

## Technical Update • June 2022

Cleveland Clinic Laboratories is dedicated to keeping you updated and informed about recent testing changes. This Technical Update is provided on a monthly basis to notify you of any changes to the tests in our catalog.

Recently changed tests are bolded, and they could include revisions to methodology, reference range, days performed, or CPT code. Deleted tests and new tests are listed separately. For your convenience, tests are listed alphabetically and order codes are provided.

To compare the new information with previous test information, refer to the online Test Directory at [clevelandcliniclabs.com](http://clevelandcliniclabs.com). Test information is updated in the online Test Directory on the Effective Date stated in the Technical Update. Please update your database as necessary.

For additional detail, contact Client Services at 216.444.5755 or 800.628.6816, or via email at [clientservices@ccf.org](mailto:clientservices@ccf.org).

Test Update Page #	Summary of Changes by Test Name	Order Code	Name Change	New Test	Test Discontinued	Special Information	Specimen Requirement	Component Change(s)	Methodology	Reference Range	Days Performed/Reported	Stability	CPT	Fee
2	Acetoacetate													
5	Acute Leukemia NGS Panel, Blood													
5-6	Acute Leukemia NGS Panel, Bone Marrow													
6	Acute Leukemia NGS Panel, Other													
9	ALL Panel NGS Bone Marrow													
9	ALL Panel NGS Peripheral Blood													
2	Alpha Globin (HBA1 & HBA2) Deletion/Duplication													
2-3	BK Virus Quantitation, Urine													
3	Blood Parasites													
3	Cathartic Laxative, Stool													
3	Chronic Lymphoproliferative Disorder NGS Bone Marrow													
7	Chronic Lymphoproliferative Disorder NGS Other													
3	Chronic Lymphoproliferative Disorder NGS Peripheral Blood													
3	Drug Detection Panel, TOF-MS, Umbilical Cord Tissue													
9	Giardia lamblia IgG, IgA, IgM													
7	Hematologic Neoplasm Fusion NGS Panel, Blood													
7-8	Hematologic Neoplasm Fusion NGS Panel, Bone Marrow													

Test Update Page #	Summary of Changes by Test Name	Order Code	Name Change	New Test	Test Discontinued	Special Information	Specimen Requirement	Component Change(s)	Methodology	Reference Range	Days Performed/Reported	Stability	CPT	Fee
8	Hematologic Neoplasm Fusion NGS Panel, Other													
9	Hematologic Neoplasm Next Generation Sequencing Panel Marrow													
9	Hematologic Neoplasm Next Generation Sequencing Panel Peripheral Blood													
9	Legionella IgM Abs													
9	Legionella pneumophila Antibody (Types 1-6), IgG by IFA													
8	Myeloid NGS Panel Other													
3	Myeloid Panel NGS Bone Marrow													
4	Myeloid Panel NGS Peripheral Blood													
4	Routine Flu A/B & RSV													

## Test Changes

Test Name	Order Code	Change	Effective Date
Acetoacetate	ACETAC	<b>Reported:</b> 9–13 days	effective immediately
Alpha Globin (HBA1 & HBA2) Deletion/Duplication	HBADD	<b>Specimen Requirement:</b> 3 mL whole blood in EDTA (Lavender) tube; Refrigerated	8/2/22
BK Virus Quantitation, Urine	UBKQT	<p><b>For interface clients only–Test build may need to be modified</b></p> <p><b>Includes:</b>            BK Virus, Urine Interp            BK Virus, Urine, IU/mL            BK Virus, Urine, log IU/mL</p> <p><b>Special Information:</b> Must indicate specimen source.</p> <p><b>Clinical Information:</b> Detect and quantify BK virus in urine. The quantitative range of this assay is <b>2.3–8.0 log IU/mL (200-100,000,000 IU/mL)</b>. A negative result (&lt;1.1 log IU/mL or &lt;12.2 IU/mL) does not rule out the presence of PCR inhibitors in the patient specimen or BK virus DNA concentrations below the level of detection of the assay. Inhibition may also lead to underestimation of viral quantitation. No international standard is currently available for calibration of this assay. Caution should be taken when interpreting results generated by different assay methodologies. If the assay did NOT detect the virus, the test result will be reported as <b>Negative</b>. If the assay DETECTED the presence of the virus but was not able to accurately quantify the <b>viral concentration</b>, the test result will be reported as "<b>&lt;2.3 log IU/mL (&lt;200 IU/mL), not quantifiable.</b>"</p> <p><b>Specimen Requirement:</b> 5 mL random urine in sterile container; <b>Minimum:</b> 1 mL; <b>Refrigerated;</b> Send to Cleveland Clinic Laboratories on the day of collection. Specimen source required. <b>Specimen must be transferred into cobas PCR Urine Sample Kit within 24 hours of collection.</b></p> <p><b>Stability:</b>            Ambient: 24 hours if neat. <b>If transferred into cobas PCR Urine Sample Kit within 24 hours, stability is increased to 90 days.</b>            Refrigerated: 24 hours if neat. <b>If transferred into cobas PCR Urine Sample Kit within 24 hours, stability is increased to 90 days.</b></p> <p><i>(continued on page 3)</i></p>	7/12/22

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
BK Virus Quantitation, Urine <i>(continued from page 2)</i>		<p><b>Methodology:</b> Real-Time Polymerase Chain Reaction (RT-PCR)</p> <p><b>Reference Range:</b>                      BK Virus Quantitation, Urine (UBKDNA): Not detected                      BK Virus <b>IU/mL</b> Urine (UBKCOP): Refer to report                      BK Virus log <b>IU/mL</b> Urine (UBKLOG): Refer to report</p> <p><b>Days Performed: Mon–Fri</b></p>	
Blood Parasites	BLDPAR	<p><b>Specimen Requirement: 2 mL</b> whole blood in EDTA (Lavender) tube; Ambient; Transport to Main campus within 4 hrs. Use STAT courier when necessary. Rapid results can be critical to establishing appropriate therapy</p>	6/2/22
Cathartic Laxative, Stool	STCATH	<p><b>Reported: 9–13 days</b></p> <p><b>CPT: 83735; 84100</b></p>	effective immediately
Chronic Lymphoproliferative Disorder NGS Bone Marrow	LPMNGS	<p><b>Special Information: The following genes are interrogated: BRAF, MYD88, NOTCH1, SF3B1, STAT3, STAT5B and TP53.</b></p> <p><b>Specimen Requirement: 4 mL</b> bone marrow aspirate in EDTA (Lavender) tube; Collection Ambient; <b>Transport Refrigerated</b></p> <p><b>Stability:</b>                      Ambient: <b>If specimen is to be stored longer than 24 hours, it should be placed at 2-8C for up to 7 days.</b>                      Refrigerated: 7 days                      Frozen: Unacceptable</p> <p><b>Days Performed: Mon–Fri</b></p> <p><b>CPT: 81445</b></p>	effective immediately
Chronic Lymphoproliferative Disorder NGS Peripheral Blood	LPPNGS	<p><b>Special Information: The following genes are interrogated: BRAF, MYD88, NOTCH1, SF3B1, STAT3, STAT5B and TP53.</b></p> <p><b>Specimen Requirement: 4 mL</b> peripheral blood in EDTA (Lavender) tube; Collection Ambient; <b>Transport Refrigerated</b></p> <p><b>Stability:</b>                      Ambient: <b>If specimen is to be stored longer than 24 hours, it should be placed at 2–8C for up to 7 days.</b>                      Refrigerated: 7 days                      Frozen: Unacceptable</p> <p><b>Days Performed: Mon–Fri</b></p> <p><b>CPT: 81445</b></p>	effective immediately
Drug Detection Panel, TOF-MS, Umbilical Cord Tissue	DRGTOF	CPT: 80326; 80347; 80364; 80355	effective immediately
Myeloid Panel NGS Bone Marrow	MYNGSM	<p><b>Special Information: The following genes are interrogated: ABL1, ASXL1, BCOR, BCORL1, BRAF, CALR, CBL, CEBPA, CSF3R, CUX1, DDX41, DNMT3A, EED, ETNK1, ETV6, EZH2, FLT3, GATA1, GATA2, IDH1, IDH2, JAK2, JAK3, KDM6A, KIT, KMT2A, KRAS, LUC7L2, MPL, NF1, NPM1, NRAS, PHF6, PIGA, PPMID, PRPF8, PTEN, PTPN11, RAD2, RIT1, RUNX1, SETBP1, SF3B1, SH2B3, SMC1A, SMC3, SRSF2, STAG2, STAT3, STAT5B, SUZ12, TET2, TP53, U2AF1, WT1, and ZRSR2.</b></p> <p><b>Clinical Limitation: This test does not evaluate for fusions. For a combined evaluation including fusions relevant to acute leukemias, the Acute Leukemia NGS panel is recommended.</b></p> <p><b>Clinical Information: Molecular evaluation of known or suspected chronic myeloid neoplasms, including but not limited to myeloproliferative neoplasms, myelodysplastic syndromes, and overlap myelodysplastic/myeloproliferative neoplasms. Evaluates for single nucleotide variants, small insertions and deletions within the covered regions of the targeted genes.</b></p> <p><b>Specimen Requirement: 4 mL</b> bone marrow aspirate in EDTA (Lavender) tube; Collection Ambient; Transport <b>Refrigerated</b></p> <p><b>Stability:</b>                      Ambient: <b>If specimen is to be stored longer than 24 hours, it should be placed at 2-8 C for up to 7 days.</b>                      Refrigerated: 7 days                      Frozen: Unacceptable</p> <p><b>CPT: 81455</b></p>	effective immediately

## Test Changes (Cont.)

Test Name	Order Code	Change	Effective Date
Myeloid Panel NGS Peripheral Blood	MYNGSP	<p><b>Special Information:</b> The following genes are interrogated: ABL1, ASXL1, BCOR, BCORL1, <b>BRAF</b>, CALR, CBL, CEBPA, CSF3R, CUX1, DDX41, DNMT3A, EED, ETNK1, ETV6, EZH2, FLT3, GATA1, GATA2, IDH1, IDH2, JAK2, <b>JAK3</b>, <b>KDM6A</b>, KIT, KMT2A, KRAS, <b>LUC7L2</b>, MPL, NF1, NPM1, NRAS, PHF6, PIGA, PPMID, <b>PRPF8</b>, PTEN, PTPN11, RAD2, <b>RIT1</b>, RUNX1, SETBP1, SF3B1, SH2B3, SMC1A, SMC3, SRSF2, STAG2, STAT3, STAT5B, SUZ12, TET2, TP53, U2AF1, WT1, and ZRSR2.</p> <p><b>Clinical Limitation:</b> This test does not evaluate for fusions. For a combined evaluation including fusions relevant to acute leukemias, the Acute Leukemia NGS panel is recommended.</p> <p><b>Clinical Information:</b> Molecular evaluation of known or suspected chronic myeloid neoplasms, including but not limited to myeloproliferative neoplasms, myelodysplastic syndromes, and overlap myelodysplastic/myeloproliferative neoplasms. Evaluates for single nucleotide variants, small insertions and deletions within the covered regions of the targeted genes.</p> <p><b>Specimen Requirement:</b> 4 mL peripheral blood in EDTA (Lavender) tube; Collection Ambient; Transport <b>Refrigerated</b></p> <p><b>Stability:</b>            Ambient: <b>If specimen is to be stored longer than 24 hours, it should be placed at 2-8 C for up to 7 days.</b>            Refrigerated: 7 days            Frozen: Unacceptable</p> <p><b>CPT: 81455</b></p>	effective immediately
Routine Flu A/B & RSV	RTFRSV	<p><b>Stability:</b>            Ambient: 24 hrs            Refrigerated: <b>96 hours</b>            Frozen: Unacceptable</p>	effective immediately

# New Tests

Test Name	Order Code	Change	Effective Date
Acute Leukemia NGS Panel, Blood	HDPNGS	<p><b>Special Information:</b> RNA_genes: ABL1, ABL2, AFDN, ALK, BCL11B, BCL2, BCL3, BCL6, BCR, BIRC3, BLNK, CBFB, CBL, CCND1, CCND2, CCND3, CD274, CD28, CDK6, CDKN2A, CEBPA, CEBPD, CEBPE, CEBPG, CHD1, CHIC2, CIITA, CREBBP, CRLF2, CSF1R, CTLA4, DEK, DGKH, DUSP22, EBF1, EIF4A1, EPOR, ERG, ETV6, FGFR1, FLT3, FOXP1, GLIS2, HLF, ID4, IKZF1, IKZF2, IKZF3, IL2RB, IRF4, IRF8, ITK, JAK2, KAT6A, KLF2, LMO1, LMO2, LYN, MALT1, MECOM, KMT2A, MEF2D, MKL1, MLF1, MLLT10, , MUC1, MYC, MYH11, NF1, NFKB2, NOTCH1, NTRK3, NUP214, NUP98, NUTM1, P2RY8, PAG1, PAX5, PBX1, PDCD1, PDCD1LG2, PDGFRA, PDGFRB, PICALM, PML, PRDM16, PTK2B, RARA, RBM15, ROS1, RUNX1, RUNX1T1, SEMA6A, SETD2, STIL, SYK, TAL1, TCF3, TFG, TLX1, TLX3, TP63, TSLP, TYK2, VAV1, ZCCHC7, ZNF384.</p> <p>DNA_genes: ABL1, ASXL1, BCOR, BCORL1, BRAF, CALR, CBL, CDKN2A, CEBPA, CSF3R, CUX1, DDX41, DNMT3A, EED, ETNK1, ETV6, EZH2, FBXW7, FLT3, GATA1, GATA2, GNAS, IDH1, IDH2, IKZF1, JAK2, JAK3, KDM6A, KIT, KMT2A, KRAS, LUC7L2, MPL, MYD88, NF1, NOTCH1, NPM1, NRAS, PAX5, PHF6, PIGA, PPM1D, PRPF8, PTEN, PTPN11, RAD21, RIT1, RUNX1, SETBP1, SF3B1, SH2B3, SMC1A, SMC3, SRSF2, STAG2, STAT3, STAT5B, SUZ12, TET2, TP53, U2AF1, WT1, ZRSR2.</p> <p><b>Clinical Limitation:</b> Not to be ordered concurrently with the Hematologic Neoplasm Fusion NGS Panel or the Chronic Myeloid NGS Panel, since this panel includes all targeted regions from those panels.</p> <p><b>Clinical Information:</b> DNA and RNA combination testing to evaluate for single nucleotide variants, small insertions and deletions, and common fusions in acute hematologic malignancies (acute myeloid and acute lymphoblastic leukemias); content includes all of the fusion targets of Hematologic Neoplasm Fusion NGS Panel as well as all of the DNA targets in the Chronic Myeloid NGS Panel.</p> <p><b>Specimen Requirement:</b> 8 mL peripheral blood in EDTA (Lavender) tube; Collection Ambient; Transport Refrigerated; Refrigerate ASAP</p> <p><b>Stability:</b>            Ambient: If specimen is to be stored longer than 24 hours, it should be placed at 2-8 C for up to 3 days. If testing is delayed, pending specimen triaging, store as NUCBUF            Refrigerated: Stored up to 3 days. If testing is delayed, pending specimen triaging, store as NUCBUF            Frozen: Unacceptable</p> <p><b>Methodology:</b> Next Gen Sequencing</p> <p><b>Days Performed:</b> Mon–Fri</p> <p><b>Reported:</b> 10 days</p> <p><b>CPT: 81455</b></p>	effective immediately
Acute Leukemia NGS Panel, Bone Marrow	HDMNGS	<p><b>Special Information:</b> RNA_genes: ABL1, ABL2, AFDN, ALK, BCL11B, BCL2, BCL3, BCL6, BCR, BIRC3, BLNK, CBFB, CBL, CCND1, CCND2, CCND3, CD274, CD28, CDK6, CDKN2A, CEBPA, CEBPD, CEBPE, CEBPG, CHD1, CHIC2, CIITA, CREBBP, CRLF2, CSF1R, CTLA4, DEK, DGKH, DUSP22, EBF1, EIF4A1, EPOR, ERG, ETV6, FGFR1, FLT3, FOXP1, GLIS2, HLF, ID4, IKZF1, IKZF2, IKZF3, IL2RB, IRF4, IRF8, ITK, JAK2, KAT6A, KLF2, LMO1, LMO2, LYN, MALT1, MECOM, KMT2A, MEF2D, MKL1, MLF1, MLLT10, , MUC1, MYC, MYH11, NF1, NFKB2, NOTCH1, NTRK3, NUP214, NUP98, NUTM1, P2RY8, PAG1, PAX5, PBX1, PDCD1, PDCD1LG2, PDGFRA, PDGFRB, PICALM, PML, PRDM16, PTK2B, RARA, RBM15, ROS1, RUNX1, RUNX1T1, SEMA6A, SETD2, STIL, SYK, TAL1, TCF3, TFG, TLX1, TLX3, TP63, TSLP, TYK2, VAV1, ZCCHC7, ZNF384.</p> <p>DNA_genes: ABL1, ASXL1, BCOR, BCORL1, BRAF, CALR, CBL, CDKN2A, CEBPA, CSF3R, CUX1, DDX41, DNMT3A, EED, ETNK1, ETV6, EZH2, FBXW7, FLT3, GATA1, GATA2, GNAS, IDH1, IDH2, IKZF1, JAK2, JAK3, KDM6A, KIT, KMT2A, KRAS, LUC7L2, MPL, MYD88, NF1, NOTCH1, NPM1, NRAS, PAX5, PHF6, PIGA, PPM1D, PRPF8, PTEN, PTPN11, RAD21, RIT1, RUNX1, SETBP1, SF3B1, SH2B3, SMC1A, SMC3, SRSF2, STAG2, STAT3, STAT5B, SUZ12, TET2, TP53, U2AF1, WT1, ZRSR2.</p> <p><b>Clinical Limitation:</b> Not to be ordered concurrently with the Hematologic Neoplasm Fusion NGS Panel or the Chronic Myeloid NGS Panel, since this panel includes all targeted regions from those panels.</p> <p><i>(continued on page 6)</i></p>	effective immediately

## New Tests (Cont.)

Test Name	Order Code	Change	Effective Date
Acute Leukemia NGS Panel, Bone Marrow <i>(continued from page 5)</i>		<p><b>Clinical Information:</b> DNA and RNA combination testing to evaluate for single nucleotide variants, small insertions and deletions, and common fusions in acute hematologic malignancies (acute myeloid and acute lymphoblastic leukemias); content includes all of the fusion targets of Hematologic Neoplasm Fusion NGS Panel as well as all of the DNA targets in the Chronic Myeloid NGS Panel.</p> <p><b>Specimen Requirement:</b> 8 mL bone marrow aspirate in EDTA (Lavender) tube; Collection Ambient; Transport Refrigerated; Refrigerate ASAP</p> <p><b>Stability:</b>            Ambient: If specimen is to be stored longer than 24 hours, it should be placed at 2-8 C for up to 3 days. If testing is delayed, awaiting specimen triaging, store as NUCBUF            Refrigerated: Stored up to 3 days. If testing is delayed, awaiting specimen triaging, store as NUCBUF            Frozen: Unacceptable</p> <p><b>Methodology:</b> Next Gen Sequencing</p> <p><b>Days Performed:</b> Mon–Fri</p> <p><b>Reported:</b> 10 days</p> <p><b>CPT: 81455</b></p>	
Acute Leukemia NGS Panel, Other	HDONGS	<p><b>Special Information:</b> RNA_genes: ABL1, ABL2, AFDN, ALK, BCL11B, BCL2, BCL3, BCL6, BCR, BIRC3, BLNK, CBFB, CBL, CCND1, CCND2, CCND3, CD274, CD28, CDK6, CDKN2A, CEBPA, CEBPD, CEBPE, CEBPG, CHD1, CHIC2, CIITA, CREBBP, CRLF2, CSF1R, CTLA4, DEK, DGKH, DUSP22, EBF1, EIF4A1, EPOR, ERG, ETV6, FGFR1, FLT3, FOXP1, GLIS2, HLF, ID4, IKZF1, IKZF2, IKZF3, IL2RB, IRF4, IRF8, ITK, JAK2, KAT6A, KLF2, LMO1, LMO2, LYN, MALT1, MECOM, KMT2A, MEF2D, MKL1, MLF1, MLLT10, , MUC1, MYC, MYH11, NF1, NFKB2, NOTCH1, NTRK3, NUP214, NUP98, NUTM1, P2RY8, PAG1, PAX5, PBX1, PDCD1, PDCD1LG2, PDGFRA, PDGFRB, PICALM, PML, PRDM16, PTK2B, RARA, RBM15, ROS1, RUNX1, RUNX1T1, SEMA6A, SETD2, STIL, SYK, TAL1, TCF3, TFG, TLX1, TLX3, TP63, TSLP, TYK2, VAV1, ZCCHC7, ZNF384.</p> <p>DNA_genes: ABL1, ASXL1, BCOR, BCORL1, BRAF, CALR, CBL, CDKN2A, CEBPA, CSF3R, CUX1, DDX41, DNMT3A, EED, ETNK1, ETV6, EZH2, FBXW7, FLT3, GATA1, GATA2, GNAS, IDH1, IDH2, IKZF1, JAK2, JAK3, KDM6A, KIT, KMT2A, KRAS, LUC7L2, MPL, MYD88, NF1, NOTCH1, NPM1, NRAS, PAX5, PHF6, PIGA, PPM1D, PRPF8, PTEN, PTPN11, RAD21, RIT1, RUNX1, SETBP1, SF3B1, SH2B3, SMC1A, SMC3, SRSF2, STAG2, STAT3, STAT5B, SUZ12, TET2, TP53, U2AF1, WT1, ZRSR2.</p> <p><b>Clinical Limitation:</b> Testing of peripheral blood or fresh/buffy coat bone marrow aspirate is preferred to this test on FFPE when those samples are available and representative of disease state.</p> <p>Not to be ordered concurrently with the Hematologic Neoplasm Fusion NGS Panel or the Chronic Myeloid NGS Panel, since this panel includes all targeted regions from those panels.</p> <p><b>Clinical Information:</b> DNA and RNA combination testing to evaluate for single nucleotide variants, small insertions and deletions, and common fusions in acute hematologic malignancies (acute myeloid and acute lymphoblastic leukemias); content includes all of the fusion targets of Hematologic Neoplasm Fusion NGS Panel as well as all of the DNA targets in the Chronic Myeloid NGS Panel.</p> <p><b>Specimen Requirement:</b> Twenty unstained and unbaked slides; Ambient; Need 20 charged, unbaked, unstained slides or 10 x 7 micron curls (scrolls) plus 1 H&amp;E slide with best tumor area circled containing at least 8% tumor</p> <p><b>Stability:</b>            Ambient: FFPE tissue and clot section slides and curls are transported and stored at ambient temperature or refrigerated indefinitely            Refrigerated: FFPE tissue and clot section slides and curls are transported and stored at ambient temperature or refrigerated indefinitely            Frozen: Unacceptable</p> <p><b>Methodology:</b> Next Gen Sequencing</p> <p><b>Days Performed:</b> Mon–Fri</p> <p><b>Reported:</b> 10 days</p> <p><b>CPT: 81455</b></p>	effective immediately

## New Tests (Cont.)

Test Name	Order Code	Change	Effective Date
Chronic Lymphoproliferative Disorder NGS Other	LPONGS	<p><b>Special Information:</b> The following genes are interrogated: BRAF, MYD88, NOTCH1, SF3B1, STAT3, STAT5B and TP53.</p> <p><b>Specimen Requirement:</b> Ten unstained and unbaked slides; Ambient; Need 10 charged, unbaked, unstained slides or 10 x 7 micron curls (scrolls) plus 1 H&amp;E with best tumor area circled containing at least 10% tumor.</p> <p><b>Stability:</b>                      Ambient: Clot section slides and curls are transported and stored at ambient temperature or refrigerated indefinitely.                      Refrigerated: Clot section slides and curls are transported and stored at ambient temperature or refrigerated indefinitely.                      Frozen: Unacceptable</p> <p><b>Methodology:</b> Next Generation DNA Sequencing</p> <p><b>Days Performed:</b> Mon–Fri</p> <p><b>Reported:</b> Mon–Fri</p> <p><b>CPT:</b> 81445</p>	effective immediately
Hematologic Neoplasm Fusion NGS Panel, Blood	HFPNGS	<p><b>Special Information:</b> ABL1, ABL2, ALK, BCL11B, BCL2, BCL3, BCL6, BCR, BIRC3, BLNK, CBFB, CBL, CCND1, CCND2, CCND3, CD274, CD28, CDK6, CDKN2A, CEBPA, CEBPD, CEBPE, CEBPG, CHD1, CHIC2, CIITA, CREBBP, CRLF2, CSF1R, CTLA4, DEK, DGKH, DUSP22, EBF1, EIF4A1, EPOR, ERG, ETV6, FGFR1, FLT3, FOXP1, GLIS2, HLF, ID4, IKZF1, IKZF2, IKZF3, IL2RB, IRF4, IRF8, ITK, JAK2, KAT6A, KLF2, LMO1, LMO2, LYN, MALT1, MECOM, KMT2A, MEF2D, MKL1, MLF1, MLLT10, MLLT4, MUC1, MYC, MYH11, NF1, NFKB2, NOTCH1, NTRK3, NUP214, NUP98, NUTM1, P2RY8, PAG1, PAX5, PBX1, PDCD1, PDCD1LG2, PDGFRA, PDGFRB, PICALM, PML, PRDM16, PTK2B, RARA, RBM15, ROS1, RUNX1, RUNX1T1, SEMA6A, SETD2, STIL, SYK, TAL1, TCF3, TFG, TLX1, TLX3, TP63, TSLP, TYK2, VAV1, ZCCHC7, ZNF384</p> <p><b>Clinical Information:</b> Detects common fusions in hematologic malignancies. Content is identical to the fusion component genes in the Acute Leukemia NGS panel.</p> <p><b>Specimen Requirement:</b> 4 mL peripheral blood in EDTA (Lavender) tube; Collection Ambient; Transport Refrigerated</p> <p><b>Stability:</b>                      Ambient: If specimen is to be stored longer than 24 hours, it should be placed at 2-8 C for up to 3 days. If testing is to be delayed, pending triage, store as NUCBUF                      Refrigerated: Stored up to 3 days. If testing is to be delayed, pending triage, store as NUCBUF                      Frozen: Unacceptable</p> <p><b>Methodology:</b> Next Gen Sequencing</p> <p><b>Days Performed:</b> Mon–Fri</p> <p><b>Reported:</b> 10 days</p> <p><b>CPT:</b> 81455</p>	effective immediately
Hematologic Neoplasm Fusion NGS Panel, Bone Marrow	HFMNGS	<p><b>Special Information:</b> ABL1, ABL2, AFDN, ALK, BCL11B, BCL2, BCL3, BCL6, BCR, BIRC3, BLNK, CBFB, CBL, CCND1, CCND2, CCND3, CD274, CD28, CDK6, CDKN2A, CEBPA, CEBPD, CEBPE, CEBPG, CHD1, CHIC2, CIITA, CREBBP, CRLF2, CSF1R, CTLA4, DEK, DGKH, DUSP22, EBF1, EIF4A1, EPOR, ERG, ETV6, FGFR1, FLT3, FOXP1, GLIS2, HLF, ID4, IKZF1, IKZF2, IKZF3, IL2RB, IRF4, IRF8, ITK, JAK2, KAT6A, KLF2, KMT2A, LMO1, LMO2, LYN, MALT1, MECOM, MEF2D, MKL1, MLF1, MLLT10, MUC1, MYC, MYH11, NF1, NFKB2, NOTCH1, NTRK3, NUP214, NUP98, NUTM1, P2RY8, PAG1, PAX5, PBX1, PDCD1, PDCD1LG2, PDGFRA, PDGFRB, PICALM, PML, PRDM16, PTK2B, RARA, RBM15, ROS1, RUNX1, RUNX1T1, SEMA6A, SETD2, STIL, SYK, TAL1, TCF3, TFG, TLX1, TLX3, TP63, TSLP, TYK2, VAV1, ZCCHC7, ZNF384.</p> <p><b>Clinical Information:</b> Detects common fusions in hematologic malignancies. Content is identical to the fusion component genes in the Acute Leukemia NGS panel.</p> <p><b>Specimen Requirement:</b> 4 mL bone marrow aspirate in EDTA (Lavender) tube; Collection Ambient; Transport Refrigerated; Refrigerate ASAP</p> <p><b>Stability:</b>                      Ambient: If specimen is to be stored longer than 24 hours, it should be placed at 2-8 C for up to 3 days. If testing is to be delayed, pending triage, store as NUCBUF                      Refrigerated: Stored up to 3 days. If testing is to be delayed, pending triage, store as NUCBUF                      Frozen: Unacceptable</p> <p><i>(continued on page 8)</i></p>	effective immediately

## New Tests (Cont.)

Test Name	Order Code	Change	Effective Date
Hematologic Neoplasm Fusion NGS Panel, Bone Marrow <i>(continued from page 7)</i>		<b>Methodology:</b> Next Gen Sequencing <b>Days Performed:</b> Mon–Fri <b>Reported:</b> 10 days <b>CPT:</b> 81455	
Hematologic Neoplasm Fusion NGS Panel, Other	HFONGS	<b>Special Information:</b> ABL1, ABL2, AFDN, ALK, BCL11B, BCL2, BCL3, BCL6, BCR, BIRC3, BLNK, CBF, CBL, CCND1, CCND2, CCND3, CD274, CD28, CDK6, CDKN2A, CEBPA, CEBPD, CEBPE, CEBPG, CHD1, CHIC2, CIITA, CREBBP, CRLF2, CSF1R, CTLA4, DEK, DGKH, DUSP22, EBF1, EIF4A1, EPOR, ERG, ETV6, FGF1, FLT3, FOXP1, GLIS2, HLF, ID4, IKZF1, IKZF2, IKZF3, IL2RB, IRF4, IRF8, ITK, JAK2, KAT6A, KLF2, KMT2A, LMO1, LMO2, LYN, MALT1, MECOM, MEF2D, MKL1, MLF1, MLLT10, MUC1, MYC, MYH11, NF1, NFKB2, NOTCH1, NTRK3, NUP214, NUP98, NUTM1, P2RY8, PAG1, PAX5, PBX1, PDCD1, PDCD1LG2, PDGFRA, PDGFRB, PICALM, PML, PRDM16, PTK2B, RARA, RBM15, ROS1, RUNX1, RUNX1T1, SEMA6A, SETD2, STIL, SYK, TAL1, TCF3, TFG, TLX1, TLX3, TP63, TSLP, TYK2, VAV1, ZCCHC7, ZNF384. <b>Clinical Information:</b> Detects common fusions in hematologic malignancies. Content is identical to the fusion component genes in the Acute Leukemia NGS panel. <b>Specimen Requirement:</b> Ten unstained and unbaked slides; Collection Ambient; Transport Ambient; Need 10 charged, unbaked, unstained slides or 10 x 7 micron curls (scrolls) plus 1 H&E slide with best tumor area circled containing at least 8% tumor <b>Stability:</b> Ambient: FFPE tissue and clot section slides and curls are transported and stored at ambient temperature or refrigerated indefinitely Refrigerated: FFPE tissue and clot section slides and curls are transported and stored at ambient temperature or refrigerated indefinitely Frozen: Unacceptable <b>Methodology:</b> Next Gen Sequencing <b>Days Performed:</b> Mon–Fri <b>Reported:</b> 10 days <b>CPT:</b> 81455	effective immediately
Myeloid NGS Panel Other	MYNGSO	<b>Special Information:</b> The following genes are interrogated: ABL1, ASXL1, BCOR, BCORL1, BRAF, CALR, CBL, CEBPA, CSF3R, CUX1, DDX41, DNMT3A, EED, ETNK1, ETV6, EZH2, FLT3, GATA1, GATA2, IDH1, IDH2, JAK2, JAK3, KDM6A, KIT, KMT2A, KRAS, LUC7L2, MPL, NF1, NPM1, NRAS, PHF6, PIGA, PPMID, PRPF8, PTEN, PTPN11, RAD2, RIT1, RUNX1, SETBP1, SF3B1, SH2B3, SMC1A, SMC3, SRSF2, STAG2, STAT3, STAT5B, SUZ12, TET2, TP53, U2AF1, WT1, and ZRSR2. <b>Clinical Limitation:</b> This test does not evaluate for fusions. For a combined evaluation including fusions relevant to acute leukemias, the Acute Leukemia NGS panel is recommended. <b>Clinical Information:</b> Molecular evaluation of known or suspected chronic myeloid neoplasms, including but not limited to myeloproliferative neoplasms, myelodysplastic syndromes, and overlap myelodysplastic/myeloproliferative neoplasms. Evaluates for single nucleotide variants, small insertions and deletions within the covered regions of the targeted genes. <b>Specimen Requirement:</b> Ten unstained and unbaked slides; Ambient; Need 10 charged, unbaked, unstained slides or 10 x 7 micron curls (scrolls) plus 1 H&E with best tumor area circled containing at least 10% tumor. <b>Stability:</b> Ambient: Clot section slides and curls are transported and stored at ambient temperature or refrigerated indefinitely. Refrigerated: Clot section slides and curls are transported and stored at ambient temperature or refrigerated indefinitely. Frozen: Unacceptable <b>Methodology:</b> Next Generation DNA Sequencing <b>Days Performed:</b> Mon–Fri <b>Reported:</b> 10 days <b>CPT:</b> 81455	effective immediately



## Discontinued Tests

Test Name	Order Code	Test Information	Effective Date
ALL Panel NGS Bone Marrow	ALLBM	Test will no longer be orderable.	effective immediately
ALL Panel NGS Peripheral Blood	ALLPB	Test will no longer be orderable.	effective immediately
Giardia lamblia IgG, IgA, IgM	GIAGAM	Test will no longer be orderable. Recommended replacement test is Cryptosporidium & Giardia Antigens by EIA (OVAPSC).	effective immediately
Hematologic Neoplasm Next Generation Sequencing Panel Marrow	HNMNGS	Test will no longer be orderable. For lab use only.	effective immediately
Hematologic Neoplasm Next Generation Sequencing Panel Peripheral Blood	HNPNGS	Test will no longer be orderable. For lab use only.	effective immediately
Legionella IgM Abs	LEGMAB	Test will no longer be orderable. Recommended replacement tests are Legionella Culture (LEGCUL), Legionella Urinary Ag (LEGUAG) or Legionella pneumophila PCR (LEGPCR).	effective immediately
Legionella pneumophila Antibody (Types 1-6), IgG by IFA	SLEGAB	Test will no longer be orderable. Recommended replacement tests are Legionella Culture (LEGCUL), Legionella Urinary Ag (LEGUAG) or Legionella pneumophila PCR (LEGPCR).	effective immediately