



University of Washington Medical Center 1959 NE Pacific Street. Seattle, WA 98195 Transfusion Services Laboratory Policies and Procedures Manual	Original Effective Date: 08/09/17	Number: PC-0065.02
	Revision Effective Date:	
TITLE: Method Comparison		

PURPOSE:

To verify the same results are obtained when performing the same test using different methods

PRINCIPLE & CLINICAL SIGNIFICANCE

POLICIES:

Method comparisons are performed twice a year for the following:

TEST	METHODS
ABO/Rh	<ul style="list-style-type: none"> Automated Method Manual tube Method
Antibody Screen	<ul style="list-style-type: none"> Automated Method LISS Tube Method PEG Tube Method
Antibody Identification	<ul style="list-style-type: none"> Automated Method LISS Tube Method PEG Tube Method
Direct Antiglobulin Test (DAT: Polyspecific and IgG)	<ul style="list-style-type: none"> Automated Method Manual tube Method
Donor ABO/Rh	<ul style="list-style-type: none"> Automated Method Manual tube Method

SPECIMEN REQUIREMENTS:

EDTA is preferred and if not tested soon after collection, should be stored at 1-6°C.

Red top tubes are acceptable.

See SOP *Specimen Acceptability and Order Receipt*

REAGENTS/SUPPLIES/EQUIPMENT:

Reagents:	Supplies:	Equipment:
See specific SOP	See specific SOP	See specific SOP

QUALITY CONTROL:

- Reagents are quality controlled daily or on day of use
- Reagents are used according to manufacturer's instructions

INSTRUCTIONS:

TABLE OF CONTENTS:

[Comparison of Antibody Screen Test Methods](#)[Comparison of Antibody Identification Methods](#)[Comparison of ABO/Rh Test Methods](#)[Comparison of DAT \(Polyspecific and IgG\) Test Methods](#)[Comparison of Donor ABO/Rh Confirmation Test Methods](#)**Comparison of Antibody Screen Test Methods**

STEP	ACTION
1	Select at least 10 patient samples with a minimum of 2 positive antibody screens
2	Perform an antibody screen on each specimen using the following methods <ul style="list-style-type: none"> • LISS Tube Method (SOP <i>LISS Indirect Antiglobulin Technique</i>) • PEG Tube Method (SOP <i>PEG Indirect Antiglobulin Technique</i>) • Vision Automated Antibody Screen (SOP <i>Ortho Vision – Patient and Donor Testing and Ortho Vision – Results Management</i>)
3	Record the reactions and results of the tube testing on an <i>ABSC Method Comparison Worksheet</i> and print the results from the Ortho Vision
4	Record the interpretations on the <i>ABSC Method Comparison Worksheet</i> – refer to section Interpretation

Comparison of Antibody Identification Methods

STEP	ACTION
1	Select at least 2 patient specimens with a positive antibody screen NOTE: Samples should be positive for clinically significant antibodies
2	Perform an antibody identification workup on each specimen using the following methods <ul style="list-style-type: none"> • LISS Tube Method (SOP <i>LISS Indirect Antiglobulin Technique</i>) • PEG Tube Method (SOP <i>PEG Indirect Antiglobulin Technique</i>) • Automated Antibody Screen (SOP <i>Ortho Vision – Patient and Donor Testing and Ortho Vision - Results Management</i>)
3	Record the reactions and results of the tube testing on the appropriate panel antigram
4	Print the results from the Ortho Vision and record the reaction and results on the appropriate antigram
5	Record the interpretations of antibody identified on the <i>ABID Method Comparison Worksheet</i> – refer to section Interpretation
6	Attached all paperwork to the <i>ABID Method Comparison Worksheet</i>

Comparison of ABO/Rh Test Methods

STEP	ACTION
1	Select a least 8 patient specimens ensuring there is a sample for each ABO group (A, B, AB and O) and each Rh type (Rh Neg and Rh Pos)

STEP	ACTION
2	Perform ABO/Rh testing on each specimen using the following methods <ul style="list-style-type: none"> • Tube Method (SOP <i>ABO/Rh Manual Tube Method</i>) • Automated Method (SOPs <i>Ortho Vision – Patient and Donor Testing and Ortho Vision - Results Management</i>)
3	Record the reactions and results of the tube testing on a <i>Type and Screen Downtime Worksheet</i>
4	Print the results from the Ortho Vision
5	Record the interpretations on the <i>ABO/Rh Method Comparison Worksheet</i> – refer to section Interpretation
6	Attached all paperwork to the <i>ABO/Rh Method Comparison Worksheet</i>

Comparison of DAT (Polyspecific and IgG) Test Methods

STEP	ACTION
1	Select at least 5 patient specimens with a minimum of 2 IgG positive and 1 polyspecific negative
2	Perform polyspecific DAT testing on each specimen using the following methods <ul style="list-style-type: none"> • Tube Method (SOP <i>DAT (Direct Antiglobulin Test)</i>) • Automated method (SOPs <i>Ortho Vision – Patient and Donor Testing and Ortho Vision - Results Management</i>)
3	Record the reactions and results of the tube testing on the <i>DAT Method Comparison Worksheet</i> and print the reactions and the results from the Ortho Vision
4	Perform IgG DAT testing on each specimen using the following methods <ul style="list-style-type: none"> • Tube Method (SOP <i>DAT (Direct Antiglobulin Test)</i>) • Automated method (SOPs <i>Ortho Vision – Patient and Donor Testing and Ortho Vision - Results Management</i>)
5	Record the reactions and results of the tube testing on the <i>DAT Method Comparison Worksheet</i> and print the reactions and the results from the Ortho Vision – refer to section Interpretation
6	Record the interpretations on the <i>DAT Method Comparison Worksheet</i>

Comparison of Donor ABO/Rh Confirmation Test Methods

STEP	ACTION
1	Select at least 5 specimens ensuring there is a sample for each ABO group (A, B, AB and O) and each Rh type (Rh Neg and Rh Pos)
2	Perform ABO/Rh donor confirmation testing on each specimen using the following methods <ul style="list-style-type: none"> • Tube method (SOP <i>Unit Type Confirmation Using Tube Method</i>) • Ortho Vision Automated method (SOPs <i>Ortho Vision-Patient and Donor Testing and Ortho Vision-Results Management</i>)
3	Record the reactions and results of the tube testing on the <i>Donor ABO/Rh Method Comparison Worksheet</i> and print the reactions and the results from the Ortho Vision

TITLE: Method Comparison	Number: PC-0065.02
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STEP	ACTION
4	Record the interpretations on the <i>Donor ABO/Rh Method Comparison Worksheet</i> – refer to section Interpretation

CALCULATIONS/INTERPRETATIONS/RESULTS REPORTING/NORMAL VALUES/CRITICAL VALUES

Interpretation

If	Then Method Comparison is
Interpretations match between methods	Acceptable
Interpretations do not match between methods	Not Acceptable

REFERENCES

CAP All Common Checklist – Current Version

RELATED DOCUMENTS

- FORM *ABO/Rh Method Comparison Worksheet*
- FORM *ABSC Method Comparison Worksheet*
- FORM *ABID Method Comparison Worksheet*
- FORM *DAT Method Comparison Worksheet*
- FORM *Donor ABO/Rh Method Comparison Worksheet*
- SOP *ABO/Rh Manual Tube Method*
- SOP *LISS Indirect Antiglobulin Technique*
- SOP *PEG Indirect Antiglobulin Technique*
- SOP *Ortho Vision – Patient and Donor Testing*
- SOP *Ortho Vision - Results Management*
- SOP *DAT (Direct Antiglobulin Test)*
- SOP *Antibody Identification*

TITLE: Method Comparison

**Number:
PC-0065.02**

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