Polycythemia vera	Primary Myelofibrosis	Essential Thrombocytopenia
Erythrocytosis + splenomegaly	"teardrop" red cells in the PBS	Bleeding and/or thrombosis
Congenital heart disease, chronic pulmonary disease, smoking must be ruled out	Anemia and splenomegaly	
Major Hemoglobin (HbA1)	Minor Hemoglobin (HbA2)	Fetal hemoglobin (HbF)
2 alpha + 2 beta globin units (A + B)	2 alpha + 2 delta globin units (A + D)	2 alpha + 2 gamma globin units (A + C)
Main Hgb variant present in young children and adults		High concentration in infants < 6 mos old
		Normally present in trace to negligible amount in adult blood sample

Hereditary Spherocytosis	G6PD enzyme deficiency hemolytic anemia	Thalassemia	Sickle Cell Anemia
(+) Osmotic fragility test	Normocytic, normochromic	Hypochromic, microcytic	
Splenectomy curative	Medication intake triggers episodic hemolytic anemia	Deficient cell membrane-associated spectrin in many cases	Due to single DNA base mutation in the 6th beta globin gene triplet code
			Frequently associated with venous stasis and leg ulcers

Osmotic Fragility Test	Hemoglobin Electrophoresis	Ham's Test	Coomb's Test	Red Cell Metabolic Enzyme Assay
Hereditary spherocytosis	Thalassemias	Paroxysmal Nocturnal Hemoglobin	Autoimmune Hemolytic Anemia	G6PD deficiency hemolytic anemia
Packed Red Cell	Frozen Plasma	Cryoprecipitate	Fresh Whole Blood	Platelet Concentrate
For symptomatic chronic anemia without associated hemorrhage	Used to control bleeding in a chronic liver cirrhotic patient	Controls bleeding in a known hemophilia A patient	Neonatal exchange transfusion	Controls bleeding in any thrombocytopenic condition