1. **Principle**

To test for a weak expression of the D antigen.

Red cells that react weakly or not at all in direct agglutination tests with anti-D may react with anti-D by the Capture Solid Phase Weak D testing.

Red cells that fail to react a grade 2 in direct agglutination tests with anti-D are incubated with Anti-D at 37C with LISS in the Capture-R Select strips. The strips are then washed and IgG coated indicator cells added.

1. **Scope and Related Policies**

Refer to SWIM manual, RT.003 “Weak D Typing”

1. **Specimen**
   1. EDTA anticoagulated Red Blood Cells.
   2. For assays using Capture-R® Select, do not use hemolyzed samples of grade 1+ or greater for creating a monolayer. Fragmented red blood cell membranes will interfere with monolayer formation.
2. **Material**

Equipment: Immucor Galileo Echo

Supplies: Solid waste tray

Liquid waste container

Strip holders/trays

Reagent/Sample racks

Reagents: PHIX buffered Saline

Anti-D Series 4

Capture-R Select Strips

Capture LISS

DAT Control Cells

Capture-R Indicator Cells

1. **Quality Control**

Weak D testing must be performed on WB corQC level 1 to 4.

1. **Procedure**
   1. Place patient sample on sample rack.
   2. Place sample rack on Echo.
   3. Click on running man.
   4. Click “Weak D”. Click Next.
   5. Select sample. Click Next.
   6. Load required strips/reagents.
   7. Click “Begin Tests”.
2. **Reporting**
   1. The results shall be reviewed and verified by the Echo technologist.
   2. At this time, we are not routinely running or reporting Echo Weak D.
3. **Procedural Notes**
   1. DAT control cells are required for Weak D testing. The Echo will pipette one control for every Weak D test. A maximum of 4 Weak D can be done on one strip.
   2. Weak D testing has been found to be stronger on Echo Solid Phase.
4. **References**
   1. Galileo Echo Operator Manual
   2. SWIM Manual