

DATE:	20 July 2026
TO:	All Zones – Hematologists in Alberta
FROM:	Molecular Pathology Program, Alberta Precision Laboratories
RE:	BCR::ABL1 Minor Breakpoint qPCR Reporting Changes

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Key Message

- As of July 13, 2026, for all samples received for BCR::ABL1 Minor Breakpoint qPCR testing in Alberta Precision Laboratories Molecular Pathology South Sector at the Arthur Child (including North Sector samples), there will be minor changes in reporting of cases with borderline sample quality to provide results at lower sensitivity.

Background

- BCR::ABL1 Minor Breakpoint qPCR testing at the Arthur Child is utilized for South Sector patients for initial testing and followup of fusion-positive chronic myeloid leukemia (CML) and acute lymphoblastic leukemia (ALL), and North Sector patients for followup of minor breakpoint fusion-positive ALL.
- ABL1 expression is used as a quality control metric. Currently, if the ABL1 level is too low to support a limit of detection (LOD) of 4.61 log reduction (LR) in a sample negative for BCR::ABL1, the test is reported as failed due to poor quality, and recollection is recommended.
- However, for certain clinical scenarios (such as monitoring fusion-positive ALL), 4.0 LR may be adequate for clinical purposes, and is achievable with a lower ABL1 copy number.
- Therefore, cases negative for detectable BCR::ABL1 at >4.0 LR that cannot achieve a sensitivity of 4.61 LR due to an inadequate ABL1 level will now be reported as:
 - “Sample sensitivity is ** with log reduction of **. Recollection is suggested if 4.61 LR is required.”

How this will impact you

- Rare BCR::ABL1 minor breakpoint qPCR cases with borderline sample quality that would previously have been reported as test failed will now have results reported with a comment regarding reduced sensitivity.

Action Required

- Hematologists:** Be aware of this change in reporting. When you receive a report indicating reduced sample sensitivity, if 4.61 LR is required, submit a new request to reattempt testing on a new blood sample.

Effective: July 13, 2026

Questions/Concerns

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