FOUNDATIONONE®LIQUID

Liquid test
Solid answers.

Introducing FoundationOne®Liquid, our next-generation liquid biopsy test from our proven portfolio.

A SIMPLE BLOOD DRAW CAN DELIVER RELIABLE ANSWERS

By analyzing circulating tumor DNA (ctDNA) with our comprehensive genomic profiling approach and providing expertly curated reports, ***FoundationOne Liquid empowers providers*** to help guide therapy selection and identify clinical trial options for more patients.

Robust Performance

>99%

Sensitivity[1]

>99%

Positivity Predictive Value (PPV)[2]

Analytically validated across four main classes of genomic alterations, ensuring high quality results to better inform treatment decisions[3]

Expanded Content

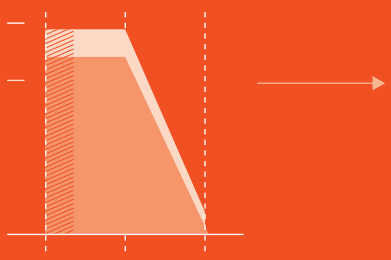
A comprehensive list of 70 cancer-related genes which includes homologous recombination deficiency (HRD) and IO resistance genes

SEE GENE LIST ON BACK

MICROSATELLITE INSTABILITY

(MSI-H)[4] detection can provide ***immunotherapy selection guidance***

Streamlined Report



Simplified report including ***longitudinal comparison*** with prior test results and a ***dynamic visual*** of mutant allele frequency (MAF) changes

SEE SAMPLE REPORT ON BACK

FOR MORE DETAILED INFORMATION VISIT *foundationmedicine.com/liquid*

Gene List

70 cancer-related genes below

ABL1	*AKT1*	*ALK*	*APC*	*AR*	*ARAF*	*ATM*	*BRAF*
BRCA1	*BRCA2*	*BTK*	*CCND1*	*CD274*	*CDH1*	*CDK4*	*CDK6*
CDK12	*CDKN2A*	*CHEK2*	*CRKL*	*CTNNB1*	*DDR2*	*EGFR*	*ERBB2*
ERRFI1	*ESR1*	*EZH2*	*FGFR1*	*FGFR2*	*FGFR3*	*FLT3*	*FOXL2*
GNA11	*GNAQ*	*GNAS*	*HRAS*	*IDH1*	*IDH2*	*JAK2*	*JAK3*
KIT	*KRAS*	*MAP2K1*	*MAP2K2*	*MDM2*	*MET*	*MPL*	*MTOR*
MYC	*MYCN*	*MYD88*	*NF1*	*NPM1*	*NRAS*	*PALB2*	*PDCD1LG2*
PDGFRA	*PDGFRB*	*PIK3CA*	*PTEN*	*PTPN11*	*RAF1*	*RB1*	*RET*
ROS1	*SMO*	*STK11*	*TERT*	*TP53*	*VEGFA*		

Sample Report

FOUNDATIONONE®LIQUID

PATIENT

TUMOR TYPE: Lung adenocarcinoma

REPORT DATE: 01 Jan 2018

CRF#: XXXXXXXX

ABOUT THE TEST FoundationOne®Liquid is a next generation sequencing (NGS) assay that identifies clinically relevant genomic alterations in circulating tumor DNA.

PATIENT
DISEASE Lung adenocarcinoma
NAME Not Given
DATE OF BIRTH Not Given
SEX Not Given
MEDICAL RECORD # Not Given

PHYSICIAN
ORDERING PHYSICIAN Not Given
MEDICAL FACILITY Not Given
ADDITIONAL RECIPIENT Not Given
MEDICAL FACILITY ID Not Given
PATHOLOGIST Not Given

SPECIMEN
SPECIMEN ID Not Given
SPECIMEN TYPE Blood
DATE OF COLLECTION Not Given
SPECIMEN RECEIVED Not Given
MEDIAN EXON COVERAGE Not Given

Biomarker Findings
Microsatellite status MSI-High

Genomic Findings
For a complete list of the genes assayed, please refer to the Appendix.
EGFR exon 19 deletion (L747_A750>P)
TP53 C242G

8 Therapies with Clinical Benefit
0 Therapies with Lack of Response
10 Clinical Trials

BIOMARKER FINDINGS	THERAPIES WITH CLINICAL BENEFIT (IN PATIENT'S TUMOR TYPE)	THERAPIES WITH CLINICAL BENEFIT (IN OTHER TUMOR TYPE)
Microsatellite status - MSI-High	Pembrolizumab	none

GENOMIC FINDINGS	MAF%	THERAPIES WITH CLINICAL BENEFIT (IN PATIENT'S TUMOR TYPE)	THERAPIES WITH CLINICAL BENEFIT (IN OTHER TUMOR TYPE)
EGFR **-** exon 19 deletion (L747_A750>P)	0.20%	Afatinib	Cetuximab
		Erlotinib	Lapatinib
		Gefitinib	Panitumumab
10 Trials see p. 8		Osimertinib	

GENOMIC FINDINGS WITH NO REPORTABLE THERAPEUTIC OR CLINICAL TRIALS OPTIONS

For more information regarding biological and clinical significance, including prognostic, diagnostic, germline, and potential chemosensitivity implications, see the Genomic Findings section.

TP53 **-** C242G ..... p. 3

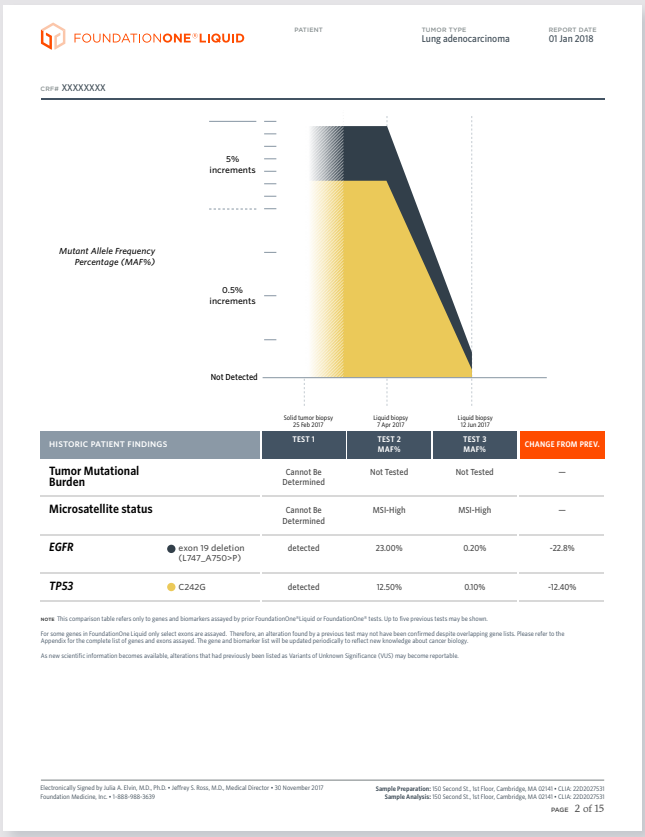
NOTE Genomic alterations detected may be associated with activity of certain FDA-approved drugs; however, the agents listed in this report may have varied clinical evidence in the patient's tumor type. Neither the therapeutic agents nor the trials identified are ranked in order of potential or predicted efficacy for this patient, nor are they ranked in order of level of evidence for this patient's tumor type. In the appropriate clinical context, germline testing of APC, BRCA1, BRCA2, CDH1, NF1, PALB2, RB1, RET, STK11, and TP53 is recommended.

Mutant Allele Frequency is not applicable for copy number amplifications or rearrangements.

Electronically Signed by Julia A. Elvin, M.D., Ph.D. • Jeffrey S. Ross, M.D., Medical Director • 30 November 2017
Foundation Medicine, Inc. • 1-888-988-3639

Sample Preparation: 150 Second St., 1st Floor, Cambridge, MA 02141 • CLIA: 22D2027531
Sample Analysis: 150 Second St., 1st Floor, Cambridge, MA 02141 • CLIA: 22D2027531

PAGE 1 of 15



FOUNDATIONONE®LIQUID

PATIENT

TUMOR TYPE: Lung adenocarcinoma

REPORT DATE: 01 Jan 2018

CRF# XXXXXXXX

HISTORIC PATIENT FINDINGS		TEST 1	TEST 2 MAF%	TEST 3 MAF%	CHANGE FROM PREV.
Tumor Mutational Burden		Cannot Be Determined	Not Tested	Not Tested	—
Microsatellite status		Cannot Be Determined	MSI-High	MSI-High	—
EGFR	● exon 19 deletion (L747_A750>P)	detected	23.00%	0.20%	-22.8%
TP53	● C242G	detected	12.50%	0.10%	-12.40%

NOTE This comparison table refers only to genes and biomarkers assayed by prior FoundationOne®Liquid or FoundationOne® tests. Up to five previous tests may be shown.

For some genes in FoundationOne Liquid only select exons are assayed. Therefore, an alteration found by a previous test may not have been confirmed despite overlapping gene lists. Please refer to the Appendix for the complete list of genes and exons assayed. The gene and biomarker list will be updated periodically to reflect new knowledge about cancer biology.

As new scientific information becomes available, alterations that had previously been listed as Variants of Unknown Significance (VUS) may become reportable.

Electronically Signed by Julia A. Elvin, M.D., Ph.D. • Jeffrey S. Ross, M.D., Medical Director • 30 November 2017
Foundation Medicine, Inc. • 1-888-988-3639

Sample Preparation: 150 Second St., 1st Floor, Cambridge, MA 02141 • CLIA: 22D2027531
Sample Analysis: 150 Second St., 1st Floor, Cambridge, MA 02141 • CLIA: 22D2027531

PAGE 2 of 15

References

1. >99% sensitivity for base substitutions, indels and rearrangements at >0.5% MAF. Sensitivity for copy number variations is >95% when the tumor fraction is ≥20%. Internal data on file.
2. >99% PPV for all alterations, calculated as a weighted average of the PPV for each class of alteration, with the weighting based upon the frequency with which FoundationACT detects each class of alteration. The PPV for base substitutions, indels and rearrangements is >99% at >0.5% MAF. The PPV for copy number variations at ≥20% tumor fraction is 97.6%. Internal data on file.
3. Internal data on file.
4. MSI status will be reported for samples determined to have high microsatellite instability.

FOUNDATION MEDICINE®

www.foundationmedicine.com | Tel. 888.988.3639 | Fax 617.418.2290 | MKT-0224-02