

Test Update

Peripheral Blood Smear Request Changes

UVM Medical Center

Effective October 20, 2025, the Slide Request (LAB2037) order will undergo changes to increase clinical efficiency. The orderable test name will be updated to **Peripheral Blood Smear Request** and it will include the following options to select from (Select One):

- ▶ Slide Request
- ▶ Hemolysis/Schistocyte Review
- ▶ Pathologist Review
- ▶ Parasite Exam, Blood (*new addition*)

Our laboratory maintains internal criteria, based on automated analysis and manual review of the peripheral smear, to initiate peripheral blood smear review. Laboratory-initiated peripheral blood smear reviews have been shown to be better at detecting clinically relevant information compared to requests initiated by clinicians. Generally, this is an over-utilized resource with data gleaned from clinician-requested pathologist smear review influencing around 1% of cases. In addition, requests for hemolysis/schistocyte review and parasite exams have been incorrectly ordered as pathologist smear reviews.

Requests for a Slide Request, Hemolysis/Schistocyte Review, or a Pathologist Review - Hematology, require that a CBC with a differential **must** have been performed within 12 hours of the order or one needs to be added to the current order. If this is not performed, the order may be cancelled.

In addition, for the Pathologist Review - Hematology to be performed, the CBC and differential needs to meet certain criteria, which have been determined in the literature to have a higher probability of an additional significant morphologic abnormality.

New Criteria for performing a Pathologist Review – Hematology:

- ▶ WBC <4.00 K/cmm or >30.00 K/cmm
- ▶ Hgb <7.0 g/dL or >16.0 g/dL for both sexes
- ▶ PLT <100 K/cmm or >450 K/cmm
- ▶ MCV >105 fL
- ▶ ANC <1.00 K/cmm or >20.00 K/cmm

Should these screening criteria not be met, a Pathologist Review - Hematology will **NOT** be performed. It will be reported as, "This request does not meet pathologist review criteria. A smear will be held in the lab for up to a week".

If you have any questions regarding these changes, please contact the UVMHC Hematology Medical Director, Division Chief of Hematopathology, Dr. Marian Rollins-Raval, MD MPH (Marian.Rollins-Raval@uvmhealth.org).

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Pathology & Laboratory Medicine

Location

111 Colchester Ave.
Burlington, VT 05401

Phone Laboratory Customer Service

802-847-5121
800-991-2799

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References

1. Kurt-Mangold ME, Grieme CV, Krasowski MD, Rosenthal NS. Clinical Utility of Ordered Pathology Blood Smear Reviews - an Overused Resource?. *Clin Lab*. 2018;64(1):99-104. doi:10.7754/Clin.Lab.2017.170703
2. Palur K, Arakeri SU. Effectiveness of the International Consensus Group criteria for manual peripheral smear review. *Indian J Pathol Microbiol*. 2018;61(3):360-365. doi:10.4103/IJPM.IJPM_142_17
3. Loo E, Rodrigues Simoes NJ, Browne LJ, Mindiola Romero AE, Kaur P. Hematology lab waste reduction through implementation of peripheral smear review criteria. *Int J Lab Hematol*. 2023;45(5):813-815. doi:10.1111/ijlh.14103

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