Lab Dept: Anatomic Pathology

Test Name: BCR-ABL1 BY PCR, QUALITATIVE

General Information

Lab Order Codes:	BCRL
Synonyms:	Philadelphia Chromosome Ph1; BCR/ABL1, Qualitative, Diagnostic Assay
CPT Codes:	81206 – BCR/ABL1 (t(9;22)), translocation analysis; major breakpoint, qualitative or quantitative 81207 – BCR/ABL1, minor breakpoint, qualitative or quantitative 81208 – BCR/ABL1, other breakpoint, qualitative or quantitative
Test Includes:	Detect the presence or absence of BCR/ABL mRNA. If positive, the fusion variant will be reported.

Logistics

Test Indications:	Aids in the diagnostic workup for patients with high probability bcr/abl1-positive hematopoietic neoplasms, predominantly CML and ALL. When positive, the test identifies which mRNA fusion variant is present to guide selection of an appropriate monitoring assay. If a quantitative monitoring assay is not available for a rare fusion variant, this assay may be of some value for monitoring, as it is quite sensitive and can provide a positive or negative result.
Lab Testing Sections:	Anatomic Pathology – Sendouts
Referred to:	Mayo Medical Laboratories (MML Test: BADX)
Phone Numbers:	MIN Lab: 612-813-6280 STP Lab: 651-220-6550
Test Availability:	Daily, 24 hours
Turnaround Time:	Results are reported in 5-10 days
Special Instructions:	Complete and submit "Hematopathology Patient Information Sheet" with the specimen. Include the following information: patient's name, referring (ordering) physician, specimen submitted & pertinent clinical history.

Specimen

Specimen Type:	Whole blood or Bone marrow

Container:	Lavender top (EDTA) tube
Draw Volume:	4 mL (Minimum: 1 mL) blood 3 mL (Minimum: 1 mL) bone marrow
Processed Volume:	Same as Draw Volume
Collection:	Routine venipuncture; Routine bone marrow collection. Gently invert tube to mix.
Special Processing:	Lab Staff: Do Not Centrifuge. Specimen should remain in the original collection container. Label specimen appropriately (blood or bone marrow).Store and ship refrigerated. Forward promptly and include Hematopathology Patient Information Sheet. **Specimen must arrive at Mayo within 120 hours of collection.**
Patient Preparation:	N/A
Sample Rejection:	Mislabeled or unlabeled specimens; specimens other than blood or bone marrow; gross hemolysis

Interpretive

Reference Range:	Interpretive report. A qualitative result is provided that indicates the presence or absence of BCR/ABL mRNA. When positive, the fusion variant is also reported.
Critical Values:	N/A
Limitations:	This test is only qualitative and should not be used for routine monitoring. Monitoring of most CML patients should be performed using Mayo test: BCRAB, BCR/ABL, p210 mRNA Detection, Reverse Transcription-PCR (RT-PCR), Quantitative Chronic Myelogenous Leukemia (CML). Monitoring of patients known to carry a p190 fusion should be performed using Mayo test: BA190, BCR/ABL, p190, Quantitative mRNA Detection, Reverse Transcription- PCR, Quantitative Monitoring Assay. If a patient is known to have a rare fusion variant that is not covered by 1 of these monitoring assays, contact Dr. He or Dr. Viswanatha at 800-533-1710 extension 6-5323 to discuss whether this qualitative assay can be used for monitoring.
Methodology:	Reverse Transcription-Polymerase Chain Reaction (RT-PCR), multiplex PCR (LightCycler 96)
References:	Mayo Medical Laboratories May 2016
Updates:	1/29/2013: CPT 2013 update 9/2/2015: Method update, previous PCR method included fluorescent bead array analysis (Luminex). Change from ABL to ABL1. Specimen stability extended, previously arrival within 72 hours. Updated specimen rejection. 5/19/16: Storage temp change, previously room temp.