Second ABO Testing for No History Patients

Wake Forest Baptist Health	**DOCUMENT TYPE:** ☒ Policy	**ORIGIN DATE IN TITLE 21** January 2021
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APPLICABLE LABORATORY(S)):

☒ North Carolina Baptist Hospital (NCBH)
☐ Lexington Medical Center (LMC)
☐ Davie Medical Center (DMC)
☐ Wilkes Medical Center (WMC)
☐ High Point Medical Center (HPMC)
☐ Westchester
☐ Clemmons

PROCEDURE STATEMENT

The purpose of this policy is to outline the requirements for ABO/RH determination on patients with NO prior ABO/RH history.

SCOPE

i. Protocol owner/Implementer: Julie H. Simmons/Christina S. Warren
ii. Protocol prepared by: Julie H. Simmons
iii. Who performs protocol: Department staff/management

DEFINITIONS

A. Policy: As defined in the Policy on Creating and Amending Policy, a statement of principle that is developed for the purpose of guiding decisions and activities related to governance, administration, or management of care, treatment, services or other activities of WFBH. A policy may help to ensure compliance with applicable laws and regulations, promote one or more of the missions of WFBH, contain guidelines for governance, and set parameters within which faculty, staff, students, visitors and others are expected to operate.

B. WFBH Lab System: Wake Forest Baptist Lab System is a health system that includes Wake Forest Baptist Medical Center and all affiliated organizations including Wake Forest University Health Sciences (WFUHS), North Carolina Baptist Hospital (NCBH), Lexington Medical Center (LMC), Davie Medical Center (DMC), Wilkes Medical Center (WMC), High Point Medical Center (HPMC), Lab at Westchester and Lab at Clemmons.

C. TSX: Type and Screen

D. SCC: Blood Bank computer system

E. AABB Standards:

5.11 Samples and Requests

Identifying information of the patient and the sample shall correspond and be confirmed at the time of collection using two independent identifiers.

5.14.1 ABO Group

The ABO group shall be determined by testing the red cells with anti-A and anti-B reagents and by testing the serum or plasma fro expected antibodies with A1 and B reagent red cells. If a discrepancy is detected and transfusion is necessary before resolution, only Group O Red Blood Cells shall be issued.

5.14.5 Pretransfusion Testing for Allogeneic Transfusion of Whole Blood, Red Blood Cell, and Granulocyte Components.

There shall be two determinations of the recipient's ABO group as specified in Standard 5.14.1. The first determination shall be performed on a current sample and the second determination by one of the following methods:

1) Comparison with previous records
2) Testing a second sample collected at a time different from the first sample, including a new verification of patient identification.
3) Retesting the same sample if patient identification was verified using a validated electronic identification system.

Standards 5.11 and 5.27.1 apply.

5.27.1 Recipients whose ABO group is not known or has not been confirmed shall receive group O Red Blood Cells or low-titer group O Whole Blood.

F. CAP Checklist

TRM.30575 Misidentification Risk

The facility has a system to reduce the risk of mistransfusion for non-emergent red cell transfusions.

NOTE: Mistransfusion occurs from misidentification of the intended recipient at the time of specimen collection for pretransfusion testing, during laboratory testing and preparation of units to be issued, and at the time of transfusion. Misidentification at sample collection occurs approximately once in every 1,000 samples, and in one in every 12,000 transfusions the recipient receives a unit not intended for or not properly selected for him/her.

Risk reduction options that might be considered include:

- Verifying the ABO group of the intended recipient on a second sample collected at a separate phlebotomy (including the recording of the result in the institution's historical record)
- Utilizing a mechanical barrier system
- Utilizing an electronic identification verification system that ensures that the patient from whom the pretransfusion specimen was collected is the same patient who is about to be transfused
- Other approaches capable of reducing the risk of mistransfusion.

The laboratory is expected to participate in monitoring the effectiveness of the system that it implements.

The laboratory should also consider improvements in procedures and/or educational efforts as part of its program to reduce the risk of mistransfusion.

POLICY GUIDELINES

A. Content

1. Potential recipients of red blood cells, low titer whole blood or granulocytes should have two Group/types documented before the issue of NON Group O packed cells, low titer whole blood or granulocytes per AABB Standard 5.14.5.
    a. The first should be the current sample and the second can be either historical, a second sample collected at a different time with verification of patient identity or testing of the same sample IF patient identification was verified with an electronic identification system.
    b. Inpatient phlebotomists use the electronic identification system.
    c. Outpatient phlebotomists and nursing do NOT use the electronic identification system.
2. Recipients who type Group O, A, B, or AB on the first sample AND are collected by inpatient phlebotomist may have the current sample repeated by a second technologist with a different suspension since they are collected using an electronic identification system.
3. Recipients who were not collected by inpatient phlebotomy with the electronic verification system should have a second sample obtained so that the ABO/Rh can be repeated.
    a. The second sample can be obtained from Core Lab if collected at least 30 minutes before/after the collection time of the current Blood Bank sample.
    b. If no Core Lab sample is available, then call the floor and request an additional sample.
    c. The current sample may be repeated and resulted in the ABOEO test in SCC to permit electronic crossmatch of Group O red cells until a second acceptable sample is obtained.
4. Only Group O red blood cells, low titer whole blood or granulocytes may be issued until a second separate specimen is received and tested.
5. The individual who performs the initial ABO type (Group O, A, B, AB) will check in Wake One to see if a Core Lab sample is available.
    a. If Core Lab sample is available, then the technologist will call and request the sample be sent to Blood Bank.
    b. If no Core Lab sample is available, then the technologist will call and request additional sample be collected.
    c. The fake antibody '<2ABO' (*Give O RCs until 2nd ABORh*) will be put into SCC to alert that Group O red blood cells, low titer whole blood or granulocytes must be transfused until receipt of second separate specimen.
6. The ABO2 test will be ordered by Front Desk when the sample is received. It can be added to the original TSX order in SCC.
7. The second ABORh forward/reverse (ABO2) will be performed and resulted.
    a. Once the ABO2 test has been performed, then the fake antibody '<2ABO' may be removed and the patient can receive group specific red blood cells.
8. During BEAKER downtimes, a second sample obtained from a different phlebotomy should be obtained since the electronic identification system cannot be used.
9. Audits will be performed monthly to verify that a second separate ABO has been obtained appropriately.
    a. Audits will be located in the Quarterly QC folders.
    Refer to Attachment: Audit: Second ABO obtained from Patients not collected with electronic identification system.

REFERENCES

RELATED POLICIES/PROCEDURES (NAVEX)

ABO Rh Protocol
ABO Testing Manual Method
Crossmatch Protocols

ATTACHMENTS/LINKED DOCUMENTS (TITLE 21)

Flow Chart for No History Patients with Potential Transfusion of Red Blood Cells, Low Titer Whole Blood or Granulocytes
Audit: Second ABO Obtained for Patients NOT collected with electronic identification system.

REVISION DATES: REVIEW CHANGE SUMMARY AS REPRESENTED IN TITLE 21.