

FOR ADULTS

MEDICATION NAME:	Anti-Rho (D) or RH (D) IMMUNE GLOBULIN Brand: WinRHo
HOW IS IT GIVEN:	Intravenous (IV) infusion.
HOW DOES IT WORK:	Anti-D immunoglobulin is an antibody collected from the blood of immunized donors. The antibody binds to a protein (antigen) on red blood cells called Rn(D). Anti-D immunoglobulin binds to red blood cells so long as a person is Rh(D) positive, this includes patients with ITP. It works in ITP by competing with the ability of macrophages in the spleen to remove antibody-coated platelets because each macrophage must know choose between removing an antibody coated red cell or platelet.
COMMON DOSING REGIMENS:	50-75 mcg/kg (250-375 IU/kg) given as an IV infusion.
COMMON SIDE EFFECTS:	Headaches, fever, chills, and a slight decrease in hemoglobin level (usually 1-2 g/dl) can occur.
RARE BUT SERIOUS SIDE EFFECTS :	In 2010, the FDA added a 'black box' warning for WinRHo use among those with ITP to warn of the rare but potentially severe side effect. Potentially life-treatening hemolysis (breakdown of red blood cells) is the main concern. Other risks include acute kidney failure and disseminated intravascular coagulation (DIC, a serious bleeding and clotting disorder) with multi-organ failure.
TYPICAL TIME TO RESPONSE :	24-72 hrs.
LIKELIHOOD OF INITIAL RESPONSE :	60-80% of patients who are Rh(D)-positive.
LIKELIHOOD OF LONG-TERM RESPONSE (3-5 YEARS):	Effects generally last 1-24 weeks (average of 5 weeks).
OTHER CONSIDERATIONS:	Anti-D is ineffective in Rh(D) negative patients and those who have had a splenectomy. Caution is indicated in patients who have kidney disease, anemia (low red blood cell count) or active infection. Patients should be made aware that anti-D immunoglobulin is a blood product. Transmission of infection or other complications has not been reported. Should generally be avoided in pregnancy as anti-D antibodies can cross the placenta and may cause anemia in the fetus and newborn.

References:

- 1. Platelet Disorder Support Association https://pdsa.org/anti-rho-d.html
- 2. Sandler, S.G., Novak, S.C., and Roland, B. (2000). The cost of treating immune thrombocytopenia purpura using intravenous Rh immune globulin vs intravenous immune globulin. American Journal of Hematology. March 63(3): 156-158.
- 3. Stasi, R., and Provan, D. (2004). Management of Immune Thrombocytopenic Purpura in Adults. Mayo Clinic Proceedings. April 79:504-522.
- 4. Stotler, BA., and Schwartz, J. (2015). How we use WinRho in patients with idiopathic thrombocytopenia purpura. Transfusion. 55(11): 2547-2550.
- 5. Rho (D) Immune Globin: https://www.drugs.com/dosage/rho-d-immune-globulin.html.