

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, 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 a rare, but potentially severe and even life-threatening, side effect, i.e. intravascular hemolysis (breakdown of red blood cells in the blood, not removal by the spleen), acute kidney failure and disseminated intravascular coagulation (DIC, a serious bleeding and clotting disorder) leading to multi-organ failure.
TYPICAL TIME TO RESPONSE	24-72 hrs.
LIKELIHOOD OF INITIAL RESPONSE	60-80% of patients who are Rh(D)-positive, if not splenectomized.
LIKELIHOOD OF LONG-TERM RESPONSE (3-5 YEARS)	Effects generally last 1-8 weeks (average of 3-4 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.

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>.