TRAINING UPDATE

Lab Location:	SGMC and WOMC	**Date Implemented:**	2.14.20
Department:	Blood Bank	**Due Date:**	2.29.20

DESCRIPTION OF PROCEDURE REVISION

Name of procedure:

Antibody Identification

Description of change(s):

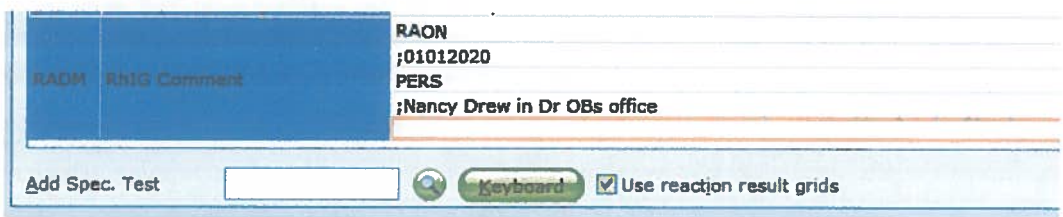
We changed the description for ABGD and ADRH.

- ABGD = Anti-D detected
- ADRH = Anti-D detected, possibly due to RhIG administration

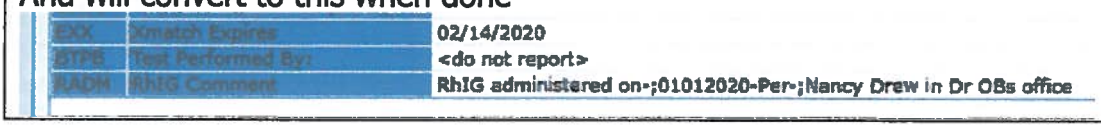
Also, there is a new comment code for entering RhIG administration. The comment MUST be entered in this fashion or it won't cross to Cerner.

- Type a lowercase r in the "Add Spec Test" field
- When the RADM box opens, type a lowercase s
- This will enter the RAON comment. Type the date on which the patient received RhIG or WinRho
- Tab to the next field and enter a lowercase p to enter the PERS field
- Enter the name of the person you spoke to (or Cerner) in the PERS field

The comment will look like this while entering



And will convert to this when done



Appendix B
LIS Antibody Code Translation Table

Code	Translation
AA1	Anti-A1
ABG	Anti-Bg
ABGC	Anti-C
ABGD	Anti-D detected
ABGE	Anti-E
ABGG	Anti-G
ABGI	Anti-I
ABGM	Anti-M
ABGN	Anti-N
ABGS	Anti-S
ABGV	Anti-V
ACEL	Anti-cellano
ACHDA	Anti-Chido (a)
ACOB	Anti-Colton (b)
ACW	Anti-Cw
ADOA	Anti-Dombrock (a)
ADRH	Anti-D detected, possibly due to RhIG administration
AFYA	Anti-Fy (a)
AFYB	Anti-Fy (b)
AGOA	Anti-Go (a)
AH	Anti-H
AHE	Anti-Henshaw
AHIA	Antibody to high incidence Ag
AHRB	Anti-hrB
AIH	Anti-IH
AJKA	Anti-Jk (a)
AJKB	Anti-Jk (b)
AJSA	Anti- Js (a)
AJSB	Anti- Js (b)
AKEL	Anti-Kell
AKPA	Anti- Kp (a)
AKPB	Anti- Kp (b)
ALEA	Anti- Le (a)
ALEB	Anti- Le (b)
ALIA	Antibody to low incidence Ag
ALTF	Anti-f
ALTI	Anti-i
ALUA	Anti-Lu (a)
ALUB	Anti-Lu (b)
AP1	Anti- P1
ASAR	No significant antibodies found
ASDA	Anti-Sd (a)
ASMC	Anti-little c
ASME	Anti- little e

Code	Translation
ASMS	Anti-little s
ATJA	Anti- Tj (a)
AU	Anti-U
AWIN	Anti-D due to Win Rho D
AWRA	Anti- Wr (a)
AXGA	Anti-Xg (a)
AYTA	Anti-Yt (a)
AYTB	Anti-Yt (b)
ASME	Anti- little e
CAA	Cold auto antibody
EAA1	Anti-A1 found to be coating cells
EABGC	Anti- C found to be coating cells
EABGD	Anti-D found to be coating cells
EABGE	Anti-E found to be coating cells
EABGG	Anti-G found to be coating cells
EABGS	Anti-S found to be coating cells
EACEL	Anti-Cellano found to be coating cells
EADRH	Anti-D, possibly due to RhIG, found to be coating cells
EAFYA	Anti-Fy (a) found to be coating cells
EAFYB	Anti-Fy (b) found to be coating cells
EAJKA	Anti-Jk (a) found to be coating cells
EAJKB	Anti-Jk (b) found to be coating cells
EAJSA	Anti- Js (a) found to be coating cells
EAJSB	Anti- Js (b) found to be coating cells
EAKEL	Anti-Kell found to be coating cells
EAKPA	Anti-Kp (a) found to be coating cells
EAKPB	Anti-Kp (b) found to be coating cells
EAM	Anti-M found to be coating cells
EAN	Anti-N found to be coating cells
EAP1	Anti-P1 found to be coating cells
EASMC	Anti-c found to be coating cells
EASME	Anti-e found to be coating cells
EASMS	Anti-s found to be coating cells
EAU	Anti-U found to be coating cells
EAWIN	Anti-D due to Win Rho D found to be coating cells
EINCL	No antibody found to be coating cells
ENHAN	Antibody to enhancement media
NAAB	No new antibodies detected
NEL	No antibody detected in eluate
NSC	Non-specific cold antibody
PEL	Panagglutinin found to be coating cells
PLA1	Platelet antibody
WAA	Warm auto antibody

Appendix C
Guidelines for Antibody Workup

SEROLOGIC EVALUATION OF PASSIVELY-ACQUIRED ANTIBODIES

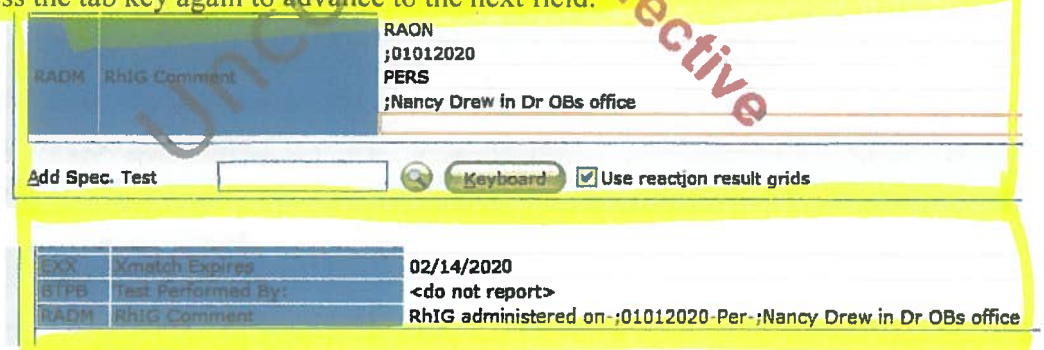
Antibodies can be passively acquired via injection, infusion, or transfusion. Blood bank staff members must be able to determine if an antibody is passive or active based on patient history.

Medications that are known to cause passive transfer of antibodies:

- Rh Immune Globulin (RhIG)- A sterile solution containing IgG anti-D for use in preventing Rh immunization.
  - RhIG demonstrates like anti-D.
  - Rh-negative and weak D positive women generally receive RhIG during and following pregnancy.
  - Rh-negative women and men may receive RhIG following an Rh-positive platelet transfusion or other exposure to Rh-positive red cells.
  - RhIG generally reacts at strengths ≤2+ in strength. However, titer should never be used to differentiate active from passive anti-D.
  - RhIG can be differentiated from real D by determining if it has an IgM component; RhIG only contains IgG anti-D. Refer to the reference lab if it is necessary to determine if a patient is making real anti-D.
  - RhIG has a half-life of 30 days and will fall below detectable levels within a few months.
- WinRho- A form of RhIG used to treat immune thrombocytopenia (ITP). WinRho binds to D antigen sites in Rh-positive individuals and mimics an autoantibody with D specificity. WinRho should be suspected when an Rh-positive individual demonstrates the appearance of an autoantibody with D specificity especially when the individual has a low platelet count or diagnosis of ITP.
  - WinRho is seen in Rh-positive patients with a diagnosis of ITP or thrombocytopenia.
  - Serologically, WinRho generally appears with the following results:
    - Rh positive
    - DAT positive
    - Antibody in plasma anti-D (due to WinRho)
    - Antibody in eluate anti-D (due to WinRho)
    - Other antibodies such as anti-A, -B, -C, and –E may also be seen in patients who have received RhIG.
- Immune Globulin- Concentration of plasma immunoglobulins used to treat congenital immunodeficiencies or viral exposures or to provide prophylaxis for certain viral exposures. Immune globulin comes in different forms including IVIG, anti-lymphocyte globulin, and anti-thymocyte globulin.
  - IVIG is routinely given to patients with the following diagnoses:
    - Primary or secondary immune deficiencies
    - Immune cytopenias
    - Presumed immune disorder
    - Other immunologic conditions
  - IVIG can (rarely) convey sufficient antibodies to cause a positive DAT.

When a passively-acquired antibody is suspected:

1. Obtain the patient's medication history. This can be done by calling the patient care area or accessing the information in the patient's electronic medical record. Document on the antibody identification form.
2. Enter the correct antibody code into the LIS.
    a. ADRH is anti-D detected, possibly due to RhIG administration
    b. EADRH is anti-D, possible due to RhIG, found to be coating cells
    c. AWIN is anti-D due to WinRho D
    d. EAWIN is anti-D due to Win Rho D found to be coating cells
    e. AIVIG is anti-D due to IVIG
    f. Other passive antibodies must be typed freetext into the LIS
3. When a passive antibody is detected, a comment must be added.
    a. Freetext the comment for IVIG administration.
    b. Follow this procedure to enter the comment for RhIG or WinRho D administration. The comment must be entered in this fashion or it will not cross to Cerner.
    c. In the "Add Spec Test" box, type a lowercase "r" for the "RADM" field to open.
    d. In the RADM box, type a lowercase "s" to add the "RAON" comment.
    e. Press the tab key to move to the next line. Press the semi-colon twice to open the field for a freetext comment. Then, enter the date on which the patient received RhIG or WinRho D.
    f. Press the tab key to move to the next line. Then, type a lowercase "p" for the "PERS" field to open.
    g. Press the tab key to move to the next line. Press the semi-colon twice to open the field for a freetext comment. Then, enter the person who provide the date of RhIG/WinRho D administration. It is acceptable to type "Cerner" in this box if the information was obtained from the electronic medical record.
    h. Press the tab key again to advance to the next field.



4. Crossmatch per crossmatch procedure.

WARM AUTOANTIBODIES WITH BROAD UNDETERMINED SPECIFICITY

Warm autoantibodies with broad undetermined specificity present special problems for antibody identification and blood transfusion. These antibodies often agglutinate all red blood cells with which they are tested, interfering with both pre-transfusion testing and crossmatching. This type of antibody should be suspected when all cells are positive on the antibody screen, antibody panel, and eluate (if tested).