

Date: March 5, 2019

Laboratory Utilization Improvement: CBC Manual Differential Discontinuation

Dear Regional Pathology Services Clients,

On April 16, 2019 the CBC with Platelet and Manual Differential (Test Code CBCM) and Manual Differential (Test Code: DIFF) will no longer be orderable.

Due to payor non-payment, over utilization of this test and improvements in our automated platform our laboratories will be discontinuing these tests in the upcoming weeks. Medicare considers the peripheral blood smear code (CPT code 85060) to be reimbursed only for patients with an inpatient status at the time of service. The service is not payable for any other status.

Due to these restrictions all CBC orders with differential counts will be performed with automated differentials to maximize our laboratories efficiency and accuracy. When the instrumentation flags the auto diff trigger and the need for a smear review, a 100-cell count manual differential is performed and any red cell and platelet abnormalities are reported. If on technologist review, the findings meet laboratory established criteria for pathologist review, RPS client services will place an order using the **New Code PBSR** (Peripheral blood smear review). The slide will be reviewed by a hematopathologist who will report significant findings, provide interpretation or recommend further studies. Please note that not all auto diff triggers will need a peripheral blood smear review by a pathologist.

The instrument generated automated differentials are more accurate, count more cells (8000 to 10,000) and are resulted within about a minute, while a manual differential is subject to intra- and inter-observer variation, uneven slide distribution, lower numbers of cells counted (100) and takes 10 minutes or longer to perform.

This internal laboratory workflow has been extensively validated so clinically significant abnormalities are not missed by the instrumentation in combination with examination by the technologist and(or) hematopathologist when needed.

When the CBC is normal a smear review is not usually indicated in most cases unless there is a clinical indication or suspicion for a hematologic disorder³ (Table 1).

If a smear review (PBSR) needs to be ordered when the CBC is normal, the clinicians may request this test through Regional Pathology Services; however appropriate clinical history and a clinical indication should be provided. Following the request, RPS verifies the order with the pathologist. If the test is not approved the clinician may request to discuss the case with the laboratory director over the phone.

Please provide ALL of the following to RPS when ordering a peripheral blood smear review:

- **Specimen requirements:** 5 mL whole blood in EDTA (lavender) tube and 6 unfixed push smears. Immediately invert tube several times following procurement of whole blood. (Minimum: 0.1 mL whole blood and 2 unfixed push smears).
- **A recent CBC report**
- **Patient history**
- **Clinical indications (See table 1)**
- **Physician's name**

- Telephone number

Table 1

Common clinical indications for peripheral blood smear analysis:
<ul style="list-style-type: none">○ Unexplained cytopenia: anemia, leukopenia or thrombocytopenia○ Unexplained leukocytosis, lymphocytosis or monocytosis○ Unexplained jaundice or hemolysis○ Suspected cases of nutritional anemia○ Features of congenital hemolytic anemias such as splenomegaly, jaundice or bone pains○ Suspected chronic or acute myeloproliferative disease, e.g. chronic myeloid leukemia○ Suspected organ failure such as renal disease, liver failure○ Features of hyperviscosity syndrome as in paraproteinemias, leukemic hyperleukocytosis, polycythemia○ Severe bacterial sepsis and parasitic infections○ Malignancies with possible bone marrow involvement○ Suspected chronic lymphoproliferative diseases such as chronic lymphocytic leukemia○ Lymphoma with leukemic spills○ Evaluation of therapeutic response in hemopathies

References:

1. Pierre RV. Peripheral blood film review. *Clin Lab Med.* 2002; 22(1):279-297.
2. M. E. Kurt-Mangold et al. Clinical Utility of Ordered Pathology Blood Smear Reviews - an Overused Resource? *Clin. Lab.* 2018; 64.
3. B. Bain Diagnosis from Blood Smear *N Engl J Med* 2005; 353:498-507

Interface builds will be sent in another lab alert two weeks prior to these changes taking effect. For questions please contact rpsinterfacesupport@unmc.edu

If you would like to discuss this further with your client representative please contact client services at 402-559-6420 and ask to speak with one of the client coordinators.

24/7 Client Services 402-559-6420