-30C Irradiated
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<b>User</b>	No specific user role is required.																												
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Enter a shipment of pooled cryoprecipitate including all product codes used by your local supplier. Optionally, the shipment may include all product codes as listed above.</li> <li>2. Go to Blood Units, Modify Units, and select THAW modification type.</li> <li>3. Select the pooled cryoprecipitate units entered above.</li> <li>4. Execute the modification in batch.</li> <li>5. Verify that the expiration time is set to 4 hours from the modification time for each target unit.</li> </ol>																												

**Option: Modification: Thaw**

<b>Expected Outcome</b>	The expiration time presented for each thawed pooled cryoprecipitate unit is four (4) hours, which is the modification time. The possible target product codes are listed below.
	10191 Thawed CRYOPRECIPITATED AHF POOLED
	10291 Thawed CRYOPRECIPITATED AHF POOLED IRRADIATED
	11191 Thawed CRYOPRECIPITATED AHF POOLED DONOR RETESTED
	Thawed CRYOPRECIPITATED AHF POOLED IRRADIATED DONOR
	RETESTED
	11291
	27628 <sup>L</sup> Thawed POOLED CRYOPRECIPITATE None/XX/rt
	27629 <sup>L</sup> Thawed POOLED CRYOPRECIPITATE None/XX/rt Irradiated
	27630 <sup>L</sup> Thawed POOLED CRYOPRECIPITATE None/XX/rt ResLeu:NS
	27631 <sup>L</sup> Thawed POOLED CRYOPRECIPITATE None/XX/rt Irradiated ResLeu:NS
	27632 <sup>L</sup> Thawed POOLED CRYOPRECIPITATE NS/XX/rt
	27633 <sup>L</sup> Thawed POOLED CRYOPRECIPITATE NS/XX/rt Irradiated
	27634 <sup>L</sup> Thawed POOLED CRYOPRECIPITATE NS/XX/rt ResLeu:NS
	27635 <sup>L</sup> Thawed POOLED CRYOPRECIPITATE NS/XX/rt Irradiated ResLeu:NS
	27645 <sup>L</sup> Thawed POOLED CRYOPRECIPITATE
	E3591 Thawed POOLED CRYOPRECIPITATE None/XX/rt
	E3592 Thawed POOLED CRYOPRECIPITATE None/XX/rt Open
	E3593 Thawed POOLED CRYOPRECIPITATE None/XX/rt Open Irradiated
	E3594 Thawed POOLED CRYOPRECIPITATE None/XX/rt Irradiated
	E5284 Thawed POOLED CRYOPRECIPITATE NS/XX/rt Open
	E5599 Thawed POOLED CRYOPRECIPITATE NS/XX/rt Open From 2 donors
	E5600 Thawed POOLED CRYOPRECIPITATE NS/XX/rt Open From 3 donors
	E5601 <sup>^</sup> Thawed POOLED CRYOPRECIPITATE NS/XX/rt Open From 4 donors*
	E5602 <sup>^</sup> Thawed POOLED CRYOPRECIPITATE NS/XX/rt Open From 5 donors
	E5603 Thawed POOLED CRYOPRECIPITATE NS/XX/rt Open From 6 donors
	E5604 <sup>^</sup> Thawed POOLED CRYOPRECIPITATE NS/XX/rt Open From 7 donors*
	E5605 <sup>^</sup> Thawed POOLED CRYOPRECIPITATE NS/XX/rt Open From 8 donors*
E5606 <sup>^</sup> Thawed POOLED CRYOPRECIPITATE NS/XX/rt Open From 9 donors*	
E5607 Thawed POOLED CRYOPRECIPITATE NS/XX/rt Open From 10 donors*	
E5821 Thawed POOLED CRYOPRECIPITATE NS/XX/rt	
E6000 Thawed POOLED CRYOPRECIPITATE NS/XX/rt Open Irradiated	
*There are no original product codes to provide targets for E5599, E5600, E5603 and E5607.	
<sup>L</sup> The product codes are exclusive to VBECS as Local Codabar product codes and may or may not display as a target.	
<sup>^</sup> The product code does not display as a target in THAW modification but may be entered into VBECS via Incoming Shipment.	

<b>Option: Select Patient Tool</b>	
<b>Test Objective 5):</b> Verify that a VistA patient with an improperly formatted name (as described and allowed by your VistA environment) is not processed in VBECS.	
Note: This is tested in three options due to the nature of the patient search, Incoming Shipment, Edit Unit Information, and Document ABO Incompatible Transfusion.	
<b>Scenario 1:</b> Verify that a VistA patient with an improperly formatted name (as described) is NOT selectable for unit restriction in Incoming Shipment, Edit Unit Information, and Document ABO Incompatible Transfusion.	
<b>Data</b>	Seven VistA patients with the following characteristics. <ol style="list-style-type: none"> <li>1. A VistA patient with NO first name.</li> <li>2. A VistA patient with NO last name.</li> <li>3. A VistA patient with a first name that is 31 or more characters.</li> <li>4. A VistA patient with a last name that is 31 or more characters.</li> <li>5. A VistA patient with a middle name that is 31 or more characters.</li> <li>6. A VistA patient with a FULL name that is 31 or more characters long, including comma and space with a middle name.</li> <li>7. A VistA patient with a FULL name that is 31 or more characters long, including comma without a middle name.</li> </ol>
<b>User</b>	No specific user role is required when tested using Incoming Shipment option as described in Step 2. An Enhanced Technologist is required when tested using Edit Unit Information as described in Step 4. A Traditional Supervisor or above when tested using Document ABO Incompatible Transfusion as described in Step 5.
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Create the seven (7) test patients listed in the Data section of this objective in VISTA.</li> <li>2. Incoming Shipment: Attempt to select each test patient as the "Restricted For Patient" for an autologous unit of any product type during an Incoming Shipment.</li> <li>3. Restrict the unit to any VBECS patient already in the database.</li> <li>4. Edit Unit Information: Attempt to change the "Restricted For Patient" to each of the seven test patients.</li> <li>5. Document ABO Incompatible Transfusion: Attempt to select each of the seven test patients.</li> </ol>
<b>Expected Outcome</b>	The seven test patients may not be selected in any of the options.
<b>Scenario 2:</b> VBECS rejects CPRS orders when the patient name exceeds the acceptable conditions.	
<b>Data</b>	Use the seven (7) test patients entered in Scenario 1.
<b>User</b>	No specific user role is required.
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Create a VBECS diagnostic test and/or blood product order for each of the seven test patients.</li> <li>2. Verify the rejection of the CPRS orders by VBECS. (In CPRS).</li> <li>3. In VBECS, go to Orders, Accept Orders. Verify the orders are not listed in the Pending Order List.</li> </ol>

Option: Select Patient Tool	
<b>Expected Outcome</b>	The seven test patient orders are not processed by VBECS.

Option: Print Caution Tag and Blood Transfusion Record form (BTRF)	
<b>Test Objective 6):</b> Successfully print a BTRF without incident when an irregular antibody is listed that never has an antigen negative requirement.	
<b>Scenario 1:</b> Verify that an antibody specificity that cannot and may not have an antigen requirement in a patient record allows the BTRF to print. This is limited to: <i>Anti-A; Anti-B; Anti-I; Anti-i; Anti-I(int); Anti-LW; Anti-Lu; Anti-Le, other; Anti-N, other; Anti-M, other; Anti-rhesus, other; Antibody to Low-Incidence Antigen; Anti-rhesus; NOS; Antibody to High-Incidence Antigen; Cold auto-antibody; HTLA (probable); Warm auto-antibody; Antibody, No Specificity Identified.</i>	
<b>Data</b>	Select a patient (#2) with one antibody specificity active in their VBECS record. The antibody must be one listed in the Test Objective 2 Scenario 1. The antibody may exist by any valid VBECS entry method or database conversion. Place a CPRS Order for a TAS and RBC. Complete the TAS order in VBECS. Make sure that the antibody screen test for this specimen is complete (it may be positive or negative). Select a red cell product that is available (ABO/Rh confirmation is complete) and is otherwise acceptable for any of the patient's other requirements.
<b>User</b>	No specific user role is required.
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Go to Blood Units, Select unit. Add the unit to the RBC order. Click OK to select the unit. Verify that the override is not required for the specificity.</li> <li>2. Complete the crossmatch serologic crossmatch test.</li> <li>3. Print the BTRF.</li> </ol>
<b>Expected Outcome</b>	The BTRF prints. No antigen information is printed on the BTRF.

Option: Record Phenotype Testing and Patient Antigen Typing	
<b>Test Objective 7):</b> Demonstrate that the updated reaction result combinations result in the expected system response.	
<b>Note:</b> Using multiple units allows you to enter all the varied patterns for a single screen shot, alternately you may clear the grid and use the same unit repeatedly to verify the data entry patterns.	
<b>Scenario 1:</b> Verify that the system does not allow the entry of an inconclusive interpretation for any antigen testing (reagent type) other than weak D.	
<b>Data</b>	Enter at minimum one unit of Rh Negative red blood cells, apheresis red blood cells or whole blood, any valid activated product code, limited or available.
<b>User</b>	No specific user role is required.

<b>Option: Record Phenotype Testing and Patient Antigen Typing</b>	
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Create a worklist with at least one unit for testing that includes one reagent type for any irregular antigen and weak D.</li> <li>2. Enter reaction results to create an inconclusive weak D test by having a positive control.</li> <li>3. Enter reaction results for the other reagent type using W, F, and/or M. Attempt to enter an interpretation of "I" (Inconclusive).</li> <li>4. Enter reaction results for the other reagent type using W, F, and/or M. Attempt to enter an interpretation of "P".</li> </ol>
<b>Expected Outcome</b>	<ol style="list-style-type: none"> <li>1. The system responds by enabling the OK button for the weak D test.</li> <li>2. The system indicates that an "I" entry is not allowed.</li> <li>3. The system indicates that a "P" interpretation is valid.</li> </ol>
<b>Scenario 2:</b> Verify that an Inconclusive Interpretation is not allowed for a selected reagent type with any testing phase.	
<b>Data</b>	Enter at minimum one unit of red blood cells, apheresis red blood cells or whole blood, any valid activated product code, limited or available.
<b>User</b>	No specific user role is required.
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Create a worklist with at least one unit for testing for any antigen typing except Weak D.</li> <li>2. Enter reaction results at least one W, F or M for the row (Do not enter any reaction results 1+-4+).</li> <li>3. Attempt to enter an interpretation of "I".</li> <li>4. Attempt to enter an interpretation of "N"</li> <li>5. Attempt to enter an interpretation of "P"</li> </ol>
<b>Expected Outcome</b>	<p>The system responds to each step above as follows:</p> <ol style="list-style-type: none"> <li>1. "I" is an invalid entry. Re-enter your results.</li> <li>2. "N" is an invalid entry. Re-enter your results.</li> <li>3. "P" is a valid entry. The OK button enables.</li> </ol>
<b>Scenario 3:</b> Verify that the system responses are correct for an IS/RT testing of a selected reagent type.	
<b>Data</b>	Enter at minimum one unit of red blood cells, apheresis red blood cells or whole blood, any valid activated product code, limited or available.
<b>User</b>	No specific user role is required.
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Create a worklist with at least one unit for testing and Testing Phases of IS/RT.</li> <li>2. Enter reaction results to create this pattern: IS is not tested (X) and RT is positive (P) with a P interpretation.</li> <li>3. Enter reaction results to create this pattern IS is positive (P) and RT is not tested (X) with a P interpretation.</li> </ol>
<b>Expected Outcome</b>	The system responds to either 2 or 3 by enabling the OK button.
<b>Scenario 4:</b> Verify that the system responses are correct for an IS/37 testing of a selected reagent type.	
<b>Data</b>	Enter at minimum one unit of red blood cells, apheresis red blood cells or whole blood, any valid activated product code, limited or available.
<b>User</b>	No specific user role is required.

<b>Option: Record Phenotype Testing and Patient Antigen Typing</b>	
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Create a worklist with at least one unit for testing and Testing Phases of IS/37.</li> <li>2. Enter reaction results to create this pattern: IS is not tested (X) and 37 is positive (P) with a P interpretation.</li> </ol>
<b>Expected Outcome</b>	The system responds by enabling the OK button.

<b>Option: Select Blood Unit</b>	
<b>Test Objective 8):</b> Demonstrate the improved response time when selecting a large number of units for one patient.	
<b>Scenario 1:</b> Verify that the system responds within 15 seconds when selecting and crossmatching six (6) to ten (10) blood products for a single patient.	
<b>Data</b>	Enter the number of units required to mimic a large volume crossmatch scenario at your hospital, at least six (6) units.
<b>User</b>	No specific user role is required.
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Select the blood units in one session.</li> <li>2. Perform crossmatch testing on all units selected in Step 1.</li> <li>3. Print the BTRF and Caution Tag for each unit.</li> </ol>
<b>Expected Outcome</b>	The system responds within 15 seconds to the user.
<b>Scenario 2:</b> Verify that the system responds within 15 seconds when multiple users are selecting different blood units for a single patient. Note: Attempts to use the same blood unit by multiple users will result in a data lock, which is expected functionality unrelated to this correction.	
<b>Data</b>	Enter the number of units required to mimic a large volume crossmatch scenario at your hospital, at least six (6) units of the same or different product types. For example, RBC to be crossmatched, while FFP is thawed and something different is being issued. Alternately, any one product type in various states of selection, issue and modification associated with the same patient may be selected.
<b>User</b>	No specific user role is required for the multiple users required to execute this scenario, at minimum two (2) users.
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Select the first batch of blood units.</li> <li>2. Hand off the first batch to a second user who will issue these units while another set of units is being selected by the first user.</li> <li>3. At the same time as Step 2, a third staff member may be selecting additional products for testing or modification as assigned to the same patient.</li> </ol>
<b>Expected Outcome</b>	The system responds within 15 seconds to all users.

<b>Option: Patient ABO/Rh Test</b>	
<b>Test Objective 9):</b> Verify that the ABO interpretation cannot be saved without its corresponding Rh interpretation and that the ABO/Rh discrepancy override is triggered when appropriate.	
<b>Scenario 1:</b> Verify that the ABO interpretation cannot be saved without its corresponding Rh interpretation. Alternately, repeat the scenario for Rh interpretation.	
<b>Data</b>	Place a CPRS Order for an ABO/Rh test for a selected patient.
<b>User</b>	No specific user role is required.
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Accept the order in VBECS.</li> <li>2. Select the order from the pending task list.</li> <li>3. Enter ABO and Rh test results.</li> <li>4. Enter only the ABO interpretation. (Rh interpretation remains blank.)</li> <li>5. Attempt to save the test. Verify that the OK button is disabled.</li> <li>6. Enter the Rh interpretation.</li> <li>7. Verify that the OK button is enabled and save the typing.</li> </ol>
<b>Expected Outcome</b>	At step 5: The OK button is disabled and the ABO/Rh test may not be saved. At step 7. The OK button is enabled and the ABO/Rh test may be saved.
<b>Scenario 2:</b> Verify that when an ABO/Rh discrepancy is unresolved, Select Unit will not allow selection of type specific blood for either blood type (by VBECS TEST entry) filed that create the discrepancy.	
<b>Data</b>	Place a CPRS Order for a TAS and RBC using a patient with a known blood type on file from a previous VBECS ABO/Rh test, not NR. Make sure that the antibody screen test for this specimen is complete (it may be positive or negative). Enter three red cell products that are available (ABO/Rh confirmation is complete) and is otherwise acceptable for any of the patient's other requirements; one that is type specific for the historic blood type, one that is type specific for the current type, and one that is O.
<b>User</b>	No specific user role is required.
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Complete the ABO/Rh test creating an ABO discrepancy with the previous historical patient blood type (previous testing instance).</li> <li>2. Complete the override comments and save the test result.</li> <li>3. Go to Select Unit, select the RBC order and verify that the Emergency Issue message appears.</li> <li>4. Attempt to select the O unit, by entering the unit id and product code or by selecting it from the pick list. This unit is selectable. Add it.</li> <li>5. Attempt to select the blood unit that matches the historic blood type on file. This unit will need to be entered, as it will not appear on a pick list. Verify that this unit is not selectable.</li> <li>6. Attempt to select the blood unit that matches the current specimen's blood type. This unit will need to be entered, as it will not appear on a pick list. Verify that this unit is not selectable.</li> <li>7. Save the selected unit.</li> <li>8. Go to Issue Unit, enter the unit id and product codes for both of the units that failed to be selected, and verify that they are not selectable at issue.</li> <li>9. Verify that the only unit available for issue is the O unit and that it appears on the Emergency Issue tab.</li> </ol>

<b>Option: Patient ABO/Rh Test</b>	
<b>Expected Outcome</b>	The ABO/Rh discrepancy override is triggered and any blood selection activity reflects that the ABO/Rh discrepancy will not allow the selection of type specific units for either blood type saved on the patient record.
<b>Scenario 3:</b> Verify that Select Unit will not allow selection of type specific blood for either blood type filed that create the discrepancy when an ABO/Rh discrepancy is unresolved and the historic ABO/Rh is "VistA Converted".	
<b>Data</b>	Place a CPRS Order for a TAS and RBC using a patient with a known VistA converted blood type on file, not NR. Make sure that the antibody screen test for this specimen is complete (it may be positive or negative). Enter three red cell products that are available (ABO/Rh confirmation is complete) and is otherwise acceptable for any of the patient's other requirements; one that is type specific for the historic blood type, one that is type specific for the current type, and one that is O.
<b>User</b>	No specific user role is required.
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Complete the ABO/Rh test creating an ABO discrepancy with the previous historical patient blood type (VistA converted).</li> <li>2. Complete the override comments and save the test result.</li> <li>3. Go to Select Unit, select the RBC order and verify that an Emergency Issue message appears (CR 2789).</li> <li>4. Attempt to select the blood unit that matches the current specimen's blood type. This unit will need to be entered, as it will not appear on a pick list. Verify that this unit is not selectable.</li> <li>5. Attempt to select the O unit, by entering the unit id and product code or by selecting it from the pick list. This unit is selectable. Add it.</li> <li>6. Attempt to select the blood unit that matches the historic blood type on file. This unit will need to be entered, as it will not appear on a pick list. Verify that this unit is selectable.</li> <li>7. Save the selected units.</li> <li>8. Go to Issue Unit, enter the unit id and product codes for the unit that failed to be selected, and verify that it is not selectable at issue.</li> <li>9. Verify that the O unit is available for issue and that it appears on the Emergency Issue tab.</li> <li>10. Verify that the unit that matches the VistA converted blood type is available for issue and that it appears on the Emergency Issue tab.</li> </ol>
<b>Expected Outcome</b>	The ABO/Rh discrepancy override is triggered and any blood selection activity reflects that the ABO/Rh discrepancy will not allow the selection of type specific units for the current specimen's blood type saved on the patient record.  Note: VBECS allows the user to select and issue a type specific unit that matches the VistA converted blood type compatibility tables. This should be used appropriately as defined in your local policies and procedures.

<b>Option: Any report from the Report Menu</b>	
<b>Test Objective 10):</b> Verify that the default printer displayed is the logged on user's division and that inactivation of the GHOST division does not affect report printing.	
<b>Scenario 1:</b> Verify that the report printer dialog presents the logged on user's division printer as the default printer selection.	
<b>Data</b>	None.
<b>User</b>	No specific user role is required. The user must normally see a DO NOT SELECT Division when they log onto VBECS.
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Request the selected report to print.</li> <li>2. Verify that your current logged on division printer is presented as the default printer for the report.</li> </ol>
<b>Expected Outcome</b>	The user's logged on division printer is displayed without any additional user interaction.
<b>Scenario 2:</b> Verify that when the GHOST Division is inactivated the DO NOT USE division no longer displays for user selection and that the default printer displays is unaffected.	
<b>Data</b>	<p>Go to the VBECS Administrator icon for the TEST environment.  Select Configure Division.  Uncheck the division named GHOST in the list. A warning message displays regarding inactivation of the division. Ensure you have selected the division GHOST.  Click Yes to the warning message.  The division GHOST is removed from the list.  Accept your changes.</p>
<b>User</b>	Administrative Supervisor is required to inactivate the GHOST division. No specific user role is required to execute the steps.
<b>Steps</b>	<ol style="list-style-type: none"> <li>1. Log onto VBECS.</li> <li>2. Verify that the DO NOT SELECT division is not displayed.</li> <li>3. Repeat Objective 10 Scenario 1.</li> </ol>
<b>Expected Outcome</b>	<ol style="list-style-type: none"> <li>2. The user no longer has an option to select a DO NOT SELECT division.</li> <li>3. The default printer displays correctly.</li> </ol>

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## Appendix B: Modification Target Unavailable

Your blood supplier may provide you with a list of their possible products for manufacture. It is recommended that valid product codes found on your local supplier's product list be used for all your local validation testing. This will help focus your validation efforts on products that may actually require processing at your facility. It is recommended that all blood components (product codes) that require modification prior to administration be tested for the availability of a target for the modification method prior to expected production use of that product code.

Should you encounter a blood component in a modification method that does not present a product target code for selection, suggested workarounds are:

- 1) Refuse to accept the product from your supplier, if possible, until this is rectified by a table update.
- 2) Maintain an off-line inventory of the frozen products, entering the unit as a thawed product into VBECS when needed. The newly entered unit will not require modification and is available for immediate selection.
- 3) Enter the frozen product into VBECS inventory, then inactivate or discard that frozen unit, re-entering it with the thawed product code when needed. The newly entered unit will not require modification and is available for immediate selection.
- 4) Create and maintain a local policy and procedure for a mapping table between the ISBT 128 product code that cannot be modified as there is no target and one that can be modified and provide a target.

Known problems include:

- The inability to thaw more than one portion of a divided apheresis unit. These are clearly identified by the division designation of A0, B0, etc. not 00 in the ISBT 128 labeled unit's product code. This has not presented a problem with Codabar labeled products at this time.
- Certain ISBT 128 labeled product codes do not have targets available during THAW modification which requires a workaround as described in the *Known Anomalies and Defects* document.
- ICCBBA Core Conditions (@04, @07, @08, @34, @35, @36, @37, @40, @41, @47, @48, @59, @60, @61, @62, @63, @A2, @A4, @A5, A8, @AH, @AM, @AN, @AR, @AU, @AX, @B4, @BJ, @BK, @BL, @BN, @BO, @BQ, @BR, @BS, @BT, @CA, @CB, @CE, @CR, @CS, @CT, @CU, @CV) that are NOT handled by the VBECS modification tables which will result in missing targets and may apply to ISBT 128 Product codes above E5725 that require modification to transfuse.
- Table 1 identifies the product codes and the modification type where no target is available for the product codes added in 1.3.0.0 and 1.5.0.0 blood product table updates.



If a missing target is discovered that is not included in Table 1, please file a Remedy ticket.

**Table 1: Product Codes and Modification Type**

<u>Product Code</u>	<u>Modification Type with No Target for this Product Code</u>
E0749	Thaw
E0752	Thaw
E0755	Thaw

<u>Product Code</u>	<u>Modification Type with No Target for this Product Code</u>
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E0758	Thaw
E0761	Thaw
E0764	Thaw
E3583	Thaw
E3584	Thaw
E3585	Thaw
E3586	Thaw
E3587	Thaw
E3588	Thaw
E3589	Thaw
E3590	Thaw
E5495	Rejuvenate    Volume Reduction
E5496	Rejuvenate    Volume Reduction
E5497	Rejuvenate    Volume Reduction
E5498	Rejuvenate    Volume Reduction
E5499	Rejuvenate    Volume Reduction
E5500	Rejuvenate    Volume Reduction
E5501	Volume Reduction
E5502	Rejuvenate    Volume Reduction
E5503	Volume Reduction
E5504	Rejuvenate    Volume Reduction
E5506	Rejuvenate    Volume Reduction
E5507	Volume Reduction
E5508	Volume Reduction
E5509	Rejuvenate    Volume Reduction
E5510	Volume Reduction
E5511	Pool
E5512	Pool
E5518	Volume Reduction
E5519	Volume Reduction
E5520	Volume Reduction
E5521	Volume Reduction
E5522	Volume Reduction
E5523	Volume Reduction
E5524	Volume Reduction

**Product Code**                      **Modification Type with No Target for this Product Code**

E5525	Volume Reduction
E5526	Volume Reduction
E5527	Volume Reduction
E5528	Volume Reduction
E5529	Volume Reduction
E5530	Volume Reduction
E5535	Rejuvenate      Volume Reduction
E5536	Volume Reduction
E5537	Rejuvenate      Volume Reduction
E5538	Rejuvenate      Volume Reduction
E5539	Volume Reduction
E5540	Rejuvenate      Volume Reduction
E5541	Volume Reduction
E5542	Volume Reduction
E5543	Rejuvenate      Volume Reduction
E5544	Rejuvenate      Volume Reduction
E5545	Volume Reduction
E5546	Rejuvenate      Volume Reduction
E5547	Volume Reduction
E5553	Rejuvenate
E5554	Rejuvenate
E5555	Wash              Rejuvenate
E5556	Rejuvenate
E5557	Rejuvenate
E5558	Rejuvenate
E5559	Rejuvenate
E5560	Wash              Rejuvenate
E5561	Rejuvenate
E5562	Wash              Rejuvenate
E5563	Rejuvenate
E5564	Rejuvenate
E5565	Wash              Rejuvenate
E5566	Wash              Rejuvenate
E5567	Rejuvenate
E5568	Wash              Rejuvenate

<u>Product Code</u>	<u>Modification Type with No Target for this Product Code</u>			
E5569	Rejuvenate			
E5621	Thaw			
E6058	Thaw			
E6059	Thaw			
E6060	Thaw			
E6061	Thaw			
E6062	Thaw			
E6063	Thaw			
E6064	Thaw			
E6065	Volume Reduction			
E6066	Rejuvenate	Volume Reduction		
E6084	Thaw			
E6085	Thaw			
E6128	Volume Reduction			
E6133	Volume Reduction			
E6134	Volume Reduction			
E6135	Volume Reduction			
E6144	Wash	Freeze	Volume Reduction	
E6145	Wash	Rejuvenate	Freeze	Volume Reduction
E6146	Wash	Rejuvenate	Freeze	Volume Reduction
E6147	Wash	Rejuvenate	Freeze	Volume Reduction
E6148	Volume Reduction			
E6149	Volume Reduction			
E6152	Rejuvenate	Volume Reduction		
E6153	Volume Reduction			
E6154	Rejuvenate	Volume Reduction		
E6155	Volume Reduction			

## Appendix C: Additional Blood Product Table Changes

This table is organized by ascending Product Code order; Codabar units display ISBT 128 product codes.

**Table 1: Additional Blood Product Table change details**

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
APHERESIS FRESH FROZEN PLASMA	18261	MSH 8760 to 61320
APHERESIS FRESH FROZEN PLASMA	18262	MSH 8760 to 61320
APHERESIS FRESH FROZEN PLASMA	18263	MSH 8760 to 61320
APHERESIS FRESH FROZEN PLASMA	18264	MSH 8760 to 61320
APHERESIS FRESH FROZEN PLASMA	18265	MSH 8760 to 61320
APHERESIS FRESH FROZEN PLASMA	18266	MSH 8760 to 61320
APHERESIS FRESH FROZEN PLASMA	18267	MSH 8760 to 61320
APHERESIS FRESH FROZEN PLASMA	18268	MSH 8760 to 61320
APHERESIS FRESH FROZEN PLASMA	48711	MSH to 8760 hours (1 year)
APHERESIS FRESH FROZEN PLASMA	E3885	MSH 672 to 8760
APHERESIS FRESH FROZEN PLASMA	E3891	MSH 672 to 8760
APHERESIS FRESH FROZEN PLASMA	E4457	MSH 672 to 8760
APHERESIS FRESH FROZEN PLASMA	E4516	Added D2 to ProductAttributeForm and LUKOPR to ProductShortName
APHERESIS FRESH FROZEN PLASMA	E4618	MSH 24 to 8760
APHERESIS FRESH FROZEN PLASMA	E4814	MSH 672 to 61320
APHERESIS FRESH FROZEN PLASMA	E4816	MSH 672 to 61320
APHERESIS FRESH FROZEN PLASMA	E4818	MSH 672 to 61320
APHERESIS FRESH FROZEN PLASMA	E4820	MSH 672 to 61320
APHERESIS FRESH FROZEN PLASMA	E5681	"NaCitrate" to "NaCit" in ProductShortName
APHERESIS GRANULOCYTES-PLATELETS	E3691	PV 200 to 150
APHERESIS GRANULOCYTES-PLATELETS	E3692	PV 200 to 150
APHERESIS GRANULOCYTES-PLATELETS	E3693	PV 200 to 150
APHERESIS GRANULOCYTES-PLATELETS	E3694	PV 200 to 150
APHERESIS GRANULOCYTES-PLATELETS	E3695	PV 200 to 150
APHERESIS GRANULOCYTES-PLATELETS	E3696	PV 200 to 150
APHERESIS GRANULOCYTES-PLATELETS	E4189	MSH 24 to 336
APHERESIS GRANULOCYTES-PLATELETS	E4190	MSH 24 to 336
APHERESIS GRANULOCYTES-PLATELETS	E4191	MSH 24 to 336
APHERESIS GRANULOCYTES-PLATELETS	E4192	MSH 24 to 336
APHERESIS GRANULOCYTES-PLATELETS	E4580	Added " " between "refg" and "Open" in ProductName
APHERESIS GRANULOCYTES-PLATELETS	E4685	MSH 24 to 336
APHERESIS GRANULOCYTES-PLATELETS	E4686	MSH 24 to 336
APHERESIS GRANULOCYTES-PLATELETS	E4687	MSH 24 to 336
APHERESIS GRANULOCYTES-PLATELETS	E4688	MSH 24 to 336
APHERESIS LEUKOCYTES	E3757	MSH to 24 hours
APHERESIS LEUKOCYTES	E3758	MSH to 24 hours
APHERESIS LEUKOCYTES	E3765	MSH to 24 hours
APHERESIS LEUKOCYTES	E3766	MSH to 24 hours
APHERESIS LEUKOCYTES	E3773	MSH to 24 hours
APHERESIS LEUKOCYTES	E3774	MSH to 24 hours
APHERESIS LEUKOCYTES	E3777	MSH to 24 hours
APHERESIS LEUKOCYTES	E3778	MSH to 24 hours
APHERESIS LEUKOCYTES	E3781	MSH to 24 hours
APHERESIS LEUKOCYTES	E3782	MSH to 24 hours
APHERESIS LEUKOCYTES	E3785	MSH to 24 hours
APHERESIS LEUKOCYTES	E3788	MSH to 24 hours
APHERESIS LEUKOCYTES	E3789	MSH to 24 hours
APHERESIS LEUKOCYTES	E3790	MSH to 24 hours
APHERESIS LEUKOCYTES	E3793	MSH to 24 hours
APHERESIS LEUKOCYTES	E3794	MSH to 24 hours
APHERESIS LEUKOCYTES	E3797	MSH to 24 hours
APHERESIS LEUKOCYTES	E3798	MSH to 24 hours
APHERESIS LEUKOCYTES	E3801	MSH to 24 hours
APHERESIS LEUKOCYTES	E3804	MSH to 24 hours
APHERESIS LEUKOCYTES	E3829	MSH to 24 hours

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
APHERESIS LEUKOCYTES	E3830	MSH to 24 hours
APHERESIS LEUKOCYTES	E6057	MSH to 24 hours
APHERESIS PLATELETS	E5062	MSH to 120 hours (5 days)
APHERESIS RED BLOOD CELLS	03330	MSH 1008 to 672
APHERESIS RED BLOOD CELLS	03380	MSH 1008 to 672
APHERESIS RED BLOOD CELLS	03390	MSH 1008 to 672
APHERESIS RED BLOOD CELLS	24011	MSH to 504 hours (21 days)
APHERESIS RED BLOOD CELLS	24811	MSH to 504 hours (21 days)
APHERESIS RED BLOOD CELLS	25011	MSH to 504 hours (21 days)
APHERESIS RED BLOOD CELLS	25811	MSH to 504 hours (21 days)
APHERESIS RED BLOOD CELLS	E3824	MSH 1008 to 840
APHERESIS RED BLOOD CELLS	E4027	MSH 1008 to 840
APHERESIS RED BLOOD CELLS	E4040	MSH 1008 to 840
APHERESIS RED BLOOD CELLS	E4041	MSH 1008 to 840
APHERESIS RED BLOOD CELLS	E4044	MSH 1008 to 840
APHERESIS RED BLOOD CELLS	E4045	MSH 1008 to 840
APHERESIS RED BLOOD CELLS	E4118	MSH 1008 to 840
APHERESIS RED BLOOD CELLS	E4216	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4217	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4221	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4222	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4223	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4227	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4228	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4229	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4233	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4234	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4271	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4272	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4273	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4274	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4275	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4276	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4277	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4278	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4279	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4280	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4281	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4282	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4283	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4284	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4285	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4286	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4287	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4288	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4289	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4290	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4291	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4292	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4293	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4294	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4295	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4296	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4297	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4298	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4299	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4300	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4301	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4302	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4303	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4304	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4305	MSH 1008 to 504

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
APHERESIS RED BLOOD CELLS	E4306	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4307	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4311	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4312	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4313	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4317	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4318	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4319	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4323	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4324	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4361	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4362	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4363	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4364	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4365	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4366	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4367	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4368	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4369	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4370	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4371	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4372	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4373	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4374	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4375	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4376	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4377	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4378	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4379	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4380	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4381	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4382	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4383	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4384	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4385	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4386	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4387	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4388	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4389	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4390	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4391	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4392	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4393	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4394	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4395	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4401	MSH 1008 to 840
APHERESIS RED BLOOD CELLS	E4548	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4549	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4550	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4551	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4552	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4553	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4554	MSH 672 to 504
APHERESIS RED BLOOD CELLS	E4555	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4556	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4557	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4558	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4559	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4607	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4610	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4613	MSH 1008 to 504
APHERESIS RED BLOOD CELLS	E4616	MSH 1008 to 504

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
APHERESIS RED BLOOD CELLS	E5162	MSH 840 to 1008
APHERESIS RED BLOOD CELLS	E5163	MSH 840 to 1008
APHERESIS RED BLOOD CELLS	E5231	MSH 840 to 1008
APHERESIS RED BLOOD CELLS	E5232	MSH 840 to 1008
APHERESIS RED BLOOD CELLS	E5233	MSH 840 to 1008
APHERESIS RED BLOOD CELLS	E5234	MSH 840 to 1008
APHERESIS RED BLOOD CELLS	E5235	MSH 840 to 1008
APHERESIS RED BLOOD CELLS	E5236	MSH 840 to 1008
APHERESIS RED BLOOD CELLS	E6004	MSH to 672 hours (28 days)
CRYOPRECIPITATE	E5165	"NS" to "XX" in ProductName
CRYOPRECIPITATE	E5166	"NS" to "XX" in ProductName
CRYOPRECIPITATE	E5686	PV 450 to 15
DEGLYCEROLIZED REJUVENATED RED BLOOD CELLS	06501	MSH 24 to 336
DEGLYCEROLIZED RED BLOOD CELLS	06401	MSH 24 to 336
DEGLYCEROLIZED RED BLOOD CELLS	27348	PV 450 to 200 and MSH 24 to 336
DEGLYCEROLIZED RED BLOOD CELLS	27349	PV 450 to 200 and MSH 24 to 336
DEGLYCEROLIZED RED BLOOD CELLS	27350	PV 450 to 200 and MSH 24 to 336
DEGLYCEROLIZED RED BLOOD CELLS	27351	PV 450 to 200 and MSH 24 to 336
DEGLYCEROLIZED RED BLOOD CELLS	27352	PV 450 to 200
DEGLYCEROLIZED RED BLOOD CELLS	27353	PV 450 to 200
DEGLYCEROLIZED RED BLOOD CELLS	27354	PV 450 to 200
DEGLYCEROLIZED RED BLOOD CELLS	27355	PV 450 to 200
DEGLYCEROLIZED RED BLOOD CELLS	27356	PV 450 to 200
DEGLYCEROLIZED RED BLOOD CELLS	27357	PV 450 to 200
DEGLYCEROLIZED RED BLOOD CELLS	27358	PV 450 to 200
DEGLYCEROLIZED RED BLOOD CELLS	27359	MSH 24 to 336
DEGLYCEROLIZED RED BLOOD CELLS	27360	MSH 24 to 336
DEGLYCEROLIZED RED BLOOD CELLS	27361	MSH 24 to 336
DEGLYCEROLIZED RED BLOOD CELLS	27362	MSH 24 to 336
DEGLYCEROLIZED RED BLOOD CELLS	36401	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	36402	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	36403	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	36404	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	36405	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	36406	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	36407	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	36408	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	36801	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	36802	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	36803	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	36804	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	36805	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	36806	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	36807	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	36808	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	37401	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	37402	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	37403	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	37404	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	37405	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	37406	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	37407	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	37408	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	37801	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	37802	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	37803	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	37804	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	37805	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	37806	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	37807	MSH to 336 hours (14 days)
DEGLYCEROLIZED RED BLOOD CELLS	37808	MSH to 336 hours (14 days)

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
DEGLYCEROLIZED RED BLOOD CELLS	E3942	MSH 24 to 336
DEGLYCEROLIZED RED BLOOD CELLS	E3993	MSH 24 to 336
DEGLYCEROLIZED RED BLOOD CELLS	E4203	MSH 24 to 336
DEGLYCEROLIZED RED BLOOD CELLS	E4683	MSH 24 to 336
DEGLYCEROLIZED RED BLOOD CELLS	E4684	MSH 24 to 336
DEGLYCEROLIZED RED BLOOD CELLS	E4993	PV 450 to 200
DEGLYCEROLIZED RED BLOOD CELLS	E5587	PV 450 to 200
DEGLYCEROLIZED RED BLOOD CELLS	E5713	PV 450 to 200
DEGLYCEROLIZED RED BLOOD CELLS	E5714	PV 450 to 200
DEGLYCEROLIZED RED BLOOD CELLS	E5725	PV 450 to 200
FRESH FROZEN PLASMA	18101	Change ProductShortName "FFP None" to "PLASMA None"
FRESH FROZEN PLASMA	18161	MSH 672 to 8760
FRESH FROZEN PLASMA	47301	MSH 61320 to 8760
FRESH FROZEN PLASMA	47302	MSH 61320 to 8760
FRESH FROZEN PLASMA	47303	MSH 61320 to 8760
FRESH FROZEN PLASMA	47304	MSH 61320 to 8760
FRESH FROZEN PLASMA	47305	MSH 61320 to 8760
FRESH FROZEN PLASMA	47306	MSH 61320 to 8760
FRESH FROZEN PLASMA	47307	MSH 61320 to 8760
FRESH FROZEN PLASMA	47308	MSH 61320 to 8760
FRESH FROZEN PLASMA	48301	MSH 61320 to 8760
FRESH FROZEN PLASMA	48302	MSH 61320 to 8760
FRESH FROZEN PLASMA	48303	MSH 61320 to 8760
FRESH FROZEN PLASMA	48304	MSH 61320 to 8760
FRESH FROZEN PLASMA	48305	MSH 61320 to 8760
FRESH FROZEN PLASMA	48306	MSH 61320 to 8760
FRESH FROZEN PLASMA	48307	MSH 61320 to 8760
FRESH FROZEN PLASMA	48308	MSH 61320 to 8760
FRESH FROZEN PLASMA	E2498	MSH 672 to 8760
FRESH FROZEN PLASMA	E2499	MSH 672 to 8760
FRESH FROZEN PLASMA	E2500	MSH 672 to 8760
FRESH FROZEN PLASMA	E2501	MSH 672 to 8760
FRESH FROZEN PLASMA	E2515	MSH 672 to 8760
FRESH FROZEN PLASMA	E2516	MSH 672 to 8760
FRESH FROZEN PLASMA	E2517	MSH 672 to 8760
FRESH FROZEN PLASMA	E2518	MSH 672 to 8760
FRESH FROZEN PLASMA	E2519	MSH 672 to 8760
FRESH FROZEN PLASMA	E2520	MSH 672 to 8760
FRESH FROZEN PLASMA	E2530	MSH 672 to 8760
FRESH FROZEN PLASMA	E2531	MSH 672 to 8760
FRESH FROZEN PLASMA	E2532	MSH 672 to 8760
FRESH FROZEN PLASMA	E2533	MSH 672 to 8760
FRESH FROZEN PLASMA	E2547	MSH 672 to 8760
FRESH FROZEN PLASMA	E2548	MSH 672 to 8760
FRESH FROZEN PLASMA	E2549	MSH 672 to 8760
FRESH FROZEN PLASMA	E2550	MSH 672 to 8760
FRESH FROZEN PLASMA	E2551	MSH 672 to 8760
FRESH FROZEN PLASMA	E2552	MSH 672 to 8760
FRESH FROZEN PLASMA	E2562	MSH 672 to 8760
FRESH FROZEN PLASMA	E2563	MSH 672 to 8760
FRESH FROZEN PLASMA	E2564	MSH 672 to 8760
FRESH FROZEN PLASMA	E2565	MSH 672 to 8760
FRESH FROZEN PLASMA	E2579	MSH 672 to 8760
FRESH FROZEN PLASMA	E2580	MSH 672 to 8760
FRESH FROZEN PLASMA	E2581	MSH 672 to 8760
FRESH FROZEN PLASMA	E2582	MSH 672 to 8760
FRESH FROZEN PLASMA	E2583	MSH 672 to 8760
FRESH FROZEN PLASMA	E2584	MSH 672 to 8760
FRESH FROZEN PLASMA	E2594	MSH 672 to 8760
FRESH FROZEN PLASMA	E2595	MSH 672 to 8760
FRESH FROZEN PLASMA	E2596	MSH 672 to 8760

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
FRESH FROZEN PLASMA	E2597	MSH 672 to 8760
FRESH FROZEN PLASMA	E2611	MSH 672 to 8760
FRESH FROZEN PLASMA	E2612	MSH 672 to 8760
FRESH FROZEN PLASMA	E2613	MSH 672 to 8760
FRESH FROZEN PLASMA	E2614	MSH 672 to 8760
FRESH FROZEN PLASMA	E2615	MSH 672 to 8760
FRESH FROZEN PLASMA	E2616	MSH 672 to 8760
FRESH FROZEN PLASMA	E2626	MSH 672 to 8760
FRESH FROZEN PLASMA	E2627	MSH 672 to 8760
FRESH FROZEN PLASMA	E2628	MSH 672 to 8760
FRESH FROZEN PLASMA	E2629	MSH 672 to 8760
FRESH FROZEN PLASMA	E2643	MSH 672 to 8760
FRESH FROZEN PLASMA	E2644	MSH 672 to 8760
FRESH FROZEN PLASMA	E2645	MSH 672 to 8760
FRESH FROZEN PLASMA	E2646	MSH 672 to 8760
FRESH FROZEN PLASMA	E2647	MSH 672 to 8760
FRESH FROZEN PLASMA	E2648	MSH 672 to 8760
FRESH FROZEN PLASMA	E2658	MSH 672 to 8760
FRESH FROZEN PLASMA	E2659	MSH 672 to 8760
FRESH FROZEN PLASMA	E2660	MSH 672 to 8760
FRESH FROZEN PLASMA	E2661	MSH 672 to 8760
FRESH FROZEN PLASMA	E2675	MSH 672 to 8760
FRESH FROZEN PLASMA	E2676	MSH 672 to 8760
FRESH FROZEN PLASMA	E2677	MSH 672 to 8760
FRESH FROZEN PLASMA	E2678	MSH 672 to 8760
FRESH FROZEN PLASMA	E4121	core condition @AS to @BK and "None" to "CPDA-1" in ProductShortName
FRESH FROZEN PLASMA	E4122	core condition @AS to @BK and "None" to "CPDA-1" in ProductShortName
FRESH FROZEN PLASMA	E4126	core condition @AS to @BK and "None" to "CPDA-1" in ProductShortName
FRESH FROZEN PLASMA	E4663	MSH 672 to 8760
FRESH FROZEN PLASMA	E4664	MSH 672 to 8760
FRESH FROZEN PLASMA	E4834	MSH 672 to 8760
FRESH FROZEN PLASMA	E4836	MSH 672 to 8760
FRESH FROZEN PLASMA	E4838	MSH 672 to 8760
FRESH FROZEN PLASMA	E4840	MSH 672 to 8760
FRESH FROZEN PLASMA	E4842	MSH 672 to 8760
FRESH FROZEN PLASMA	E4844	MSH 672 to 8760
FRESH FROZEN PLASMA	E4858	MSH 672 to 8760
FRESH FROZEN PLASMA	E4860	MSH 672 to 8760
FRESH FROZEN PLASMA	E4862	MSH 672 to 8760
FRESH FROZEN PLASMA	E4864	MSH 672 to 8760
FRESH FROZEN PLASMA	E4866	MSH 672 to 8760
FRESH FROZEN PLASMA	E4868	MSH 672 to 8760
FRESH FROZEN PLASMA	E4882	MSH 672 to 61320 hours (7 years)
FRESH FROZEN PLASMA	E4884	MSH 672 to 61320 hours (7 years)
FRESH FROZEN PLASMA	E4886	MSH 672 to 61320 hours (7 years)
FRESH FROZEN PLASMA	E4888	MSH 672 to 61320 hours (7 years)
FRESH FROZEN PLASMA	E4890	MSH 672 to 61320 hours (7 years)
FRESH FROZEN PLASMA	E4892	MSH 672 to 61320 hours (7 years)
FRESH FROZEN PLASMA	E4894	MSH 672 to 61320 hours (7 years)
FRESH FROZEN PLASMA	E4896	MSH 672 to 61320 hours (7 years)
FRESH FROZEN PLASMA	E4898	MSH 672 to 61320 hours (7 years)
FRESH FROZEN PLASMA	E4900	MSH 672 to 61320 hours (7 years)
FRESH FROZEN PLASMA	E4902	MSH 672 to 61320 hours (7 years)
FRESH FROZEN PLASMA	E4904	MSH 672 to 61320 hours (7 years)
FRESH FROZEN PLASMA	E5332	PV 450 to 225
FRESH FROZEN PLASMA	E5333	PV 450 to 225
FRESH FROZEN PLASMA	E5336	PV 450 to 225
FRESH FROZEN PLASMA	E5378	MSH 672 to 8760
FRESH FROZEN PLASMA	E5636	PV 500 to 225

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
FRESH FROZEN PLASMA	E5637	PV 500 to 225
FRESH FROZEN PLASMA	E5682	PV 450 to 225
FRESH FROZEN PLASMA	E5688	PV 450 to 225
FRESH FROZEN PLASMA	E5689	PV 450 to 225
FRESH FROZEN PLASMA	E5690	PV 450 to 225
FROZEN POOLED SERUM	E3986	MSH to 8760 hours (1 year)
FROZEN POOLED SERUM	E5146	MSH to 8760 hours (1 year)
FROZEN RED BLOOD CELLS	27322	PV 450 to 200
FROZEN RED BLOOD CELLS	27323	PV 450 to 200
FROZEN RED BLOOD CELLS	27324	PV 450 to 200
FROZEN RED BLOOD CELLS	27325	PV 450 to 200
FROZEN RED BLOOD CELLS	27326	PV 450 to 200
FROZEN RED BLOOD CELLS	27327	PV 450 to 200
FROZEN RED BLOOD CELLS	27328	PV 450 to 200
FROZEN RED BLOOD CELLS	27329	PV 450 to 200
FROZEN RED BLOOD CELLS	27330	PV 450 to 200
FROZEN RED BLOOD CELLS	27331	PV 450 to 200
FROZEN RED BLOOD CELLS	27332	PV 450 to 200
FROZEN RED BLOOD CELLS	27333	PV 450 to 200
FROZEN RED BLOOD CELLS	E4523	PV 450 to 200
FROZEN RED BLOOD CELLS	E5651	PV 450 to 200
FROZEN RED BLOOD CELLS	E5711	PV 450 to 200
FROZEN RED BLOOD CELLS	E5712	PV 450 to 200
GRANULOCYTES	E5511	MSH to 4 hours
GRANULOCYTES	E5512	MSH to 4 hours
LEUKOCYTES	16401	MSH to 24 hours
LEUKOCYTES	20101	MSH to 24 hours
LEUKOCYTES	20111	MSH to 24 hours
LEUKOCYTES	20201	MSH to 24 hours
LEUKOCYTES	20211	MSH to 24 hours
LEUKOCYTES	20301	MSH to 24 hours
LEUKOCYTES	20311	MSH to 24 hours
LEUKOCYTES	27587	MSH to 24 hours
LEUKOCYTES	27637	MSH to 24 hours
LEUKOCYTES	27639	MSH to 24 hours
LEUKOCYTES	27649	MSH to 24 hours
LEUKOCYTES	27651	MSH to 24 hours
LEUKOCYTES	27715	MSH to 24 hours
LEUKOCYTES	27716	MSH to 24 hours
LEUKOCYTES	27720	MSH to 24 hours
LEUKOCYTES	27722	MSH to 24 hours
LEUKOCYTES	E3697	MSH to 24 hours
LEUKOCYTES	E3698	MSH to 24 hours
LEUKOCYTES	E3699	MSH to 24 hours
LEUKOCYTES	E3700	MSH to 24 hours
LEUKOCYTES	E3702	MSH to 24 hours
LEUKOCYTES	E3703	MSH to 24 hours
LEUKOCYTES	E3704	MSH to 24 hours
LEUKOCYTES	E3705	MSH to 24 hours
LEUKOCYTES	E3707	MSH to 24 hours
LEUKOCYTES	E3708	MSH to 24 hours
LEUKOCYTES	E3709	MSH to 24 hours
LEUKOCYTES	E3710	MSH to 24 hours
LEUKOCYTES	E3712	MSH to 24 hours
LEUKOCYTES	E3713	MSH to 24 hours
LEUKOCYTES	E3714	MSH to 24 hours
LEUKOCYTES	E3715	MSH to 24 hours
LEUKOCYTES	E3717	MSH to 24 hours
LEUKOCYTES	E3718	MSH to 24 hours
LEUKOCYTES	E3719	MSH to 24 hours
LEUKOCYTES	E3720	MSH to 24 hours
LEUKOCYTES	E3722	MSH to 24 hours

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
LEUKOCYTES	E3723	MSH to 24 hours
LEUKOCYTES	E3724	MSH to 24 hours
LEUKOCYTES	E3725	MSH to 24 hours
LEUKOCYTES	E3727	MSH to 24 hours
LEUKOCYTES	E3728	MSH to 24 hours
LEUKOCYTES	E3729	MSH to 24 hours
LEUKOCYTES	E3730	MSH to 24 hours
LEUKOCYTES	E3732	MSH to 24 hours
LEUKOCYTES	E3733	MSH to 24 hours
LEUKOCYTES	E3734	MSH to 24 hours
LEUKOCYTES	E3735	MSH to 24 hours
LEUKOCYTES	E3737	MSH to 24 hours
LEUKOCYTES	E3738	MSH to 24 hours
LEUKOCYTES	E3739	MSH to 24 hours
LEUKOCYTES	E3740	MSH to 24 hours
LEUKOCYTES	E3742	MSH to 24 hours
LEUKOCYTES	E3743	MSH to 24 hours
LEUKOCYTES	E3744	MSH to 24 hours
LEUKOCYTES	E3745	MSH to 24 hours
LEUKOCYTES	E3747	MSH to 24 hours
LEUKOCYTES	E3748	MSH to 24 hours
LEUKOCYTES	E3749	MSH to 24 hours
LEUKOCYTES	E3750	MSH to 24 hours
LEUKOCYTES	E3752	MSH to 24 hours
LEUKOCYTES	E3753	MSH to 24 hours
LEUKOCYTES	E3754	MSH to 24 hours
LEUKOCYTES	E3755	MSH to 24 hours
LEUKOCYTES	E5317	PV 500 to 200 MSH to 24 hours
LEUKOCYTES	E5318	PV 500 to 200 MSH to 24 hours
LEUKOCYTES	E5460	MSH to 24 hours
LEUKOCYTES	E5461	MSH to 24 hours
LEUKOCYTES	E5462	MSH to 24 hours
LEUKOCYTES	E5463	MSH to 24 hours
LEUKOCYTES	E5551	MSH to 24 hours
LEUKOCYTES	E5552	MSH to 24 hours
LEUKOCYTES	E5580	MSH to 24 hours
LEUKOCYTES	E5618	MSH to 24 hours
LEUKOCYTES	E6034	MSH to 24 hours
LEUKOCYTES	E6035	MSH to 24 hours
LEUKOCYTES	E6080	MSH to 24 hours
LEUKOCYTES	E6081	MSH to 24 hours
LEUKOCYTES	E6082	MSH to 24 hours
PLATELET-RICH BUFFY COAT	E3817	MSH to 24 hours
PLATELET-RICH BUFFY COAT	E3818	MSH to 24 hours
PLATELET-RICH BUFFY COAT	E3819	MSH to 24 hours
PLATELET-RICH BUFFY COAT	E3820	MSH to 24 hours
PLATELET-RICH BUFFY COAT	E3831	MSH to 24 hours
PLATELET-RICH BUFFY COAT	E3935	MSH to 24 hours
PLATELET-RICH BUFFY COAT	E5274	MSH to 24 hours
PLATELET-RICH PLASMA	12301	PV 225 to 200
PLATELETS	27682	PV 50 to 15
PLATELETS	27683	PV 50 to 15
PLATELETS	27685	PV 50 to 15
PLATELETS	27686	PV 50 to 15
PLATELETS	E4624	MSH 120 to 4
PLATELETS	E5344	PV 50 to 15
PLATELETS	E5345	PV 50 to 15
PLATELETS	E5346	PV 50 to 15
PLATELETS	E5347	PV 50 to 15
PLATELETS	E5381	MSH 24 to 4
PLATELETS	E5613	PV 500 to 15
PLATELETS	E5614	PV 500 to 15

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
PLATELETS	E5779	PV 500 to 50
POOLED GRANULOCYTES	E3679	MSH to 4 hours
POOLED GRANULOCYTES	E3680	MSH to 4 hours
POOLED GRANULOCYTES	E3681	MSH to 4 hours
POOLED GRANULOCYTES	E3682	MSH to 4 hours
POOLED GRANULOCYTES	E3683	MSH to 4 hours
POOLED GRANULOCYTES	E3684	MSH to 4 hours
POOLED GRANULOCYTES	E3685	MSH to 4 hours
POOLED GRANULOCYTES	E3686	MSH to 4 hours
POOLED GRANULOCYTES	E3687	MSH to 4 hours
POOLED GRANULOCYTES	E3688	MSH to 4 hours
POOLED GRANULOCYTES	E3689	MSH to 4 hours
POOLED GRANULOCYTES	E3690	MSH to 4 hours
POOLED GRANULOCYTES	E3967	MSH to 4 hours
POOLED GRANULOCYTES	E3987	MSH to 4 hours
POOLED GRANULOCYTES	E3988	MSH to 4 hours
POOLED GRANULOCYTES	E3989	MSH to 4 hours
POOLED GRANULOCYTES	E3990	MSH to 4 hours
POOLED GRANULOCYTES	E3991	MSH to 4 hours
POOLED PLASMA	E4991	Added "I" between "refg" and "Open" in ProductName
POOLED PLATELET-RICH BUFFY COAT	E3832	MSH to 4 hours
POOLED PLATELET-RICH BUFFY COAT	E3833	MSH to 4 hours
POOLED PLATELET-RICH BUFFY COAT	E6039	MSH to 4 hours
POOLED PLATELET-RICH BUFFY COAT	E6040	MSH to 4 hours
POOLED PLATELETS	12064	MSH to 4 hours
POOLED PLATELETS	12065	MSH to 4 hours
POOLED PLATELETS	E5279	MSH to 4 hours
POOLED PLATELETS	E5280	MSH to 4 hours
POOLED PLATELETS	E5297	MSH 120 to 4
POOLED PLATELETS	E5395	MSH to 4 hours
POOLED PLATELETS	E5396	MSH to 4 hours
POOLED PLATELETS	E6001	MSH to 4 hours
POOLED PLATELETS	E6013	MSH to 4 hours
POOLED PLATELETS	E6014	MSH to 4 hours
POOLED PLATELETS	E6016	MSH to 4 hours
POOLED PLATELETS	E6017	MSH to 4 hours
POOLED SERUM	E5144	MSH to 24 hours
RED BLOOD CELLS	04055	MSH 672 to 504
RED BLOOD CELLS	04254	MSH 672 to 1008
RED BLOOD CELLS	04355	MSH 672 to 504
RED BLOOD CELLS	04750	MSH 1008 to 840
RED BLOOD CELLS	05050	MSH 672 to 504
RED BLOOD CELLS	05051	MSH 672 to 504
RED BLOOD CELLS	05055	MSH 672 to 504
RED BLOOD CELLS	05080	MSH 672 to 504
RED BLOOD CELLS	05350	MSH 672 to 504
RED BLOOD CELLS	05351	MSH 672 to 504
RED BLOOD CELLS	05355	MSH 672 to 504
RED BLOOD CELLS	05380	MSH 672 to 504
RED BLOOD CELLS	24001	PV 250 to 350 and MSH 672 to 504 hours (21 days)
RED BLOOD CELLS	25001	PV 250 to 350 and MSH 672 to 504 hours (21 days)
RED BLOOD CELLS	27135	PV 450 to 250
RED BLOOD CELLS	27136	PV 450 to 250
RED BLOOD CELLS	27137	PV 450 to 250
RED BLOOD CELLS	27138	PV 450 to 250 and MSH 672 to 504
RED BLOOD CELLS	27139	PV 450 to 250
RED BLOOD CELLS	27140	PV 450 to 250
RED BLOOD CELLS	27141	PV 450 to 250
RED BLOOD CELLS	27142	PV 450 to 250
RED BLOOD CELLS	27143	PV 450 to 250
RED BLOOD CELLS	27144	PV 450 to 250
RED BLOOD CELLS	27145	PV 450 to 250

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
RED BLOOD CELLS	27146	PV 450 to 250
RED BLOOD CELLS	27147	PV 450 to 250
RED BLOOD CELLS	27148	PV 450 to 250
RED BLOOD CELLS	27149	PV 450 to 250
RED BLOOD CELLS	27150	PV 450 to 250
RED BLOOD CELLS	27151	PV 450 to 250
RED BLOOD CELLS	27152	PV 450 to 250
RED BLOOD CELLS	27153	PV 450 to 250
RED BLOOD CELLS	27154	PV 450 to 250
RED BLOOD CELLS	27155	PV 450 to 250
RED BLOOD CELLS	27156	PV 450 to 250
RED BLOOD CELLS	27157	PV 450 to 250 and MSH 672 to 504
RED BLOOD CELLS	27158	PV 450 to 250 and MSH 672 to 504
RED BLOOD CELLS	27159	PV 450 to 250 and MSH 672 to 504
RED BLOOD CELLS	27160	PV 450 to 250 and MSH 672 to 504
RED BLOOD CELLS	27161	PV 450 to 250
RED BLOOD CELLS	27162	PV 450 to 250
RED BLOOD CELLS	27163	PV 450 to 250
RED BLOOD CELLS	27164	PV 450 to 250
RED BLOOD CELLS	27165	PV 450 to 250
RED BLOOD CELLS	27174	MSH 672 to 504
RED BLOOD CELLS	27175	MSH 672 to 504
RED BLOOD CELLS	27178	PV 450 to 250
RED BLOOD CELLS	27179	PV 450 to 250
RED BLOOD CELLS	27180	PV 450 to 250
RED BLOOD CELLS	27181	PV 450 to 250
RED BLOOD CELLS	27182	PV 450 to 250
RED BLOOD CELLS	27183	PV 450 to 250
RED BLOOD CELLS	27184	PV 450 to 250
RED BLOOD CELLS	27185	PV 450 to 250
RED BLOOD CELLS	27186	PV 450 to 250
RED BLOOD CELLS	27187	PV 450 to 250
RED BLOOD CELLS	27188	PV 450 to 250
RED BLOOD CELLS	27189	PV 450 to 250
RED BLOOD CELLS	27190	PV 450 to 250
RED BLOOD CELLS	27191	PV 450 to 250
RED BLOOD CELLS	27192	PV 450 to 250
RED BLOOD CELLS	27193	PV 450 to 250
RED BLOOD CELLS	27194	PV 450 to 250
RED BLOOD CELLS	27195	PV 450 to 250
RED BLOOD CELLS	27196	PV 450 to 250
RED BLOOD CELLS	27197	PV 450 to 250
RED BLOOD CELLS	27198	PV 450 to 250
RED BLOOD CELLS	27199	PV 450 to 250
RED BLOOD CELLS	27200	PV 450 to 250
RED BLOOD CELLS	27201	PV 450 to 250
RED BLOOD CELLS	27202	PV 450 to 250
RED BLOOD CELLS	27203	PV 450 to 250
RED BLOOD CELLS	27204	PV 450 to 250
RED BLOOD CELLS	27205	PV 450 to 250
RED BLOOD CELLS	27206	PV 450 to 250
RED BLOOD CELLS	27207	PV 450 to 250
RED BLOOD CELLS	27208	PV 450 to 250
RED BLOOD CELLS	27209	PV 450 to 250
RED BLOOD CELLS	27220	MSH 840 to 672
RED BLOOD CELLS	27221	MSH 840 to 672
RED BLOOD CELLS	27224	PV 450 to 250
RED BLOOD CELLS	27225	PV 450 to 250
RED BLOOD CELLS	27226	PV 450 to 250
RED BLOOD CELLS	27227	PV 450 to 250
RED BLOOD CELLS	27228	PV 450 to 250
RED BLOOD CELLS	27229	PV 450 to 250

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
RED BLOOD CELLS	27230	PV 450 to 250
RED BLOOD CELLS	27231	PV 450 to 250
RED BLOOD CELLS	27232	PV 450 to 250
RED BLOOD CELLS	27233	PV 450 to 250
RED BLOOD CELLS	27234	PV 450 to 250
RED BLOOD CELLS	27235	PV 450 to 250 and MSH 672 to 504
RED BLOOD CELLS	27236	PV 450 to 250 and MSH 672 to 504
RED BLOOD CELLS	27237	PV 450 to 250 and MSH 672 to 504
RED BLOOD CELLS	27238	PV 450 to 250
RED BLOOD CELLS	27239	PV 450 to 250
RED BLOOD CELLS	27240	PV 450 to 250
RED BLOOD CELLS	27241	PV 450 to 250
RED BLOOD CELLS	27242	PV 450 to 350
RED BLOOD CELLS	27243	PV 450 to 350
RED BLOOD CELLS	27244	PV 450 to 350
RED BLOOD CELLS	27245	PV 450 to 350
RED BLOOD CELLS	27246	PV 450 to 350
RED BLOOD CELLS	27247	PV 450 to 350
RED BLOOD CELLS	27248	PV 450 to 350
RED BLOOD CELLS	27249	PV 450 to 350
RED BLOOD CELLS	27250	PV 450 to 350
RED BLOOD CELLS	27251	PV 450 to 350
RED BLOOD CELLS	27252	PV 450 to 350
RED BLOOD CELLS	27253	PV 450 to 350
RED BLOOD CELLS	27254	PV 450 to 350
RED BLOOD CELLS	27255	PV 450 to 350
RED BLOOD CELLS	27256	PV 450 to 350
RED BLOOD CELLS	27257	PV 450 to 350
RED BLOOD CELLS	27258	PV 450 to 350
RED BLOOD CELLS	27259	PV 450 to 350
RED BLOOD CELLS	27260	PV 450 to 350
RED BLOOD CELLS	27261	PV 450 to 350
RED BLOOD CELLS	27262	PV 450 to 350
RED BLOOD CELLS	27263	PV 450 to 350
RED BLOOD CELLS	27264	PV 450 to 350
RED BLOOD CELLS	27265	PV 450 to 350
RED BLOOD CELLS	27266	PV 450 to 350
RED BLOOD CELLS	27267	PV 450 to 350
RED BLOOD CELLS	27268	PV 450 to 350
RED BLOOD CELLS	27269	PV 450 to 350
RED BLOOD CELLS	27270	PV 450 to 350
RED BLOOD CELLS	27271	PV 450 to 350
RED BLOOD CELLS	27272	PV 450 to 350
RED BLOOD CELLS	27273	PV 450 to 350
RED BLOOD CELLS	27274	PV 450 to 350
RED BLOOD CELLS	27275	PV 450 to 350
RED BLOOD CELLS	27276	PV 450 to 350
RED BLOOD CELLS	27277	PV 450 to 350
RED BLOOD CELLS	27278	PV 450 to 350
RED BLOOD CELLS	27279	PV 450 to 350
RED BLOOD CELLS	27280	PV 450 to 350
RED BLOOD CELLS	27281	PV 450 to 350
RED BLOOD CELLS	27282	PV 450 to 350
RED BLOOD CELLS	27283	PV 450 to 350
RED BLOOD CELLS	27284	PV 500 to 350
RED BLOOD CELLS	27285	PV 500 to 350
RED BLOOD CELLS	27286	PV 500 to 350 and MSH 1008 to 672
RED BLOOD CELLS	27287	PV 500 to 350 and MSH 1008 to 672
RED BLOOD CELLS	27636	MSH 672 to 504
RED BLOOD CELLS	27638	MSH 672 to 504
RED BLOOD CELLS	34051	MSH 672 to 504
RED BLOOD CELLS	34052	MSH 672 to 504

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
RED BLOOD CELLS	34053	MSH 672 to 504
RED BLOOD CELLS	34054	MSH 672 to 504
RED BLOOD CELLS	34055	MSH 672 to 504
RED BLOOD CELLS	34056	MSH 672 to 504
RED BLOOD CELLS	34057	MSH 672 to 504
RED BLOOD CELLS	34058	MSH 672 to 504
RED BLOOD CELLS	34351	MSH 672 to 504
RED BLOOD CELLS	34352	MSH 672 to 504
RED BLOOD CELLS	34353	MSH 672 to 504
RED BLOOD CELLS	34354	MSH 672 to 504
RED BLOOD CELLS	34355	MSH 672 to 504
RED BLOOD CELLS	34356	MSH 672 to 504
RED BLOOD CELLS	34357	MSH 672 to 504
RED BLOOD CELLS	34358	MSH 672 to 504
RED BLOOD CELLS	35051	MSH 672 to 504
RED BLOOD CELLS	35052	MSH 672 to 504
RED BLOOD CELLS	35053	MSH 672 to 504
RED BLOOD CELLS	35054	MSH 672 to 504
RED BLOOD CELLS	35055	MSH 672 to 504
RED BLOOD CELLS	35056	MSH 672 to 504
RED BLOOD CELLS	35057	MSH 672 to 504
RED BLOOD CELLS	35058	MSH 672 to 504
RED BLOOD CELLS	35081	MSH 672 to 504
RED BLOOD CELLS	35082	MSH 672 to 504
RED BLOOD CELLS	35083	MSH 672 to 504
RED BLOOD CELLS	35084	MSH 672 to 504
RED BLOOD CELLS	35085	MSH 672 to 504
RED BLOOD CELLS	35086	MSH 672 to 504
RED BLOOD CELLS	35087	MSH 672 to 504
RED BLOOD CELLS	35088	MSH 672 to 504
RED BLOOD CELLS	35351	MSH 672 to 504
RED BLOOD CELLS	35352	MSH 672 to 504
RED BLOOD CELLS	35353	MSH 672 to 504
RED BLOOD CELLS	35354	MSH 672 to 504
RED BLOOD CELLS	35355	MSH 672 to 504
RED BLOOD CELLS	35356	MSH 672 to 504
RED BLOOD CELLS	35357	MSH 672 to 504
RED BLOOD CELLS	35358	MSH 672 to 504
RED BLOOD CELLS	35381	MSH 672 to 504
RED BLOOD CELLS	35382	MSH 672 to 504
RED BLOOD CELLS	35383	MSH 672 to 504
RED BLOOD CELLS	35384	MSH 672 to 504
RED BLOOD CELLS	35385	MSH 672 to 504
RED BLOOD CELLS	35386	MSH 672 to 504
RED BLOOD CELLS	35387	MSH 672 to 504
RED BLOOD CELLS	35388	MSH 672 to 504
RED BLOOD CELLS	E0142	MSH 672 to 504
RED BLOOD CELLS	E0143	MSH 672 to 504
RED BLOOD CELLS	E0144	MSH 672 to 504
RED BLOOD CELLS	E0145	MSH 672 to 504
RED BLOOD CELLS	E0146	MSH 672 to 504
RED BLOOD CELLS	E0147	MSH 672 to 504
RED BLOOD CELLS	E0148	MSH 672 to 504
RED BLOOD CELLS	E0149	MSH 672 to 504
RED BLOOD CELLS	E0150	MSH 672 to 504
RED BLOOD CELLS	E0151	MSH 672 to 504
RED BLOOD CELLS	E0152	MSH 672 to 504
RED BLOOD CELLS	E0153	MSH 672 to 504
RED BLOOD CELLS	E0161	MSH 672 to 504
RED BLOOD CELLS	E0162	MSH 672 to 504
RED BLOOD CELLS	E0163	MSH 672 to 504
RED BLOOD CELLS	E0164	MSH 672 to 504

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
RED BLOOD CELLS	E0165	MSH 672 to 504
RED BLOOD CELLS	E0166	MSH 672 to 504
RED BLOOD CELLS	E0167	MSH 672 to 504
RED BLOOD CELLS	E0168	MSH 672 to 504
RED BLOOD CELLS	E0169	MSH 672 to 504
RED BLOOD CELLS	E0170	MSH 672 to 504
RED BLOOD CELLS	E0178	MSH 672 to 504
RED BLOOD CELLS	E0179	MSH 672 to 504
RED BLOOD CELLS	E0180	MSH 672 to 504
RED BLOOD CELLS	E0181	MSH 672 to 504
RED BLOOD CELLS	E0182	MSH 672 to 504
RED BLOOD CELLS	E0183	MSH 672 to 504
RED BLOOD CELLS	E0184	MSH 672 to 504
RED BLOOD CELLS	E0185	MSH 672 to 504
RED BLOOD CELLS	E0186	MSH 672 to 504
RED BLOOD CELLS	E0187	MSH 672 to 504
RED BLOOD CELLS	E0188	MSH 672 to 504
RED BLOOD CELLS	E0189	MSH 672 to 504
RED BLOOD CELLS	E0190	MSH 672 to 504
RED BLOOD CELLS	E0191	MSH 672 to 504
RED BLOOD CELLS	E0192	MSH 672 to 504
RED BLOOD CELLS	E0193	MSH 672 to 504
RED BLOOD CELLS	E0194	MSH 672 to 504
RED BLOOD CELLS	E0256	MSH 672 to 504
RED BLOOD CELLS	E0257	MSH 672 to 504
RED BLOOD CELLS	E0258	MSH 672 to 504
RED BLOOD CELLS	E0273	MSH 672 to 504
RED BLOOD CELLS	E0274	MSH 672 to 504
RED BLOOD CELLS	E0275	MSH 672 to 504
RED BLOOD CELLS	E0288	MSH 672 to 504
RED BLOOD CELLS	E0289	MSH 672 to 504
RED BLOOD CELLS	E0290	MSH 672 to 504
RED BLOOD CELLS	E0429	PV 450 to 350 and MSH 1008 to 840
RED BLOOD CELLS	E0430	PV 450 to 350 and MSH 1008 to 840
RED BLOOD CELLS	E0431	PV 450 to 350 and MSH 1008 to 840
RED BLOOD CELLS	E0432	PV 450 to 350 and MSH 1008 to 840
RED BLOOD CELLS	E0433	PV 450 to 350
RED BLOOD CELLS	E0434	PV 450 to 350
RED BLOOD CELLS	E0435	PV 450 to 350
RED BLOOD CELLS	E0436	PV 450 to 350
RED BLOOD CELLS	E0437	PV 450 to 350
RED BLOOD CELLS	E0438	PV 450 to 350
RED BLOOD CELLS	E0439	PV 450 to 350 and MSH 1008 to 840
RED BLOOD CELLS	E0440	MSH 1008 to 840
RED BLOOD CELLS	E0441	MSH 1008 to 840
RED BLOOD CELLS	E0442	MSH 1008 to 840
RED BLOOD CELLS	E0443	MSH 1008 to 840
RED BLOOD CELLS	E0450	MSH 1008 to 840
RED BLOOD CELLS	E3844	PV 450 to 350 and MSH 1008 to 840
RED BLOOD CELLS	E3845	PV 450 to 350
RED BLOOD CELLS	E3846	PV 450 to 350 and MSH 1008 to 840
RED BLOOD CELLS	E3847	PV 450 to 350
RED BLOOD CELLS	E3848	PV 450 to 350 and MSH 1008 to 840
RED BLOOD CELLS	E3849	PV 450 to 350
RED BLOOD CELLS	E3850	PV 450 to 350 and MSH 1008 to 840
RED BLOOD CELLS	E3936	Added " " between "refg" and "Irradiated" in ProductName
RED BLOOD CELLS	E3936	MSH 672 to 504
RED BLOOD CELLS	E3937	MSH 672 to 504
RED BLOOD CELLS	E3938	MSH 672 to 504
RED BLOOD CELLS	E4033	MSH 672 to 504
RED BLOOD CELLS	E4037	MSH 672 to 504
RED BLOOD CELLS	E4038	MSH 672 to 504

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
RED BLOOD CELLS	E4046	PV 450 to 350 and MSH 1008 to 840
RED BLOOD CELLS	E4076	PV 450 to 350
RED BLOOD CELLS	E4115	PV 450 to 350
RED BLOOD CELLS	E4116	PV 450 to 350 and MSH 1008 to 840
RED BLOOD CELLS	E4139	PV 450 to 350 and MSH 1008 to 840
RED BLOOD CELLS	E4156	PV 1 to 350
RED BLOOD CELLS	E4157	PV 1 to 350
RED BLOOD CELLS	E4158	PV 1 to 350
RED BLOOD CELLS	E4159	PV 450 to 350 and MSH 1008 to 840
RED BLOOD CELLS	E4160	PV 450 to 350
RED BLOOD CELLS	E4161	PV 1 to 350 and MSH 1008 to 840
RED BLOOD CELLS	E4210	PV 450 to 350
RED BLOOD CELLS	E4397	PV 450 to 350
RED BLOOD CELLS	E4400	PV 450 to 350
RED BLOOD CELLS	E4906	MSH 672 to 504
RED BLOOD CELLS	E4908	MSH 672 to 504
RED BLOOD CELLS	E4910	MSH 672 to 504
RED BLOOD CELLS	E4912	MSH 672 to 504
RED BLOOD CELLS	E4914	MSH 672 to 504
RED BLOOD CELLS	E4916	MSH 672 to 504
RED BLOOD CELLS	E4918	MSH 672 to 504
RED BLOOD CELLS	E4920	MSH 672 to 504
RED BLOOD CELLS	E4922	MSH 672 to 504
RED BLOOD CELLS	E4924	MSH 672 to 504
RED BLOOD CELLS	E4926	MSH 672 to 504
RED BLOOD CELLS	E4928	MSH 672 to 504
RED BLOOD CELLS	E4930	MSH 672 to 504
RED BLOOD CELLS	E4932	MSH 672 to 504
RED BLOOD CELLS	E4934	MSH 672 to 504
RED BLOOD CELLS	E4936	MSH 672 to 504
RED BLOOD CELLS	E5059	PV 450 to 350
RED BLOOD CELLS	E5067	MSH 672 to 504
RED BLOOD CELLS	E5077	PV 500 to 350
RED BLOOD CELLS	E5129	PV 350 to 250 and MSH 1008 to 504
RED BLOOD CELLS	E5130	PV 450 to 250
RED BLOOD CELLS	E5131	PV 450 to 250
RED BLOOD CELLS	E5132	PV 350 to 250 and MSH 1008 to 504
RED BLOOD CELLS	E5133	PV 350 to 250
RED BLOOD CELLS	E5134	PV 450 to 250
RED BLOOD CELLS	E5135	PV 450 to 250
RED BLOOD CELLS	E5136	PV 350 to 250 and MSH 672 to 504
RED BLOOD CELLS	E5137	PV 350 to 250
RED BLOOD CELLS	E5138	PV 450 to 350
RED BLOOD CELLS	E5139	PV 450 to 350
RED BLOOD CELLS	E5154	PV 250 to 350
RED BLOOD CELLS	E5159	PV 250 to 350
RED BLOOD CELLS	E5161	MSH 672 to 504
RED BLOOD CELLS	E5164	PV 250 to 350
RED BLOOD CELLS	E5167	PV 250 to 350 and MSH 504 to 672
RED BLOOD CELLS	E5239	PV 450 to 250
RED BLOOD CELLS	E5247	PV 350 to 250
RED BLOOD CELLS	E5252	PV 350 to 250 and MSH 672 to 504
RED BLOOD CELLS	E5253	PV 350 to 250 and MSH 672 to 504
RED BLOOD CELLS	E5258	PV 450 to 350 and MSH 1008 to 840
RED BLOOD CELLS	E5259	PV 450 to 350 and MSH 1008 to 840
RED BLOOD CELLS	E5260	PV 450 to 350
RED BLOOD CELLS	E5261	PV 450 to 350
RED BLOOD CELLS	E5339	PV 500 to 350 and MSH 504 to 1008
RED BLOOD CELLS	E5360	PV 350 to 250 and MSH 8760 to 504
RED BLOOD CELLS	E5361	PV 350 to 250 and MSH 672 to 504
RED BLOOD CELLS	E5364	MSH 672 to 504
RED BLOOD CELLS	E5365	MSH 2008 to 504

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
RED BLOOD CELLS	E5366	PV 250 to 350
RED BLOOD CELLS	E5367	PV 250 to 350
RED BLOOD CELLS	E5368	PV 250 to 350
RED BLOOD CELLS	E5369	PV 250 to 350
RED BLOOD CELLS	E5376	MSH 840 to 672
RED BLOOD CELLS	E5440	PV 200 to 150 and MSH 504 to 1008
RED BLOOD CELLS	E5441	PV 200 to 150 and MSH 504 to 1008
RED BLOOD CELLS	E5442	PV 200 to 150
RED BLOOD CELLS	E5443	PV 200 to 150
RED BLOOD CELLS	E5444	PV 200 to 150 and MSH 504 to 1008
RED BLOOD CELLS	E5445	PV 200 to 150 and MSH 504 to 1008
RED BLOOD CELLS	E5446	PV 200 to 150
RED BLOOD CELLS	E5447	PV 200 to 150
RED BLOOD CELLS	E5497	MSH 672 to 504
RED BLOOD CELLS	E5500	MSH 672 to 504
RED BLOOD CELLS	E5517	MSH 1008 to 840
RED BLOOD CELLS	E5553	MSH 672 to 504
RED BLOOD CELLS	E5556	MSH 672 to 504
RED BLOOD CELLS	E5557	MSH 672 to 504
RED BLOOD CELLS	E5558	MSH 672 to 504
RED BLOOD CELLS	E5585	PV 450 to 250
RED BLOOD CELLS	E5586	PV 450 to 250 and MSH 672 to 504
RED BLOOD CELLS	E5590	PV 500 to 350
RED BLOOD CELLS	E5591	PV 500 to 350
RED BLOOD CELLS	E5598	PV 500 to 350
RED BLOOD CELLS	E5608	PV 450 to 350
RED BLOOD CELLS	E5609	PV 450 to 350
RED BLOOD CELLS	E5610	PV 450 to 350
RED BLOOD CELLS	E5626	PV 450 to 250
RED BLOOD CELLS	E5627	PV 500 to 250
RED BLOOD CELLS	E5643	PV 450 to 250 and MSH 672 to 24
RED BLOOD CELLS	E5644	PV 450 to 250 and MSH 504 to 24
RED BLOOD CELLS	E5648	PV 450 to 250
RED BLOOD CELLS	E5670	PV 500 to 250
RED BLOOD CELLS	E5671	PV 500 to 250
RED BLOOD CELLS	E5672	PV 500 to 250
RED BLOOD CELLS	E5673	PV 500 to 250
RED BLOOD CELLS	E5674	PV 500 to 250
RED BLOOD CELLS	E5675	PV 500 to 250
RED BLOOD CELLS	E5676	PV 500 to 250
RED BLOOD CELLS	E5677	PV 500 to 250
RED BLOOD CELLS	E5678	PV 500 to 250
RED BLOOD CELLS	E5705	PV 450 to 250
RED BLOOD CELLS	E5706	PV 450 to 250 and MSH 672 to 504
RED BLOOD CELLS	E5707	PV 450 to 250 and MSH 672 to 504
RED BLOOD CELLS	E5726	PV 500 to 250
RED BLOOD CELLS	E5727	PV 500 to 250
RED BLOOD CELLS	E5746	PV 500 to 250
RED BLOOD CELLS	E5747	PV 500 to 250 and MSH 840 to 672
REJUVENATED RED BLOOD CELLS	27386	PV 450 to 200
REJUVENATED RED BLOOD CELLS	27387	PV 450 to 200
REJUVENATED RED BLOOD CELLS	27388	PV 450 to 200
REJUVENATED RED BLOOD CELLS	27389	PV 450 to 200
REJUVENATED RED BLOOD CELLS	27390	PV 250 to 200
REJUVENATED RED BLOOD CELLS	27391	PV 250 to 200
REJUVENATED RED BLOOD CELLS	27392	PV 250 to 200
REJUVENATED RED BLOOD CELLS	27393	PV 250 to 200
REJUVENATED RED BLOOD CELLS	27394	PV 250 to 200
REJUVENATED RED BLOOD CELLS	27395	PV 250 to 200
REJUVENATED RED BLOOD CELLS	27396	PV 250 to 200
REJUVENATED RED BLOOD CELLS	27397	PV 250 to 200
REJUVENATED RED BLOOD CELLS	27398	PV 250 to 200

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
REJUVENATED RED BLOOD CELLS	27399	PV 250 to 200
REJUVENATED RED BLOOD CELLS	27400	PV 250 to 200
REJUVENATED RED BLOOD CELLS	E0571	MSH 24 to 336
REJUVENATED RED BLOOD CELLS	E0572	MSH 24 to 336
REJUVENATED RED BLOOD CELLS	E0580	MSH 24 to 336
REJUVENATED RED BLOOD CELLS	E0581	MSH 24 to 336
REJUVENATED RED BLOOD CELLS	E0582	MSH 24 to 336
REJUVENATED RED BLOOD CELLS	E0583	MSH 24 to 336
REJUVENATED RED BLOOD CELLS	E0584	MSH 24 to 336
REJUVENATED RED BLOOD CELLS	E0585	MSH 24 to 336
REJUVENATED RED BLOOD CELLS	E0586	MSH 24 to 336
REJUVENATED RED BLOOD CELLS	E0594	MSH 24 to 336
REJUVENATED RED BLOOD CELLS	E0595	MSH 24 to 336
REJUVENATED RED BLOOD CELLS	E0596	MSH 24 to 336
REJUVENATED RED BLOOD CELLS	E0597	MSH 24 to 336
REJUVENATED RED BLOOD CELLS	E0598	MSH 24 to 336
REJUVENATED RED BLOOD CELLS	E0599	MSH 24 to 336
REJUVENATED RED BLOOD CELLS	E0600	MSH 24 to 336
REJUVENATED RED BLOOD CELLS	E0604	MSH 24 to 336
SERUM	E3894	MSH to 8760 hours (1 year)
THAWED APHERESIS FRESH FROZEN PLASMA	E6097	MSH to 24 hours
THAWED APHERESIS PLASMA	27499	MSH 24 to 120
THAWED APHERESIS PLASMA	27667	MSH 24 to 120
THAWED APHERESIS PLASMA	27668	MSH 24 to 120
THAWED APHERESIS PLASMA	27670	MSH 24 to 120
THAWED APHERESIS PLASMA	27671	MSH 24 to 120
THAWED APHERESIS PLASMA	27672	MSH 24 to 120
THAWED APHERESIS PLASMA	27673	MSH 24 to 120
THAWED APHERESIS PLASMA	27674	MSH 24 to 120
THAWED APHERESIS PLASMA	27675	MSH 24 to 120
THAWED APHERESIS PLASMA	27676	MSH 24 to 120
THAWED APHERESIS PLASMA	27677	MSH 24 to 120
THAWED APHERESIS PLASMA	E1953	MSH 24 to 120
THAWED APHERESIS PLASMA	E1954	MSH 24 to 120
THAWED APHERESIS PLASMA	E1967	MSH 24 to 120
THAWED APHERESIS PLASMA	E1968	MSH 24 to 120
THAWED APHERESIS PLASMA	E1969	MSH 24 to 120
THAWED APHERESIS PLASMA	E1970	MSH 24 to 120
THAWED APHERESIS PLASMA	E1971	MSH 24 to 120
THAWED APHERESIS PLASMA	E1972	MSH 24 to 120
THAWED APHERESIS PLASMA	E1973	MSH 24 to 120
THAWED APHERESIS PLASMA	E1974	MSH 24 to 120
THAWED APHERESIS PLASMA	E1975	MSH 24 to 120
THAWED APHERESIS PLASMA	E1976	MSH 24 to 120
THAWED APHERESIS PLASMA	E1977	MSH 24 to 120
THAWED APHERESIS PLASMA	E2050	MSH 24 to 120
THAWED APHERESIS PLASMA	E2051	MSH 24 to 120
THAWED APHERESIS PLASMA	E2052	MSH 24 to 120
THAWED APHERESIS PLASMA	E2053	MSH 24 to 120
THAWED APHERESIS PLASMA	E2054	MSH 24 to 120
THAWED APHERESIS PLASMA	E2055	MSH 24 to 120
THAWED APHERESIS PLASMA	E2056	MSH 24 to 120
THAWED APHERESIS PLASMA	E2057	MSH 24 to 120
THAWED APHERESIS PLASMA	E2058	MSH 24 to 120
THAWED APHERESIS PLASMA	E2059	MSH 24 to 120
THAWED APHERESIS PLASMA	E2060	MSH 24 to 120
THAWED APHERESIS PLASMA	E2061	MSH 24 to 120
THAWED APHERESIS PLASMA	E2062	MSH 24 to 120
THAWED APHERESIS PLASMA	E2063	MSH 24 to 120
THAWED APHERESIS PLASMA	E2064	MSH 24 to 120
THAWED APHERESIS PLASMA	E2065	MSH 24 to 120
THAWED APHERESIS PLASMA	E2066	MSH 24 to 120

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
THAWED APHERESIS PLASMA	E2067	MSH 24 to 120
THAWED APHERESIS PLASMA	E2068	MSH 24 to 120
THAWED APHERESIS PLASMA	E2069	MSH 24 to 120
THAWED APHERESIS PLASMA	E2070	MSH 24 to 120
THAWED APHERESIS PLASMA	E2071	MSH 24 to 120
THAWED APHERESIS PLASMA	E2072	MSH 24 to 120
THAWED APHERESIS PLASMA	E2073	MSH 24 to 120
THAWED APHERESIS PLASMA	E2074	MSH 24 to 120
THAWED APHERESIS PLASMA	E2075	MSH 24 to 120
THAWED APHERESIS PLASMA	E2076	MSH 24 to 120
THAWED APHERESIS PLASMA	E2077	MSH 24 to 120
THAWED APHERESIS PLASMA	E2078	MSH 24 to 120
THAWED APHERESIS PLASMA	E2079	MSH 24 to 120
THAWED APHERESIS PLASMA	E2080	MSH 24 to 120
THAWED APHERESIS PLASMA	E2081	MSH 24 to 120
THAWED APHERESIS PLASMA	E2082	MSH 24 to 120
THAWED APHERESIS PLASMA	E2083	MSH 24 to 120
THAWED APHERESIS PLASMA	E2084	MSH 24 to 120
THAWED APHERESIS PLASMA	E2085	MSH 24 to 120
THAWED APHERESIS PLASMA	E2086	MSH 24 to 120
THAWED APHERESIS PLASMA	E2087	MSH 24 to 120
THAWED APHERESIS PLASMA	E2088	MSH 24 to 120
THAWED APHERESIS PLASMA	E2089	MSH 24 to 120
THAWED APHERESIS PLASMA	E2090	MSH 24 to 120
THAWED APHERESIS PLASMA	E2091	MSH 24 to 120
THAWED APHERESIS PLASMA	E2092	MSH 24 to 120
THAWED APHERESIS PLASMA	E2093	MSH 24 to 120
THAWED APHERESIS PLASMA	E2094	MSH 24 to 120
THAWED APHERESIS PLASMA	E2095	MSH 24 to 120
THAWED APHERESIS PLASMA	E2096	MSH 24 to 120
THAWED APHERESIS PLASMA	E2097	MSH 24 to 120
THAWED APHERESIS PLASMA	E2098	MSH 24 to 120
THAWED APHERESIS PLASMA	E2099	MSH 24 to 120
THAWED APHERESIS PLASMA	E2100	MSH 24 to 120
THAWED APHERESIS PLASMA	E2101	MSH 24 to 120
THAWED APHERESIS PLASMA	E2102	MSH 24 to 120
THAWED APHERESIS PLASMA	E2103	MSH 24 to 120
THAWED APHERESIS PLASMA	E2104	MSH 24 to 120
THAWED APHERESIS PLASMA	E2105	MSH 24 to 120
THAWED APHERESIS PLASMA	E2106	MSH 24 to 120
THAWED APHERESIS PLASMA	E2107	MSH 24 to 120
THAWED APHERESIS PLASMA	E2108	MSH 24 to 120
THAWED APHERESIS PLASMA	E2109	MSH 24 to 120
THAWED APHERESIS PLASMA	E2110	MSH 24 to 120
THAWED APHERESIS PLASMA	E2111	MSH 24 to 120
THAWED APHERESIS PLASMA	E2112	MSH 24 to 120
THAWED APHERESIS PLASMA	E2113	MSH 24 to 120
THAWED APHERESIS PLASMA	E2114	MSH 24 to 120
THAWED APHERESIS PLASMA	E2115	MSH 24 to 120
THAWED APHERESIS PLASMA	E2116	MSH 24 to 120
THAWED APHERESIS PLASMA	E2117	MSH 24 to 120
THAWED APHERESIS PLASMA	E2118	MSH 24 to 120
THAWED APHERESIS PLASMA	E2119	MSH 24 to 120
THAWED APHERESIS PLASMA	E2120	MSH 24 to 120
THAWED APHERESIS PLASMA	E2121	MSH 24 to 120
THAWED APHERESIS PLASMA	E2122	MSH 24 to 120
THAWED APHERESIS PLASMA	E2135	MSH 24 to 120
THAWED APHERESIS PLASMA	E2136	MSH 24 to 120
THAWED APHERESIS PLASMA	E2137	MSH 24 to 120
THAWED APHERESIS PLASMA	E2138	MSH 24 to 120
THAWED APHERESIS PLASMA	E2139	MSH 24 to 120
THAWED APHERESIS PLASMA	E2140	MSH 24 to 120

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
THAWED APHERESIS PLASMA	E2141	MSH 24 to 120
THAWED APHERESIS PLASMA	E2142	MSH 24 to 120
THAWED APHERESIS PLASMA	E2143	MSH 24 to 120
THAWED APHERESIS PLASMA	E2144	MSH 24 to 120
THAWED APHERESIS PLASMA	E2145	MSH 24 to 120
THAWED APHERESIS PLASMA	E2218	MSH 24 to 120
THAWED APHERESIS PLASMA	E2219	MSH 24 to 120
THAWED APHERESIS PLASMA	E2220	MSH 24 to 120
THAWED APHERESIS PLASMA	E2221	MSH 24 to 120
THAWED APHERESIS PLASMA	E2222	MSH 24 to 120
THAWED APHERESIS PLASMA	E2223	MSH 24 to 120
THAWED APHERESIS PLASMA	E2224	MSH 24 to 120
THAWED APHERESIS PLASMA	E2225	MSH 24 to 120
THAWED APHERESIS PLASMA	E2226	MSH 24 to 120
THAWED APHERESIS PLASMA	E2227	MSH 24 to 120
THAWED APHERESIS PLASMA	E2228	MSH 24 to 120
THAWED APHERESIS PLASMA	E2229	MSH 24 to 120
THAWED APHERESIS PLASMA	E2230	MSH 24 to 120
THAWED APHERESIS PLASMA	E2231	MSH 24 to 120
THAWED APHERESIS PLASMA	E2232	MSH 24 to 120
THAWED APHERESIS PLASMA	E2233	MSH 24 to 120
THAWED APHERESIS PLASMA	E2234	MSH 24 to 120
THAWED APHERESIS PLASMA	E2235	MSH 24 to 120
THAWED APHERESIS PLASMA	E2236	MSH 24 to 120
THAWED APHERESIS PLASMA	E2237	MSH 24 to 120
THAWED APHERESIS PLASMA	E2238	MSH 24 to 120
THAWED APHERESIS PLASMA	E2239	MSH 24 to 120
THAWED APHERESIS PLASMA	E2240	MSH 24 to 120
THAWED APHERESIS PLASMA	E2241	MSH 24 to 120
THAWED APHERESIS PLASMA	E2242	MSH 24 to 120
THAWED APHERESIS PLASMA	E2243	MSH 24 to 120
THAWED APHERESIS PLASMA	E2244	MSH 24 to 120
THAWED APHERESIS PLASMA	E2245	MSH 24 to 120
THAWED APHERESIS PLASMA	E2246	MSH 24 to 120
THAWED APHERESIS PLASMA	E2247	MSH 24 to 120
THAWED APHERESIS PLASMA	E2248	MSH 24 to 120
THAWED APHERESIS PLASMA	E2249	MSH 24 to 120
THAWED APHERESIS PLASMA	E2250	MSH 24 to 120
THAWED APHERESIS PLASMA	E2251	MSH 24 to 120
THAWED APHERESIS PLASMA	E2252	MSH 24 to 120
THAWED APHERESIS PLASMA	E2253	MSH 24 to 120
THAWED APHERESIS PLASMA	E2254	MSH 24 to 120
THAWED APHERESIS PLASMA	E2255	MSH 24 to 120
THAWED APHERESIS PLASMA	E2256	MSH 24 to 120
THAWED APHERESIS PLASMA	E2257	MSH 24 to 120
THAWED APHERESIS PLASMA	E2258	MSH 24 to 120
THAWED APHERESIS PLASMA	E2259	MSH 24 to 120
THAWED APHERESIS PLASMA	E2260	MSH 24 to 120
THAWED APHERESIS PLASMA	E2261	MSH 24 to 120
THAWED APHERESIS PLASMA	E2262	MSH 24 to 120
THAWED APHERESIS PLASMA	E2263	MSH 24 to 120
THAWED APHERESIS PLASMA	E2264	MSH 24 to 120
THAWED APHERESIS PLASMA	E2265	MSH 24 to 120
THAWED APHERESIS PLASMA	E2266	MSH 24 to 120
THAWED APHERESIS PLASMA	E2267	MSH 24 to 120
THAWED APHERESIS PLASMA	E2268	MSH 24 to 120
THAWED APHERESIS PLASMA	E2269	MSH 24 to 120
THAWED APHERESIS PLASMA	E2270	MSH 24 to 120
THAWED APHERESIS PLASMA	E2271	MSH 24 to 120
THAWED APHERESIS PLASMA	E2272	MSH 24 to 120
THAWED APHERESIS PLASMA	E2273	MSH 24 to 120
THAWED APHERESIS PLASMA	E2274	MSH 24 to 120

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
THAWED APHERESIS PLASMA	E2275	MSH 24 to 120
THAWED APHERESIS PLASMA	E2276	MSH 24 to 120
THAWED APHERESIS PLASMA	E2277	MSH 24 to 120
THAWED APHERESIS PLASMA	E2278	MSH 24 to 120
THAWED APHERESIS PLASMA	E2279	MSH 24 to 120
THAWED APHERESIS PLASMA	E2280	MSH 24 to 120
THAWED APHERESIS PLASMA	E2281	MSH 24 to 120
THAWED APHERESIS PLASMA	E2282	MSH 24 to 120
THAWED APHERESIS PLASMA	E2283	MSH 24 to 120
THAWED APHERESIS PLASMA	E2284	MSH 24 to 120
THAWED APHERESIS PLASMA	E2285	MSH 24 to 120
THAWED APHERESIS PLASMA	E2286	MSH 24 to 120
THAWED APHERESIS PLASMA	E2287	MSH 24 to 120
THAWED APHERESIS PLASMA	E2288	MSH 24 to 120
THAWED APHERESIS PLASMA	E2289	MSH 24 to 120
THAWED APHERESIS PLASMA	E2290	MSH 24 to 120
THAWED APHERESIS PLASMA	E2303	MSH 24 to 120
THAWED APHERESIS PLASMA	E2304	MSH 24 to 120
THAWED APHERESIS PLASMA	E2305	MSH 24 to 120
THAWED APHERESIS PLASMA	E2306	MSH 24 to 120
THAWED APHERESIS PLASMA	E2307	MSH 24 to 120
THAWED APHERESIS PLASMA	E2308	MSH 24 to 120
THAWED APHERESIS PLASMA	E2309	MSH 24 to 120
THAWED APHERESIS PLASMA	E2310	MSH 24 to 120
THAWED APHERESIS PLASMA	E2311	MSH 24 to 120
THAWED APHERESIS PLASMA	E2312	MSH 24 to 120
THAWED APHERESIS PLASMA	E2313	MSH 24 to 120
THAWED APHERESIS PLASMA	E2386	MSH 24 to 120
THAWED APHERESIS PLASMA	E2387	MSH 24 to 120
THAWED APHERESIS PLASMA	E2388	MSH 24 to 120
THAWED APHERESIS PLASMA	E2389	MSH 24 to 120
THAWED APHERESIS PLASMA	E2390	MSH 24 to 120
THAWED APHERESIS PLASMA	E2391	MSH 24 to 120
THAWED APHERESIS PLASMA	E2392	MSH 24 to 120
THAWED APHERESIS PLASMA	E2393	MSH 24 to 120
THAWED APHERESIS PLASMA	E2394	MSH 24 to 120
THAWED APHERESIS PLASMA	E2395	MSH 24 to 120
THAWED APHERESIS PLASMA	E2396	MSH 24 to 120
THAWED APHERESIS PLASMA	E2397	MSH 24 to 120
THAWED APHERESIS PLASMA	E2398	MSH 24 to 120
THAWED APHERESIS PLASMA	E2399	MSH 24 to 120
THAWED APHERESIS PLASMA	E2400	MSH 24 to 120
THAWED APHERESIS PLASMA	E2401	MSH 24 to 120
THAWED APHERESIS PLASMA	E2402	MSH 24 to 120
THAWED APHERESIS PLASMA	E2403	MSH 24 to 120
THAWED APHERESIS PLASMA	E2404	MSH 24 to 120
THAWED APHERESIS PLASMA	E2405	MSH 24 to 120
THAWED APHERESIS PLASMA	E2406	MSH 24 to 120
Thawed Apheresis PLASMA	E2407	MSH 24 to 120
Thawed Apheresis PLASMA	E2408	MSH 24 to 120
Thawed Apheresis PLASMA	E2409	MSH 24 to 120
Thawed Apheresis PLASMA	E2410	MSH 24 to 120
Thawed Apheresis PLASMA	E2411	MSH 24 to 120
Thawed Apheresis PLASMA	E2412	MSH 24 to 120
Thawed Apheresis PLASMA	E2413	MSH 24 to 120
Thawed Apheresis PLASMA	E2414	MSH 24 to 120
Thawed Apheresis PLASMA	E2415	MSH 24 to 120
Thawed Apheresis PLASMA	E2416	MSH 24 to 120
Thawed Apheresis PLASMA	E2417	MSH 24 to 120
Thawed Apheresis PLASMA	E2418	MSH 24 to 120
Thawed Apheresis PLASMA	E2419	MSH 24 to 120
Thawed Apheresis PLASMA	E2420	MSH 24 to 120

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
Thawed Apheresis PLASMA	E2421	MSH 24 to 120
Thawed Apheresis PLASMA	E2422	MSH 24 to 120
Thawed Apheresis PLASMA	E2423	MSH 24 to 120
Thawed Apheresis PLASMA	E2424	MSH 24 to 120
Thawed Apheresis PLASMA	E2425	MSH 24 to 120
Thawed Apheresis PLASMA	E2426	MSH 24 to 120
Thawed Apheresis PLASMA	E2427	MSH 24 to 120
Thawed Apheresis PLASMA	E2428	MSH 24 to 120
Thawed Apheresis PLASMA	E2429	MSH 24 to 120
Thawed Apheresis PLASMA	E2430	MSH 24 to 120
Thawed Apheresis PLASMA	E2431	MSH 24 to 120
Thawed Apheresis PLASMA	E2432	MSH 24 to 120
Thawed Apheresis PLASMA	E2433	MSH 24 to 120
Thawed Apheresis PLASMA	E2434	MSH 24 to 120
Thawed Apheresis PLASMA	E2435	MSH 24 to 120
Thawed Apheresis PLASMA	E2436	MSH 24 to 120
Thawed Apheresis PLASMA	E2437	MSH 24 to 120
Thawed Apheresis PLASMA	E2438	MSH 24 to 120
Thawed Apheresis PLASMA	E2439	MSH 24 to 120
Thawed Apheresis PLASMA	E2440	MSH 24 to 120
Thawed Apheresis PLASMA	E2441	MSH 24 to 120
Thawed Apheresis PLASMA	E2442	MSH 24 to 120
Thawed Apheresis PLASMA	E2443	MSH 24 to 120
Thawed Apheresis PLASMA	E2444	MSH 24 to 120
Thawed Apheresis PLASMA	E2445	MSH 24 to 120
Thawed Apheresis PLASMA	E2446	MSH 24 to 120
Thawed Apheresis PLASMA	E2447	MSH 24 to 120
Thawed Apheresis PLASMA	E2448	MSH 24 to 120
Thawed Apheresis PLASMA	E2449	MSH 24 to 120
Thawed Apheresis PLASMA	E2450	MSH 24 to 120
Thawed Apheresis PLASMA	E2451	MSH 24 to 120
Thawed Apheresis PLASMA	E2452	MSH 24 to 120
Thawed Apheresis PLASMA	E2453	MSH 24 to 120
Thawed Apheresis PLASMA	E2454	MSH 24 to 120
Thawed Apheresis PLASMA	E2455	MSH 24 to 120
Thawed Apheresis PLASMA	E2456	MSH 24 to 120
THAWED APHERESIS PLASMA	E5428	MSH 24 to 120
THAWED APHERESIS PLASMA	E5429	MSH 24 to 120
THAWED APHERESIS PLASMA	E5430	MSH 24 to 120
THAWED APHERESIS PLASMA	E5431	MSH 24 to 120
THAWED APHERESIS PLASMA	E5489	MSH 24 to 120
THAWED APHERESIS PLASMA	E5548	MSH 24 to 120
THAWED APHERESIS PLASMA	E5549	MSH 24 to 120
THAWED APHERESIS PLASMA	E5550	MSH 24 to 120
THAWED APHERESIS PLASMA	E5641	MSH 24 to 120
THAWED APHERESIS PLASMA	E5642	MSH 24 to 120
THAWED APHERESIS PLATELETS	E6026	MSH to 4 hours
THAWED FRESH FROZEN PLASMA	18101	Change ProductShortName "FFP Thaw None" to "PLASMA Thaw None"
THAWED FRESH FROZEN PLASMA	18161	MSH 24 to 120
THAWED FRESH FROZEN PLASMA	18289	MSH 6 to 24
THAWED FRESH FROZEN PLASMA	18531	PV 125 to 225
THAWED FRESH FROZEN PLASMA	18931	PV 125 to 225
THAWED FRESH FROZEN PLASMA	19501	PV 250 to 225
THAWED FRESH FROZEN PLASMA	19531	PV 125 to 225
THAWED FRESH FROZEN PLASMA	89501	PV 250 to 225
THAWED FRESH FROZEN PLASMA	E5734	PV 500 to 225
THAWED FRESH FROZEN PLASMA	E5735	PV 500 to 225
THAWED FRESH FROZEN PLASMA	E6036	MSH to 24 hours
THAWED POOLED PLASMA	E5275	MSH 120 to 24
THAWED POOLED PLASMA	E5304	MSH 120 to 24
THAWED POOLED PLASMA	E5305	MSH 120 to 24

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
THAWED POOLED PLASMA	E5306	MSH 120 to 24
THAWED POOLED PLASMA	E5307	MSH 120 to 24
THAWED POOLED PLASMA	E5308	MSH 120 to 24
THAWED POOLED PLASMA	E6036	MSH 120 to 24
THAWED POOLED PLASMA	E6141	MSH 120 to 24
WASHED APHERESIS PLATELETS	12010	PV 250 to 200
WASHED APHERESIS PLATELETS	12050	PV 250 to 200
WASHED APHERESIS PLATELETS	12080	PV 250 to 200
WASHED APHERESIS PLATELETS	12610	PV 250 to 200
WASHED APHERESIS PLATELETS	12611	PV 250 to 200
WASHED APHERESIS PLATELETS	12620	PV 250 to 200
WASHED APHERESIS PLATELETS	12650	PV 250 to 200
WASHED APHERESIS PLATELETS	12680	PV 250 to 200
WASHED APHERESIS PLATELETS	12710	PV 250 to 200
WASHED APHERESIS PLATELETS	12711	PV 250 to 200
WASHED APHERESIS PLATELETS	12750	PV 250 to 200
WASHED APHERESIS PLATELETS	12751	PV 250 to 200
WASHED APHERESIS PLATELETS	12780	PV 250 to 200
WASHED APHERESIS PLATELETS	12781	PV 250 to 200
WASHED APHERESIS PLATELETS	12810	PV 250 to 200
WASHED APHERESIS PLATELETS	12811	PV 250 to 200
WASHED APHERESIS PLATELETS	12850	PV 250 to 200
WASHED APHERESIS PLATELETS	12851	PV 250 to 200
WASHED APHERESIS PLATELETS	22011	PV 125 to 225 and MSH 120 to 4
WASHED APHERESIS PLATELETS	22511	PV 250 to 200
WASHED APHERESIS PLATELETS	22811	PV 250 to 200
WASHED APHERESIS PLATELETS	27565	PV 250 to 200
WASHED APHERESIS PLATELETS	27566	PV 250 to 200
WASHED APHERESIS PLATELETS	27567	PV 250 to 200
WASHED APHERESIS PLATELETS	27568	PV 250 to 200
WASHED APHERESIS PLATELETS	27569	PV 250 to 200
WASHED APHERESIS PLATELETS	27570	PV 250 to 200
WASHED APHERESIS PLATELETS	27571	PV 250 to 200
WASHED APHERESIS PLATELETS	27572	PV 250 to 200
WASHED APHERESIS PLATELETS	27573	PV 250 to 200
WASHED APHERESIS PLATELETS	27574	PV 250 to 200
WASHED APHERESIS PLATELETS	27575	PV 250 to 200
WASHED APHERESIS PLATELETS	27576	PV 250 to 200
WASHED APHERESIS PLATELETS	27577	PV 250 to 200
WASHED APHERESIS PLATELETS	27578	PV 250 to 200
WASHED APHERESIS PLATELETS	27579	PV 250 to 200
WASHED APHERESIS PLATELETS	27580	PV 250 to 200
WASHED APHERESIS PLATELETS	27581	PV 250 to 200
WASHED APHERESIS PLATELETS	27582	PV 250 to 200
WASHED APHERESIS PLATELETS	E3531	PV 250 to 200
WASHED APHERESIS PLATELETS	E3532	PV 250 to 200
WASHED APHERESIS PLATELETS	E3533	PV 250 to 200
WASHED APHERESIS PLATELETS	E3534	PV 250 to 200
WASHED APHERESIS PLATELETS	E3535	PV 250 to 200
WASHED APHERESIS PLATELETS	E3536	PV 250 to 200
WASHED APHERESIS PLATELETS	E3537	PV 250 to 200
WASHED APHERESIS PLATELETS	E3538	PV 250 to 200
WASHED APHERESIS PLATELETS	E3539	PV 250 to 200
WASHED APHERESIS PLATELETS	E3540	PV 250 to 200
WASHED APHERESIS PLATELETS	E3541	PV 250 to 200
WASHED APHERESIS PLATELETS	E3542	PV 250 to 200
WASHED APHERESIS PLATELETS	E3543	PV 250 to 200
WASHED APHERESIS PLATELETS	E3544	PV 250 to 200
WASHED APHERESIS PLATELETS	E3545	PV 250 to 200
WASHED APHERESIS PLATELETS	E3546	PV 250 to 200
WASHED APHERESIS PLATELETS	E3547	PV 250 to 200
WASHED APHERESIS PLATELETS	E3548	PV 250 to 200

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
WASHED APHERESIS PLATELETS	E3549	PV 250 to 200
WASHED APHERESIS PLATELETS	E3550	PV 250 to 200
WASHED APHERESIS PLATELETS	E3551	PV 250 to 200
WASHED APHERESIS PLATELETS	E3552	PV 250 to 200
WASHED APHERESIS PLATELETS	E3553	PV 250 to 200
WASHED APHERESIS PLATELETS	E3554	PV 250 to 200
WASHED APHERESIS PLATELETS	E3555	PV 250 to 200
WASHED APHERESIS PLATELETS	E3556	PV 250 to 200
WASHED APHERESIS PLATELETS	E3557	PV 250 to 200
WASHED APHERESIS PLATELETS	E3558	PV 250 to 200
WASHED APHERESIS PLATELETS	E3559	PV 250 to 200
WASHED APHERESIS PLATELETS	E3560	PV 250 to 200
WASHED APHERESIS PLATELETS	E3561	PV 250 to 200
WASHED APHERESIS PLATELETS	E3562	PV 250 to 200
WASHED APHERESIS PLATELETS	E3563	PV 250 to 200
WASHED APHERESIS PLATELETS	E3564	PV 250 to 200
WASHED APHERESIS PLATELETS	E3565	PV 250 to 200
WASHED APHERESIS PLATELETS	E3566	PV 250 to 200
WASHED APHERESIS PLATELETS	E3567	PV 250 to 200
WASHED APHERESIS PLATELETS	E3568	PV 250 to 200
WASHED APHERESIS PLATELETS	E3569	PV 250 to 200
WASHED APHERESIS PLATELETS	E3570	PV 250 to 200
WASHED APHERESIS PLATELETS	E3968	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E3969	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E3970	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E3971	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E3972	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E3973	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4105	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4106	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4107	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4108	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4109	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4110	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4111	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4112	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4133	PV 250 to 200
WASHED APHERESIS PLATELETS	E4134	PV 250 to 200
WASHED APHERESIS PLATELETS	E4135	PV 250 to 200
WASHED APHERESIS PLATELETS	E4136	PV 250 to 200
WASHED APHERESIS PLATELETS	E4137	PV 250 to 200
WASHED APHERESIS PLATELETS	E4138	PV 250 to 200
WASHED APHERESIS PLATELETS	E4166	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4167	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4168	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4169	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4170	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4171	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4172	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4173	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4174	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4175	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4176	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4177	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4411	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4412	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4413	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4414	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4419	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4420	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4421	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4422	PV 250 to 200 MSH to 4 hours

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
WASHED APHERESIS PLATELETS	E4424	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4426	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4428	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4430	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4432	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4434	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4436	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4438	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4440	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4442	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4444	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4446	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4483	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4485	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4491	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4492	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4493	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4494	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4496	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4498	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4500	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4502	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4681	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E4682	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E5007	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E5008	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E5009	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E5010	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E5011	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E5012	PV 250 to 200 MSH to 4 hours
WASHED APHERESIS PLATELETS	E5387	MSH to 4 hours
WASHED APHERESIS PLATELETS	E5388	MSH to 4 hours
WASHED APHERESIS PLATELETS	E5391	MSH to 4 hours
WASHED APHERESIS PLATELETS	E5392	MSH to 4 hours
WASHED APHERESIS PLATELETS	E5870	MSH to 4 hours
WASHED APHERESIS PLATELETS	E5871	MSH to 4 hours
WASHED APHERESIS PLATELETS	E5872	MSH to 4 hours
WASHED APHERESIS PLATELETS	E5873	MSH to 4 hours
WASHED APHERESIS PLATELETS	E5874	MSH to 4 hours
WASHED APHERESIS PLATELETS	E5875	MSH to 4 hours
WASHED APHERESIS PLATELETS	E5876	MSH to 4 hours
WASHED APHERESIS PLATELETS	E5877	MSH to 4 hours
WASHED APHERESIS RED BLOOD CELLS	24011	PV 150 to 200
WASHED APHERESIS RED BLOOD CELLS	24811	PV 150 to 200
WASHED APHERESIS RED BLOOD CELLS	27589	PV 150 to 200
WASHED APHERESIS RED BLOOD CELLS	27590	PV 150 to 200
WASHED APHERESIS RED BLOOD CELLS	27591	PV 150 to 200
WASHED APHERESIS RED BLOOD CELLS	27592	PV 150 to 200
WASHED APHERESIS RED BLOOD CELLS	27593	PV 150 to 200
WASHED APHERESIS RED BLOOD CELLS	27594	PV 150 to 200
WASHED APHERESIS RED BLOOD CELLS	34941	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	34942	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	34943	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	34944	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	34961	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	34962	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	34963	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	34964	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	35941	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	35942	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	35943	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	35944	PV 250 to 200

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
WASHED APHERESIS RED BLOOD CELLS	35961	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	35962	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	35963	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	35964	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	36011	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	36012	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	36013	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	36014	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	36021	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	36022	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	36023	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	36024	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	36061	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	36062	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	36063	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	36064	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	36071	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	36072	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	36073	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	36074	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4140	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4143	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4144	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4145	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4560	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4561	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4562	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4563	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4564	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4565	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4566	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4567	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4671	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4672	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4673	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4674	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4675	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4676	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4677	PV 250 to 200
WASHED APHERESIS RED BLOOD CELLS	E4678	PV 250 to 200
WASHED RED BLOOD CELLS	04901	MSH 24 to 336
WASHED RED BLOOD CELLS	05901	MSH 24 to 336
WASHED RED BLOOD CELLS	27298	PV 450 to 200
WASHED RED BLOOD CELLS	27299	PV 450 to 200
WASHED RED BLOOD CELLS	27300	PV 450 to 200
WASHED RED BLOOD CELLS	27301	PV 450 to 200
WASHED RED BLOOD CELLS	27302	PV 450 to 200
WASHED RED BLOOD CELLS	27303	PV 450 to 200
WASHED RED BLOOD CELLS	27304	PV 450 to 200
WASHED RED BLOOD CELLS	27305	PV 450 to 200
WASHED RED BLOOD CELLS	27306	PV 450 to 200
WASHED RED BLOOD CELLS	27307	PV 450 to 200
WASHED RED BLOOD CELLS	27308	PV 450 to 200
WASHED RED BLOOD CELLS	27309	PV 450 to 200
WASHED RED BLOOD CELLS	27310	PV 250 to 200
WASHED RED BLOOD CELLS	27311	PV 250 to 200
WASHED RED BLOOD CELLS	27312	PV 250 to 200
WASHED RED BLOOD CELLS	27313	PV 250 to 200
WASHED RED BLOOD CELLS	E3939	MSH 24 to 336
WASHED RED BLOOD CELLS	E3940	MSH 24 to 336
WASHED RED BLOOD CELLS	E4398	MSH 24 to 336
WASHED RED BLOOD CELLS	E4399	MSH 24 to 336

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
WASHED RED BLOOD CELLS	E4999	PV 450 to 200 and MSH 24 to 336
WASHED RED BLOOD CELLS	E5000	PV 450 to 200 and MSH 24 to 336
WASHED RED BLOOD CELLS	E5140	PV 350 to 200
WASHED RED BLOOD CELLS	E5141	PV 350 to 200 and MSH 504 to 24 hours
WASHED RED BLOOD CELLS	E5262	PV 450 to 200
WASHED RED BLOOD CELLS	E5263	PV 450 to 200
WASHED RED BLOOD CELLS	E5264	PV 450 to 200
WASHED RED BLOOD CELLS	E5265	PV 450 to 200
WHOLE BLOOD	00100	MSH 1008 to 24
WHOLE BLOOD	00110	MSH 1008 to 24
WHOLE BLOOD	00181	MSH 672 to 504
WHOLE BLOOD	26001	MSH to 504 hours (21 days)
WHOLE BLOOD	27001	MSH to 504 hours (21 days)
WHOLE BLOOD	27102	MSH 672 to 504
WHOLE BLOOD	27107	PV 450 to 250
WHOLE BLOOD	27108	MSH 672 to 504
WHOLE BLOOD	27109	PV 450 to 250 and MSH 672 to 504
WHOLE BLOOD	27111	PV 450 to 250
WHOLE BLOOD	27114	MSH 672 to 504
WHOLE BLOOD	27117	PV 450 to 250
WHOLE BLOOD	27122	PV 450 to 250
WHOLE BLOOD	27129	PV 450 to 250
WHOLE BLOOD	30151	PV 250 to 450 and MSH 672 to 504
WHOLE BLOOD	30152	PV 250 to 450 and MSH 672 to 504
WHOLE BLOOD	30153	PV 250 to 450 and MSH 672 to 504
WHOLE BLOOD	30154	PV 250 to 450 and MSH 672 to 504
WHOLE BLOOD	30155	PV 250 to 450 and MSH 672 to 504
WHOLE BLOOD	30156	PV 250 to 450 and MSH 672 to 504
WHOLE BLOOD	30157	PV 250 to 450 and MSH 672 to 504
WHOLE BLOOD	30158	PV 250 to 450 and MSH 672 to 504
WHOLE BLOOD	30181	MSH 672 to 504
WHOLE BLOOD	30182	MSH 672 to 504
WHOLE BLOOD	30183	MSH 672 to 504
WHOLE BLOOD	30184	MSH 672 to 504
WHOLE BLOOD	30185	MSH 672 to 504
WHOLE BLOOD	30186	MSH 672 to 504
WHOLE BLOOD	30187	MSH 672 to 504
WHOLE BLOOD	30188	MSH 672 to 504
WHOLE BLOOD	30251	MSH 672 to 504
WHOLE BLOOD	30252	MSH 672 to 504
WHOLE BLOOD	30253	MSH 672 to 504
WHOLE BLOOD	30254	MSH 672 to 504
WHOLE BLOOD	30255	MSH 672 to 504
WHOLE BLOOD	30256	MSH 672 to 504
WHOLE BLOOD	30257	MSH 672 to 504
WHOLE BLOOD	30258	MSH 672 to 504
WHOLE BLOOD	30281	MSH 672 to 504
WHOLE BLOOD	30282	MSH 672 to 504
WHOLE BLOOD	30283	MSH 672 to 504
WHOLE BLOOD	30284	MSH 672 to 504
WHOLE BLOOD	30285	MSH 672 to 504
WHOLE BLOOD	30286	MSH 672 to 504
WHOLE BLOOD	30287	MSH 672 to 504
WHOLE BLOOD	30288	MSH 672 to 504
WHOLE BLOOD	31451	MSH 672 to 504
WHOLE BLOOD	31452	MSH 672 to 504
WHOLE BLOOD	31453	MSH 672 to 504
WHOLE BLOOD	31454	MSH 672 to 504
WHOLE BLOOD	31455	MSH 672 to 504
WHOLE BLOOD	31456	MSH 672 to 504
WHOLE BLOOD	31457	MSH 672 to 504
WHOLE BLOOD	31458	MSH 672 to 504

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
WHOLE BLOOD	31481	MSH 672 to 504
WHOLE BLOOD	31482	MSH 672 to 504
WHOLE BLOOD	31483	MSH 672 to 504
WHOLE BLOOD	31484	MSH 672 to 504
WHOLE BLOOD	31485	MSH 672 to 504
WHOLE BLOOD	31486	MSH 672 to 504
WHOLE BLOOD	31487	MSH 672 to 504
WHOLE BLOOD	31488	MSH 672 to 504
WHOLE BLOOD	32451	MSH 672 to 504
WHOLE BLOOD	32452	MSH 672 to 504
WHOLE BLOOD	32453	MSH 672 to 504
WHOLE BLOOD	32454	MSH 672 to 504
WHOLE BLOOD	32455	MSH 672 to 504
WHOLE BLOOD	32456	MSH 672 to 504
WHOLE BLOOD	32457	MSH 672 to 504
WHOLE BLOOD	32458	MSH 672 to 504
WHOLE BLOOD	32481	MSH 672 to 504
WHOLE BLOOD	32482	MSH 672 to 504
WHOLE BLOOD	32483	MSH 672 to 504
WHOLE BLOOD	32484	MSH 672 to 504
WHOLE BLOOD	32485	MSH 672 to 504
WHOLE BLOOD	32486	MSH 672 to 504
WHOLE BLOOD	32487	MSH 672 to 504
WHOLE BLOOD	32488	MSH 672 to 504
WHOLE BLOOD	E0001	MSH 672 to 504
WHOLE BLOOD	E0001	PV 450 to 250
WHOLE BLOOD	E0002	MSH 672 to 504
WHOLE BLOOD	E0003	MSH 672 to 504
WHOLE BLOOD	E0004	MSH 672 to 504
WHOLE BLOOD	E0005	MSH 672 to 504
WHOLE BLOOD	E0006	MSH 672 to 504
WHOLE BLOOD	E0007	MSH 672 to 504
WHOLE BLOOD	E0008	MSH 672 to 504
WHOLE BLOOD	E0009	MSH 672 to 504
WHOLE BLOOD	E0010	MSH 672 to 504
WHOLE BLOOD	E0011	MSH 672 to 504
WHOLE BLOOD	E0012	MSH 672 to 504
WHOLE BLOOD	E0017	MSH 672 to 504
WHOLE BLOOD	E0018	MSH 672 to 504
WHOLE BLOOD	E0019	MSH 672 to 504
WHOLE BLOOD	E0020	MSH 672 to 504
WHOLE BLOOD	E0021	MSH 672 to 504
WHOLE BLOOD	E0022	MSH 672 to 504
WHOLE BLOOD	E0023	MSH 672 to 504
WHOLE BLOOD	E0024	MSH 672 to 504
WHOLE BLOOD	E0025	MSH 672 to 504
WHOLE BLOOD	E0026	MSH 672 to 504
WHOLE BLOOD	E0031	MSH 672 to 504
WHOLE BLOOD	E0032	MSH 672 to 504
WHOLE BLOOD	E0033	MSH 672 to 504
WHOLE BLOOD	E0034	MSH 672 to 504
WHOLE BLOOD	E0035	MSH 672 to 504
WHOLE BLOOD	E0036	MSH 672 to 504
WHOLE BLOOD	E0037	MSH 672 to 504
WHOLE BLOOD	E0038	MSH 672 to 504
WHOLE BLOOD	E0039	MSH 672 to 504
WHOLE BLOOD	E0040	MSH 672 to 504
WHOLE BLOOD	E0045	MSH 672 to 504
WHOLE BLOOD	E0046	MSH 672 to 504
WHOLE BLOOD	E0047	MSH 672 to 504
WHOLE BLOOD	E0048	MSH 672 to 504
WHOLE BLOOD	E0049	MSH 672 to 504

Product Type Code	Product Code	Table Changes (MSH= Maximum Storage Hours PV= Product Volume)
WHOLE BLOOD	E0050	MSH 672 to 504
WHOLE BLOOD	E0051	MSH 672 to 504
WHOLE BLOOD	E0052	PV 350 to 250 and MSH 672 to 504
WHOLE BLOOD	E0097	PV 450 to 250
WHOLE BLOOD	E0098	MSH 672 to 504
WHOLE BLOOD	E0099	MSH 672 to 504
WHOLE BLOOD	E0100	MSH 672 to 504
WHOLE BLOOD	E0100	MSH 672 to 504
WHOLE BLOOD	E0101	MSH 672 to 504
WHOLE BLOOD	E0101	MSH 672 to 504
WHOLE BLOOD	E0102	MSH 672 to 504
WHOLE BLOOD	E0103	MSH 672 to 504
WHOLE BLOOD	E0104	MSH 672 to 504
WHOLE BLOOD	E0105	MSH 672 to 504
WHOLE BLOOD	E0106	MSH 672 to 504
WHOLE BLOOD	E0107	MSH 672 to 504
WHOLE BLOOD	E0108	MSH 672 to 504
WHOLE BLOOD	E0109	MSH 672 to 504
WHOLE BLOOD	E0120	MSH 672 to 504
WHOLE BLOOD	E0121	MSH 672 to 504
WHOLE BLOOD	E0122	MSH 672 to 504
WHOLE BLOOD	E0123	MSH 672 to 504
WHOLE BLOOD	E0124	MSH 672 to 504
WHOLE BLOOD	E0125	MSH 672 to 504
WHOLE BLOOD	E0126	MSH 672 to 504
WHOLE BLOOD	E0127	MSH 672 to 504
WHOLE BLOOD	E0128	MSH 672 to 504
WHOLE BLOOD	E0129	MSH 672 to 504
WHOLE BLOOD	E0130	PV 350 to 250 and MSH 672 to 504
WHOLE BLOOD	E0131	MSH 672 to 504
WHOLE BLOOD	E0132	MSH 672 to 504
WHOLE BLOOD	E0133	MSH 672 to 504
WHOLE BLOOD	E0134	MSH 672 to 504
WHOLE BLOOD	E0135	MSH 1008 to 24
WHOLE BLOOD	E0136	MSH 1008 to 24
WHOLE BLOOD	E0137	MSH 1008 to 24
WHOLE BLOOD	E0138	MSH 1008 to 24
WHOLE BLOOD	E0139	MSH 1008 to 24
WHOLE BLOOD	E0140	MSH 1008 to 24
WHOLE BLOOD	E0141	MSH 1008 to 24
WHOLE BLOOD	E3842	MSH 672 to 24
WHOLE BLOOD	E4150	PV 350 to 250 and MSH 672 to 504
WHOLE BLOOD	E4151	PV 450 to 250
WHOLE BLOOD	E4153	PV 350 to 250 and MSH 672 to 504
WHOLE BLOOD	E4207	MSH 1008 to 504
WHOLE BLOOD	E4208	MSH 672 to 504
WHOLE BLOOD	E5013	PV 350 to 250 and MSH 672 to 504
WHOLE BLOOD	E5014	PV 350 to 250 and MSH 672 to 504
WHOLE BLOOD	E5076	MSH 1008 to 504
WHOLE BLOOD	E5128	MSH 1008 to 504
WHOLE BLOOD	E5334	PV 450 to 250
WHOLE BLOOD	E5356	MSH 840 to 504
WHOLE BLOOD	E5357	MSH 672 to 504
WHOLE BLOOD	E5373	MSH 840 to 672
WHOLE BLOOD	E5374	PV 450 to 300 and MSH 840 to 504
WHOLE BLOOD	E5436	MSH 672 to 504
WHOLE BLOOD	E5437	MSH 672 to 504
WHOLE BLOOD	E5438	MSH 672 to 504
WHOLE BLOOD	E5439	MSH 672 to 504
WHOLE BLOOD	E5559	PV 350 to 250 and MSH 672 to 504
WHOLE BLOOD	E5560	PV 350 to 250
WHOLE BLOOD	E5561	PV 350 to 250

<b>Product Type Code</b>	<b>Product Code</b>	<b>Table Changes (MSH= Maximum Storage Hours PV= Product Volume)</b>
WHOLE BLOOD	E5562	PV 350 to 250 and MSH 672 to 504
WHOLE BLOOD	E5563	PV 350 to 250 and MSH 672 to 504
WHOLE BLOOD	E5564	PV 350 to 250 and MSH 672 to 504
WHOLE BLOOD	E5565	PV 350 to 250
WHOLE BLOOD	E5566	PV 450 to 250
WHOLE BLOOD	E5567	PV 350 to 250
WHOLE BLOOD	E5568	PV 350 to 250 and MSH 672 to 504
WHOLE BLOOD	E5569	PV 350 to 250 and MSH 672 to 504
WHOLE BLOOD	E5584	MSH 672 to 504
WHOLE BLOOD	E5612	PV 450 to 250
WHOLE BLOOD	E5807	PV 350 to 250

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