

	Medication Name: Type/Trade (Brand)	How It Works:	Route of Administration	Common Side Effects:	Typical Response Time
FIRST-LINE					
Corticosteroids:	Prednisone/Prednisolone Brand: Deltasone, Rayos, Prednicot, predniSONE IntenSol, Sterapred, Omnipred, and Sterapred DS.	Reduces destruction of antibody-coated platelets in the blood and the bone marrow, thereby increasing effective platelet production. May also reduce ITP bleeding through a direct effect on the blood vessel.	Oral tablet or liquid solution	Mood swings, anger, anxiety, insomnia and other sleep disturbances, weight gain, Puffy and rounder face, stomach irritation, ulcers, elevated blood pressure, elevated blood sugar, and water retention.	Initial response 5-14 days; many see a response within 2-3 days.
	Dexamethasone Brand: Decadron, Dexamethasone IntenSol, Dexasone, Solurex, Baycadron, and Zema Pak.				Initial response 3-14 days, Peak response 4-28 days.
	Intravenous immunoglobulin (IVIG)	IVIG is a blood product that reduces the destruction of antibody-coated platelets.	Intravenous (IV) infusion	Headache; flu-like symptoms (flushing, nausea, fever, chills, malaise). Rare: Aseptic meningitis, lower than normal blood pressure, hemolysis (breakdown of red blood cells), kidney failure, thrombosis (blood clots), and anaphylaxis (severe allergy).	24-48 hours
	Anti-Rho (D) or RH (D) IMMUNE GLOBULIN Brand: WinRHo	Anti-D immunoglobulin binds to red blood cells to remove antibody-coated platelets. Only used by patients with a positive blood type.	Intravenous (IV) infusion	Headaches, fever, chills, and a slight decrease in hemoglobin level (usually 1-2 g/dL) can occur. In rare situations, life-threatening hemolysis (breakdown of red blood cells) can occur. Other risks include acute kidney failure and disseminated intravascular coagulation (DIC, a serious bleeding and clotting disorder) with multi-organ failure.	24-72 hours
	Watchful Waiting Strategy Aka: ACTIVE OBSERVATION approach	Individuals who have no bleeding or only mild bleeding and are at a low risk of future bleeding are actively followed with observation. This requires close communication between the individual with ITP and their health care provider.	Not applicable.	Patients might feel anxious about not receiving medication to raise their platelet count. Anxiety can be reduced by close communication with the doctor and discussion about concerns. This treatment is not appropriate for patients with moderate-severe bleeding symptoms, who may be at risk of serious bleeding.	Not applicable
SECOND-LINE					
Off-label use:	Monoclonal Antibody: * Rituximab Brand: Rituxan	Attaches to and depletes B lymphocytes (immune cells), including the B cells that produce autoantibodies that attach to platelets in patients with ITP.	Intravenous (IV) infusion	Infusion reactions, especially with the first infusion. Rare: serum sickness, late-onset neutropenia, and infection. See black box warning in treatment table in https://www.pdsa.org/treating-itp.html .	1-7 weeks
	* Eltrombopag Brand: Promacta/Revolade	Binds to the thrombopoietin receptor on megakaryocytes, which stimulates platelet production.	Oral tablet	<u>Eltrombopag</u> : Nausea, increased liver enzymes, headache. Platelet count may drop suddenly if drug stopped abruptly. Thrombosis (blood clots), hepatotoxicity (liver injury), and bone marrow reticulosis (fibrous scarring) have been reported but are rare.	1-3 weeks
TPO-RA:	* Romiplostim Brand: NPlate		Subcutaneous injection	<u>NPlate</u> : Headache, joint and muscle pain. Platelet count may drop suddenly if drug stopped abruptly. Thrombosis (blood clots) and bone marrow reticulosis (fibrous scarring) have been reported, but are rare.	1-3 weeks
	Avatrombopag Brand: Doplelet		Oral tablet	<u>Avatrombopag</u> : Unusual weight gain or loss. The risk of thrombosis (blood clots) and bone marrow reticulosis (fibrous scarring) has not been established.	1-3 weeks

Fostamatinib Brand: Tavalisse, Tavlesse	Spleen tyrosine kinase (SYK) inhibitor that blocks platelet clearance.	Oral tablet	Diarrhea, hypertension, GI distress including nausea and abdominal pain. Hepatotoxicity, and decreased white blood cell counts have been reported.	2-4 weeks
THIRD-LINE				
* Azathioprine Brand: Imuran, Azasan	Reduces the immune response. Used to treat diverse autoimmune disorders and some forms of lymphoma.	Oral tablet	Hepatotoxicity (liver damage) can occur. Rare: neutropenia (low white blood cells) which increases the risk for serious bacterial infections, and hair loss.	3-6 months
* Cyclosporine A Brand: Neoral and Sandimmune	Reduces the immune response.	Oral tablet or Intravenous (IV) injection	Elevated blood pressure, tremor, muscle pain, overgrowth of gum tissue, headache, stomach irritation, neuropathy (nerve pain), and decreased magnesium levels. Rare: Severe hypertension (high blood pressure) and vascular damage causing hemolysis, thrombocytopenia and renal failure. Infections may occur.	3-4 weeks
* Cyclophosphamide Brand: Cytoxan, Neosar	Interferes with the proliferation of cells involved in (auto)immune responses.	Oral tablet or intravenous (IV) infusion	Bone marrow suppression. Mouth sores and ulcers can occur if severe neutropenia (low white blood cell counts) develops. Hemorrhagic cystitis (irritation and bleeding from the bladder), hair loss, nausea and vomiting have also been reported. May cause infertility. Serious infection and bleeding. Secondary malignancy (e.g. bladder cancer and secondary leukemia) have been reported with long-term use.	2-10 weeks
* Danazol Brand: Danocrine	A modified testosterone. Mechanism of action not fully established. May reduce destruction of antibody-coated platelets initially and act as an immunosuppressant with long-term use.	Oral tablet	Weight gain, fluid retention, muscle pain, rash, and hair loss. This drug disrupts the production of estrogen and can have a masculinizing effect on women leading to hirsutism, deeper voice, and menstrual irregularities. In men it can affect sperm production. Liver damage and hypoglycemia (low blood sugar).	1-6 months
* Dapsone (diphenylsulfone) Brand: Avlosulfon	Mechanism of action is not established. May work by inducing "mild" hemolysis and thereby divert splenic macrophages from clearing antibody-coated platelets.	Oral tablet	Mild hemolysis (destruction of red blood cells) causing anemia and itching. Severe hemolytic anemia, methemoglobinemia (an abnormal type of hemoglobin), Stevens-Johnson syndrome (severe skin rash).	1-3 months
* Mycophenolate mofetil therapy (MMF) Brand: Cellcept	Interferes with the proliferation of cells involved in (auto)immune responses.	Oral tablet or liquid suspension	Cytopenias (low platelets, low red and/or white cells), headaches, gastrointestinal, liver damage, high blood pressure, and increased susceptibility to infection. A rare but possible risk of lymphoma/cancer.	1-3 months
* Sirolimus Brand: Rapamune/Rapamycin	Interferes with the function of cells involved in (auto)immune responses.	Oral tablet or liquid suspension	Susceptibility to infection, hypertension (high blood pressure), angioedema (swelling to the lips), peripheral edema (swelling to the arms and legs), impaired wound healing, hyperlipidemia, impaired renal function with proteinuria. There is a 'black box' warning for infections in both liver and lung transplant patients. Possible increased risk of lymphoma or other malignancies.	2-4 weeks
* Vincristine Brand: Oncovin, Vincasar	Thought to increase platelet count by decreasing destruction of antibody-coated platelets.	Intravenous (IV) push	Peripheral neuropathy (nerve pain), constipation, hair loss. Serious skin reactions have been reported if the medication gets under the skin when infusing instead of staying in the vein.	1 week
* Splenectomy (rarely used in pregnancy; often used as a last resort).	A surgical procedure in which the spleen (organ) is removed. The spleen plays a major role in platelet clearance.	Surgical procedure	Immediate surgical discomfort. Hospitalization for 2-3 days if there are no complications. Most patients can return to their normal activity level by 6 weeks. While rare, there is a life-long increased risk of blood infection (sepsis), and thrombosis (blood clots).	1-3 days