OncoMetrix™
Definitive Cancer Diagnostics

Next-Generation Sequencing

Comprehensive Myeloid & CLL Prognostic Panels

NEXT GENERATION SEQUENCING PANELS	GENE(S) EVALUATED								
Comprehensive Myeloid Sequencing Panel	ABL1	ASXL1	ATRX	BCOR	BCORL1	BRAF	CALR	CBL	CBLB
	CBLC	CDKN2A	CEBPA	CSF3R	CUX1	DNMT3A	ETV6/TEL	EZH2	FBXW7
	FLT3	GATA1	GATA2	GNAS	HRAS	IDH1	IDH2	IKZF1	JAK2
	JAK3	KDM6A	KIT	KRAS	MLL	MPL	MYD88	NOTCH1	NPM1
	NRAS	PDGFRA	PHF6	PTEN	PTPN11	RAD21	RUNX1	SETBP1	SF3B1
	SMC1A	SMC3	SRSF2	STAG2	TET2	TP53	U2AF1	WT1	ZRSR2
CLL Prognostic Sequencing Panel	MYD88	SF3B1	TP53	NOTCH1					

Comprehensive

- Offers the capability to detect 568 different genetic alterations across 54 genes
- NGS may provide a broader selection of therapeutic options for clinical diagnosis

Efficient

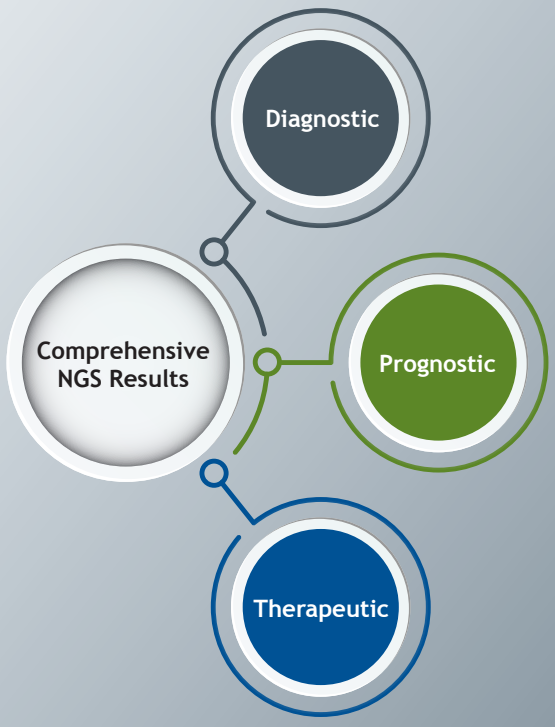
- Comprehensive report presents NGS data in a streamlined format, making it easier for ordering physicians to disseminate information and put protocol into practice based on findings

Rapid

- NGS greatly reduces the time to detect clinically actionable mutations with results in 7 to 10 days for rapid-track treatment implementation

Progressive

- Clinical trial suggestions may provide greater access to NCI-MATCH trials based on patient's molecular tumor subtype



Specimen Collection & Ordering Tests

Appropriate specimen types for NGS testing are peripheral blood (EDTA) lavender top tube and/or bone marrow collections.

If you would like NGS testing to be performed on a patient specimen:
1. Fill out the OncoMetrix requisition form with all of the appropriate patient information along with diagnosis or any indication for testing.
2. Check the box for either the Comprehensive Myeloid Sequencing Panel or CLL Prognostic Sequencing Panel.
3. Place the completed requisition form and patient sample into the OncoMetrix Collection Kit and call 877.670.HEME (4363) for pick-up.

If you would like to add NGS testing onto a previously tested patient's specimen, please call 877.670.HEME (4363) and speak with one of our client service specialists.

OncoMetrix™
Definitive Cancer Diagnostics

Comprehensive Genomic Report

PATIENT
Patient: SAMPLE PATIENT
DOB/Sex: 1/31/1950 Male
MR/Chart #:
Accession #:

SPECIMEN
Specimen: Bone Marrow
Collected: 3/1/2017
Received: 3/2/2017
All Specimens:

PHYSICIAN
SAMPLE DOCTOR
Copies:
REPORT DATE: 03/10/2017

Quick TAT from collection date to reporting

Results Interpretation:
Positive for FLT3 ITD mutation
Positive for BRAF (V600E) mutation

Clear and comprehensive results

Biomarkers with Clinically Significant Alterations:

BRAF (V600E), FLT3 ITD

Biomarkers that Tested Negative for Clinically Significant Alterations:

ABL1, ASXL1, ATRX, BCOR, BCORL1, BRAF, CALR, CBL, CBLB, CBLC, CDKN2A, CSF3R, CUX1, DNMT3A, ETV6/TEL, EZH2, FBXW7, GATA1, GATA2, GNAS, HRAS, IDH1, IDH2, IKZF1, JAK2, JAK3, KDM6A, KIT, KRAS, MLL, MPL, MYD88, NOTCH1, NPM1, NRAS, PDGFRA, PHF6, PTEN, PTPN11, RAD21, RUNX1, SETBP1, SF3B1, SMC1A, SMC3, SRSF2,STAG2, TET2, TP53, U2AF1, WT1, ZRSR2

GENETIC ALTERATIONS:
Detected Alterations of Known or Potential Pathogenicity

Gene	Gene Alteration	Type of Alteration	Significance	Therapeutic Implications	Additional Information
BRAF	V600E c.1799T>A VAF: 7.1%	Substitution - Missense	Pathogenic	Associated with drug response; Potentially relevant clinical trials	COSMIC: COSM1131, COSM476 Allele Frequency: 0.0%dbSNP: rs113488022

Prognostic implications for clinically significant alterations

PROGNOSTIC IMPLICATIONS:
Prognostic Implications of Detected Alterations in Patient's Cancer Type

Detected Alterations	Prognosis	Other Relevant Information	Source
FLT3 ITD	May be favorable (See Other Information)	FLT3 ITD is generally associated with poor prognosis. But concurrently occurring favorable fusions may modify the outcome.	NCCN, MCG

DRUG RESPONSE:
Drugs Associated with Sensitivity or Resistance, Based on Genomic Analysis

Drug	Response to Drug Associated with Detected Alteration	Alteration(s) Detected	Condition	Other Relevant Information	Line of Therapy	Source
Sorafenib	Primary sensitivity	FLT3 ITD	Acute Myeloid Leukemia	NCCN recommends that sorafenib maybe added to hypomethylating agents (decitabine of 5-azacytidine) for patients with FLT3 ITD mutations.	Refractory	NCCN,MCG

Drug sensitivity and resistance for significant alterations which may provide additional therapy information

Drugs Associated With Sensitivity For Other Tumor Types, Based on Genomic Analysis

Drug	Response to Drug Associated with Detected Alteration	Alteration(s) Detected	Condition	Other Relevant Information	Line of Therapy	Source
Cobimetinib and Vemurafenib	Primary sensitivity	BRAF V600E	Melanoma	Recommended by FDA for treatment of patients with unresectable or metastatic melanoma with a BRAF V600E/K mutation	Metastatic	FDA,MCG

CLINICAL TRIALS:

Potentially Relevant Targeted Clinical Trials Trial Title	Relevant Genes	Conditions
Quizartinib With Standard of Care Chemotherapy and as Maintenance Therapy in Patients With Newly Diagnosed FLT3-ITD (+) AML (NCT02668653)	FLT3	Acute Myeloid Leukemia, Leukemia

Clinical trials may expand therapy options for patients based on their molecular tumor subtype

Regions with Insufficient Coverage
The following capture regions demonstrated suboptimal coverage. Assay sensitivity cannot be guaranteed:

ATRX_1.1, ATRX_2.1, BCOR_2.1, CBLB_1.1

Electronically signed by: Mihaela Onciu, MD
03/10/2017 03:35PM

ICD10 Codes: D72.829 CPT Codes: 81455