



Chronic Juvenile Myeloid Leukemia
Acute Myelomonocytic Leukemia
Myeloid Leukemia Chronic Myelomonocytic Leukemia

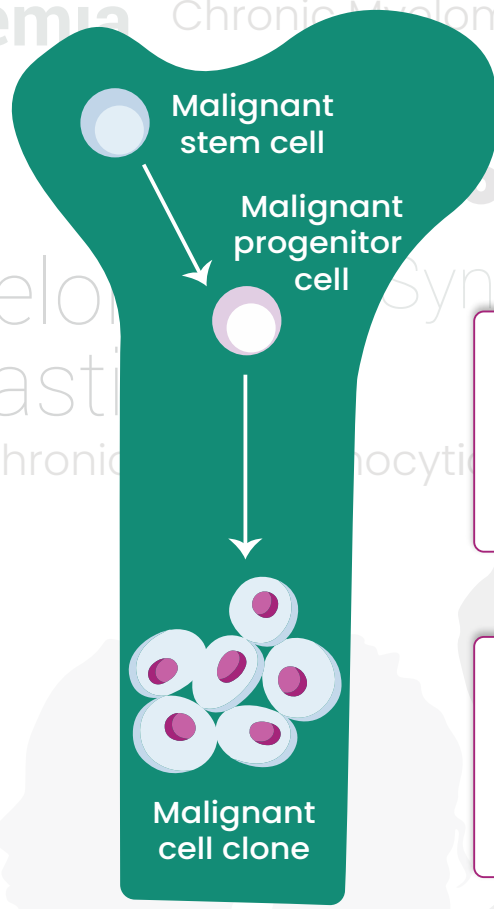

ESSENTIAL THROMBOCYTHEMIA (ET)
Platelets (Abnormal)




POLYCYTHEMIA VERA (PV)
Red blood cell (Abnormal)



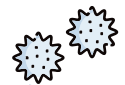
MYELOFIBROSIS (MF)
Collagen and reticulin fibers (Fibrosis)



MYELOYDYSPLASTIC SYNDROMES (MDS)
Immature blood cells



ACUTE MYELOGENOUS LEUKEMIA (AML)
Immature white cells



Comprehensive Testing Solutions to diagnose

HEMATOLOGICAL MALIGNANCIES

Acute Leukemia Panels

OncoLife – AML– Basic panel FISH

7 Markers

t(8;21) inv(16) BCR-ABL1 MLL t(15;17) 3q26(EVI1) del(17p)

OncoLife – AML Extended FISH

11 Markers

t(8;21) inv(16) BCR-ABL1 MLL PML-RARAt(15; 17) inv(3)
del(17p) t(9;11) t(11;19) t(4;11) t(6;11)

Recommended by **European Leukemia Net (ELN) Guidelines**

Clinical Utility



- Use to identify prognostically important abnormalities in newly diagnosed AML
- Identifies the most frequent cytogenetic abnormalities associated with favorable, intermediate, and poor risk
- Use to monitor response to therapy and progression of disease

OncoLife – Comprehensive Myeloid Panel

Targeted NGS assay designed to assist in the understanding of myeloid mutations

Clinical Utility



It interrogates relevant DNA mutations and fusion transcripts associated with myeloid disorders

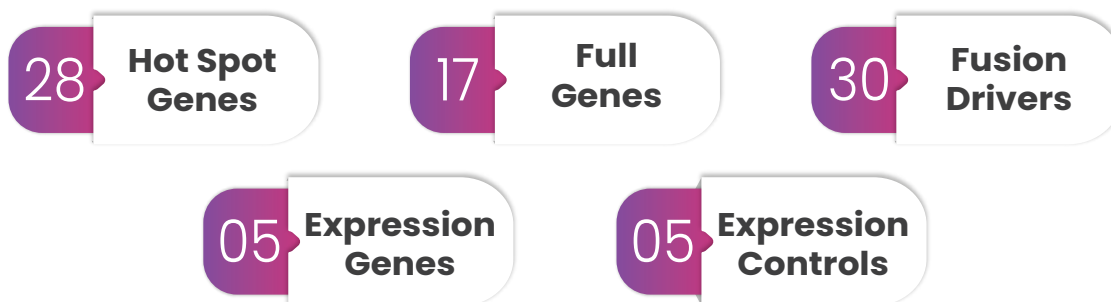


Cover all the major myeloid disorders

- Acute Myeloid Leukemia (AML)
- Myeloid Dysplastic Syndrome (MDS)
- Myeloproliferative Neoplasm (MPN)
- Chronic Myeloid Leukemia (CML)
- Chronic Myelomonocytic Leukemia (CMML)
- Juvenile Myelomonocytic Leukemia (JMML)

Based on the recommendations of AMP-ASCO-CAP guidelines.

Hotspot Genes		Full Genes		Fusion Driver		Expression/ Control Genes
ABL1	KRAS	ASXL1	PRPF8	ABL1	MET	BAALC
BRAF	MPL	BOOR	RB1	ALK	MLLT10	MECUM
CBL	MYD88	CALR	RUNX1	BCL2	MLLT3	MYC
CSF3R	NPM1	CEBPA	SHZB3	BRAF	MYBL1	SMC1A
DNMT3A	NRAS	ETV6	STAG2	CCND1	MYH11	WT1
FLT3	PTPN11	EZH2	TET2	CREBBP	NTRK3	EIF2B1
GATA2	SETBP1	IKZF1	TP53	EGFR	NUP214	FBXW2
HRAS	SF3B1	NF1	ZRSR2	ETV6	PDGFRA	PSMB2
IDH1	SRSF2	PHF6		FGFR1	PDGFRB	PUM1
IDH2	U2AF1			FGFR2	RARA	TRIM27
JAK2	WT1			FUS	RBM15	
KIT				HMGA2	RUNX1	
				JAK2	TCF3	
				KMT2A	TEF3	
				MECUM		



Also available

ONCO0031	OncoLife - Comprehensive Myeloid panel	40 target genes and 29 driver genes in a broad fusion panel
ONCO0023	OncoLife - MDS, FISH	OncoLife -AML and MDS, FISH
ONCO0018	OncoLife - AML & MDS, FISH	t(8;21), inv(16), BCR-ABL1, MLL, PML-RARA, -5/del(5q), 7/del(7q), +8, 3q26(EV11), del(17p) (10Markers)
ONCO0019	OncoLife - AML & MDS Extended, FISH	t(8;21), inv(16), BCR-ABL1, KMT2A(MLL), PML-RARA, -5/del(5q), -7/del(7q), +8, inv(3) EV11 rearrangement, TP53 deletion del(17p), Translocation: t(9;11), t(11;19), t(4;11), t(6;11) (14Markers)

OncoLife – Myeloproliferative Neoplasm Panel

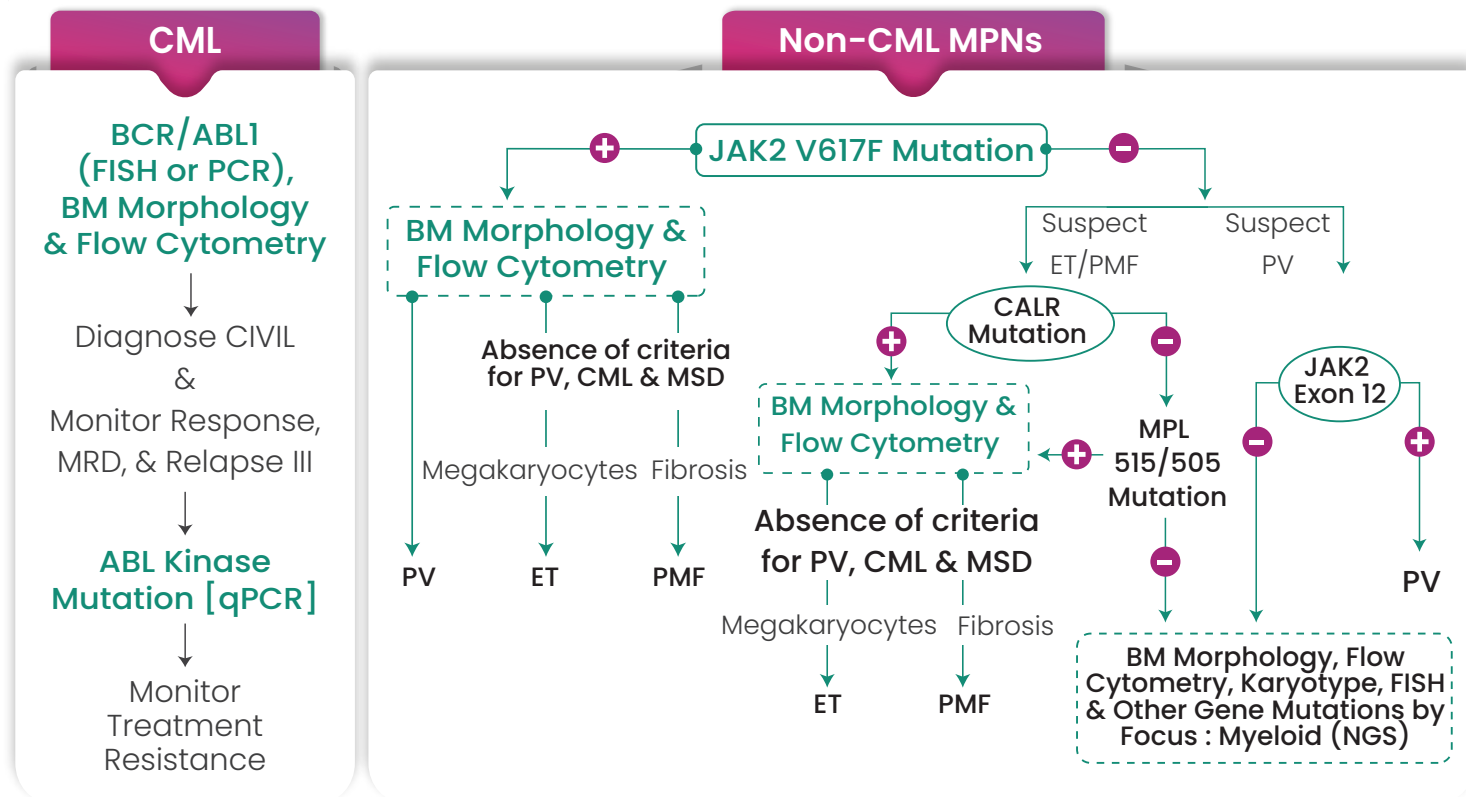
Panel provides targeted detection of mutations in JAK2 (Exon 12, 14) BCR-ABL, CALR and MPL

Clinical Utility



- The panel is used for diagnosis/follow-up of myeloproliferative neoplasms (MPN).
- This test identifies the presence of JAK2 mutations in both exons 12 and 14, which includes JAK2 V617F activating mutation.
- Variable deletions and insertions in exon 12 of JAK2 have been detected in ~3%-5% of PV patients who lack JAK2 V617F mutation.
- Somatic insertion/deletion CALR mutations in exon 9 have been reported to be mutually exclusive with JAK2 and MPL mutations, and have been identified in 20-35% of patients with ET and PMF
- MPL mutations have been reported in 5%-10% of ET and PMF patients

Algorithm – CML & Non-CML MPNs



Also available

M0040	MPL hotspot mutation analysis (Exon 10)	MPL
J0001b	JAK2 hotspot mutation analysis (Exon 12, 14)	JAK2 (Exon 12,14)
B0002c	BCR-ABL1 gene fusion analysis, qualitative (Major, Minor & Micro)	BCR-ABL1
B0002b	BCR-ABL1 gene fusion analysis, quantitative (Major or Minor)	BCR-ABL1

Chronic Lymphocytic Leukemia (CLL) Panels

- It becomes difficult for the physicians to identify the patients who may benefit from an early treatment strategy and to provide the patients with relevant information on disease prognosis due to heterogeneous clinical behavior of patients with CLL
- Considering the clinical heterogeneity of CLL, genetic markers have been established as routinely used prognostic factors in addition to the traditional staging systems

OncoLife - CLL - FISH

Useful in prognosis and prediction of treatment in CLL patients

when used in combination with other clinical and diagnostic findings

7 Markers

del(13q) del(11q22)(ATM) del(6q23) del(17p) +12 IGH t(11;14)

Clinical Utility



- CLL FISH panel is used for the detection of chromosome aberrations observed in chronic lymphocytic leukemia/small lymphocytic lymphoma.
- Panel may be useful in discriminating CLL from leukemic-phase mantle cell lymphoma
- Detection rate is improved from 45% with a chromosome study to 80% with FISH
- Assessing relapse and progression

Also available

OncoLife - CLL Extended, FISH

11 Markers

del(13q) del(11q22)(ATM) del(6q23) del(17p) +12 IGH t(11;14)
t(4;14) t(14;16) t(14;20) t(6;14)

IGHV gene mutation analysis, Sanger sequencing

MYD88 L265P hotspot mutation analysis, Sanger sequencing



Test Ordering Information

Test Code	Test Name	Specimen Type	TAT
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Hematolife - Acute Myeloid Leukemia

K0011	Karyotyping - Non leukemia	2-3 ml bonemarrow/peripheral blood in sodium heparin (Green top) tube	10 days
K0012	Karyotyping - Leukemia		
S0045	Stress Cytogenetics - chromosomal breakage Study		
C0127	CEBPA hotspot mutation analysis	3 ml EDTA vial - Peripheral blood/ Bone marrow	10 days
F0079b	FLT3 ITD mutation analysis(including mutant allele burden)	3 ml EDTA vial - Peripheral blood/ Bone Marrow Bone Marrow morphology report, CBC report and/or FISH report if available should accompany the sample	12 days
N0017	NPM1 hotspot mutation analysis (Exon 12)	EDTA vial - Peripheral blood/ Bone Marrow Bone Marrow morphology report, CBC report and/or FISH report if available should accompany the sample	10 days
F0079	FLT3 D835 hotspot mutation analysis	3 ml EDTA vial - Peripheral blood/ Bone marrow - Peripheral blood/ Bone Marrow Bone Marrow morphology report, CBC report and/or FISH report if available should accompany the sample	7 days
F0079a	FLT3 ITD mutation analysis		
F0079c	FLT3 mutation analysis (Internal tandem duplication analysis and D835 mutation analysis)		
ONCO0013	APML PML RARA t(15;17), FISH	2-3 ml bonemarrow/peripheral blood in sodium heparin (Green top) tube	5 Days
ONCO0014	APML PML RARA t(15;17), FISH+KT		
P0056	PML - RARA gene fusion analysis, qualitative	EDTA vial - Peripheral blood/ Bone Marrow Bone Marrow morphology report, CBC report	7 days
P0056a	PML - RARA gene fusion analysis, quantitative		
ONCO0015	OncoLife - AML - Basic panel , FISH t(8;21), inv(16), BCR-ABL1, MLL , t(15;17),3q26(EV11), del(17p) (7Markers)	2-3 ml bonemarrow/peripheral blood in sodium heparin (Green top) tube	5 Days
ONCO0016	OncoLife - AML Basic panel, FISH+KT t(8;21), inv(16), BCR-ABL1, MLL , t(15;17),3q26(EV11), del(17p) (7Markers)+ KT		
ONCO0017	OncoLife - AML Extended FISH t(8;21), inv(16), BCR-ABL1, MLL, PML-RARAt(15;17), inv(3), del(17p), t(9;11), t(11;19), t(4;11), t(6;11) (11Markers)		
ONCO0040	OncoLife - Acute myeloid leukemia panel NPM1 , FLT3 ITD, FLT3 TKD, CEBPA (4 genes)	3 ml EDTA vial - Peripheral blood/ Bone Marrow Bone Marrow morphology report, CBC report and/or FISH report if available should accompany the sample	10 days
ONCO0031	OncoLife - Comprehensive Myeloid panel 40 target genes and 29 driver genes in a broad fusion panel		21 days

Hematolife-MDS

ONCO0023	OncoLife - MDS, FISH -5/del(5q),-7/del(7q), +8, del(20q), TP53 deletion del(17q) (5Markers)	2-3 ml bonemarrow/peripheral blood in sodium heparin (Green top) tube	5 Days
ONCO0024	OncoLife - MDS, FISH+Karyotyping -5/del(5q),-7/del(7q), +8, del(20q), TP53 deletion del(17q) (5Markers)+KT		
ONCO0018	OncoLife - AML and MDS, FISH t(8;21), inv(16), BCR-ABL1, MLL , PML-RARA, -5/del(5q), 7/del(7q), +8,3q26(EV11), del(17p) (10Markers)		
ONCO0019	OncoLife - AML and MDS Extended, FISH t(8;21), inv(16), BCR-ABL1, KMT2A(MLL) ,PML-RARA, -5/del(5q),-7/del(7q),+8, inv(3) EV11 rearrangement, TP53 deletion del(17p),Translocation: t(9;11), t(11;19), t(4;11), t(6;11) (14Markers)		



Test Ordering Information

Test Code	Test Name	Specimen Type	TAT
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Hematolife-CLL

I0025	IGHV gene mutation analysis	3 ml EDTA vial - Peripheral blood/ Bone Marrow/ paraffin blackbone Marrow morphology report, CBC report and/or FISH report if available should accompany the sample. Histopathology report must accompany the specimen	14 days
ONCO0020	OncoLife - CLL - FISH del(13q),del(11q22)(ATM),del(6q23), del(17p),+12,IGH,,t(11;14) (7Markers)	2-3 ml bonemarrow/peripheral blood in sodium heparin (Green top) tube	5 days
ONCO0021	OncoLife - CLL, FISH+KT del(13q), del(11q22)(ATM), del(6q23), del(17p), +12,IGH, t(11;14) (7Markers)+KT	2-3 ml bonemarrow/peripheral blood in sodium heparin (Green top) tube	5 days
ONCO0022	OncoLife - CLL Extended, FISH del(13q), del(11q22)(ATM), del(6q23), del(17p), +12, IGH, t(11;14), t(4;14), t(14;16), t(14:20), t(6;14) (11Markers)	2-3 ml bonemarrow/peripheral blood in sodium heparin (Green top) tube	5 days
ONCO0007	Lymphoma Panel by IHC	Formalin fixed paraffin embedded tissue block/Biopsy	7 days
F0079c	MYD88 L265P hotspot mutation analysis	EDTA vial - Peripheral blood/ Bone Marrow/FFPE Tissue Bone Marrow morphology report, CBC report and/or FISH report if available should accompany the sample. Histopathology report must accompany the specimen	10 days

Hematolife-CML

A0131	ABL1 tyrosine kinase domain mutation analysis	3 ml EDTA vial - Peripheral blood/ Bone marrow	10 days
B0002c	BCR-ABL1 gene fusion analysis, qualitative (Major, Minor & Micro)		5 days
B0002e	BCR-ABL1 gene fusion analysis,quantitative (Major or Minor)		5 days
ONCO0011	CML BCR ABLt(9;22)(Chronic Phase) Panel, FISH	2-3 ml bonemarrow/peripheral blood in sodium heparin (Green top) tube	5 days
ONCO0012	CML (Chronic Phase) Panel, FISH+KT		5 days



Test Ordering Information

Test Code	Test Name	Specimen Type	TAT
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Hematolife-MPN

C0126	CALR hotspot mutation analysis (Exon 9)	3 ml EDTA vial - Peripheral blood/ Bone marrow	10 days
M0040	MPL hotspot mutation analysis (Exon 10)	EDTA vial - Peripheral blood/ Bone Marrow Bone Marrow morphology report, CBC report and/or FISH report if available should accompany the sample	10 days
J0001b	JAK2 hotspot mutation analysis (Exon 12, 14)	EDTA vial - Peripheral blood/ Bone Marrow Bone Marrow morphology report, CBC report and/or FISH report if available should accompany the sample	10 days
J0001c	JAK2 V617F mutation analysis		7 days
J0001d	JAK2 V617F hotspot mutation analysis		10 days
ONCO0041	OncoLife - Myeloproliferative neoplasm panel BCR - ABL1, JAK2 (Exon 12, 14) , MPL , CALR		10 days

Hematolife-Multiple Myeloma

BS19639	Multiple Myeloma Screening Panel Free Light Chain Assay, Serum; Immunofixation Electrophoresis, Serum; Protein Electrophoresis, Serum; Immunoglobulin Profile, serum	5 ml serum in SST/Red Top (No Additive) tube	2 days
BS19640	Multiple Myeloma Monitoring Panel Beta 2 Microglobulin, Serum; Free Light Chain Assay, Serum; Immunofixation Electrophoresis, Serum; Protein Electrophoresis, Serum; Immunoglobulin Profile, serum; CBC; Urea Serum; Creatinine, Serum; Lactate dehydrogenase (LDH), Serum	3 mL (2 mL min.) Whole blood in 1 Lavender Top (EDTA) tube AND 5 mL (3 mL min.) Serum from 1 SST	2 days
ONCO0025	OncoLife - MM - FISH (plasma cells enrichment) del(17p), -13/del(13q), del(1p)&Amp(1q), IGH translocation, +3, +7, +9, +15 (8Markers)	2-3 ml bonemarrow/peripheral blood in sodium heparin (Green top) tube	5 days
ONCO0026	OncoLife - MM, FISH+KT (plasma cells enrichment) del(17p), -13/del(13q), del(1p)&Amp(1q), IGH translocation, +3, +7, +9, +15 (8Markers)+KT		
ONCO0027	OncoLife - MM, FISH Extended (with plasma cells enrichment) del(17p), -13/del(13q), del(1p)&Amp(1q), IGH translocation, +3, +7, +9, +15 (8Markers)		