

November 9, 2023

**HEMATOLOGY****Automated CBC analyzer update**Date effective: **November 14, 2023**

**Background Information:** Current Sysmex CBC (complete blood count) testing is being replaced due to age, end of support and newly available technology. A competitive process resulted in Sysmex being selected as the replacement vendor for the CBC testing platform including new generation of testing analyzers, digital slide scanning units (Cellavision), and result management software (Caresphere). These systems will be replaced beginning November 14, 2023 at the Health Sciences Center Hematology Laboratory and incrementally through additional sites in the months following. Digital slide scanning will be expanded from the current 3 to 21 lab sites across Manitoba.

**Clinical Practice Change:**

- Additional or enhanced report parameters will include automated nucleated RBC results in a broader group of laboratories as well as automated immature granulocyte counts in all labs scheduled for analyzer replacement. These additional parameters will be included in the patient report when present.
- CBC sample stability, including reticulocytes, has been validated to 72 hours refrigerated (increased from 48hrs) and 24 hours at room temperature (unchanged).
- 7mL EDTA tubes are not accepted by the new analyzers.
- Reference ranges remain unchanged.

**References/Resources:** Please refer to the Laboratory Information Manual (LIM) for up to date information on updated CBC testing: <https://apps.sbgh.mb.ca/labmanual/test/print?seedId=1304>

**Patient Impact:**

- Reduced additional tubes drawn at smaller lab sites and improved turnaround time of testing results.

**System Improvements:**

- Improved standardization of results across laboratories through automation and remote access through digital imaging and advanced middleware.
- Reduced turn around time for Hematopathologist reviews.
- Reduced manual slide reviews due to enhanced analyzer capabilities.
- Improved laboratory workflow through less sendout and receipt activities
- Real time data review and interlaboratory support
- Reticulocyte testing in broader group of Shared Health Laboratories

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