Comprehensive Molecular Testing for Lung Cancer

NCCN Guidelines | Actionable Markers Beyond NCCN | DNA + RNA + MSI

GETTING LUNG CANCER PATIENTS ON THE RIGHT TREATMENT, FASTER; BECAUSE TIME MATTERS.

WHY CIRCULOGENE

CIRCULOGENE’s molecular diagnostics process is based on the discovery that as tumor cells multiply, they also die, releasing their DNA/RNA into the bloodstream. CIRCULOGENE’S comprehensive tumor DNA/RNA sequencing is the only testing available that combines minimal volumes of blood with the most advanced next-generation sequencing (NGS) to monitor tumor-mutant DNA/RNA within well-characterized, well-documented, cancer-associated genes.

CIRCULOGENE’S SOLUTION

As CIRCULOGENE our programmatic approach characterizes genomic changes to give patients and their treatment teams the most actionable information possible in order to make programmatic treatment decisions faster.

CIRCULOGENE’S LISA Enrichment Technology

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CIRCULOGENE’S PROPRIETARY ENRICHMENT TECHNOLOGY

CIRCULOGENE’S Proprietary Enrichment Technology, LISA (Liquid In Situ Amplification), is the ONLY technology that bypasses the purification step, which is important because genetic material will not be lost.

CIRCULOGENE’S LISA Enrichment Technology

ACCESS

Minimal-volume input with maximal yield. One lavender tube (4mL) for full range of DNA, RNA, and MSI immunotherapy testing

ENRICH

Proprietary, direct-on-specimen enrichment technology locates and captures cell-free DNA

DETECT

Capable of testing more than 50 genes for approximately 3,000 possible mutations

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855-380-1555
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CLIA #: 01D2101075 | CAP Accredited: 9373166
CIRCULOGENE is a Clinical Laboratory Improvement Amendments (CLIA) and College of American Pathologists (CAP) certified laboratory
TIME MATTERS

Every 2.3 minutes there is a newly diagnosed lung cancer patient, which means it’s a race against time. Time is crucial. Time to treatment matters! Patients getting more time with their loved ones matters! Starting the correct treatment as quickly as possible upon diagnosis improves survival! CIRCULOGENE’s comprehensive lung panel is the easiest, most patient friendly decision that can be made at the time of biopsy.

THE CIRCULOGENE DIFFERENCE: PROGRAMMATIC APPROACH

CIRCULOGENE gives all Four Pillars ofThoracic Oncology Care the ability to construct optimal treatment plans for patients in a multi-disciplinary, time effective approach.

CIRCULOGENE SOLUTION

REQUIRES ONLY 4 ML OF BLOOD (ONE PURPLE TOP EDTA TUBE)

TREATMENT PLAN IN 9 DAYS

OTHER PLASMA NGS APPROACH: BIOPSY TO TREATMENT

TISSUE ONLY APPROACH:

COMPLETE BIOMARKER TESTING SOLUTION FOR YOUR PATIENT, BECAUSE IT MATTERS.

"Adding plasma next generation sequencing testing to the routine management of metastatic non-small cell lung cancer patients appears to increase targetable mutation detection and improve delivery of targeted therapy. Tissue alone detected targetable mutations for 20% of patients. Adding plasma sequencing increased targetable mutation detection to 36%."-JAMA Oncology 2019, Aggarwal

CIRCULOGENE's comprehensive NGS Lung Panel includes all of the current NCCN targetable markers as well as all actionable markers and co-mutations so that you can make critical decisions in your patient’s treatment plan.

PATIENT BENEFITS FROM PRECISION ONCOLOGY

"N of 1 is 100% for that patient" –Dr. Paul Walker, Director of Thoracic Oncology at East Carolina University

EXPERT RECOMMENDED BIOMARKERS 3*NCCN TARGETABLE MARKERS

CIRCULOGENE’S COMPREHENSIVE LUNG PANEL

ABL1 CDKN2A FGFR3 JAK3 NRAS SMAD4
AKT1 CSF1R FLT3 KDR NTRK FUSIONS (20)* SMARCB1
ALK CTNNB1 GNA11 KIT PD-LI EXPRESSION* SMO
ALK FUSION* EGFR* GNAQ KRAS PDGFRα SRC
APC ERBB2 GNAS MET PIK3CA STK11
ATM ERBB4 HNF1A MLH1 PTEN TP53
BRAF* EZH2 HRAS MPL PTPN11 VHL
BRCA1 FBXW7 IDH1 MSI RB1
BRCA2 FGFR1 IDH2 NOTCH1 RET
CDH1 FGFR2 JAK2 NPM1 ROS1 FUSION*

SOMATIC TESTING RESULTS

<table>
<thead>
<tr>
<th>Biomarker</th>
<th>Mutation Detected</th>
<th>Variant Location</th>
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<tbody>
<tr>
<td>EGFR</td>
<td>Detected</td>
<td>Exon 18 (L858R)</td>
</tr>
<tr>
<td>ALK</td>
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<td></td>
</tr>
<tr>
<td>RET</td>
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<tr>
<td>BRAF</td>
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56 year old male patient presented in wheelchair with weight loss and epigastric pain

CIRCULOGENE NGS plasma was drawn at time of tissue biopsy. Diagnosis: TTF-1 adenocarcinoma

CIRCULOGENE results detected ROS1 mutation (Tissue returned QNS 3 weeks later)

Patient began ROS1 targeted treatment 10 days post-biopsy

“I came in needing a wheelchair, now I am dancing a jig.”
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OTHER PLASMA NGS APPROACH:
BIOPSY TO TREATMENT

Tissue Biopsy
Step 1: Tissue Biopsy

Diagnosis
Step 2: Diagnosis

CIRCULOGENE Results
Step 3: CIRCULOGENE Results

Multi-Disciplinary Discussion
Step 4: Multi-Disciplinary Discussion

Treatment
Step 5: Treatment

TREATMENT PLAN IN 9 DAYS

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