Automatic Pathologist Review of Peripheral Smear (PRPS) Criteria

Peripheral smears meeting the following criteria will be automatically reviewed by a pathologist. Review is generally performed for new findings (first occurrence within the previous 3 months) unless otherwise clinically indicated.

Category	Criteria Triggering Pathologist Review
CBC Abnormalities	WBC <2.0 K/µL or >50.0 K/µL; Hgb <6.0 g/dL (without obvious cause) or >20.0 g/dL; MCV <60 fL or >110 fL; Platelets <20 K/µL (non-oncology patients) or >750 K/µL.
Absolute Cell Counts	Significant lymphocytosis, neutropenia/neutrophilia, or monocytosis meeting age-specific laboratory review thresholds.
Immature or Abnormal White Cells	New blasts, unexplained marked left shift, atypical/reactive lymphocytosis (>25%), plasma cells (>2% without known myeloma), suspected lymphoma cells, significant smudge cells with lymphocytosis, or critical green neutrophil inclusions.
Red Blood Cell Morphology	Elevated NRBCs, schistocytes, spherocytes, sickle cells, bite/blister cells, hemoglobin crystals, Cabot rings, or other marked RBC abnormalities.
Platelet Morphology	Megakaryocytes or abnormal platelet morphology associated with thrombocytopenia.
Myelodysplastic / Myeloproliferative Findings	Dysplastic WBCs, RBCs, or platelets; giant platelets; oval macrocytes; pancytopenia; markedly increased cell lines; teardrop cells with myelocytes and NRBCs.
Megaloblastic Changes	Oval macrocytes, elevated MCV, hypersegmented neutrophils, and pancytopenia.
Other Significant Findings	Auer rods; parasites or organisms; Alder-Reilly, Chediak-Higashi, Pelger-Huet, or May-Hegglin changes; extracellular crystals; severe rouleaux formation; unusual or unidentified cells.

Urgent findings such as acute leukemia or malaria may prompt immediate pathologist notification.