

# LABORATORY V. 5.2

# User Guide For Patch LR\*5.2\*275

# VistA BLOOD BANK SOFTWARE

December 2001

Department of Veterans Affairs VistA System Design and Development

# I. Introduction

Patch LR\*5.2\*275 is being released to address multiple, chronic user problems. An overview of each problem follows:

# Problem #1:

Once units are selected and associated with an inappropriate specimen/accession, there is currently no intuitive way to un-associate these units.

# **ROUTINE: LRBLPUS2**

The routine LRBLPUS2 was modified to update the patient record of units selected for crossmatch when units previously selected on a specimen are reselected on a *new* specimen for the same patient.

#### Problem # 2:

When selecting units for a patient, and multiple specimens are accessioned for the patient, AND a barcode scanner is used to scan the product code barcode for component selection while using the option: **Select Units for Patients** [LRBLPIC], the system does not display all available accessions and prompt the user to select the correct one. The most recently accessioned specimen is accepted as the default, and *all* selected units are associated with that specimen, even if it has been cancelled and given a status of **Not Performed**.

## ROUTINE: LRBLPUS

The routine LRBLPUS was modified to fix this defect that prevented the display of all available specimens when a barcode scanner is used to scan the product code barcode at the prompt **Blood component for unit selection**.

## Problem #3:

If:

• Units are selected and associated for an accession that is later cancelled,

-AND-

• The tech enters results of **ND** (Not Done) for the ABO and Rh on the previously-selected specimen,

-AND-

• The tech performs actual testing on a new specimen,

Then:

At the time crossmatch results are entered, the system does *not* evaluate the result of **ND** as **Not Done** and allows crossmatch results to be entered on the cancelled specimen, even after issuing a warning that an Antibody Screen has not been performed on the incorrectly-associated specimen.

# **ROUTINE: LRBLPX1**

The routine LRBLPX1 was modified to evaluate the results of **ND**, (Not Done), for ABO and Rh Type entered on the patient specimen/accession selected for crossmatch as **No results available**, or null. A warning message is displayed to the user and crossmatch results entry is not allowed.

The routine LRBLPX1 was modified to repeat the comparison between the ABO/Rh interpretation entered on the current specimen and the ABO/Rh interpretation of the patient's historical record. A warning message with no override is displayed when there is a discrepancy.

## Problem #4:

When using the option **Enter crossmatch results** [LRBLPX] and the user does not complete the data entry and exits before entering the actual crossmatch interpretation, the BLOOD INVENTORY File (#65) fields XMATCH TECH (#65.02,.05) and DATE/TIME CROSSMATCHED (#65.02,.09) are populated (transparent to the user). When the option **Crossmatch: Transfusion Report** [LRBLRCT] is later run, it errors with a null subscript error because the report expects actual crossmatch results to be entered when the DATE/TIME CROSSMATCHED field has data.

#### ROUTINE: LRBLPX

The routine LRBLPX was modified to only populate the XMATCH TECH and DATE/TIME CROSSMATCHED fields for a unit of blood when the actual crossmatch results are entered. This was causing database integrity problems that caused the **Crossmatch: Transfusion Report** [LRBLCT] to error with a null subscript error.

# Problem # 5:

The FileMan logic used to search the FUNCTION FIELD File (#61.3) when executing the option **Edit Corresponding Antigen/Antibody** [LRBLSNO] does not search for all possible matches to input. It is set to stop at the first possible match. In the event that the user intended to input a lower case antibody, and FileMan converts the input to upper case, the option may inadvertently return the upper case antibody.

# ROUTINE: LRBLS

This routine was modified to search for all possible matches when performing a lookup to the FUNCTION FIELD File (#61.3). The routine was also modified to display data input and require the user to confirm the selection prior to prompting for specific data fields to be edited in the **Corresponding Antigen/Antibody** [LRBLSNO] option.

# Problem # 6:

During patient data entry using the options **Enter test data** [LRBLPET] and **Previous Records** [LRBLPER], data entered at the prompts Select SERUM ANTIBODY and Select ANTIBODIES IDENTIFIED: may inadvertently stuff an upper case antibody when in fact the lower case counterpart was input by the user.

## INPUT TEMPLATES: LRBLSCREEN, LRBLPOLD

These two input templates were modified to display data input and require the user to confirm the selections.

# Note:

The six problems cited do involve a software safety critical requirement, but do NOT change the scope of the design safeguard or intended use.

# II. Installation Instructions

# NOTE #1

The following patches are required, however, KIDS will not check for their prior installation:

LR\*5.2\*1 LR\*5.2\*25 LR\*5.2\*72 LR\*5.2\*78

LR\*5.2\*79 LR\*5.2\*247

# **NOTE # 2**

After a successful install of this patch, KIDS deletes the routine LR275PRE from the system. There will be no checksums to check.

Users can remain on the system. Patch installation should take less than 5 minutes. No additional resources are needed as a result of loading this patch. Taskman does not need to be disabled.

- 1. Use the 'INSTALL/CHECK MESSAGE' option on the PackMan menu. This option will load the KIDS package in this message onto your system.
- 2. Review your mapped set. If the routines are mapped, they should be removed from the mapped set at this time.
- 3. From the Kernel installation and Distribution System Menu, select the Installation menu.
- 4. You may elect to use the following options (when prompted for the INSTALL NAME, enter LR\*5.2\*275):
  - a. Backup a Transport Global
  - b. Compare Transport Global to Current System
  - c. Verify Checksums in Transport Global
- 5. Use the Install Package(s) option and select the package (LR\*5.2\*275).
- 6. When prompted: "Want KIDS to INHIBIT LOGONs during the install?" respond "NO"
- 7. When prompted "Want to DISABLE Scheduled Options, Menu Option, and Protocols? YES??", respond "YES". When prompted to select the options you would like to place out of order, enter the option [LRBL] Blood Bank.
- 8. Enter protocols you wish to mark as 'Out Of Order': <CR>
- 9. Delay Install (Minutes): (0-60): 0// enter 0
- 10. If routines were unmapped as part of step 2, they should be returned to the mapped set once the installation has run to completion.

# **Note #3**

The File 61.3, Function Field is where the Antibody – Antigen relationships are stored. These relationships should have been configured locally with the initial Blood Bank setup. It has been found, through the testing of this patch that some sites may have not defined these Antibody – Antigen relationships. The following FileMan search procedures should be followed to ensure that the Antibody – Antigen relationships are configured properly at your site.

Attention: This association is imperative because the software cannot check for the Antibody Antigen relationship unless defined. If improperly defined, the software will allow units that are not phenotyped for a clinically significant Antigen to be issued and transfused.

# Step by step instructions to Search File 61.3 FUNCTION FIELD

- 1. FileMan access is required to do search.
- 2. The example below provides a minimal set of Antibodies with their Corresponding Antigen/Antibody:

```
Select VA FileMan Option: Search File Entries
OUTPUT FROM WHAT FILE: FUNCTION FIELD//
 -A- SEARCH FOR FUNCTION FIELD FIELD:
                                          IDENTIFIER
  -A- CONDITION: = EQUALS
 -A- EOUALS: BLOOD GROUP ANTIBODY
 -B- SEARCH FOR FUNCTION FIELD FIELD: CORRESPONDING ANTIGEN/ANTIBODY
  -B- CONDITION: 'NULL
 -C- SEARCH FOR FUNCTION FIELD FIELD: <CR>
IF: AB
         IDENTIFIER EQUALS "AB" (BLOOD GROUP ANTIBODY)
                and CORRESPONDING ANTIGEN/ANTIBODY NOT NULL
OR:
STORE RESULTS OF SEARCH IN TEMPLATE:
SORT BY: NAME//
START WITH NAME: FIRST//
FIRST PRINT FIELD: NAME
THEN PRINT FIELD: CORRESPONDING ANTIGEN/ANTIBODY
THEN PRINT FIELD:
Heading (S/C): FUNCTION FIELD SEARCH Replace
DEVICE: ;;300 DecServer Right Margin: 80//
```

FUNCTION FIELD SEARCH	NOV 16,2001 11:21 PAGE 1
NAME	CORRESPONDING ANTIGEN/ANTIBODY
ANTI A-1	A-1
ANTI C	C
ANTI D	D
ANTI E	E
ANTI Fy(a)	Fy(a)
ANTI Fy(b)	Fy(b)
ANTI Jk(a)	Jk(a)
ANTI Jk(b)	Jk(b)
ANTI Js(a)	Js(a)
ANTI Js(b)	Js(b)
ANTI K	K
ANTI S	S
ANTI c	С
ANTI e	e
ANTI k	k
ANTI s	S

- 3. Your list should have at least the above entries, if not use the option 'Edit corresponding antigen/ antibody' [LRBLSNO] to create any missing relationships. Your site may have additional clinically significant antibodies, these can be locally defined.
  - a. In order for software to perform the checks, the antibodies must be entered in the 'Select ANTIBODIES IDENTIFIED field, in addition to the 'Select SERUM ANTIBODY field during data entry using the option **Enter test data** [LRBLPET].
  - b. Select SERUM ANTIBODY is used to collect workload as well as identify antibodies not considered clinically significant. All antibodies are entered in this field.
  - c. Clinically significant antibodies must be entered again in the Select ANTIBODIES IDENTIFIED field. This step ensures that the patient cumulative record is updated and filed properly.
- 4. Validate changes using these clinically significant antibodies.

# III. Validation Requirements

Installation of this patch requires that a site validation be performed for several blood bank options.

As is the case with all patches to the Blood Bank software, it is assumed that a full validation of the software has been previously performed. The validation scenarios that follow are designed to provide guidance to sites for the re-validation of options listed in the description of patch LR\*5.2\*275. Changes made to the software that involve the reading, interpretation and displaying of information through these options must be validated.

# GENERAL VALIDATION NOTES

All sites must validate the affected options that are used within their facility. Site validation should be undertaken in a mirrored test account if at all possible. This does NOT mean that the test account must be mirrored just prior to validation. For the purposes of validating patches to the Blood Bank software, the site-configurable files that control how the Blood Bank software behaves, such as the FUNCTION FIELD File (#61.3), must be identical to the production account. Validation performed in a mirrored test account does NOT need to be repeated in a production environment.

# IV. Changes to v5.2 Blood Bank User Manual Examples

Routine LRBLS was modified to search for all possible matches when performing a lookup to the FUNCTION FIELD File (#61.3). The routine was also modified to display data input and require the user to confirm the selection prior to prompting for specific data fields to be edited in the **Corresponding Antigen/Antibody** [LRBLSNO] option.

As a result of these modifications, the following four examples taken from the v5.2 Blood Bank User Manual have been changed to reflect the new confirmation prompts.

The following Blood Bank Patient Option Enter Test Data example replaces the one found on page 171 of the V 5.2 Blood Bank User Manual:

# Example 2:

Pretransfusion testing for a patient with a positive direct antiglobulin test and a clinically significant serum antibody with workload turned on.

The prompts displayed after the patient information below are based on having the first default for the Patient option in the LABORATORY SITE file (#69.9) set to "YES." This will include the prompts for the Direct Coombs testing. If you do not wish to have these prompts included, use the Edit Blood Bank Site Parameters (S-EF-SP) option in the Supervisor's Menu to set the default to "NO."

```
Select Blood bank patient Option: ET Enter test data

BLOOD BANK Patient data entry for MAR 5, 1993 ? YES// <RET> (YES)
```

```
Enter TEST COMMENT(s) ? NO// Y (YES)
Edit SPECIMEN COMMENT(s) ? NO// <RET> (NO)
Select Accession Number: 3 for MAR 5, 1993
WASHINGTON, GEORGE ID: 592-88-8888 ABO: A Rh: POS
Specimen: BLOOD
Antibody present: ANTI K
Test: TRANSFUSION REQUEST
ABO: A Rh: POS
 ABO INTERPRETATION: A A
 ABO TESTING COMMENT: <RET>
 RH INTERPRETATION: POS
 RH TESTING COMMENT: <RET>
 DIRECT AHG(POLYSPECIFIC): 1 1 1+ TINY CLUMPS, TURBID BACKGROUND
 ANTI-IGG: 1 1 1+ TINY CLUMPS, TURBID BACKGROUND
 ANTI-COMPLEMENT: N N NO AGGLUTINATION
 DIRECT AHG INTERPRETATION: ?
    CHOOSE FROM:
      Ρ
               POSITIVE
      Ν
               NEGATIVE
               INVALID, USE EDTA SPECIMEN
 DIRECT AHG INTERPRETATION: P POSITIVE
 DIRECT AHG TEST COMMENT: <RET>
 Select ELUATE ANTIBODY: <RET>
 ANTIBODY SCREEN INTERPRETATION: P POS
 Select SERUM ANTIBODY: E
    1 E ANTI E
                     52030 ANTI E
    2 Ew ANTI E(w) 52110 ANTI E(w)
CHOOSE 1-2: 1 ANTI E
   SERUM ANTIBODY: ANTI E// <RET>
 Select SERUM ANTIBODY: <RET>
  SERUM ANTIBODY: ANTI E
                                SNOMED CODE: 52030
  IS THIS CORRECT? YES// Y (YES) ←=====New Confirmation Prompt
 Select ANTIBODY SCREEN COMMENT: <RET>
```

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Enter '?' for list of antibodies identified to date.

The following two Blood Bank Patient Option *Previous Records* examples replace the two found beginning on page 174 of the V 5.2 Blood Bank User Manual:

# Example 1:

Addition of Anti-E in a patient with a previous history of anti-K and anti-C

```
Select Blood bank patient Option: PR Previous records
         Blood bank patient data from old records
Select Patient Name: W8888 WASHINGTON, GEORGE 03-01-00 592888888 SC VETERAN
WASHINGTON, GEORGE ID: 592-88-8888 Physician: WELBY, HARRY
ABO group: A Rh type: POS
AGE: 93 DATE OF BIRTH: MAR 1, 1900
Ward on Adm: 1B Service: ALLERGY
Adm Date: NOV 22, 1984 Adm DX: ACUTE DEPRESSION
Present Ward: 1B
                              MD: WELBY, HARRY
PATIENT LOCATION: 1B// <RET>
Antibody present: ANTI C
                 ANTI K
Select ANTIBODIES IDENTIFIED: ANTI C// ANTI E
    1 E ANTI E
                     52030 ANTI E
```

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```
2 Ew ANTI E(w)
                          52110 ANTI E(w)
CHOOSE 1-2: 1
  ANTIBODIES IDENTIFIED COMMENT: <RET>
Select ANTIBODIES IDENTIFIED:
   ANTIBODIES IDENTIFIED: ANTI E
                                        SNOMED CODE: 52030
   ANTIBODIES IDENTIFIED: ANTI E(w)
                                           SNOMED CODE: 52110
                                         ←=====New Confirmation Prompt
   IS THIS CORRECT? YES// Y
                              (YES)
Select RBC ANTIGENS PRESENT: ?
 ANSWER WITH RBC ANTIGENS PRESENT(other)
    YOU MAY ENTER A NEW RBC ANTIGENS PRESENT(other), IF YOU WISH
 ANSWER WITH FUNCTION FIELD SYNONYM, OR SNOMED CODE, OR IDENTIFIER
 DO YOU WANT THE ENTIRE FUNCTION FIELD LIST? N (NO)
 RBC ANTIGENS PRESENT: Jk(a)// <RET>
Select RBC ANTIGENS PRESENT: <RET>
Select RBC ANTIGENS ABSENT: K// <RET>
 RBC ANTIGENS ABSENT: K// <RET>
Select RBC ANTIGENS ABSENT: <RET>
Select HLA ANTIGEN PRESENT: <RET>
Select HLA ANTIGENS ABSENT: <RET>
BLOOD BANK COMMENTS:
 1> TRANSFUSE K negative, C negative blood only 8/12/87
  2> Transfuse washed cells only-febrile nonhemolytic reaction 8/20/87
EDIT Option: E
Edit line: 1
1) TRANSFUSE K negative, C negative blood only 8/12/87
Replace K negative, C negative With K, C, E negative
Replace 8/12/87 With 9/20/87
Replace <RET>
1) Transfuse K, C, E negative blood only. 9/20/87
EDIT Option: <RET>
Select TRANSFUSION RECORD TRANSFUSION DATE/TIME: <RET>
```

# Example 2:

Entry of previous transfusions (before implementation of module) for a patient already entered in the system

Select Blood bank patient Option: PR Previous records

# Blood bank patient data from old records

Select Patient Name: P0019 PROCESSING, SIMON 08-12-23 300010019 NON-VETERAN (OTHER) PROCESSING, SIMON ID: 300-01-0019 ABO group: B Rh type: NEG AGE: 69 DATE OF BIRTH: AUG 12, 1923 PATIENT LOCATION: ORTHOPEDICS// <RET> Antibody present: ANTI K ANTI Jk(a) Select ANTIBODIES IDENTIFIED: ANTI K// <RET> ANTIBODIES IDENTIFIED: ANTI K// <RET> ANTIBODIES IDENTIFIED COMMENT: <RET> Select ANTIBODIES IDENTIFIED: <RET> ANTIBODIES IDENTIFIED: ANTI K SNOMED CODE: 51810 IS THIS CORRECT? YES// Y (YES) ←=====New Confirmation Prompt Select RBC ANTIGENS PRESENT: // <RET> RBC ANTIGENS PRESENT: // Select RBC ANTIGENS PRESENT: <RET> Select RBC ANTIGENS ABSENT: <RET> Select HLA ANTIGEN PRESENT: <RET> Select HLA ANTIGENS ABSENT: <RET> BLOOD BANK COMMENTS: 1> <RET> Select TRANSFUSION RECORD TRANSFUSION DATE/TIME: 8-6-87 AUG 6, 1987 TRANSFUSION RECORD COMPONENT: 04060 CPDA-1 RED BLOOD CELLS 04060 PRBC 1 TRANSFUSION RECORD COMPONENT ID: G11111 COMPONENT: CPDA-1 RED BLOOD CELLS// <RET> COMPONENT ID: G11111// <RET> ABO: 0 0 RH: POSITIVE UNITS POOLED: <RET> TRANSFUSION REACTION: NO Select TRANSFUSION COMMENT: <RET> Select CROSSMATCH COMMENT: <RET> Select TRANSFUSION RECORD TRANSFUSION DATE/TIME: 8-6-87 AUG 6, 1987 CPDA-1 RED BLOOD CELLS G11111

For new entries only. No editing.

Select TRANSFUSION RECORD TRANSFUSION DATE/TIME: 8-6-87 AUG 6, 1987
TRANSFUSION RECORD COMPONENT: 04060 CPDA-1 RED BLOOD CELLS 04060 PRBC 1
TRANSFUSION RECORD COMPONENT ID: G22222
COMPONENT: CPDA-1 RED BLOOD CELLS// <RET>
COMPONENT ID: G22222// <RET>

ABO: O O
RH: POSITIVE
UNITS POOLED: <RET>
TRANSFUSION REACTION: NO
Select TRANSFUSION COMMENT: <RET>
Select CROSSMATCH COMMENT: <RET>
Select TRANSFUSION RECORD TRANSFUSION DATE/TIME: <RET>
Select Patient Name: <RET>

The following Blood Bank Files Option *Edit Corresponding Antigen/Antibody* example replaces the one found on page 375 of the V 5.2 Blood Bank User Manual:

# Example 1:

Entry of data for Anti-K

2>Anti-K may also be found as a naturally occurring IgM antibody. 3>The antibody can cause acute hemolytic transfusion reactions and 4>hemolytic disease of the newborn. Anti-K has been implicated as a 5>cause of delayed hemolytic transfusion reactions. 6><RET>

EDIT Option: <RET>

Select TITLE OF ARTICLE: <RET>

Select ANTIGEN or ANTIBODY: <RET>

Select Edit blood bank files Option: <RET>

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# **LR\*5.2\*275 TEST CASES**

The following test package is designed to provide the basis for system validation following the installation of patch LR\*5.2\*275. It is assumed that a full validation of the Blood Bank software has been previously performed. The test cases included in this document have been designed to revalidate menu options that were affected by the coding changes exported with patch LR\*5.2\*275.

Stress testing, which will involve input representing limit, negative and non-valid data entry, should be performed following the guidelines presented in Appendix E of the Blood Bank User Manual. The normal test scenarios may be modified to incorporate the additional data entry with the appropriate adjustment to the indicated "Expected Results".

This document covers the following topics:

- I. INTRODUCTION
- II. PROCEDURAL NOTES
- III. TEST CASE OVERVIEW
- IV. SETUP
- V. TEST CASES

# I. INTRODUCTION

The following test scenarios have been created to assist with the validation of the system performance for options affected by the coding changes exported with patch LR\*5.2\*275. In addition, the individual facilities are required to ensure that existing system functionality has not been adversely effected by the installation of this patch.

Site validation should be undertaken in a mirrored test account if at all possible. This does NOT mean that the test account must be mirrored just prior to validation. For the purpose of validating patches to the Blood Bank software, this means a site-configurable file that controls how the Blood Bank software behaves, such as the Blood product File (#66), are identical to the production account. Validation performed in a mirrored account does NOT need to be repeated in a production environment.

The attached test cases are designed to exercise the menu options that are affected by the coding changes contained in path LR\*5.2\*275. These scenarios involve Selecting Units for Patients [LRBLPIC], requesting a Crossmatch: Transfusion Report [LRBLRCT], Edit Corresponding Antigen/Antibody [LRBLSNO], Enter test data [LRBLPET], and Previous records [LRBLPER] although other menu options will be called upon during setup and confirmation of expected results.

It is assumed a full validation of the Blood Bank software has been previously performed. The test cases included in this document have been designed to revalidate only those menu options affected by the coding changes associated with the installation of LR\*5.2\*275. It is the responsibility of the individual site to determine if the scope of the test cases needs to be broadened to include additional functionality based on a risk analysis of the actual procedures and workflow at

the facility. For additional guidance, please refer to Appendix E of the Blood Bank User manual dated March 2001. By following the specific test case format limit and negative testing may be accomplished by entering unacceptable data in all fields where data input is requested of the user. This allows the facility to utilize the test format provided, with data similar to that presented during initial system validation. The goal should be to adequately stress the application to assure continued acceptable performance at each facility.

## II. PROCEDURAL NOTES

This test package does not provide any materials beyond the actual test cases. When a barcode label is required for scanned input, as required for the test case designated P-RS-US-01, it is assumed that a label is available at the testing facility.

When a patient, specimen, or unit is requested during testing, each facility will substitute a local input and modify expected results accordingly. Since the majority of data entry is manual, it is left to the test site to determine how closely they would like their screen output to parallel the screen capture presented in this set of test cases.

Expected results are in the form of screen captures. In most cases there is more information displayed than is actually included in the test case. In those cases the intent was to display the system prompt, and only that portion of the screen capture that was deemed necessary for the correct interpretation of the result.

The following conventions (underlined) are utilized throughout the test scenarios:

- a. Enter "x" at the prompt indicates a manual user response to a system prompt is required. The x must be replaced by the appropriate data.
- b. <u>Select XY</u> indicates a menu option selection.
- c. <u>Enter <CR> at the prompt represents a request to select the ENTER key.</u>
- d. **BOLD FACE ENTRY** indicates a complete or partial screen capture.
- e. <u>Italicized display</u> indicates a clarification that may help in interpreting a screen display.
- f. Scan... indicates data input with the use of a bar code scanner.

# III. TEST CASE OVERVIEW

Test Case #1 [P-RS-US\_01]: The purpose of this test case is to confirm that all available patient specimens are displayed during the Select units for patients process when a barcode scanner is utilized to identify the component type required.

Test Case #2 [P-RS-US\_02]: The purpose of this test case is to confirm that all available patient specimens are displayed during the Select units for patients process when the component type is identified manually via the keyboard.

Test Case #3 [P-RS-US\_03]: This test case confirms that a unit, once assigned to a patient specimen, may be reassigned to another specimen for that same patient, with subsequent crossmatch results associated with the correct specimen.

Test Case #4 [R-UR-CT\_01]: This test scenario will confirm that the Crossmatch: Transfusion Report will run without generating any errors when the Crossmatch result entry process is completed.

Test Case #5 [R-UR-CT\_02]: This test case is a follow-up to R-UR-CT\_01. It confirms that the Crossmatch: Transfusion Report will perform correctly when the Crossmatch result entry process is begun, but halted before results are entered.

Test Case #6 [P-RS-XM\_01]: This test case validates the systems ability to prevent entering crossmatch results for a unit that is associated with a specimen devoid of ABO/Rh test results.

Test Case #7 [P-RS-XM\_02]: This exercise validates the systems ability to interpret a specimen ABO and Rh result of ND (Not Done) as a null entry, and prevent entry of crossmatch results.

Test Case #8 [S-EF-AA\_01]: This test case validates the search and display functionality utilized during the ANTIBODY lookup. A message has been added within the menu option to indicate that the search is case sensitive. When an exact match is not found, the system will return a list of choices from which to select the desired antibody or antigen. In addition, the requirement that there is user confirmation following data entry, before accessing the edit function for a specific antibody or antigen.

Test Case #9 [P-ET\_01]: This test case will validate the requirement that input data is displayed, and the user be given the opportunity to accept or reject the selection.

Test Case #10 [P-PR\_01]: This test case will validate the requirement that input data is displayed, and the user be given the opportunity to accept or reject the selection, for this menu option [P-PR].

# IV. SETUP

The accompanying test cases require setup prior to execution. The setup consists of the following:

- a. Patient: Each facility will locate or create a patient for use when performing the appropriate test scenario. A single patient is all that is required. The patient appearing in the following test cases is identified as DOE, JOHN. When site specific patient specific information is displayed, it is replaced with X's, with an accompanying italicized *Note*:. The patient ABO/Rh for the following test cases is identified as A NEGATIVE. Each facility may substitute for the displayed ABO/Rh, as long as the Expected Results" are modified accordingly.
- b. Specimens: Each facility is to receive 5 specimens [P-SL] for the patient to be used during validation testing. These specimens are to be received in the following order, and handled as indicated:

Specimen #1: do not result with the patients ABO/Rh

Specimen #2: result with the patients ABO/Rh using menu option [P-ET]

Specimen #3: result with the patients ABO/Rh using menu option [P-ET]

Specimen #4: result with the patients ABO/Rh using menu option [P-ET]

Specimen #5: do not result with the patients ABO/Rh

c. Inventory: Each facility will enter 6 units into inventory. The units which appear in the test cases are defined as follows:

UNIT#	UNIT ID	COMPONENT TYPE	AB O	Rh
1	PMD001	AS-1 RED BLOOD CELLS (04210)	A	NEGATIVE
2	PMD002	AS-1 RED BLOOD CELLS (04210)	A	NEGATIVE
3	PMD003	AS-1 RED BLOOD CELLS (04210)	A	NEGATIVE
4	PMD004	AS-1 RED BLOOD CELLS (04210)	A	NEGATIVE
5	PMD005	AS-1 RED BLOOD CELLS (04210)	A	NEGATIVE
6	PMD006	AS-1 RED BLOOD CELLS (04210)	A	NEGATIVE

Note: The Unit ID, component type, and ABO/Rh designation may be altered at the test site. Adjustments must be made to the "Expected Results" to reflect the actual data assignment.

d. The performance of test Case 8 is dependant on the relationship established between antibodies and antigens in the .04 (CORRESPONDING ANTIGEN/ANTIBODY) field, of the FUNCTION FIELD file. Differences between Expected and Actual results may be due to the current status of these antigen/antibody relationships, and should be investigated by the testing technologist to determine if the variance is acceptable. Justification of any variance must be documented in the comments column of the appropriate test case.

# **Test Case # 1 [P-RS-US\_01]**

Date Performed: Technologist:	
-------------------------------	--

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
1	Log into the blood bank module	D Donor		
		I Inventory		
		P Blood bank patient		
		Q Inquiries		
		R Reports		
		S Supervisor		
		W Ward		
		Select Blood bank Option:		
2	Select P [Blood bank patient]	CD Change to new division		
	Select I [Blood bank patient]	DA Remove an accession		
		DT Blood transfusion results		
		ET Enter test data		
		PR Previous records		
		RS Request/select/xmatch blood components		
		SI Special instructions		
		SL Specimen log-in		
		TA Add tests to a given accession.		
		TD Delete test from an accession		
		TL Test worklist		
		WL Accession area worklist		
		Colort Pland hank notions Ontions		
3	Select RS	Select Blood bank patient Option:		
3	[Request/select/xmatch blood	CR Blood component requests CT Unit CAUTION tag labels		
	components]	US Select units for patients		
	components]	XM Enter crossmatch results		
		Anti Linei et ossinaten results		
		Select Request/select/xmatch blood components Option:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
4	Select US [Select units for	Selection of units for a patient		
	patients]	REGION 7 ISC,TX (DEMO)		
		Accession Area: BLOOD BANK		
		To use BAR CODE READER		
		Pass reader wand over a GROUP-TYPE (ABO/Rh)		
		label		
		=>		
		Note: division is site specific.		
5	Scan any ABO/Rh bar code label	Select only unassigned/uncrossmatched units ? YES//		
6	Enter <cr> at the prompt</cr>	Select Patient Name:		
7	Enter "DOE,JOHN" at the	Select Patient Name: DOE,JOHN		
	prompt	ABO group: A Rh type: NEG		
		AGE: XX DATE OF BIRTH: XXXX		
		PATIENT LOCATION: XX//		
		Note: Additional patient information may be displayed. This is only		
		a partial representation of the screen capture.		
		Note: XX, and DATE represent patient information that is site		
		specific.		
8	Enter <cr> at the prompt</cr>	OK TO CONTINUE ? YES//		
9	Enter <cr> at the prompt</cr>	Blood component for unit selection:		
10	Scan a bar code label	1) mm/dd/yyyy hh:mm Acc # BB mmdd 5		
	representing AS-1 RED BLOOD	2) mm/dd/yyyy hh:mm Acc # BB mmdd 4		
	CELLS (04210).	3) mm/dd/yyyy hh:mm Acc # BB mmdd 3		
		4) mm/dd/yyyy hh:mm Acc # BB mmdd 2		
		5) mm/dd/yyyy hh:mm Acc # BB mmdd 1		
		Select patient blood sample (1-5):		
		Note: mm/dd/yyyy represents the date of specimen receipt.		
		hh:mm represents the time of specimen receipt.		
		mmdd represents the date associated with the BB accession		
		number.		
		Note: the displayed data is site specific and will differ if additional		
		specimens are available for the patient.		
11	Enter "^" at the prompt	Blood component for unit selection:		
12	Enter <cr> at the prompt</cr>	Select Patient Name:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
13	Enter <cr> at the prompt</cr>	CR Blood component requests		
		CT Unit CAUTION tag labels		
		US Select units for patients		
		XM Enter crossmatch results		
		Select Request/select/xmatch blood components Option		
14	Enter <cr> at the prompt</cr>	CD Change to new division		
11	Enter vere at the prompt	DA Remove an accession		
		DT Blood transfusion results		
		ET Enter test data		
		PR Previous records		
		RS Request/select/xmatch blood components		
		SI Special instructions		
		SL Specimen log-in		
		TA Add tests to a given accession.		
		TD Delete test from an accession		
		TL Test worklist		
		WL Accession area worklist		
		Select Blood bank patient Option:		
15	Enter <cr> at the prompt</cr>	D Donor		
		I Inventory		
		P Blood bank patient		
		Q Inquiries		
		R Reports		
		S Supervisor		
		W Ward		
		Select Blood bank Option:		

# **Test Case # 2 [P-RS-US\_02]**

Date Performed: Technologist:	
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STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
1	Log into the blood bank module	D Donor I Inventory P Blood bank patient Q Inquiries R Reports S Supervisor W Ward Select Blood bank Option:		
2	Select P [Blood bank patient]	CD Change to new division DA Remove an accession DT Blood transfusion results ET Enter test data PR Previous records RS Request/select/xmatch blood components SI Special instructions SL Specimen log-in TA Add tests to a given accession. TD Delete test from an accession TL Test worklist WL Accession area worklist Select Blood bank patient Option:		
3	Select RS [Request/select/xmatch blood components]	CR Blood component requests CT Unit CAUTION tag labels US Select units for patients XM Enter crossmatch results  Select Request/select/xmatch blood components Option:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
4	Select US [Select units for	Selection of units for a patient		
	patients]	REGION 7 ISC,TX (DEMO)		
		Accession Area: BLOOD BANK		
		To use BAR CODE READER		
		Pass reader wand over a GROUP-TYPE (ABO/Rh)		
		label		
		=>		
		Note: division is site specific.		
5	Enter <cr> at the prompt</cr>	Select only unassigned/uncrossmatched units ? YES//		
6	Enter <cr> at the prompt</cr>	Select Patient Name:		
7	Enter "DOE,JOHN" at the	Select Patient Name: DOE, JOHN		
	prompt	ABO group: A Rh type: NEG		
		AGE: XX DATE OF BIRTH: DATE		
		PATIENT LOCATION: XX//		
		Note: Additional patient information may be displayed. This is only		
		a partial representation of the screen capture.		
		Note: XX, and DATE represent patient information that is site		
		specific.		
8	Select <cr> at the prompt</cr>	OK TO CONTINUE ? YES//		
9	Select <cr> at the prompt</cr>	Blood component for unit selection:		
10	Enter "04210" at the prompt	1) mm/dd/yyyy hh:mm Acc # BB mmdd 5		
		2) mm/dd/yyyy hh:mm Acc # BB mmdd 4		
		3) mm/dd/yyyy hh:mm Acc # BB mmdd 3		
		4) mm/dd/yyyy hh:mm Acc # BB mmdd 2		
		5) mm/dd/yyyy hh:mm Acc # BB mmdd 1		
		Select patient blood sample (1-5):		
		Note: mm/dd/yyyy represents the date of specimen receipt.		
		Hh:mm represents the time of specimen receipt.		
		mmdd represents the date associated with the BB accession		
		number.		
		Note: the displayed data is site specific and will differ if additional		
1.1	F	specimens are available for the patient.		
11	Enter "^" at the prompt	Blood component for unit selection:		
12	Enter <cr> at the prompt</cr>	Select Patient Name:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
13	Enter <cr> at the prompt</cr>	CR Blood component requests		
		CT Unit CAUTION tag labels		
		US Select units for patients		
		XM Enter crossmatch results		
		Select Request/select/xmatch blood components Option		
14	Enter <cr> at the prompt</cr>	CD Change to new division		
		DA Remove an accession		
		DT Blood transfusion results		
		ET Enter test data		
		PR Previous records		
		RS Request/select/xmatch blood components		
		SI Special instructions		
		SL Specimen log-in		
		TA Add tests to a given accession.		
		TD Delete test from an accession		
		TL Test worklist		
		WL Accession area worklist		
		Select Blood bank patient Option:		
15	Enter <cr> at the prompt</cr>	D Donor		
		I Inventory		
		P Blood bank patient		
		Q Inquiries		
		R Reports		
		S Supervisor		
		W Ward		
		Calcat Plant bank Onthe		
		Select Blood bank Option:		

# **Test Case # 3 [P-RS-US\_03]**

Date Performed: Technologist:	
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STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
1	Log into the blood bank module	D Donor		
		I Inventory		
		P Blood bank patient		
		Q Inquiries		
		R Reports		
		S Supervisor		
		W Ward		
	Calcad D (D1 and 11 and 12 and 13 and 13	Select Blood bank Option:		
2	Select P [Blood bank patient]	CD Change to new division		
		DA Remove an accession DT Blood transfusion results		
		ET Enter test data		
		PR Previous records		
		RS Request/select/xmatch blood components		
		SI Special instructions		
		SL Specimen log-in		
		TA Add tests to a given accession.		
		TD Delete test from an accession		
		TL Test worklist		
		WL Accession area worklist		
		Select Blood bank patient Option:		
3	Select RS	CR Blood component requests		
	[Request/select/xmatch blood	CT Unit CAUTION tag labels		
	components]	US Select units for patients		
		XM Enter crossmatch results		
		Select Request/select/xmatch blood components Option:		
		Select Requestiscice amaten blood components Option.		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
4	Select US [Select units for	Selection of units for a patient		
	patients]	REGION 7 ISC,TX (DEMO)		
	patients	Accession Area: BLOOD BANK		
		To use BAR CODE READER		
		Pass reader wand over a GROUP-TYPE (ABO/Rh)		
		label		
		=>		
		Note: division is site specific.		
5	Enter <cr> at the prompt</cr>	Select only unassigned/uncrossmatched units ? YES//		
6	Enter <cr> at the prompt</cr>	Select Patient Name:		
7	Enter "DOE,JOHN" at the	Select Patient Name: DOE,JOHN		
	prompt	ABO group: A Rh type: NEG		
		AGE: XX DATE OF BIRTH: DATE		
		PATIENT LOCATION: XX//		
		Note: Additional patient information may be displayed. This is only		
		a partial representation of the screen capture.		
		Note: XX, and DATE represent patient information that is site		
		specific.		
8	Select <cr> at the prompt</cr>	OK TO CONTINUE ? YES//		
9	Select <cr> at the prompt</cr>	Blood component for unit selection:		
		Note: Additional information will display if the patient selected has		
		"Unit assigned/xmatched:" and/or "Component(s) requested:" from		
		prior setup and/or testing.		
10	Enter "04210" at the prompt	1) mm/dd/yyyy hh:mm Acc # BB mmdd 5		
		2) mm/dd/yyyy hh:mm Acc # BB mmdd 4		
		3) mm/dd/yyyy hh:mm Acc # BB mmdd 3		
		4) mm/dd/yyyy hh:mm Acc # BB mmdd 2		
		5) mm/dd/yyyy hh:mm Acc # BB mmdd 1		
		Select patient blood sample (1-5):		
		Note: mm/dd/yyyy represents the date of specimen receipt.		
		hh:mm represents the time of specimen receipt.		
		mmdd represents the date associated with the BB accession number.		
		Note: the displayed data is site specific and will differ if additional		
		specimens are available for the patient.		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
11	Enter "1" at the prompt	Select UNIT:		
	Note: the input must reflect the			
	5 <sup>th</sup> specimen received during			
12	Setup.  Enter "??" at the prompt	PMD001 A NEG mm/dd/yy		
12	Enter ?? at the prompt	PMD001 A NEG mm/dd/yy PMD002 A NEG mm/dd/yy		
		PMD003 A NEG mm/dd/yy		
		PMD004 A NEG mm/dd/yy		
		PMD005 A NEG mm/dd/yy		
		PMD006 A NEG mm/dd/yy		
		Note: mm/dd/yy represents the expiration date of the unit		
13	Enter "PMD001" at the prompt	UNIT OK for DOE, JOHN 111-11-1111 ? YES//		
14	Enter <cr> at the prompt</cr>	Select UNIT:		
15	Enter <cr> at the prompt</cr>	Blood component for unit selection:		
16	Enter <cr> at the prompt</cr>	Select Patient Name:		
17	Enter <cr> at the prompt</cr>	CR Blood component requests		
		CT Unit CAUTION tag labels		
		US Select units for patients		
		XM Enter crossmatch results		
		Select Request/select/xmatch blood components Option:		
18	Select US [Select units for	Selection of units for a patient		
10	patients]	REGION 7 ISC,TX (DEMO)		
	patients	Accession Area: BLOOD BANK		
		To use BAR CODE READER		
		Pass reader wand over a GROUP-TYPE (ABO/Rh)		
		label		
		=>		
		Note: division is site specific.		
19	Enter <cr> at the prompt</cr>	Select only unassigned/uncrossmatched units ? YES//		
20	Enter <cr> at the prompt</cr>	Select Patient Name:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
21	Enter "DOE,JOHN" at the	Select Patient Name: DOE,JOHN		
	prompt	ABO group: A Rh type: NEG		
		AGE: XX DATE OF BIRTH: DATE		
		PATIENT LOCATION: XX//		
		Note: Additional patient information may be displayed. This is only		
		a partial representation of the screen capture.		
		Note: XX, and DATE represent patient information that is site		
		specific.		
22	Enter <cr> at the prompt</cr>	OK TO CONTINUE ? YES// (YES)		
23	Select <cr> at the prompt</cr>	Blood component for unit selection:		
		Note: Additional information will display if the patient selected has		
		"Unit assigned/xmatched:" and/or "Component(s) requested:" from		
		prior setup and/or testing.		
24	Enter "04210" at the prompt	1) mm/dd/yyyy hh:mm Acc # BB mmdd 5		
		2) mm/dd/yyyy hh:mm Acc # BB mmdd 4		
		3) mm/dd/yyyy hh:mm Acc # BB mmdd 3		
		4) mm/dd/yyyy hh:mm Acc # BB mmdd 2 5) mm/dd/yyyy hh:mm Acc # BB mmdd 1		
		Select patient blood sample (1-5):		
		Note: mm/dd/yyyy represents the date of specimen receipt.		
		hh:mm represents the time of specimen receipt.		
		mmdd represents the date associated with the BB accession		
		number.		
		Note: the displayed data is site specific and will differ if additional		
		specimens are available for the patient.		
25	Enter "2" at the prompt.	Select UNIT:		
	Note: the input must reflect the			
	4 <sup>th</sup> specimen received during			
	setup.			
26	Enter "??" at the prompt	PMD001 A NEG mm/dd/yy		
		PMD002 A NEG mm/dd/yy		
		PMD003 A NEG mm/dd/yy		
		PMD004 A NEG mm/dd/yy		
		PMD005 A NEG mm/dd/yy		
		PMD006 A NEG mm/dd/yy		
		Note: mm/dd/yy represents the expiration date of the unit		
		Note: the displayed data is site specific and will differ if additional specimens are available for the patient.		
		specimens are available for the patient.		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
27	Enter "PMD001" at the prompt	UNIT OK for DOE, JOHN 111-11-1111 ? YES//		
28	Enter <cr> at the prompt</cr>	Select UNIT:		
29	Enter <cr> at the prompt</cr>	Blood component for unit selection:		
30	Enter <cr> at the prompt</cr>	Select Patient Name:		
31	Enter <cr> at the prompt</cr>	CR Blood component requests		
		CT Unit CAUTION tag labels		
		US Select units for patients		
		XM Enter crossmatch results		
		Salast Paguagt/galast/ymotah bland components Ontions		
32	Select XM [Enter crossmatch	Select Request/select/xmatch blood components Option:  Enter crossmatch results		
32	results]	Enter crossmatch results		
	resures	REGION 7 ISC,TX (DEMO)		
		Select Patient Name:		
		Note: division is site specific.		
33	Enter "DOE,JOHN" at the	Select units (1-7) to enter XMATCH results:		
	prompt	Note: in this example there were multiple units available for xmatch		
		and a list was displayed. This will vary from site to site.		
		Note: input YES to the "Antibody screen results not entered. OK to		
2.4	C.1	continue? NO//" prompt.		
34	Select unit "PMD001"	Note: input YES to the "Antibody screen results not entered. OK to continue? NO//" prompt if it appears.		
		XMATCH RESULT:		
35	Enter "COMPATIBLE" at the	Note: this may display a list of valid entries. Select COMPATIBLE.		
	prompt	Select CROSSMATCH COMMENT:		
36	Enter <cr> at the prompt</cr>	DATE/TIME UNIT ASSIGNED: DATE @ TIME //		
		Note: DATE and TIME will be site specific.		
37	Enter <cr> at the prompt</cr>	Select Patient Name:		
38	Enter <cr> at the prompt</cr>	Do you want to print caution tag labels ? YES//		
39	Enter "NO" at the prompt	CR Blood component requests		
		CT Unit CAUTION tag labels		
		US Select units for patients		
		XM Enter crossmatch results		
		Select Request/select/xmatch blood components Option:		
		Sciect Acquesa select/xmatch blood components Option:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
40	Enter <cr> at the prompt</cr>	CD Change to new division		
		DA Remove an accession		
		DT Blood transfusion results		
		ET Enter test data		
		PR Previous records		
		RS Request/select/xmatch blood components		
		SI Special instructions		
		SL Specimen log-in		
		TA Add tests to a given accession.		
		TD Delete test from an accession		
		TL Test worklist		
		WL Accession area worklist		
		Select Blood bank patient Option:		
41	Enter <cr> at the prompt</cr>	D Donor		
		I Inventory		
		P Blood bank patient		
		Q Inquiries		
		R Reports		
		S Supervisor		
		W Ward		
		Select Blood bank Option:		
42	Select Q [Inquiries]	DI Single donor demographic information		
		OR Order/test status		
		PA Show list of accessions for a patient		
		PH Patient Medication List		
		PR Patient blood bank record		
		SD Single donor information		
		ST Single unit status		
		SU Single unit information- display		
		UA Units assigned/components requested		
		VD Validation documentation		
		VT Test description information		
4.2		Select Inquiries Option:		
43	Select SU [Single unit	Select BLOOD INVENTORY UNIT ID:		
	information- display ]			

ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
Enter "PMD001" at the prompt	Note: search the screen display for the entry that indicates the unit		
	has a crossmatch result of COMPATIBLE associated with the		
Enter <cr> at the prompt</cr>			
	<u>-</u>		
	1 1		
	VT Test description information		
	Calcad In well-law Outland		
Enter (CD) at the mannet			
Enter <cr> at the prompt</cr>			
	1		
	_		
	W Watu		
	Select Blood bank Option:		
		Enter "PMD001" at the prompt  Note: search the screen display for the entry that indicates the unit has a crossmatch result of COMPATIBLE associated with the correct(intended) specimen. In this example the correct specimen is associated with steps 24 & 25 of this test case.  XMATCH RESULT: COMPATIBLE PATIENT SAMPLE ACC #: BB XXXX 4 Note: XXXX represents specimen date.  Enter "A" at the prompt  Select BLOOD INVENTORY UNIT ID:  Enter <cr> at the prompt  DI Single donor demographic information OR Order/test status PA Show list of accessions for a patient PH Patient Medication List PR Patient Medication List PR Patient blood bank record SD Single unit status SU Single unit information ST Single unit information ST Single unit information Test description information  Select Inquiries Option:  Enter <cr> at the prompt  Donor P Blood bank patient Q Inquiries R Reports S Supervisor W Ward</cr></cr>	Enter "PMD001" at the prompt  Note: search the screen display for the entry that indicates the unit has a crossmatch result of COMPATIBLE associated with the correct(intended) specimen. In this example the correct specimen is associated with steps 24 & 25 of this test case.  XMATCH RESULT: COMPATIBLE PATTIENT SAMPLE ACC #: BB XXXX 4 Note: XXXX represents specimen date.  Enter "^" at the prompt  DI Single donor demographic information OR Order/test status PA Show list of accessions for a patient PH Patient Medication List PR Patient blood bank record SD Single donor information ST Single unit status SU Single unit status SU Single unit information- display UA Units assigned/components requested VD Validation documentation VT Test description information  Select Inquiries Option:  Enter <cr> at the prompt  D Donor I Inventory P Blood bank patient Q Inquiries R Reports S Supervisor W Ward</cr>

# **Test Case # 4 [R-UR-CT\_01]**

Date Performed:	Technologist:
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STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
1	Log into the blood bank module	D Donor I Inventory P Blood bank patient Q Inquiries R Reports S Supervisor W Ward		
		Select Blood bank Option:		
2	Select R [Reports]	AR Patient antibody report (short list) BR Blood bank tests report CT Unit CAUTION tag labels CV CMV Antibody Status Report DR Donor summary reports IS Blood inventory status reports IT Blood inventory transaction reports PL Patient accession list TC Transfusion reaction count TR Transfusion reactions report UP Phenotyped units available UR Blood utilization & summary reports VD Print blood bank validation WK Blood bank workload reports Select Reports Option:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
3	Select UR [Blood utilization &	AA Crossmatch/Transfusions by Specialty/Physician		
	summary reports]	AR Autologous disposition report		
		CT Crossmatch: Transfusion report		
		IS Unit issue book entries		
		IT Inappropriate transfusion requests report		
		PT Prolonged transfusion times		
		RS Transfused RBC for treating specialty		
		TH Patient transfusions & hematology results		
		TR Transfusion data report		
		TS Transfusions by treating specialty/physician		
		TX Transfusion follow-up tests		
		Select Blood utilization & summary reports Option:		
4	Select CT	Crossmatch:Transfusion Report		
	[Crossmatch:Transfusion report]			
		Start with Date TODAY//		
5	Enter <cr> at the prompt</cr>	Go to Date TODAY//		
6	Enter <cr> at the prompt</cr>	DEVICE: HOME//		
7	Enter <cr> at the prompt</cr>	Note: The report may or may not have data. What is being		
		confirmed is that there are no issues existing in the system prior to		
		beginning this exercise. If there is an error displayed then this test		
		case cannot proceed. Request assistance.		
		AA Crossmatch/Transfusions by Specialty/Physician		
		AR Autologous disposition report		
		CT Crossmatch: Transfusion report		
		IS Unit issue book entries		
		IT Inappropriate transfusion requests report		
		PT Prolonged transfusion times		
		RS Transfused RBC for treating specialty		
		TH Patient transfusions & hematology results		
		TR Transfusion data report TS Transfusions by treating specialty/physician		
		TS Transfusions by treating specialty/physician TX Transfusion follow-up tests		
		1A 11 ansiusion tonow-up tests		
		Select Blood utilization & summary reports Option:		
	I	~ Division of Dammari J Tepotito Option		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
8	Enter <cr> at the prompt</cr>	AR Patient antibody report (short list)		
	1	BR Blood bank tests report		
		CT Unit CAUTION tag labels		
		CV CMV Antibody Status Report		
		DR Donor summary reports		
		IS Blood inventory status reports		
		IT Blood inventory transaction reports		
		PL Patient accession list		
		TC Transfusion reaction count		
		TR Transfusion reactions report		
		UP Phenotyped units available		
		UR Blood utilization & summary reports		
		VD Print blood bank validation		
		WK Blood bank workload reports		
		Select Reports Option:		
9	Enter <cr> at the prompt</cr>	D Donor		
		I Inventory		
		P Blood bank patient		
		Q Inquiries		
		R Reports		
		S Supervisor		
		W Ward		
		Select Blood bank Option:		
10	Select P [Blood bank patient]	CD Change to new division		
		DA Remove an accession		
		DT Blood transfusion results		
		ET Enter test data		
		PR Previous records		
		RS Request/select/xmatch blood components		
		SI Special instructions		
		SL Specimen log-in		
		TA Add tests to a given accession.		
		TD Delete test from an accession		
		TL Test worklist		
		WL Accession area worklist		
		Select Blood bank patient Option:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
11	Select RS	CR Blood component requests		
	[Request/select/xmatch blood	CT Unit CAUTION tag labels		
	components]	US Select units for patients		
		XM Enter crossmatch results		
		Select Request/select/xmatch blood components Option:		
12	Select US [Select units for	Selection of units for a patient		
	patients]	REGION 7 ISC,TX (DEMO)		
		Accession Area: BLOOD BANK		
		To use BAR CODE READER		
		Pass reader wand over a GROUP-TYPE (ABO/Rh)		
		label		
		> Note: Jinini and a site and a file.		
12	Enter (CD) at the second	Note: division is site specific.		
13	Enter <cr> at the prompt</cr>	Select only unassigned/uncrossmatched units? YES//		
14	Enter <cr> at the prompt</cr>	Select Patient Name:		
15	Enter "DOE,JOHN" at the	Select Patient Name: DOE, JOHN		
	prompt	ABO group: A Rh type: NEG		
		AGE: XX DATE OF BIRTH: DATE PATIENT LOCATION: XX//		
		Note: Additional patient information may be displayed. This is only a partial representation of the screen capture.		
		Note: Patient name, XX, and DATE represent patient information		
		that is site specific.		
16	Enter <cr> at the prompt</cr>	OK TO CONTINUE ? YES//		
17	Enter <cr> at the prompt</cr>	Blood component for unit selection:		
1 /	Enter City at the prompt	Note: Additional information will display if the patient selected has		
		"Unit assigned/xmatched:" and/or "Component(s) requested:" from		
		prior setup and/or testing.		
		prior scrup and or resurts.		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
18	Enter "04210" at the prompt	1) mm/dd/yyyy hh:mm Acc # BB mmdd 5		
	The second secon	2) mm/dd/yyyy hh:mm Acc # BB mmdd 4		
		3) mm/dd/yyyy hh:mm Acc # BB mmdd 3		
		4) mm/dd/yyyy hh:mm Acc # BB mmdd 2		
		5) mm/dd/yyyy hh:mm Acc # BB mmdd 1		
		Select patient blood sample (1-5):		
		Note: mm/dd/yyyy represents the date of specimen receipt.		
		hh:mm represents the time of specimen receipt.		
		mmdd represents the date associated with the BB accession		
		number.		
		Note: the displayed data is site specific and will differ if additional		
		specimens are available for the patient.		
		Select patient blood sample (1-5):		
19	Enter "2" at the prompt	Select UNIT:		
	Note: the input must reflect the			
	4 <sup>th</sup> specimen received during			
	setup.			
20	Enter "??" at the prompt	PMD002 A NEG mm/dd/yy		
		PMD003 A NEG mm/dd/yy		
		PMD004 A NEG mm/dd/yy		
		PMD005 A NEG mm/dd/yy		
		PMD006 A NEG mm/dd/yy		
21	Enter "DMD002" at the assessed	Note: mm/dd/yy represents the expiration date of the unit		
21 22	Enter "PMD002" at the prompt	UNIT OK for DOE,JOHN 111-11-1111 ? YES//		
23	Enter <cr> at the prompt</cr>	Select UNIT:		
24	Enter <cr> at the prompt</cr>	Blood component for unit selection:		
25	Enter <cr> at the prompt  Enter <cr> at the prompt</cr></cr>	Select Patient Name:		
23	Enter <ck> at the prompt</ck>	CR Blood component requests		
		CT Unit CAUTION tag labels US Select units for patients		
		XM Enter crossmatch results		
		ANI DITCE CLOSSIFIATOR LESUITS		
		Select Request/select/xmatch blood components Option:		
26	Select XM [Enter crossmatch	Enter crossmatch results		
	results]			
		REGION 7 ISC,TX (DEMO)		
		Select Patient Name:		
		Note: division is site specific.		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
27	Enter "DOE,JOHN" at the	Select units (1-7) to enter XMATCH results:		
	prompt	Note: in this example there were multiple specimen available for		
		xmatch and a list was displayed. This will vary from site to site		
28	Select unit "PMD002"	Note: input YES to the "Antibody screen results not entered. OK to		
		continue? NO//" prompt if it appears.		
		XMATCH RESULT:		
29	Enter COMPATIBLE at the	Note: this may display a list of valid entries. Select COMPATIBLE.		
	prompt	Select CROSSMATCH COMMENT:		
30	Enter <cr> at the prompt</cr>	DATE/TIME UNIT ASSIGNED: DATE @ TIME //		
		Note: DATE and TIME will be site specific.		
31	Enter <cr> at the prompt</cr>	Select Patient Name:		
32	Enter <cr> at the prompt</cr>	Do you want to print caution tag labels ? YES//		
33	Enter "NO" at the prompt	CR Blood component requests		
		CT Unit CAUTION tag labels		
		US Select units for patients		
		XM Enter crossmatch results		
		Select Request/select/xmatch blood components Option:		
34	Enter <cr> at the prompt</cr>	CD Change to new division		
		DA Remove an accession		
		DT Blood transfusion results		
		ET Enter test data		
		PR Previous records		
		RS Request/select/xmatch blood components		
		SI Special instructions		
		SL Specimen log-in		
		TA Add tests to a given accession.		
		TD Delete test from an accession		
		TL Test worklist		
		WL Accession area worklist		
		Select Blood bank patient Option:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
35	Enter <cr> at the prompt</cr>	D Donor		
		I Inventory		
		P Blood bank patient		
		Q Inquiries		
		R Reports		
		S Supervisor		
		W Ward		
		Select Blood bank Option:		
36	Select R [Reports]	AR Patient antibody report (short list)		
	r · · · · · · · · · · · · · · · · · · ·	BR Blood bank tests report		
		CT Unit CAUTION tag labels		
		CV CMV Antibody Status Report		
		DR Donor summary reports		
		IS Blood inventory status reports		
		IT Blood inventory transaction reports		
		PL Patient accession list		
		TC Transfusion reaction count		
		TR Transfusion reactions report		
		UP Phenotyped units available		
		UR Blood utilization & summary reports		
		VD Print blood bank validation		
		WK Blood bank workload reports		
		Select Reports Option:		
37	Select UR [Blood utilization &	AA Crossmatch/Transfusions by Specialty/Physician		
	summary reports]	AR Autologous disposition report		
		CT Crossmatch:Transfusion report		
		IS Unit issue book entries		
		IT Inappropriate transfusion requests report		
		PT Prolonged transfusion times		
		RS Transfused RBC for treating specialty		
		TH Patient transfusions & hematology results		
		TR Transfusion data report		
		TS Transfusions by treating specialty/physician		
		TX Transfusion follow-up tests		
		Select Blood utilization & summary reports Option:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
38	Select CT	Crossmatch:Transfusion Report	COLCOLLE	COMMENTE
	[Crossmatch:Transfusion report]	Of Ossimaten, Franklasion Report		
	[Crossimican Transfasion Topolt]	Start with Date TODAY//		
39	Enter <cr> at the prompt</cr>	Go to Date TODAY//		
40	Enter <cr> at the prompt</cr>	DEVICE: HOME//		
41	Enter <cr> at the prompt</cr>	1) DOE,JOHN 111-11-1111		
'1	Enter vere at the prompt	DATE @ TIME PMD002 AS-1 C On x-match, not counted		
		Note: The report may contain additional information. It will at least		
		contain the information for the unit resulted in step 28 of this test		
		case.		
		AA Crossmatch/Transfusions by Specialty/Physician		
		AR Autologous disposition report		
		CT Crossmatch: Transfusion report		
		IS Unit issue book entries		
		IT Inappropriate transfusion requests report		
		PT Prolonged transfusion times		
		RS Transfused RBC for treating specialty		
		TH Patient transfusions & hematology results		
		TR Transfusion data report		
		TS Transfusions by treating specialty/physician		
		TX Transfusion follow-up tests		
		Select Blood utilization & summary reports Option:		
42	Enter <cr> at the prompt</cr>	AR Patient antibody report (short list)		
		BR Blood bank tests report		
		CT Unit CAUTION tag labels		
		CV CMV Antibody Status Report		
		DR Donor summary reports		
		IS Blood inventory status reports		
		IT Blood inventory transaction reports		
		PL Patient accession list		
		TC Transfusion reaction count		
		TR Transfusion reactions report		
		UP Phenotyped units available		
		UR Blood utilization & summary reports VD Print blood bank validation		
		WK Blood bank workload reports		
		Select Reports Option:		
		Select Reports Option.		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
43	Enter <cr> at the prompt</cr>	D Donor		
		I Inventory		
		P Blood bank patient		
		Q Inquiries		
		R Reports		
		S Supervisor		
		W Ward		
		Select Blood bank Option:		

# **Test Case # 5 [R-UR-CT\_02]**

Date Performed:	Technologist:
	1 1 1 8 1 1 8 1 1 1 1 1 1 1 1 1 1 1 1 1

Log into the blood bank module	STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
Select R [Reports]  AR Patient antibody report (short list) BR Blood bank tests report CT Unit CAUTION tag labels CV CMV Antibody Status Report DR Donor summary reports IS Blood inventory status reports IT Blood inventory transaction reports PL Patient accession list TC Transfusion reaction count TR Transfusion reactions report UP Phenotyped units available UR Blood utilization & summary reports		Log into the blood bank module	D Donor I Inventory P Blood bank patient Q Inquiries R Reports S Supervisor		
2 Select R [Reports]  AR Patient antibody report (short list) BR Blood bank tests report CT Unit CAUTION tag labels CV CMV Antibody Status Report DR Donor summary reports IS Blood inventory status reports IT Blood inventory transaction reports PL Patient accession list TC Transfusion reaction count TR Transfusion reactions report UP Phenotyped units available UR Blood utilization & summary reports			Select Blood bank Option:		
WK Blood bank workload reports  Select Reports Option:	2	Select R [Reports]	AR Patient antibody report (short list) BR Blood bank tests report CT Unit CAUTION tag labels CV CMV Antibody Status Report DR Donor summary reports IS Blood inventory status reports IT Blood inventory transaction reports PL Patient accession list TC Transfusion reaction count TR Transfusion reactions report UP Phenotyped units available UR Blood utilization & summary reports VD Print blood bank validation WK Blood bank workload reports		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
3	Select UR [Blood utilization &	AA Crossmatch/Transfusions by Specialty/Physician		
	summary reports]	AR Autologous disposition report		
		CT Crossmatch: Transfusion report		
		IS Unit issue book entries		
		IT Inappropriate transfusion requests report		
		PT Prolonged transfusion times		
		RS Transfused RBC for treating specialty		
		TH Patient transfusions & hematology results		
		TR Transfusion data report		
		TS Transfusions by treating specialty/physician		
		TX Transfusion follow-up tests		
		Select Blood utilization & summary reports Option:		
4	Select CT	Crossmatch:Transfusion Report		
	[Crossmatch:Transfusion report]			
		Start with Date TODAY//		
5	Enter <cr> at the prompt</cr>	Go to Date TODAY//		
6	Enter <cr> at the prompt</cr>	DEVICE: HOME//		
7	Enter <cr> at the prompt</cr>	Note: The report may or may not have data. What is being		
		confirmed is that there are no issues existing in the system prior to		
		beginning this exercise. If there is an error displayed then this test		
		case cannot proceed. Request assistance.		
		AA Crossmatch/Transfusions by Specialty/Physician		
		AR Autologous disposition report		
		CT Crossmatch: Transfusion report		
		IS Unit issue book entries		
		IT Inappropriate transfusion requests report		
		PT Prolonged transfusion times		
		RS Transfused RBC for treating specialty		
		TH Patient transfusions & hematology results		
		TR Transfusion data report		
		TS Transfusions by treating specialty/physician		
		TX Transfusion follow-up tests		
		Select Blood utilization & summary reports Option:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
8	Enter <cr> at the prompt</cr>	AR Patient antibody report (short list)		
	1	BR Blood bank tests report		
		CT Unit CAUTION tag labels		
		CV CMV Antibody Status Report		
		DR Donor summary reports		
		IS Blood inventory status reports		
		IT Blood inventory transaction reports		
		PL Patient accession list		
		TC Transfusion reaction count		
		TR Transfusion reactions report		
		UP Phenotyped units available		
		UR Blood utilization & summary reports		
		VD Print blood bank validation		
		WK Blood bank workload reports		
		Select Reports Option:		
9	Enter <cr> at the prompt</cr>	D Donor		
		I Inventory		
		P Blood bank patient		
		Q Inquiries		
		R Reports		
		S Supervisor		
		W Ward		
		Select Blood bank Option:		
10	Select P [Blood bank patient]	CD Change to new division		
		DA Remove an accession		
		DT Blood transfusion results		
		ET Enter test data		
		PR Previous records		
		RS Request/select/xmatch blood components		
		SI Special instructions		
		SL Specimen log-in		
		TA Add tests to a given accession.		
		TD Delete test from an accession		
		TL Test worklist		
		WL Accession area worklist		
		Select Blood bank patient Option:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
11	Select RS	CR Blood component requests		
	[Request/select/xmatch blood	CT Unit CAUTION tag labels		
	components]	US Select units for patients		
		XM Enter crossmatch results		
		Select Request/select/xmatch blood components Option:		
12	Select US [Select units for	Selection of units for a patient		
	patients]	REGION 7 ISC,TX (DEMO)		
		Accession Area: BLOOD BANK		
		To use BAR CODE READER		
		Pass reader wand over a GROUP-TYPE (ABO/Rh)		
		label		
		Notes division in site on self-		
12	Enter (CD) at the second	Note: division is site specific.		
13	Enter <cr> at the prompt</cr>	Select only unassigned/uncrossmatched units? YES//		
14	Enter <cr> at the prompt</cr>	Select Patient Name:		
15	Enter "DOE,JOHN" at the	Select Patient Name: DOE,JOHN		
	prompt	ABO group: A Rh type: NEG		
		AGE: XX DATE OF BIRTH: DATE PATIENT LOCATION: XX//		
		Note: Additional patient information may be displayed. This is only a partial representation of the screen capture.		
		Note: XX, and DATE represent patient information that is site		
		specific.		
16	Select <cr> at the prompt</cr>	OK TO CONTINUE ? YES//		
17	Select < CR> at the prompt	Blood component for unit selection:		
1 /	Select CRV at the prompt	Note: Additional information will display if the patient selected has		
		"Unit assigned/xmatched:" and/or "Component(s) requested:" from		
		prior setup and/or testing.		
		prior semp and or results.		

	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
18	Enter "04210" at the prompt	1) mm/dd/yyyy hh:mm Acc # BB mmdd 5		
		2) mm/dd/yyyy hh:mm Acc # BB mmdd 4		
		3) mm/dd/yyyy hh:mm Acc # BB mmdd 3		
		4) mm/dd/yyyy hh:mm Acc # BB mmdd 2		
		5) mm/dd/yyyy hh:mm Acc # BB mmdd 1		
		Select patient blood sample (1-5):		
		Note: mm/dd/yyyy represents the date of specimen receipt.		
		hh:mm represents the time of specimen receipt.		
		mmdd represents the date associated with the BB accession		
		number.		
		Note: the displayed data is site specific and will differ if additional		
10	E . "0" 1	specimens are available for the patient.		
	Enter "2" at the prompt	Select UNIT:		
	Note: the input must reflect the 4 <sup>th</sup> specimen received during			
20	setup. Enter "??" at the prompt	PMD003 A NEG mm/dd/yy		
20	Enter !! at the prompt	PMD005 A NEG mm/dd/yy PMD004 A NEG mm/dd/yy		
		PMD005 A NEG mm/dd/yy		
		PMD006 A NEG mm/dd/yy		
		Note: mm/dd/yy represents the expiration date of the unit		
		Select UNIT:		
21	Enter "PMD003" at the prompt	UNIT OK for DOE,JOHN 111-11-1111 ? YES//		
22	Enter <cr> at the prompt</cr>	Select UNIT:		
23	Enter <cr> at the prompt</cr>	Blood component for unit selection:		
	Enter <cr> at the prompt</cr>	Select Patient Name:		
25	Enter <cr> at the prompt</cr>	CR Blood component requests		
		CT Unit CAUTION tag labels		
		US Select units for patients		
		XM Enter crossmatch results		
		Select Request/select/xmatch blood components Option:		
26	Select XM [Enter crossmatch	Enter crossmatch results		
	results]			
		REGION 7 ISC,TX (DEMO)		
		Select Patient Name:		
		Note: division is site specific.		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
27	Enter "DOE,JOHN" at the	Select units (1-7) to enter XMATCH results:		
	prompt	Note: in this example there were multiple specimen available for		
		xmatch and a list was displayed. This will vary from site to site.		
		Note: there may be additional prompts depending on previous		
		activity in the test account		
28	Select unit "PMD003"	Note: input YES to the "Antibody screen results not entered. OK to		
		continue? NO//" prompt if it appears.		
		XMATCH RESULT: .		
29	Enter "^" at the prompt	Select Patient Name:		
30	Enter <cr> at the prompt</cr>	Do you want to print caution tag labels ? YES//		
31	Enter "NO" at the prompt	CR Blood component requests		
		CT Unit CAUTION tag labels		
		US Select units for patients		
		XM Enter crossmatch results		
		Select Request/select/xmatch blood components Option:		
32	Enter <cr> at the prompt</cr>	CD Change to new division		
		DA Remove an accession		
		DT Blood transfusion results		
		ET Enter test data		
		PR Previous records RS Request/select/xmatch blood components		
		•		
		SL Specimen log-in TA Add tests to a given accession.		
		TD Delete test from an accession		
		TL Test worklist		
		WL Accession area worklist		
		WE Accession area workingt		
		Select Blood bank patient Option:		
33	Enter <cr> at the prompt</cr>	D Donor		
	1 1	I Inventory		
		P Blood bank patient		
		Q Inquiries		
		R Reports		
		S Supervisor		
		W Ward		
		Select Blood bank Option:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
34	Select R [Reports]	AR Patient antibody report (short list)		
	2	BR Blood bank tests report		
		CT Unit CAUTION tag labels		
		CV CMV Antibody Status Report		
		DR Donor summary reports		
		IS Blood inventory status reports		
		IT Blood inventory transaction reports		
		PL Patient accession list		
		TC Transfusion reaction count		
		TR Transfusion reactions report		
		UP Phenotyped units available		
		UR Blood utilization & summary reports		
		VD Print blood bank validation		
		WK Blood bank workload reports		
2.7		Select Reports Option:		
35	Select UR [Blood utilization &	AA Crossmatch/Transfusions by Specialty/Physician		
	summary reports]	AR Autologous disposition report		
		CT Crossmatch: Transfusion report		
		IS Unit issue book entries		
		IT Inappropriate transfusion requests report		
		PT Prolonged transfusion times		
		RS Transfused RBC for treating specialty TH Patient transfusions & hematology results		
		TR Transfusion data report		
		TS Transfusions by treating specialty/physician TX Transfusion follow-up tests		
		1A Transfusion follow-up tests		
		Select Blood utilization & summary reports Option:		
36	Select CT	Crossmatch: Transfusion Report		
	[Crossmatch:Transfusion report]			
		Start with Date TODAY//		
37	Enter <cr> at the prompt</cr>	Go to Date TODAY//		
38	Enter <cr> at the prompt</cr>	DEVICE: HOME//		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
39	Enter <cr> at the prompt</cr>	1) DOE,JOHN 111-11-1111  DATE @ TIME PMD003 AS-1 C On x-match, not counted Note: The report may contain additional information. It will not contain the unit referenced in step 28 of this test case.  '^' TO STOP:  Note: if there are no additional pages the screen may include the information displayed in the following step. Proceed from that point.		
40	Enter <cr> at the prompt</cr>	AA Crossmatch/Transfusions by Specialty/Physician AR Autologous disposition report CT Crossmatch:Transfusion report IS Unit issue book entries IT Inappropriate transfusion requests report PT Prolonged transfusion times RS Transfused RBC for treating specialty TH Patient transfusions & hematology results TR Transfusion data report TS Transfusions by treating specialty/physician TX Transfusion follow-up tests  Select Blood utilization & summary reports Option:		
41	Enter <cr> at the prompt</cr>	AR Patient antibody report (short list) BR Blood bank tests report CT Unit CAUTION tag labels CV CMV Antibody Status Report DR Donor summary reports IS Blood inventory status reports IT Blood inventory transaction reports PL Patient accession list TC Transfusion reaction count TR Transfusion reactions report UP Phenotyped units available UR Blood utilization & summary reports VD Print blood bank validation WK Blood bank workload reports Select Reports Option:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
42	Enter <cr> at the prompt</cr>	D Donor		
		I Inventory		
		P Blood bank patient		
		Q Inquiries		
		R Reports		
		S Supervisor		
		W Ward		
		Select Blood bank Option:		

# Test Case # 6 [P-RS-XM\_01]

Date Performed: Technologist:	
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STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
1	Log into the blood bank module	D Donor		
		I Inventory		
		P Blood bank patient		
		Q Inquiries		
		R Reports		
		S Supervisor		
		W Ward		
		Calcat Blood houls Outland		
2	Salast D [Dlood bank nationt ]	Select Blood bank Option:  CD Change to new division		
2	Select P [Blood bank patient]	CD Change to new division DA Remove an accession		
		DT Blood transfusion results		
		ET Enter test data		
		PR Previous records		
		RS Request/select/xmatch blood components		
		SI Special instructions		
		SL Specimen log-in		
		TA Add tests to a given accession.		
		TD Delete test from an accession		
		TL Test worklist		
		WL Accession area worklist		
		Select Blood bank patient Option:		
3	Select RS	CR Blood component requests		
	[Request/select/xmatch blood	CT Unit CAUTION tag labels		
	components]	US Select units for patients		
		XM Enter crossmatch results		
		Select Request/select/xmatch blood components Option:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
4	Select US [Select units for	Selection of units for a patient		
	patients]	REGION 7 ISC,TX (DEMO)		
		Accession Area: BLOOD BANK		
		To use BAR CODE READER		
		Pass reader wand over a GROUP-TYPE (ABO/Rh)		
		label		
		=>		
	T GD 1	Note: division is site specific.		
5	Enter <cr> at the prompt</cr>	Select only unassigned/uncrossmatched units ? YES//		
6	Enter <cr> at the prompt</cr>	Select Patient Name:		
7	Enter "DOE,JOHN" at the	Select Patient Name: DOE, JOHN		
	prompt	ABO group: A Rh type: NEG		
		AGE: XX DATE OF BIRTH: DATE		
		PATIENT LOCATION: XX//		
		Note: Additional patient information may be displayed. This is only a partial representation of the screen capture.		
		Note: XX, and DATE represent patient information that is site		
		specific.		
8	Select <cr> at the prompt</cr>	OK TO CONTINUE ? YES//		
9	Select <cr> at the prompt</cr>	Blood component for unit selection:		
	Select (Cro at the prompt	Note: Additional information will display if the patient selected has		
		"Unit assigned/xmatched:" and/or "Component(s) requested:" from		
		prior setup and/or testing.		
10	Enter "04210" at the prompt	1) mm/dd/yyyy hh:mm Acc # BB mmdd 5		
	The second secon	2) mm/dd/yyyy hh:mm Acc # BB mmdd 4		
		3) mm/dd/yyyy hh:mm Acc # BB mmdd 3		
		4) mm/dd/yyyy hh:mm Acc # BB mmdd 2		
		5) mm/dd/yyyy hh:mm Acc # BB mmdd 1		
		Select patient blood sample (1-5):		
		Note: mm/dd/yyyy represents the date of specimen receipt.		
		hh:mm represents the time of specimen receipt.		
		Mmdd represents the date associated with the BB accession		
		number.		
		Note: the displayed data is site specific and will differ if additional		
		specimens are available for the patient.		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
11	Enter "1" at the prompt  Note: the input must reflect the  5th specimen received during	Select UNIT:		
	setup.			
12	Enter "??" at the prompt	PMD003 A NEG mm/dd/yy		
		PMD004 A NEG mm/dd/yy		
		PMD005 A NEG mm/dd/yy		
		PMD006 A NEG mm/dd/yy		
		Note: mm/dd/yy represents the expiration date of the unit.		
		Select UNIT:		
13	Enter "PMD004" at the prompt	UNIT OK for DOE,JOHN 111-11-1111 ? YES//		
14	Enter <cr> at the prompt</cr>	Select UNIT:		
15	Enter <cr> at the prompt</cr>	Blood component for unit selection:		
16	Enter <cr> at the prompt</cr>	Select Patient Name:		
17	Enter <cr> at the prompt</cr>	CR Blood component requests		
		CT Unit CAUTION tag labels		
		US Select units for patients		
		XM Enter crossmatch results		
10	T . XXXIII	Select Request/select/xmatch blood components Option:		
18	Enter XM [Enter crossmatch results]	Enter crossmatch results		
		Select Patient Name:		
19	Enter "DOE.JOHN" at the	Select units (1-7) to enter XMATCH results:		
	prompt	Note: in this example there were multiple specimen available for		
		xmatch and a list was displayed. This will vary from site to site.		
20	Select unit "PMD004"	Sorry, must have ABO/Rh results to enter XMATCH results		
21	F (602 ) (1	Select Patient Name:		
21	Enter "^" at the prompt	Do you want to print caution tag labels ? YES//		
22	Enter "N" at the prompt	CR Blood component requests		
		CT Unit CAUTION tag labels		
		US Select units for patients		
		XM Enter crossmatch results		
		Salast Daguagt/galast/rmotab bland same and Ontion		
		Select Request/select/xmatch blood components Option:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
23	Enter <cr> at the prompt</cr>	CD Change to new division		
		DA Remove an accession		
		DT Blood transfusion results		
		ET Enter test data		
		PR Previous records		
		RS Request/select/xmatch blood components		
		SI Special instructions		
		SL Specimen log-in		
		TA Add tests to a given accession.		
		TD Delete test from an accession		
		TL Test worklist WL Accession area worklist		
		WL Accession area worklist		
		Select Blood bank patient Option:		
24	Enter ET [Enter test data]	BLOOD BANK Patient data entry for DATE ? YES//		
		Note: Assumes setup and test case are performed on same day.		
		Adjust as needed.		
25	Enter <cr> at the prompt</cr>	Enter TEST COMMENT(s) ? NO//		
26	Enter <cr> at the prompt</cr>	Edit SPECIMEN COMMENT(s) ? NO//		
27	Enter <cr> at the prompt</cr>	Select Accession Number:		
28	Enter "5" at the prompt	Patient record ABO: A Rh: NEG		
	Note: the input must reflect the			
	5 <sup>th</sup> specimen received during	ABO INTERPRETATION:		
	setup.			
29	Enter "A" at the prompt	RH INTERPRETATION:		
30	Enter "NEG" at the prompt	ANTIBODY SCREEN INTERPRETATION:		
31	Enter <cr> at the prompt</cr>	Note: Enter < CR> until the following prompt is displayed.		
		Select Accession Number:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
32	Enter <cr> at the prompt</cr>	CD Change to new division		
		DA Remove an accession		
		DT Blood transfusion results		
		ET Enter test data		
		PR Previous records		
		RS Request/select/xmatch blood components		
		SI Special instructions		
		SL Specimen log-in		
		TA Add tests to a given accession.		
		TD Delete test from an accession		
		TL Test worklist		
		WL Accession area worklist		
		Calcat Dia ad hands notion t Ontions		
33	Select RS	Select Blood bank patient Option:		
33	[Request/select/xmatch blood	CR Blood component requests CT Unit CAUTION tag labels		
	components]	US Select units for patients		
	components]	XM Enter crossmatch results		
		Aivi Enter crossmatch results		
		Select Request/select/xmatch blood components Option:		
34	Select XM [Enter crossmatch	Select Patient Name:		
	results]			
35	Enter "DOE,JOHN" at the	Select units (1-7) to enter XMATCH results:		
	prompt	Note: in this example there were multiple units available for xmatch		
		and a list was displayed. This will vary from site to site.		
36	Select unit "PMD004"	Antibody screen results not entered. OK to continue ? NO//		
		Note: this prompt will not appear if screen results have been		
		previously entered.		
37	Enter "Y" at the prompt	XMATCH RESULT:		
	Note: see expected result			
	associated with Step 36 above.			
38	Enter "COMPATIBLE" at the	Note: if a list displays select COMPATIBLE.		
20	prompt	Select CROSSMATCH COMMENT:		
39	Enter <cr> at the prompt</cr>	DATE/TIME UNIT ASSIGNED: SEP 7,2001@07:56//		
40	T (OW)	Note: date and time is site specific.		
40	Enter "N" at the prompt	Select Patient Name:		
41	Enter "^" at the prompt	Do you want to print caution tag labels ? YES//		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
42	Enter "N" at the prompt	CR Blood component requests		
		CT Unit CAUTION tag labels		
		US Select units for patients		
		XM Enter crossmatch results		
		Select Request/select/xmatch blood components Option:		
43	Enter <cr> at the prompt</cr>	CD Change to new division		
		DA Remove an accession		
		DT Blood transfusion results		
		ET Enter test data		
		PR Previous records		
		RS Request/select/xmatch blood components		
		SI Special instructions		
		SL Specimen log-in		
		TA Add tests to a given accession.		
		TD Delete test from an accession		
		TL Test worklist		
		WL Accession area worklist		
		Select Blood bank patient Option:		
44	Enter <cr> at the prompt</cr>	D Donor		
		I Inventory		
		P Blood bank patient		
		Q Inquiries		
		R Reports		
		S Supervisor		
		W Ward		
		Select Blood bank Option:		

# **Test Case # 7 [P-RS-XM\_02]**

Date Performed:	Technologist:
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STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
1	Log into the blood bank module	D Donor		
		I Inventory		
		P Blood bank patient		
		Q Inquiries		
		R Reports		
		S Supervisor		
		W Ward		
	Calcad D (D1 and 11 and 12 and 13 and 13	Select Blood bank Option:		
2	Select P [Blood bank patient]	CD Change to new division		
		DA Remove an accession DT Blood transfusion results		
		ET Enter test data		
		PR Previous records		
		RS Request/select/xmatch blood components		
		SI Special instructions		
		SL Specimen log-in		
		TA Add tests to a given accession.		
		TD Delete test from an accession		
		TL Test worklist		
		WL Accession area worklist		
		Select Blood bank patient Option:		
3	Select RS	CR Blood component requests		
	[Request/select/xmatch blood	CT Unit CAUTION tag labels		
	components]	US Select units for patients		
		XM Enter crossmatch results		
		Select Request/select/xmatch blood components Option:		
		Select Requestiscice amaten blood components Option.		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
4	Select US [Select units for	Selection of units for a patient		0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	patients]	REGION 7 ISC,TX (DEMO)		
	[ Patronia ]	Accession Area: BLOOD BANK		
		To use BAR CODE READER		
		Pass reader wand over a GROUP-TYPE (ABO/Rh)		
		label		
		=>		
		Note: division is site specific.		
5	Enter <cr> at the prompt</cr>	Select only unassigned/uncrossmatched units ? YES//		
6	Enter <cr> at the prompt</cr>	Select Patient Name:		
7	Enter "DOE,JOHN" at the	Select Patient Name: DOE,JOHN		
	prompt	ABO group: A Rh type: NEG		
		AGE: XX DATE OF BIRTH: DATE		
		PATIENT LOCATION: XX//		
		Note: Additional patient information may be displayed. This is only		
		a partial representation of the screen capture.		
		Note: XX, and DATE represent patient information that is site		
		specific.		
8	Select <cr> at the prompt</cr>	OK TO CONTINUE ? YES//		
9	Select <cr> at the prompt</cr>	Blood component for unit selection:		
		Note: Additional information will display if the patient selected has		
		"Unit assigned/xmatched:" and/or "Component(s) requested:" from		
		prior setup and/or testing.		
10	Enter "04210" at the prompt	1) mm/dd/yyyy hh:mm Acc # BB mmdd 5		
		2) mm/dd/yyyy hh:mm Acc # BB mmdd 4		
		3) mm/dd/yyyy hh:mm Acc # BB mmdd 3		
		4) mm/dd/yyyy hh:mm Acc # BB mmdd 2		
		5) mm/dd/yyyy hh:mm Acc # BB mmdd 1		
		Select patient blood sample (1-5):		
		Note: mm/dd/yyyy represents the date of specimen receipt.		
		hh:mm represents the time of specimen receipt.		
		mmdd represents the date associated with the BB accession		
		number.		
		Note: the displayed data is site specific and will differ if additional		
		specimens are available for the patient.		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
11	Enter "3" at the prompt	Select UNIT:		
	Note: the input must reflect the			
	3 <sup>rd</sup> specimen received during			
	setup.			
12	Enter "??" at the prompt	PMD003 A NEG mm/dd/yy		
		PMD005 A NEG mm/dd/yy		
		PMD006 A NEG mm/dd/yy		
		Note: mm/dd/yy represents the expiration date of the unit.		
12	Enter "DMD005" at the assessed	Select UNIT:		
13	Enter "PMD005" at the prompt	UNIT OK for DOE, JOHN 111-11-1111 ? YES//		
14 15	Enter <cr> at the prompt</cr>	Select UNIT:		
16	Enter <cr> at the prompt</cr>	Blood component for unit selection: Select Patient Name:		
17	Enter <cr> at the prompt</cr>			
1 /	Enter <cr> at the prompt</cr>	CR Blood component requests CT Unit CAUTION tag labels		
		US Select units for patients		
		XM Enter crossmatch results		
		ANT Effect Crossmatch Tesuits		
		Select Request/select/xmatch blood components Option:		
18	Enter <cr> at the prompt</cr>	CD Change to new division		
		DA Remove an accession		
		DT Blood transfusion results		
		ET Enter test data		
		PR Previous records		
		RS Request/select/xmatch blood components		
		SI Special instructions		
		SL Specimen log-in		
		TA Add tests to a given accession. TD Delete test from an accession		
		TL Test worklist		
		WL Accession area worklist		
		WE Accession area worklist		
		Select Blood bank patient Option:		
19	Enter ET [Enter test data]	BLOOD BANK Patient data entry for Sep 07, 2001 ? YES//		
		Note: date and time is site specific.		
		Note: Assumes setup and test case are performed on same day.		
		Adjust as needed.		
20	Enter <cr> at the prompt</cr>	Enter TEST COMMENT(s) ? NO//		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
21	Enter <cr> at the prompt</cr>	Edit SPECIMEN COMMENT(s) ? NO//		
22	Enter <cr> at the prompt</cr>	Select Accession Number:		
23	Enter "3' at the prompt	ABO INTERPRETATION: A//		
	Note: the input must reflect the			
	3 <sup>rd</sup> specimen received during			
	setup.			
24	Enter "ND" at the prompt	ND not the ABO group on record		
		Is present testing OK ? NO//		
25	Enter "Y" at the prompt	ND not the ABO group of present specimen		
		Is present testing OK ? NO//		
26	Enter "Y" at the prompt	RH INTERPRETATION: NEG//		
27	Enter "ND" at the prompt	ND not the Rh type on record		
20	F (372)	Is present testing OK ? NO//		
28	Enter "Y" at the prompt	ND not the Rh type on present specimen		
20	E	Is present testing OK? NO//		
30	Enter "Y" at the prompt	ANTIBODY SCREEN INTERPRETATION:		
31	Enter <cr> at the prompt</cr>	Select ANTIBODIES IDENTIFIED:		
32	Enter <cr> at the prompt</cr>	Select Accession Number:		
32	Enter <cr> at the prompt</cr>	CD Change to new division DA Remove an accession		
		DT Blood transfusion results		
		ET Enter test data		
		PR Previous records		
		RS Request/select/xmatch blood components		
		SI Special instructions		
		SL Specimen log-in		
		TA Add tests to a given accession.		
		TD Delete test from an accession		
		TL Test worklist		
		WL Accession area worklist		
		Select Blood bank patient Option:		
33	Select RS	CR Blood component requests		
	[Request/select/xmatch blood	CT Unit CAUTION tag labels		
	components]	US Select units for patients		
		XM Enter crossmatch results		
		Colort Dogwood/golort/gmotab blood commence Online		
		Select Request/select/xmatch blood components Option:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
34	Select XM [Enter crossmatch results]	Select Patient Name:		
35	Enter "DOE,JOHN" at the prompt	Select units (1-9) to enter XMATCH results:		
36	Select unit "PMD005"	Sorry, must have ABO/Rh results to enter XMATCH results Select Patient Name:		
37	Enter <cr> at the prompt</cr>	Do you want to print caution tag labels ? YES//		
38	Enter "NO" at the prompt	CR Blood component requests CT Unit CAUTION tag labels US Select units for patients XM Enter crossmatch results  Select Request/select/xmatch blood components Option:		
39	Enter <cr> at the prompt</cr>	CD Change to new division DA Remove an accession DT Blood transfusion results ET Enter test data PR Previous records RS Request/select/xmatch blood components SI Special instructions SL Specimen log-in TA Add tests to a given accession. TD Delete test from an accession TL Test worklist WL Accession area worklist Select Blood bank patient Option:		
40	Enter <cr> at the prompt</cr>	D Donor I Inventory P Blood bank patient Q Inquiries R Reports S Supervisor W Ward Select Blood bank Option:		

## **Test Case #8 [S-EF-AA\_01]**

The performance of test Case 8 is dependant on the relationship established between antibodies and antigens in the .04 (CORRESPONDING ANTIGEN/ANTIBODY) field, of the FUNCTION FIELD file. Differences between Expected and Actual results may be due to the current status of these antigen/antibody relationships, and should be investigated by the testing technologist to determine if the variance is acceptable. Justification of any variance must be documented in the comments column of this test case.

Date Performed:	Technologist:

STEP	ACTION		EXPECTED RESULT	OUTCOME	COMMENTS
1	Log into the blood bank module	D	Donor		
		I	Inventory		
		P	Blood bank patient		
		Q	Inquiries		
		R	Reports		
		S	Supervisor		
		W	Ward		
			Blood bank Option:		
2	Select S [Supervisor]	DO	Delete entire order or individual tests		
		ED	Blood donor edit options		
		EF	Edit blood bank files		
		EI	Blood bank inventory edit options		
		EP	Blood bank patient edit options		
		FD	Outline for one or more files		
		II	Blood bank inventory integrity report		
		LL	Edit number of lines in a label		
		SR	Summary and deletion reports		
		SW	Blood bank workload		
		Select	Supervisor Option:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
3	Select EF [Edit blood bank	AA Edit Corresponding Antigen/Antibody		
	files]	BD Edit blood bank descriptions file		
		BP Edit blood product file		
		BU Edit blood bank utility file		
		CR Edit Blood Component Request File		
		LL Edit lab letter file		
		MS Maximum surgical blood order edit		
		SP Edit blood bank site parameters		
		VD Blood bank validation documentation		
		Select Edit blood bank files Option::		
4	Select AA [Edit Corresponding	This option is case sensitive.		
	Antigen/Antibody]	Enter data using the EXACT case of the ANTIBODY or		
		ANTIGEN.		
		Select ANTIGEN or ANTIBODY:		
5	Enter "ANTI E" at the prompt	1. ANTI E 52030		
		2. ANTI E(w) 52110		
		CHOOSE 1-2:		
6	Enter "^" at the prompt	Select ANTIGEN or ANTIBODY:		
7	Enter "ANTI E" at the prompt	1. ANTI E 52030		
		2. ANTI E(w) 52110		
	7	CHOOSE 1-2:		
8	Enter "1" at the prompt	ANTIBODY: ANTI E		
		CORRESPONDING ANTIGEN: E//		
		SNOMED CODE: 52030		
0	Enter "VES" at the manner	IS THIS CORRECT? NO//		
9	Enter "YES" at the prompt  Enter <cr> at the prompt</cr>	CORRESPONDING ANTIGEN/ANTIBODY: E// COMPATIBILITY FACTOR:		
10	Enter CK at the prompt	Note: there may be a value displayed for the COMPATIBILITY		
		FACTOR.		
		Note: enter < CR> until the following is displayed.		
		This option is case sensitive.		
		Enter data using the EXACT case of the ANTIBODY or		
		ANTIGEN.		
		Select ANTIGEN or ANTIBODY:		

11 Enter "ANTI e" at the prompt CORRESPONDING ANTIGEN: e SNOMED CODE: 52050 IS THIS CORRECT? NO//	
SNOMED CODE: 52050	
is this condition	
12 Enter "A" at the prompt AA Edit Corresponding Antigen/Antibody	
BD Edit blood bank descriptions file	
BP Edit blood product file	
BU Edit blood bank utility file	
CR Edit Blood Component Request File LL Edit lab letter file	
MS Maximum surgical blood order edit	
SP Edit blood bank site parameters	
VD Blood bank validation documentation	
Select Edit blood bank files Option::	
13 Select AA [Edit Corresponding This option is case sensitive.	
Antigen/Antibody] Enter data using the EXACT case of the ANTIBODY or ANTIGEN.	
Select ANTIGEN or ANTIBODY:	
14 Enter "ANti e" at the prompt 1. ANTI E 52030	
2. ANTI E(w) 52110	
CHOOSE 1-2:	
15 Enter "^" at the prompt Select ANTIGEN or ANTIBODY:	
16 Enter "ANTI C" at the prompt 1. ANTI C 52020	
2. ANTI Ce 52070	
3. ANTI Cw 52080 4. ANTI Cx 52090	
4. ANTI CX 52090 CHOOSE 1-4:	
17 Enter "1" at the prompt ANTIBODY: ANTI C	
CORRESPONDING ANTIGEN: C	
SNOMED CODE: 52020	
IS THIS CORRECT? NO//	
18 Enter <cr> a the prompt Select ANTIGEN or ANTIBODY:  19 Enter "ANTi c" at the prompt 1. ANTI C 52020</cr>	
19 Enter "ANTi c" at the prompt	
3. ANTI CW 52080	
4. ANTI Cx 52090	
CHOOSE 1-4:	

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
20	Enter "^" at the prompt	Select ANTIGEN or ANTIBODY:		
21	Enter "ANTI c" at the prompt	ANTIBODY: ANTI c CORRESPONDING ANTIGEN: c SNOMED CODE: 52040		
		IS THIS CORRECT? NO//		
22	Enter "YES" at the prompt	CORRESPONDING ANTIGEN/ANTIBODY: c//		
23	Enter <cr> at the prompt</cr>	COMPATIBILITY FACTOR: Note: there may be a value displayed for the COMPATIBILITY FACTOR.  Note: enter < CR> until the following is displayed.  This option is case sensitive.  Enter data using the EXACT case of the ANTIBODY or ANTIGEN.		
		Select ANTIGEN or ANTIBODY:		
24	Enter "ANTI S" at the prompt	ANTIBODY: ANTI S CORRESPONDING ANTIGEN: S SNOMED CODE: 52310 IS THIS CORRECT? NO//		
25	Enter "^" at the prompt	AA Edit Corresponding Antigen/Antibody BD Edit blood bank descriptions file BP Edit blood product file BU Edit blood bank utility file CR Edit Blood Component Request File LL Edit lab letter file MS Maximum surgical blood order edit SP Edit blood bank site parameters VD Blood bank validation documentation Select Edit blood bank files Option:		
26	Select AA [Edit Corresponding Antigen/Antibody]	This option is case sensitive. Enter data using the EXACT case of the ANTIBODY or ANTIGEN. Select ANTIGEN or ANTIBODY:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
27	Enter "ANTI s" at the prompt	Select ANTIGEN or ANTIBODY: ANTI s		
		ANTIBODY: ANTI s		
		CORRESPONDING ANTIGEN: s		
		SNOMED CODE: 52320		
		IS THIS CORRECT? NO//		
28	Enter "^" at the prompt	AA Edit Corresponding Antigen/Antibody		
		BD Edit blood bank descriptions file		
		BP Edit blood product file		
		BU Edit blood bank utility file		
		CR Edit Blood Component Request File		
		LL Edit lab letter file		
		MS Maximum surgical blood order edit		
		SP Edit blood bank site parameters		
		VD Blood bank validation documentation		
		Select Edit blood bank files Option:		
29	Select AA [Edit Corresponding	This option is case sensitive.		
	Antigen/Antibody]	Enter data using the EXACT case of the ANTIBODY or		
		ANTIGEN.		
20	Forton "ANTC 22 at the manner	Select ANTIGEN or ANTIBODY:		
30	Enter "ANti s" at the prompt	ANTIBODY: ANTI S CORRESPONDING ANTIGEN: S		
		SNOMED CODE: 52310 IS THIS CORRECT? NO//		
31	Enter <cr> at the prompt</cr>	Select ANTIGEN or ANTIBODY:		
32	Enter "ANTI Jk(a)" at the	Select ANTIGEN OF ANTIBODY: Select ANTIGEN OF ANTIBODY: ANTI Jk(a)		
32	prompt	1. ANTI Jk(a) 52410		
	prompt	2. ANTI Jk(a) Jk(b) 52430		
		CHOOSE 1-2:		
33	Enter "1" at the prompt	ANTIBODY: ANTI Jk(a)		
	2 I at the prompt	CORRESPONDING ANTIGEN: Jk(a)		
		SNOMED CODE: 52410		
		IS THIS CORRECT? NO//		
34	Enter "YES" at the prompt	CORRESPONDING ANTIGEN/ANTIBODY: Jk(a)//		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
35	Enter <cr> at the prompt</cr>	COMPATIBILITY FACTOR:		
		Note: there may be a value displayed for the COMPATIBILITY		
		FACTOR.		
		Note: enter <cr> until the following is displayed.</cr>		
		This option is case sensitive.		
		Enter data using the EXACT case of the ANTIBODY or		
		ANTIGEN.		
		Select ANTIGEN or ANTIBODY:		
36	Enter "ANTI K" at the prompt	1 ANTI K 51810		
	Ziner invirir ut uie prompt	2 ANTI Kp(a) 51830		
		3 ANTI Kp(b) 51840		
		CHOOSE 1-3:		
		Note: the number of choices may vary from site to site.		
37	Enter "1" at the prompt	ANTIBODY: ANTI K		
	Note: due to site variations, the	CORRESPONDING ANTIGEN: K		
	input may be adjusted to reflect	SNOMED CODE: 51810		
	the selection of the $K$ antibody.	IC THIS CODDECTS NO!		
20	Enter WES? at the manual	IS THIS CORRECT? NO// CORRESPONDING ANTIGEN/ANTIBODY: ANTI K//		
38	Enter "YES" at the prompt Enter <cr> at the prompt</cr>	COMPATIBILITY FACTOR:		
39	Enter <cr> at the prompt</cr>	Note: there may be a value displayed for the COMPATIBILITY		
		FACTOR.		
		Note: enter < CR> until the following is displayed.		
		This option is case sensitive.		
		Enter data using the EXACT case of the ANTIBODY or		
		ANTIGEN.		
		Select ANTIGEN or ANTIBODY:		
40	Enter "ANTI k" at the prompt	ANTIBODY: ANTI k		
		CORRESPONDING ANTIGEN: k		
		SNOMED CODE: 51820		
		IS THIS CORRECT? NO//		
41	Enter <cr> at the prompt</cr>	Select ANTIGEN or ANTIBODY:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
42	Enter "E" at the prompt	1 E ANTI E 52030		
		2 E 50740		
		3 E(w) 50830		
		4 Ew ANTI E(w) 52110		
		CHOOSE 1-4:		
10	7 (41)	Note: the number of choices may vary from site to site.		
43	Enter "1" at the prompt	ANTIBODY: ANTI E		
		CORRESPONDING ANTIGEN: E SNOMED CODE: 52030		
		SNOWED CODE: 52030		
		IS THIS CORRECT? NO//		
44	Enter <cr> at the prompt</cr>	Select ANTIGEN or ANTIBODY:		
45	Enter "e" at the prompt	Select ANTIGEN or ANTIBODY: e		
		1 e ANTI e 52050		
		2 e 50760		
		CHOOSE 1-2:		
46	Enter "2" at the prompt	ANTIGEN: e		
		CORRESPONDING ANTIBODY: ANTI e		
		SNOMED CODE: 50760		
		IC THIC CODDECTS NO!		
47	Enter "YES" at the prompt	IS THIS CORRECT? NO// CORRESPONDING ANTIGEN/ANTIBODY: ANTI e//		
48	Enter CR> at the prompt	COMPATIBILITY FACTOR:		
40	Enter CK at the prompt	Note: there may be a value displayed for the COMPATIBILITY		
		FACTOR.		
		Note: enter <cr> until the following is displayed.</cr>		
		This option is case sensitive.		
		Enter data using the EXACT case of the ANTIBODY or		
		ANTIGEN.		
		Select ANTIGEN or ANTIBODY:		
49	Enter "C" at the prompt	1 C ANTI C 52020		
		2 C 50730		
		3 Ce ANTI Ce 52070		
		4 Ce 50780		
		5 Cw ANTI Cw 52080 Press <return> to see more, '^' to exit this list, OR</return>		
		CHOOSE 1-5:		
		CHOOSE 1-3;		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
50	Enter "2" at the prompt	ANTIGEN: C		
		CORRESPONDING ANTIBODY: ANTI C		
		SNOMED CODE: 50730		
		70 TT-10 00 D T 0T0 110 II		
7.1	E . CD	IS THIS CORRECT? NO//		
51 52	Enter <cr> at the prompt</cr>	Select ANTIGEN or ANTIBODY:		
52	Enter "c" at the prompt	1 c ANTI c 52040 2 c 50750		
		CHOOSE 1-2:		
53	Enter "2" at the prompt	ANTIGEN: c		
	Enter 2 at the prompt	CORRESPONDING ANTIBODY: ANTI c		
		SNOMED CODE: 50750		
		IS THIS CORRECT? NO//		
54	Enter <cr> at the prompt</cr>	Select ANTIGEN or ANTIBODY:		
55	Enter "S" at the prompt	1 S ANTI S 52310		
		2 S 51000		
		3 SHOCK, HEMORRHAGIC EM 70060		
		4 SMALL C c 50750 CHOOSE 1-4:		
56	Enter "2" at the prompt	ANTIGEN: S		
30	Enter 2 at the prompt	CORRESPONDING ANTIBODY: ANTI S		
		SNOMED CODE: 51000		
		SINGINED CODE, CIVIO		
		IS THIS CORRECT? NO//		
57	Enter "YES" at the prompt	CORRESPONDING ANTIGEN/ANTIBODY: ANTI S//		
58	Enter <cr> at the prompt</cr>	COMPATIBILITY FACTOR:		
		Note: there may be a value displayed for the COMPATIBILITY		
		FACTOR.		
		Note: enter <cr> until the following is displayed.</cr>		
		This option is case sensitive.		
		Enter data using the EXACT case of the ANTIBODY or ANTIGEN.		
		AIIIGEN.		
		Select ANTIGEN or ANTIBODY:		
59	Enter "s" at the prompt	1 s ANTI s 52320		
		2 s 51010		
		CHOOSE 1-2:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
60	Enter "2" at the prompt	ANTIGEN: S		
		CORRESPONDING ANTIBODY: ANTI s SNOMED CODE: 51010		
		SNOWED CODE. 51010		
		IS THIS CORRECT? NO//		
61	Enter <cr> at the prompt</cr>	Select ANTIGEN or ANTIBODY:		
62	Enter "K" at the prompt	1 K ANTI K 51810		
		2 K 50500		
		3 Kp(a) 50520		
		4 Kp(b) 50530 5 Kpa ANTI Kp(a) 51830		
		Press <return> to see more, '^' to exit this list, OR</return>		
		CHOOSE 1-5:		
63	Enter "2" at the prompt	ANTIGEN: K		
	Ziner Z un une prompt	CORRESPONDING ANTIBODY: ANTI K		
		SNOMED CODE: 50500		
		IS THIS CORRECT? NO//		
64	Enter <cr> at the prompt</cr>	Select ANTIGEN or ANTIBODY:		
65	Enter "k" at the prompt	1 k ANTI k 51820		
		2 k 50510		
66	Enter "2" at the prompt	CHOOSE 1-2: ANTIGEN: k		
00	Enter 2 at the prompt	CORRESPONDING ANTIBODY: ANTI k		
		SNOMED CODE: 50510		
		SITOMED CODE: SUSTO		
		IS THIS CORRECT? NO//		
67	Enter "^" at the prompt	AA Edit Corresponding Antigen/Antibody		
		BD Edit blood bank descriptions file		
		BP Edit blood product file		
		BU Edit blood bank utility file		
		CR Edit Blood Component Request File		
		LL Edit lab letter file		
		MS Maximum surgical blood order edit SP Edit blood bank site parameters		
		VD Blood bank validation documentation		
		Diood bank vanuation documentation		
		Select Edit blood bank files Option:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
68	Enter <cr> at the prompt</cr>	DO Delete entire order or individual tests		
		ED Blood donor edit options		
		EF Edit blood bank files		
		EI Blood bank inventory edit options		
		EP Blood bank patient edit options		
		FD Outline for one or more files		
		II Blood bank inventory integrity report		
		LL Edit number of lines in a label		
		SR Summary and deletion reports		
		SW Blood bank workload		
		Select Supervisor Option:		
69	Enter <cr> at the prompt</cr>	D Donor		
		I Inventory		
		P Blood bank patient		
		Q Inquiries		
		R Reports		
		S Supervisor		
		W Ward		
		Select Blood bank Option:		

# Test Case # 9 [P-ET\_01]

Date Performed:	Technologist:

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
1	Log into the blood bank module	D Donor		
		I Inventory		
		P Blood bank patient		
		Q Inquiries		
		R Reports		
		S Supervisor		
		W Ward		
		Select Blood bank Option:		
2	Select P[Blood bank patient]	CD Change to new division		
	1	DA Remove an accession		
		DT Blood transfusion results		
		ET Enter test data		
		PR Previous records		
		RS Request/select/xmatch blood components		
		SI Special instructions		
		SL Specimen log-in		
		TA Add tests to a given accession.		
		TD Delete test from an accession		
		TL Test worklist		
		WL Accession area worklist		
		Select Blood bank patient Option:		
3	Select ET [Enter test data]	BLOOD BANK Patient data entry for Mmm dd, yyyy ? YES//		
		Note: Mmm dd, yyyy is a placeholder for the current date.		
		Note: displayed date may require adjustment to reflect the actual		
		specimen collection date.		
4	Enter <cr> at the prompt</cr>	Enter TEST COMMENT(s) ? NO//		
	Note: adjust if there is no			
	specimen associated with the			
	current date.			
5	Enter <cr> at the prompt</cr>	Edit SPECIMEN COMMENT(s) ? NO//		
6	Enter <cr> at the prompt</cr>	Select Accession Number:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
7	Enter "4" at the prompt	Test:TRANSFUSION REQUEST		
	Note: this reflects the 2 <sup>nd</sup>			
	specimen received during set-up,	Patient record ABO: A Rh: NEG		
	and may be adjusted to conform	Note: the ABO and Rh display may be site specific.		
	to site conditions.	ABO INTERPRETATION: A//		
8	Enter <cr> at the prompt</cr>	RH INTERPRETATION: NEG//		
9	Enter <cr> at the prompt</cr>	ANTIBODY SCREEN INTERPRETATION:		
		Note: at some facilities POS may have been entered previously.		
10	Enter "POS" at the prompt	ANTIBODY SCREEN INTERPRETATION: POS POS		
	Note: at some facilities POS may			
	have been entered previously. If	Select SERUM ANTIBODY:		
	that is the case, $a < CR > is$ all	Note: this prompt may display an entry representing previously		
	that is required.	entered data. If this is the case use the @ functionality to delete all		
		previous antigen and antibody results before proceeding.		
11	Enter "ANti s" at the prompt	Select SERUM ANTIBODY: ANti s 52310 ANTI S		
		SERUM ANTIBODY: ANTI S//		
12	Enter "@" at the prompt	SURE YOU WANT TO DELETE THE ENTIRE SERUM		
		ANTIBODY?		
13	Enter "YES" at the prompt	Select SERUM ANTIBODY:		
14	Enter "ANTI s" a the prompt	Select SERUM ANTIBODY: ANTI s 52320 ANTI s		
		SERUM ANTIBODY: ANTI s//		
15	Enter <cr> at the prompt</cr>	Select SERUM ANTIBODY:		
16	Enter <cr> at the prompt</cr>	SERUM ANTIBODY: ANTI s SNOMED CODE: 52320		
		IS THIS CORRECT? YES//		
17	Enter "NO" at the prompt	Select SERUM ANTIBODY:		
18	Enter <cr> at the prompt</cr>	SERUM ANTIBODY: ANTI s SNOMED CODE: 52320		
		IS THIS CORRECT? YES//		
19	Enter "NO" at the prompt	Select SERUM ANTIBODY:		
20	Enter "ANTI E" at the prompt	1 ANTI E 52030 ANTI E		
		2 ANTI E(w) 52110 ANTI E(w)		
		CHOOSE 1-2:		
21	Enter "1" at the prompt	CHOOSE 1-2: 1 ANTI E 52030 ANTI E		
		SERUM ANTIBODY: ANTI E//		
22	Enter <cr> at the prompt</cr>	Select SERUM ANTIBODY:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
23	Enter <cr> at the prompt</cr>	SERUM ANTIBODY: ANTI E SNOMED CODE: 52030		
		SERUM ANTIBODY: ANTI s SNOMED CODE: 52320		
		IS THIS CORRECT? YES//		
24	Enter <cr> at the prompt</cr>	Select ANTIBODIES IDENTIFIED:		
25	Enter <cr> at the prompt</cr>	Date/time work completed: NOW//		
26	Enter <cr> at the prompt</cr>	Select EXECUTE WKLD CODE:		
27	Enter <cr> at the prompt</cr>	No WKLD CODES selected.		
		Select Accession Number:		
28	Enter "4" at the prompt	Test:TRANSFUSION REQUEST		
	Note: this reflects the 2 <sup>nd</sup>			
	specimen received during set-up,	Patient record ABO: A Rh: NEG		
	and may be adjusted to conform	Note: the ABO and Rh display may be site specific.		
	to site conditions.	ABO INTERPRETATION: A//		
29	Enter <cr> at the prompt</cr>	RH INTERPRETATION: NEG//		
30	Enter <cr> at the prompt</cr>	ANTIBODY SCREEN INTERPRETATION: POS//		
31	Enter <cr> at the prompt</cr>	Select SERUM ANTIBODY: ANTI E//		
32	Enter "ANti s" at the prompt.	Select SERUM ANTIBODY: ANTI E// ANti s 52310 ANTI S		
		SERUM ANTIBODY: ANTI S//		
33	Enter "@" at the prompt	Select SERUM ANTIBODY: ANTI S// @		
		SURE YOU WANT TO DELETE THE ENTIRE SERUM		
2.4	The Market of the Control of the Con	ANTIBODY?		
34	Enter "YES" at the prompt	Select SERUM ANTIBODY:		
35	Enter "ANTI s" at the prompt	Select SERUM ANTIBODY: ANTI s 52320 ANTI s		
26	E . CD	OK? Yes//		
36	Enter <cr> at the prompt</cr>	SERUM ANTIBODY: ANTI s//		
37	Enter <cr> at the prompt</cr>	Select SERUM ANTIBODY:		
38	Enter <cr> at the prompt</cr>	SERUM ANTIBODY: ANTI E SNOMED CODE: 52030		
		SERUM ANTIBODY: ANTI s SNOMED CODE: 52320		
		IC THIC CODDECTO VEC		
20	Enter (CD) at the many series	IS THIS CORRECT? YES//		
39	Enter <cr> at the prompt</cr>	Select ANTIBODIES IDENTIFIED:		
40	Enter <cr> at the prompt</cr>	Date/time work completed: NOW//		
41	Enter <cr> at the prompt</cr>	Select EXECUTE WKLD CODE:		
42	Enter <cr> at the prompt</cr>	Select Accession Number:		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
43	Enter <cr> at the prompt</cr>	CD Change to new division DA Remove an accession DT Blood transfusion results ET Enter test data PR Previous records RS Request/select/xmatch blood components SI Special instructions SL Specimen log-in TA Add tests to a given accession. TD Delete test from an accession TL Test worklist WL Accession area worklist	OUTCOME	COMMENTS
44	Enter <cr> at the prompt</cr>	Select Blood bank patient Option:  D Donor I Inventory P Blood bank patient Q Inquiries R Reports S Supervisor W Ward Select Blood bank Option:		

# Test Case # 10 [P-PR\_01]

Date Performed:	Technologist:
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STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
1	Log into the blood bank module	D Donor I Inventory P Blood bank patient Q Inquiries R Reports S Supervisor W Ward Select Blood bank Option:		
2	Select P [Blood bank patient]	CD Change to new division DA Remove an accession DT Blood transfusion results ET Enter test data PR Previous records RS Request/select/xmatch blood components SI Special instructions SL Specimen log-in TA Add tests to a given accession. TD Delete test from an accession TL Test worklist WL Accession area worklist Select Blood bank patient Option:		
3	Select PR [Previous records]	Select Patient Name: Note: patient is site specific.		
4	Enter "DOE,JOHN" at the prompt	Select Patient Name: DOE,JOHN ABO group: A Rh type: NEG AGE: XX DATE OF BIRTH: DATE PATIENT LOCATION: XX// Note: Additional patient information may be displayed. This is only a partial representation of the screen capture. Note: XX, and DATE represent patient information that is site specific.		

5		EXPECTED RESULT	OUTCOME	COMMENTS
5	Enter <cr> at the prompt</cr>	Select ANTIBODIES IDENTIFIED:		
		Note: there may be information displayed if the selected patient has		
		had previously entered data.		
6	Enter "ANti s" at the prompt	Select ANTIBODIES IDENTIFIED: ANti s 52310 ANTI S		
		Select ANTIBODIES IDENTIFIED:		
7	Enter <cr> at the prompt</cr>	ANTIBODIES IDENTIFIED: ANTI S SNOMED CODE:		
		52310		
		IC THIS CORRECTO VEGIL		
0	Enter "NO" at the prompt	IS THIS CORRECT? YES// Select ANTIBODIES IDENTIFIED:		
	Enter "ANTI s" at the prompt			
9	Enter ANTIS at the prompt	Select ANTIBODIES IDENTIFIED: ANTI s 52310 ANTI SOK? Yes//		
10	Enter <cr> at the prompt</cr>	ANTIBODIES IDENTIFIED: ANTI S//		
	Enter <cr> at the prompt</cr>	Select ANTIBODIES IDENTIFIED: ANTI S//		
	Enter <cr> at the prompt</cr>	ANTIBODIES IDENTIFIED:  ANTIBODIES IDENTIFIED: ANTI S SNOMED CODE:		
12	Emer CK at the prompt	52310		
		IS THIS CORRECT? YES//		
13	Enter "NO" at the prompt	Select ANTIBODIES IDENTIFIED:		
	Enter "ANTI S" at the prompt	Select ANTIBODIES IDENTIFIED: ANTI S 52310 ANTI S		
		OK? Yes//		
	Enter <cr> at the prompt</cr>	ANTIBODIES IDENTIFIED: ANTI S//		
16	Enter "@" at the prompt	SURE YOU WANT TO DELETE THE ENTIRE		
		ANTIBODIES IDENTIFIED?		
	Enter "YES" at the prompt	Select ANTIBODIES IDENTIFIED:		
	Enter "ANTI s" at the prompt	Select ANTIBODIES IDENTIFIED: ANTI s 52320 ANTI s		
19	Enter "ANTI E" at the prompt	Select ANTIBODIES IDENTIFIED: ANTI E		
		1. ANTI E 52030 ANTI E		
		2. ANTI E(w) 52110 ANTI E(w)		
20	Enter "1" at the prompt	CHOOSE 1-2: CHOOSE 1-2: 1 ANTI E 52030 ANTI E		
20	Enter "1" at the prompt	Select ANTIBODIES IDENTIFIED:		
21	Enter <cr> at the prompt</cr>	ANTIBODIES IDENTIFIED:  ANTIBODIES IDENTIFIED: ANTI E SNOMED CODE:		
41	Enter CK at the prompt	52030		
		ANTIBODIES IDENTIFIED: ANTI s SNOMED CODE:		
		52320		
		IS THIS CORRECT? YES//		

STEP	ACTION	EXPECTED RESULT	OUTCOME	COMMENTS
22	Enter <cr> at the prompt</cr>	Select RBC ANTIGENS PRESENT:		
23	Enter <cr> at the prompt</cr>	Select RBC ANTIGENS ABSENT:		
24	Enter <cr> at the prompt</cr>	Select HLA ANTIGEN PRESENT:		
25	Enter <cr> at the prompt</cr>	Select HLA ANTIGENS ABSENT:		
26	Enter <cr> at the prompt</cr>	BLOOD BANK COMMENTS:		
		No existing text		
		Edit? NO//		
27	Enter <cr> at the prompt</cr>	Select TRANSFUSION RECORD TRANSFUSION		
		DATE/TIME:		
28	Enter <cr> at the prompt</cr>	Select Patient Name:		
29	Enter <cr> at the prompt</cr>	CD Change to new division		
		DA Remove an accession		
		DT Blood transfusion results		
		ET Enter test data		
		PR Previous records		
		RS Request/select/xmatch blood components		
		SI Special instructions		
		SL Specimen log-in		
		TA Add tests to a given accession.		
		TD Delete test from an accession		
		TL Test worklist		
		WL Accession area worklist		
		Select Blood bank patient Option:		
30	Enter <cr> at the prompt</cr>	D Donor		
		I Inventory		
		P Blood bank patient		
		Q Inquiries		
		R Reports		
		S Supervisor		
		W Ward		
		Select Blood bank Option:		