

To: Medical Staff, Nursing Units, and Laboratory Clients

From: Stephen C. Ingels, M.D., Eric Thompson, M.D., & Calvin Bohanan, DHA, MLS

Subject: PeriSmear Test Discontinued, HemePath Consult, & Automated/Manual Differentials

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Effective October 16th, 2024, Norman Regional Health System Laboratory Services will discontinue the PeriSmear test. Subsequently, if the lab receives an order for a PeriSmear, a Complete Blood Count (CBC) with Differential will be ordered and performed.

Of note, when the CBC with Differential is performed there are analytical flags on the instrument indicating if/when there may be a possible sample abnormality. This process assists the Clinical Lab Scientist in identifying samples which require further review by a Lead Hematologist and/or Pathologist. If these flags are present, a manual differential will be automatically ordered and performed.

A Hemepath consult may be ordered judiciously in the event that you have a complex diagnostic concern. The consult request indicates that you would like a pathologist to review the Medical Record and recent blood smears. When a Hemepath consult is ordered there will be two "Ask Order Entry" (AOE) questions that must be answered. These AOE questions are:

1. What is the complex diagnostic problem for consultation?
2. Specific cell morphology or cell types to be addressed?

Supporting Information:

Enhanced Testing: Hematology analyzers offer a more precise Automated Differential, which analyzes thousands of cells in contrast to the 100 cells in a Manual Differential. It has been validated against internal markers and rules, cell libraries, and robust algorithms to ensure that it captures any number of clinical abnormalities. A slide will be generated in the event that a clinically significant flag is raised, and a Manual Differential may still be performed.

Improved Turnaround Times: The Automated Differential is more efficient than a Manual Differential conducted by a scientist. Additionally, approximately 70% of Manual Differentials may have been identified if they were requested as an Automated Differential, leading to faster and more comprehensive evaluations.

Enhanced Lab Efficiency: Manual Differentials require an immediate intervention and manual process for the scientist. Reducing time spent on unnecessary differentials allows scientists to focus on completing other patient tests, as well as other department tasks such as training and education, improving overall department quality.

References:

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- Prasad, V., Sharma, D., & Verma, S. L. (2022). Peripheral Blood Smear Examination: An Overview. *Webology*, 19(2).