Memo Guidance

Date:10/21/2014

**Antibody identification and crossmatching for patients with antibodies to low frequency antigens**

*Note: See attached for a list of the more common low frequency antigens. This list is NOT all inclusive.*

**Antibody Screen and ID (for previously identified low frequency antibodies)**

1. Delete automated screen as would normally do for AB R/O.
2. Add AB R/O.
3. Run automated or manual screen or selected panel on which all cells lack the low frequency antigen.
4. Run one cell that is positive for antigen using PEG IgG.
   1. If cell is ≥ 1+, patient’s plasma may be used to crossmatch units, ie. Units do not need to be antigen typed.
   2. If cell is < 1+, all crossmatched units have to be antigen typed for corresponding antigen.
   3. If blood bank does not possess a cell that is positive for offending antigen, then antigen typed units must be obtained from MVBC using regular methods of obtaining antigen negative blood products.

**Antibody ID for NEW low frequency antibodies**

If you have determined you have an antibody to a low frequency antigen, make sure you do the following:

1. Run three cells, automated and/or manual, that are positive for the antigen.
   1. If only 2 cells are available, result as a “Probable” anti-(whatever).
2. Make sure that at least one positive reacting cell is run in PEG-IgG.
   1. Ex. Run 3 Co(b+) cells on Neo and 1 Co(b+) cell in PEG-IgG OR run 2 cells on Neo and 1 in PEG-IgG OR run 3 cells in PEG-IgG along with rule out panel.
3. Follow steps 4.a, 4.b, and 4.c in previous section above.

**Exception:** Lua does not require antigen typing regardless of strength of reactivity. It has not been known to cause any transfusion reactions.

**List of common low frequency antigens:**

* Lua
* Cob
* Jsa (found more commonly in African American phenotypes)
* Kpa
* Goa (found more commonly in African American phenotypes)
* Cw (most commonly found on R1R1 phenotypes)
* V
* Ytb