

Laboratory News

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BCR/ABL1 p210 mRNA Detection test, utilizing Reverse Transcription PCR (RT-PCR) for quantitative monitoring of Chronic Myeloid Leukemia (CML) Now Available at Marshfield

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Microbiology and Molecular Pathology Laboratory will begin performing BCR/ABL1 p210 mRNA by PCR testing in-house.

Effective November 10th, the Marshfield Clinic Molecular Microbiology Laboratory will begin performing the BCR/ABL1 p210 mRNA detection test, utilizing Reverse Transcription PCR (RT-PCR) for quantitative monitoring of Chronic Myeloid Leukemia (CML). The preferred specimen is whole blood in EDTA anticoagulant. This test is designed to monitor the response to therapy in patients with CML who are known to harbor the e13/a2 and e14/a2 fusion forms, which produce the p210 protein.

Please note, other fusion forms are not detected including those containing the *BCR* e1 exon, which encodes for the p190 protein commonly found in acute lymphoblastic leukemia (ALL). If the patient is known to carry an e1/a2 (p190) fusion form, the Mayo Clinic test BA190-*BCR/ABL*, p190, mRNA Detection, Reverse Transcription-PCR (RT-PCR), Quantitative, Monitoring (test code BC190SO) should be ordered. Additionally, this test should not be used to screen for *BCR/ABL1* fusions at the time of diagnosis. The recommended screening test for *BCR/ABL1* transcripts remains Mayo Clinic's BCRFX-*BCR/ABL1*, Qualitative Diagnostic Assay with reflex to *BCR/ABL1* p190 or *BCR/ABL1* p210 quantitative assay (test code BCRFXSO), which can detect all reported common and rare *BCR/ABL1* mRNA fusion variants as well as the baseline quantitative transcript level for assessing response to initiation of therapy.

Test Details

Test Code: BCRABL-NAT

- **Specimen Collection:**
 - Preferred specimen: Whole blood in EDTA
 - Minimum amount – two EDTA tubes, 4mLs each (allows for one repeat).
- **Transport Temperature & Stability:**
 - Refrigerate: 72 hours
 - Due to short specimen stability, please avoid collecting specimens on Fridays unless they can arrive at the Marshfield lab by 11am the same day.
- **Performed:** Monday through Friday
- **CPT Code:** 81206

Questions

For questions related to testing, please contact Dr. Sophie Arbefeville at 715-221-6028 or Dr. Holly Berg at 715-221-6309.