

Original Effective Date: 6/1983

Last Approved Review Date: 2/2016

Last Approved Revision Date: 3/2016

Responsible Department: Laboratory

Responsible Person: Laboratory Medical Director

Signature:	Madm

Policies for Pre-Surgical Blood Bank Testing and Antibody Identification

1. PRE-SURGICAL BLOOD BANK TESTING

- 1.1. Patients will pre-test up to 30 days before surgery.
- 1.2. On the day of surgery, all patients will receive a full type and screen.
- 1.3. Patients with a previous or new antibody history will have at least two (2) units antigen typed and ready for crossmatch on the day of surgery.
 - 1.3.1. Antigen negative units do not need to be crossmatched ahead of an order for delivery, however they can be at the discretion of the technologist.

2. ANTIBODY IDENTIFICATION

- 2.1. Patient antibody folder will be created with initial identification.
 - 2.1.1. If previous identification folder has been removed, a new folder will be created.
 - 2.1.2. Patient full name and medical record number should be recorded on folder and all appropriate paperwork. A computer generated specimen label is acceptable.
 - 2.1.3. Include all worksheets and/or antigrams with results not recorded in the hospital computer system.
 - 2.1.4. Worksheets should be stored in chronological order.

2.2. Cold Reactive Antibodies

- 2.2.1. If an alloantibody reacts at immediate spin and interferes with the patient's reverse ABO typing, antigen negative reverse cells must be used for testing.
- 2.2.2. If an autoantibody reacts at immediate spin and interferes with the patient's forward ABO or Rh testing wash the patient's cells several times with 37C saline and repeat testing.
- 2.2.3. Ensure there is no underlying clinically significant alloantibody in the presence of an autoantibody.
 - 2.2.3.1. Specimens should be sent to MVRBC reference lab for resolution.
 - 2.2.3.2. Refer to SOP *BloodHub On-Line Ordering System* for specimen submission requirements.
- 2.2.4. All crossmatches should be antigen negative, if appropriate, and be performed using neat plasma.
 - 2.2.4.1. Issue least incompatible units, if necessary, with a signed emergency consent form. (Refer to SOP *Emergency Issue of Blood and Blood Products*)

2.3. AHG Reactive Antibodies

2.3.1. Clinically significant alloantibodies must be identified and appropriate antigen negative units provided.

Policies for Pre-Surgical Blood Bank Testing and Antibody Identification

BBMAN 9.2

- 2.3.2. Previously confirmed antibodies do not need to be reidentified or reconfirmed, but must be honored if clinically significant.
- 2.3.3. Any information regarding antibody identification by another facility must be entered into the patient history.
- 2.3.4. If a clinically significant antibody has been identified by another facility, the antibody must be honored regardless of current testing results.
- 2.3.5. Ensure there is no underlying clinically significant alloantibody in the presence of an autoantibody.
 - 2.3.5.1. Specimens should be sent to MVRBC reference lab for resolution.
 - 2.3.5.2. Refer to SOP *BloodHub On-Line Ordering System* for specimen submission requirements.
- 2.3.6. All crossmatches should be antigen negative, if appropriate, and be performed using neat plasma.
 - 2.3.6.1. Issue least incompatible units, if necessary, with a signed emergency consent form. (Refer to SOP *Emergency Issue of Blood and Blood Products*)
- 2.4. Ensure that all appropriate charges are entered for the testing performed.

3. ANTIGEN TYPING

- 3.1. Request antigen negative units from the blood supplier when:
 - 3.1.1. Antigen negative frequency is 50% or less
 - 3.1.2. Multiple antigen negative units with a combined frequency of 50% or less are required
- 3.2. Historically antigen negative units should be requested, whenever possible. (Refer to SOP *BloodHub On-Line Ordering System*)
 - 3.2.1. In house product inventory may be faxed to the blood supplier.
 - 3.2.2. Units must be antigen typed by Memorial blood bank staff when received and prior to crossmatch with patient plasma.
- 3.3. If historically antigen negative units are unavailable, blood supplier will send fully typed units.
 - 3.3.1. These units do not need retyping by Memorial blood bank staff when received.
 - 3.3.2. Typing must be entered into the unit history prior to crossmatch with patient plasma.
- 3.4. Ensure that all appropriate antigen typing charges have been entered
 - 3.4.1. Historic typing charge per unit
 - 3.4.2. Tier typing charges indicated by blood center
 - 3.4.3. Memorial typing charge per antigen per unit
- 3.5. Complete an orange card to indicate any antigen typed unit "saved" for a specific patient.
 - 3.5.1. Remove orange card when unit is no longer needed by patient.

4. USE OF THE IMMUNOHEMATOLOGY REFERENCE LABORATORY (IRL)

- 4.1. Indications for patient specimens to be shipped to the IRL may include, but are not limited to:
 - 4.1.1. Suspected antibody to a high frequency antigen.
 - 4.1.2. Suspected or history of multiple antibodies.
 - 4.1.3. Suspected autoantibody requiring adsorption.
 - 4.1.4. Specimen requiring elution
 - 4.1.4.1. Adult patients with a positive DAT due to IgG who have received packed red blood cells in the previous 2 months.

- 4.1.4.2. Physician request
- 4.2. Refer to SOP BloodHub On-Line Ordering System for specimen submission instructions
- 4.3. All reports and invoices received by the IRL should be forwarded to the blood bank supervisor or designee prior to a final report in the hospital computer system.
- 4.4. Copies of all reports will be maintained in the patient antibody folder.



PROCEDURE AND FORM CHANGE CONTROL

Title:	Policie	s for Antib	ody Ide	ntification	and Pre	-Surgical l	Blood Ba	ank Testing	g	
Writte	en	Valida	ited	Path Revi	iew	Revie	ew	Effect	ive	
Date	Ву	Date	Ву	Date	Ву	Date	By	Date	Ву	Reason for Revision
6/14/83	MRJ			6/14/83	JGH	6/14/83	MRJ			
Revised: Date										
Date						4/12/83	MRJ			
				5/21/85	JGH	6/4/85	MRJ			
				3/21/03	0011	9/8/86	MRJ			
						6/26/88	MRJ			
						9/3/90	JWS			
				1/9/93	LAT	1/8/93	MRJ			
5/28/93	MRJ			5/28/93	LAT	5/28/93	MRJ			
						1/6/96	MRJ			
12/23/96	MRJ									
5/20/04	JKR	12/15/04	GJM	12/16/04	ESB	12/15/04	MRJ	12/16/04	MRJ	Update to SCC version 23 and new techniques for COLDs and WARMs used in Blood Bank. Included in
12/20/04	JKR	12/20/04	MRJ							policies the following: mass screening; handling of specimens with strong cold antoantibodies; freezing serum, plasma, & eluate: warm autoantibodies crossmatch policies
3/3/05	MRJ	3/11/05	GJM	3/15/05	ESB	3/11/05	GJM	3/22/05	MRJ	New SCC action code: P:XM
9/11/06	JKR	10/4/06	MRJ	10/13/06	ESB	10/4/06	MRJ	10/15/06	MRJ	
						1/27/07	MRJ			

4/10/07	JKR	4/12/07	BPF	4/24/07	ESB	4/12/07	MRJ	4/24/07	MRJ	Antigen typing – Do not need to retype antigen if labeled or typed by Blood Center, For historic antigen typing – the unit must be labeled by Blood Center. If not Blood Bank needs to retype
7/15/08	MRJ	7/22/08	GJM	7/20/08	ESB	7/23/08	MRJ	7/29/08	MRJ	Incorporating the Patient ID stamp and Galileo stamp
11/22/08	MRJ									Removed instructions 3.1 a-d for prenatal titer Updated for
7/30/10	PAB	8/4/10	GJM	8/5/10	ESB			8/9/10	PAB	procedure changes and new LIS
2/4/11	PAB									Added Meditech instruction for inventory list; added new forms
8/1/12	PAB	8/2/12	KMS	8/8/12	ESB			8/20/12	PAB	Consolidated and updated; included references to specific SOP
10/11/12	PAB			10/11/12	ESB			10/15/12	PAB	Included statement regarding antibody ID by other facilities
				/		5/7/13	PAB			
7/23/13	PAB			7/25/13	ESB			7/25/13	PAB	Included BloodHub ordering, charges and additional specimen referrals.
11/19/13	PAB			11/26/13	ESB			11/26/13	PAB	Clarified reasons for elution
						5/9/14	PAB			
12/7/15	JLH							12/7/15	JLH	Added new header and BB #
2/5/16	JLH							2/5/16	JLH	New header

3/15/16 JLH 3/16/16 ESB 3/28/16 JLH PNEG	3/15/16	JLH	3/16/16 ESB	3/16/1			3/28/16		
------------------------------------------	---------	-----	-------------	--------	--	--	---------	--	--

Out of use:

Date:______ By:______ Reason:_____