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Origination 6/28/2022 Document **Kelly Sartor** Contact 6/14/2022 Last Approved Laboratory-Blood Area Bank Effective 6/28/2022 **Applicability** Dearborn Last Revised 6/14/2022 Next Review 6/13/2024

## Supervisory Review of Antibody Investigations - Dearborn Blood Bank

Document Type: Procedure

## I. PURPOSE AND OBJECTIVE:

This document will provide guidance and detailed descriptions of tasks performed for the supervisory review of antibody investigations.

#### II. DEFINITIONS:

A. Designee: a day shift medical technologist authorized by the Blood Bank supervisor to perform supervisory review after receiving training for the antibody review.

## **III. POLICIES:**

- A. The Blood Bank Supervisor, Lead Medical Technologist or designee must review all antibody investigations and special studies for completeness and accuracy; this task is referred to as supervisory review. The computer record, paperwork, and interpretations associated with the antibody investigation will be reviewed.
- B. The technologist performing supervisory review must not be the same technologist who performed the antibody investigation.

#### IV. PROCEDURE:

When reviewing the antibody investigation, the reviewers should use the following descriptions for tasks required for the *Antibody Review* 

## A. Antibody Interpretation

- Review the panel work up and confirm that the antibody interpretation has been performed correctly and is consistent with Transfusion Medicine policy, <u>Interpretation of Antibody</u> <u>Investigations</u>.
- 2. Verify that the results of each test cell are documented on an antigram copy.
- 3. Verify that the autocontrol is documented, with check cells if indicated.
- 4. Verify that each antigram is documented with the technologist initials and test date.

# **B. Antibody Screen Correlates with Antibody Interpretation**

Confirm the antibody screen results correlate with this interpretation.
For example: If Anti-Kell was identified, then the K+ screen cell is reactive and the K- screen cell is non-reactive.

## C. ABID Test Resulted Correctly

- 1. Verify that the ABID test has been resulted correctly. For example, verify that the correct comments for previously identified antibodies have been added.
- 2. For patients with passive anti-D due to RhIG confirm the ADPAS comment with the date of the RhIG administration has been added.

## D. ABID Field is Updated Correctly

- 1. Verify that the specificity of each antibody that has been currently or previously identified appears in the ABID field of the demographic screen.
- 2. Verify that the NEXM antibody appears in the ABID field of the demographic screen.

### E. ABSC Comment/Delay

1. Verify that the appropriate canned comment (ADELY or ADELX) has been added to the patient's antibody screen, to indicate that there may be a delay in providing blood products.

#### **F. Patient Comments**

Verify appropriate patient comments have been added under the CMTXT (comment text).
Verify that applicable patient history information has been added. The panel date and interpretation should be included if applicable. If a patient history was obtained, then the date that it was obtained, and applicable history shall be documented.

#### **G. Manual Billing**

1. Verify that the technologist who performed the investigation has completed appropriate

actions for any additional billing, if applicable. If the technologist who performed the investigation has not completed the billing, then the person performing the review will complete it.

## H. Review for Potential Transfusion Reaction Evaluation

- Consult with the Medical Director or designee to determine whether to order a transfusion reaction evaluation for possible delayed transfusion reaction if all four of the following conditions are met:
  - a. The patient has a positive antibody screen on the current sample in which new, unexpected antibody reactivity is detected, and
  - b. An antibody screen performed within last two (2) weeks was negative, or did not demonstrate the same unexpected reactivity present in the current sample, and
  - c. The patient received a RBC transfusion in the last two (2) weeks, and
  - d. The patient has a positive auto control or DAT.
- 2. This consultation shall be documented with the technologist's initials and the date of the consultation in Blood Bank Computer system as a CMTXT.

## I. Patient and Unit Antigen Typing

- 1. Confirm that the patient has not been transfused in the last 90 days.
  - a. If the patient has been transfused in the last 90 days, verify that the instruction "Unable to Antigen Type" has been added.
- 2. Verify that the Quality Control (QC) results are properly documented in the Blood Bank computer. This includes verification that the correct QC rack was selected and appropriate control cells (a heterozygous cell for the positive control, and an antigen negative cell for the negative control) were utilized for QC.
- 3. For antigen typing procedures that require an antiglobulin phase, verify that the patient does not have a positive DAT / autocontrol. Confirm that the testing was performed as per instructions for use and that the correct QC rack was used.
- 4. Verify the correct dilution for testing have been used; i.e. 3% test cells for tube typing, 0.8% test cells for select antigen typings performed by the IgG gel card method, 2-4% test cells for Rh antigen typing by the IgG gel card method.
- 5. For all positive patient antigens, verify that the inert control has been documented and is appropriate as described in Transfusion Medicine policy, <u>Antigen Typing</u>.
- 6. Confirm that the patient antigen results display correctly in under Patient/Display/Antigens.
- 7. Confirm that unit antigen results display correctly in under Inventory/Display/Antigens.

## J. Warm Autoantibody Investigations

1. Verify that sample has been tested and interpreted in accordance with Transfusion Medicine

- policy, Warm Autoantibody Investigation.
- 2. Verify that RBCs were crossmatched appropriately, as described in Transfusion Medicine policy, <u>Warm Autoantibody Investigation</u>.
- 3. Verify that one of the following canned messages has been added to the antibody screen, to provide crossmatching instructions:
  - a. CR60N; Perform 60-minute no-LISS Crossmatches
  - b. CRGEL; Perform Gel Crossmatches
  - c. CRPHN; Use phenotypically matched RBCs; unable to do rule-outs in 60 minute no-LISS method
  - d. CRADS; Adsorption Studies May Be Required
- 4. Verify that a phenotype appears in Blood Bank computer (under Patient / Display / Antigens) or that the sample has been sent to a reference laboratory for completion of the phenotype.
- 5. Verify that appropriate adsorption studies have been referred, if indicated.

## **K. Antibody Titration**

- 1. Antibody Titrations
- 2. Verify that appropriate test cell(s) were used (a homozygous test cell as indicated in P608, Antibody Titration.
- 3. Verify that the TITR test has been correctly resulted in the computer.
- 4. Verify that the technologist has documented that an aliquot of the current sample has been frozen (for use a control when a subsequent titer is performed).

#### L. Eluate

- 1. Verify that QC has been performed, is acceptable, and has been documented correctly. This includes
  - the required Last Wash Antibody Screen Test, as described in Transfusion Medicine policies, Testing of Eluates by the Gel Method or Testing of Eluates by the Tube Method.
- 2. Verify that the eluate has been ordered and documented in the computer (for billing purposes only, as the eluate does not interface).
- 3. Verify that the eluate has been interpreted correctly, based on the graded reactions.

## V. REFERENCES:

1. AABB Technical Manual, current edition.

#### **Approval Signatures**

Step Description Approver Date

Policy and Forms Steering Committe (if needed) Policy and Forms Steering

Committe (if needed)

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Kelly Sartor: Supv, Laboratory	6/11/2022
Gail Juleff: Project Mgr Policy	6/9/2022
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