

To: UPHS Physicians and Staff
 From: The Division of Precision and Computational Diagnostics (PCD)
 Vivianna Van Deerlin, M.D., Ph.D., Director, Molecular Pathology Laboratory
 Christopher Watt, M.D., Ph.D., Associate Director, Molecular Pathology Laboratory
 Jacquelyn Roth, Ph.D., Molecular Pathology Laboratory
 Date: August 15, 2019
 Re: NEW Test: Stand-alone Molecular Qualitative *RUNX1/RUNX1T1* and *CBFB/MYH11* Testing

Starting around the middle of August 2019, qualitative molecular testing for the *RUNX1/RUNX1T1* and *CBFB/MYH11* fusion transcripts will be available as a stand-alone order.

Testing Highlights:

- These tests utilize the same method as the current Acute Leukemia Translocation Profile assay (i.e., ALRP), but are now available as stand-alone tests. These stand-alone tests are intended for minimal residual disease (MRD) monitoring in a patient with a known rearrangement. For new leukemia workups, continue to order the full panel (i.e., ALRP)
- Both assays are included on the current ALRP assay and will have the same performance characteristics.
- The *RUNX1/RUNX1T1* assay will still detect only the exon5/exon2 breakpoint typically seen in t(8;21).
- The *CBFB/MYH11* assay will still detect only the exon5/exon33 (type A), exon5/exon29 (type D), and exon5/exon28 (type E) breakpoints typically seen in inv(16) or t(16;16).
- Results will be reported in the same manner as they currently are on the ALRP reports.

Testing Information:

- Turnaround time: 7 business days
- Acceptable specimen: The recommended sample types are peripheral blood and bone marrow aspirate.

EPIC Ordering	Target	Specimen Type	Typical Usage
<i>RUNX1/RUNX1T1</i> , Qualitative (PxCode RUNXCASE)	<i>RUNX1/RUNX1T1</i>	Blood	MRD
SPHEME Order for Molecular: <i>RUNX1/RUNX1T1</i> t(8;21) RT-PCR	<i>RUNX1/RUNX1T1</i>	Bone Marrow	MRD
<i>CBFB/MYH11</i> , Qualitative (PxCode CBFBCASE)	<i>CBFB/MYH11</i>	Blood	MRD
SPHEME Order for Molecular: <i>CBFB/MYH11</i> [inv(16)] RT-PCR	<i>CBFB/MYH11</i>	Bone Marrow	MRD
Leukemia Translocation Panel (PxCode C2008660)	Full Panel	Blood	Diagnostic
SPHEME Order for Molecular: Acute Leukemia Rearrangement Panel	Full Panel	Bone Marrow	Diagnostic

Contact Information: Call the Molecular Pathology Laboratory (215-662-6121) weekdays during regular business hours. For information on ordering and specimen requirements, kindly consult the [Lab Tests Services Guide](#).