Guidelines for Perinatal Antibody Screening and Rho(D) immune globulin (WinRho®SDF *Liquid*) Administration

INITIAL VISIT
Blood type and antibody screen

NEGATIVE ANTIBODY SCREEN or POSITIVE ANTIBODY SCREEN
***NOT ASSOCIATED WITH* HEMOLYTIC DISEASE OF THE NEWBORN [HDN]**
(due to WinRho®SDF *Liquid*, Le, HI, I, P, M, Sd, Bg, HTLA, etc.)

Rh(D) NEGATIVE **
- Repeat antibody screen at 26-28 weeks (within 2 weeks) **BEFORE** giving **WinRho®SDF *Liquid***
- **WinRho®SDF *Liquid*** 300 µg at 28 weeks unless the father of the baby is documented to be Rh(D) negative*

NEGATIVE ANTIBODY SCREEN [or positive due to WinRho®SDF *Liquid*] at 28 weeks:
- Repeat antibody screen + Kleihauer at delivery **BEFORE** giving **WinRho®SDF *Liquid***
- **WinRho®SDF *Liquid:*** minimum of 120 µg if baby is Rh(D) positive or Rh unknown*. Adjust dosage based on Kleihauer (see reverse).

***POSITIVE ANTIBODY SCREEN NOT ASSOCIATED WITH* HDN**
(due to WinRho®SDF *Liquid,* Le, HI, I, P,M, Sd, Bg, HTLA, etc)
Rh(D) negative, at delivery:
- Repeat antibody screen + Kleihauer **BEFORE** giving **WinRho®SDF *Liquid***
- **WinRho®SDF *Liquid:*** minimum of 120 µg if baby is Rh(D) positive or Rh unknown*. Adjust dosage based on Kleihauer (see reverse).

Rh(D) POSITIVE
- Repeat antibody screen at 24-28 weeks

NEGATIVE ANTIBODY SCREEN (or non-HDN antibody)
- No further testing

POSITIVE ANTIBODY SCREEN

NON-HDN

HDN

POSITIVE ANTIBODY SCREEN *ASSOCIATED WITH* HEMOLYTIC DISEASE OF THE NEWBORN (HDN)
(D, C, c, E, e, Kell, Fya/Fyb, Jka/Jkb, etc.)

Regardless of Rh type:
1. Repeat antibody screen **MONTHLY** until delivery or as recommended by the Rh Program.
2. Further direction regarding management will be offered by the Rh Program.
3. Test cord blood for ABO, Rh, Direct Antiglobulin Test (DAT), hemoglobin and bilirubin at delivery

Rh(D) negative:
Rh(D) negative women with HDN antibodies **other than anti-D antibodies** are candidates for **WinRho®SDF *Liquid***.
See guidelines for Rh(D) negative women (box on left side).**

In PEI we do not stock 120µg WinRho®SDF Liquid Please substitute 300µg WinRho®SDF Liquid where 120µg has been suggested.

*See dosage and indications for Rho(D) Immune globulin administration on reverse

For further information contact the Rh Program of Nova Scotia, 5850 / 5980 University, Avenue P.O. Box 9700, Halifax, Nova Scotia B3K 6R8
Telephone: (902) 470-6458 Facsimile: (902) 470-7468. Website: http://rcp.nshealth.ca/rh
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Rho(D) Immune globulin (WinRho®SDF *Liquid)*

▶ Indications for administration to Rh(D) negative women (without allo anti-D antibodies) unless father of the baby is documented to be Rh(D) negative:

Always confirm Rh negative status and obtain antibody screen *BEFORE* administering WinRho®SDF *Liquid; no need to wait for screen result.*

- ***28 weeks gestation:*** give **300 µg.** If given before 28 weeks, a repeat injection is required 12 weeks later.
- ***Postpartum:*** obtain Kleihauer; give minimum of **120 µg** if infant is Rh(D) positive or Rh unknown. May withhold injection if WinRho®SDF *Liquid* has been given within the previous 3 weeks provided Kleihauer* is negative AND passive anti-D antibodies (due to Rho(D) Immune globulin) are detected at delivery.
- ***Spontaneous or induced abortion, ectopic pregnancy, partial molar pregnancy; abdominal trauma:*** up to 12 weeks gestation, give minimum of **120 µg**; after 12 weeks gestation, give **300 µg**.
- ***Antepartum bleeding (threatened abortion):*** up to 12 weeks gestation, give minimum of **120 µg**; after 12 weeks, give **300 µg**; repeat every 6 weeks if bleeding episodes continue; obtain Kleihauer* test for bleeding episodes in second and third trimester.
- ***Amniocentesis, cordocentesis, chorionic villus sampling (CVS):*** obtain Kleihauer and give **300 µg;** further Kleihauer + antibody screen if procedure is repeated within 6 weeks, and give an additional **300 µg *IF*** Kleihauer* is positive ***AND/OR*** passive anti-D antibodies (due to Rho(D) Immune globulin) are *not detected*.
- ***External versions, placental abruption, placenta previa with bleeding:*** give minimum of **120 µg** in combination with Kleihauer* testing due to risk of fetomaternal hemorrhage.
- ***Platelet transfusion if platelet donors are Rh(D) positive:*** **120 µg** covers up to 6 full buffy coat or apheresed transfused platelet units and protects for up to 4-6 weeks. WinRho®SDF *Liquid* should be administered within 72 hours of the transfusion. *Rationale:* Platelets from Rh(D) positive donors contain a small amount of red blood cells.
- ***Transfusion of Rh(D) positive red blood cells (RBC's) to Rh(D) negative recipient:*** **24 µg** per mL red blood cells (RBC's). *Caution*: see product insert for limitations, or consult with the Rh Program or your blood transfusion service.

In PEI we do not stock 120µg WinRho®SDF Liquid Please substitute 300µg WinRho®SDF Liquid where 120µg has been suggested.

KLEIHAUER TEST POSITIVE for fetomaternal hemorrhage (FMH) of Rh(D) positive whole blood:

Maternal circulation estimated whole blood volume = 5,000 mL

Administer 12 µg WinRho®SDF *Liquid* per mL of fetal whole blood (may use 9 µg per mL with i.v. administration).

120 µg protects for FMH of **0.0% to 0.2% of maternal whole blood volume (0.002 x 5000 mL = 10 mL fetal whole blood x 12 = 120 µg required)**

300 µg protects for FMH of **0.0% to 0.5% of maternal whole blood volume (0.005 x 5000 mL = 25 mL fetal whole blood x 12 = 300 µg required)**

Depending on dose calculated above: 1) administer **600 µg** every 8 hours **via the intravenous route** or 2) **1,200 µg** every 12 hours **via the intramuscular route** until the total dose has been administered. Consult with the Rh Program for further assistance or refer to the product insert under "Dosage and Administration".

NOTE: 1. **Administer within 72 hours of event to ensure effectiveness** (if omitted, give as soon as possible, up to 28 days later).

2. Administer by **INTRAVENOUS or DEEP INTRAMUSCULAR route**, to ensure adequate absorption. ***Note:*** *the dorsogluteal muscle should* ***not*** *be used for intramuscular injections. Rationale: variation in placement of the sciatic nerve; risk of decreased absorption and potentially the effectiveness of WinRho®SDF Liquid. Volumes of 1 mL or less can be given in the deltoid muscle. Volumes greater than 1.0 mL can be given in the ventrogluteal or vastus lateralus muscles.*

3. WinRho®SDF *Liquid is a blood product.* Recipients should be informed of the source and safety, and informed consent should be obtained. Consent forms are also available from the Rh Program* Refer to Rh Program pamphlet *The Rh Factor and Pregnancy.* All forms are available on the website below.

4. Since there is a rare possibility of a reaction to WinRho®SDF *Liquid,* recipients should be asked to stay for 15 to 30 minutes after receiving this injection.

5. Injection reporting forms (3-part) are available from the Rh Program or our website. Please mail or fax a completed copy to the Rh Program as soon as possible. *

*** In PEI consent forms are available from PEI Reproductive Care Program (368-4952). The injection reporting form is not required.**

References: Prevention of Rh Alloimmunization. SOGC Clinical Practice Guidelines No. 133, Sept 2003. JOGC Vol 25, No 9; Cangene Corporation website: www.winrho.ca. Perry & Potter. *Clinical Nursing Skills & Techniques.* Elsevier Mosby 6th edition, 2006.

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