

Why Circulogene?

CIRCULOGENE's comprehensive tumor DNA and RNA sequencing is the only plasma testing available that combines the most advanced next-generation sequencing (NGS) and polymerase chain reaction (PCR) technology to detect and monitor cfDNA and cfRNA within well-characterized, well-documented, actionable cancer-associated genes.

SOMATIC DNA SEQUENCING

FULL GENE					
AKT1	CDH1	EZH2	JAK3	NRAS	SETD2
ALK	CDK4	FBXW7	KDR	NTRK1	SMAD4
AR	CDK12	FGFR1	KEAP1	NTRK2	SMARCA4
ARAF	CDK6	FGFR2	KIT	NTRK3	SMARCB1
ARID1A	CDKN2A	FOXL2	KRAS	PALB2	SMO
ATM	CHEK1	FGFR3	MAP2K1	PDGFRA	SRC
ATR	CHEK2	GNA11	MAP2K2	PIK3CA	STAT3
AXL	CRKL	GNAQ	MAPK3	POLD1	STK11
BAP1	CSF1R	GNAS	MET (Incl. Exon 14 Skipping)	POLE	TERT
BARD1	CTNNB1	HNF1A	PTEN	PTEN	TOP1
BRAF	DDR2	HRAS	MLH1	PTPN11	TP53
BRCA1	EGFR	IDH1	MTOR	RAF1	TSC1
BRCA2	ERBB2	IDH2	MYC	RB1	TSC2
CCND1	ERBB4	IGF1R	NF1	RET	VHL
CCNE1	ESR1	JAK2	NOTCH1	ROS1	

When to Test with Liquid Biopsy

CIRCULOGENE offers the most advanced NGS and PCR methods to both detect and continually monitor cfDNA and cfRNA.

- 1 At Diagnosis To Guide Treatment
- 2 At 6-8 Weeks Post-Treatment to Assess Response
- 3 To Assess Symptomatic or Radiographic Concern for Recurrent or Progressing Cancer Before Surgery



SOMATIC RNA FUSION NGS

ABL1	CCNB3	FGFR1	MYB	POU5F1	STAT6
ACTB	CCND1	FGFR2	MYC	PPARGC1A	STRN
AFAP1	CD74	FGFR3	NAB2	PPP1CB	SUZ12
AGK	CIC	FLI1	NCOA1	PRKACA	TACC1
AKAP12	CLTC	FN1	NCOA2	PRKAR1A	TACC3
AKAP4	CNTRL	FOXO1	NCOA4	PTPRZ1	TAF15
AKAP9	COL1A1	FOXO4	NFIB	QKI	TCF12
AKT2	CREB1	FUS	NOTCH2	RAF1	TERT
AKT3	CREB3L1	GLI1	NPM1	RANBP2	TFE3
ALK	CREB3L2	GOPC	NR4A3	RARA	TFG
ASPSCR1	CRTC1	GPR128	NRG1	RELA	THADA
ATF1	DDIT3	HMGA2	NRG2	RELCH	TMPRSS2
ATP1B1	DNAJBI	JAZF1	NSD3	RET	TPM3
ATRX	EGFR	KIAA1549	NTRK1	ROS1	TPR
BAG4	EML4	KIF5B	NTRK2	RREB1	TRIM24
BCL2	EPC1	LMNA	NTRK3	RSP02	TRIM33
BCOR	ERBB2	LPP	NUTM1	RSP03	TRIO
BCORL1	ERBB4	MAGI3	PAX3	SDC1	VGLL2
BCR	ERG	MAML1	PAX7	SDC4	WT1
BICC1	ESR1	MAML2	PAX8	SHTN1	WWTR1
BRAF	ETV1	MAML3	PDGFB	SLC34A2	YAP1
BRD3	ETV4	MET	PDGFRA	SND1	YWHAE
BRD4	ETV5	MGA	PDGFRB	SQSTM1	ZMYM2
CAMTA1	ETV6	MGMT	PHF1	SS18	ZNF703
CCAR2	EWSR1	MIR143	PIK3CA	SSX1	ZFTA
CCDC6	EZR	MITF	PLAG1	SSX2	
CCDC88A	FEV	MKL2	PML	SSX4	

CNV

AR	CDK4	ERBB2	KIT
CCND1	CDK6	FGFR1	MET
CCNE1	EGFR	FGFR2	MYC

FUSION BY RT-PCR

ALK	NTRK2	RET
NTRK1	NTRK3	ROS1

IMMUNOTHERAPY

MSI	PD-L1 RNA Expression
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HEREDITARY GENES

APC	CDH1	FLCN	NBN	RAD51C	TP53
ATM	CDK4	HOXB13	NF1	RAD51D	TSC1
AXIN2	CDKN2A	MET	NTHL1	RECQL	TSC2
BAP1	CHEK2	MITF	PALB2	SCG5	VHL
BARD1	CTNNA1	MLH1	PMS2	SDHB	
BMPR1A	EPCAM	MSH2	POLD1	SDHC	
BRCA1	FANCC	MSH3	POLE	SDHD	
BRCA2	FANCM	MSH6	POT1	SMAD4	
BRIP1	FH	MUTYH	PTEN	STK11	



GET STARTED TODAY

Talk to your CIRCULOGENE representative to request our collection kit and requisition form.



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Precision Care.

WWW.CIRCULOGENE.COM
INFO@CIRCULOGENE.COM
855-614-7083

LIQUID PD-L1
NCCN GUIDELINES
PCR + NGS ALL STATES

Comprehensive
Molecular Testing
for Lung Cancer

GETTING LUNG CANCER PATIENTS
ON THE RIGHT TREATMENT FASTER

The Circulogene Best-in-class

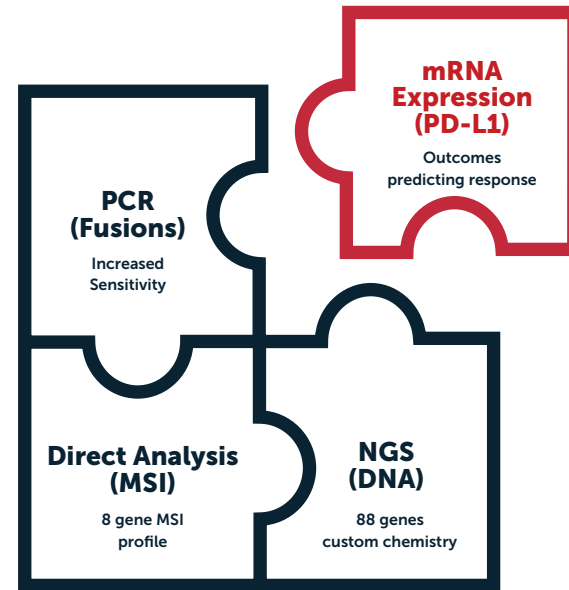
difference

CIRCULOGENE combines the best-in-class preanalytical, instrumentation, and technology to provide oncologists (and their patients) with the most comprehensive results. Having results in as little as 7 days could lead to personalized treatment, faster.

- Combines NGS and PCR
- Increases RNA yields with proprietary LISA technology
- Provides the ONLY liquid PD-L1
- Offers Enhanced MSI
- Clinical utility to detect at all cancer stages
- Early indication of metastasis

INTERNATIONAL ASSOCIATION FOR THE STUDY OF LUNG CANCER (IASLC) RECOMMENDATION:

Liquid biopsy is emerging as not only complementary to tissue-based analysis but also acceptable as the initial approach ("plasma first") for biomarker evaluation at the time of diagnosis and for monitoring the efficacy of targeted therapies.



80% OF CANCER PATIENTS START TREATMENT WITHOUT NUCLEAR PROFILE

ASCO (2019) reported that only 20% of NSCLC patients have a molecular profile or biopsy to maximize information gathered for optimal treatment decisions.

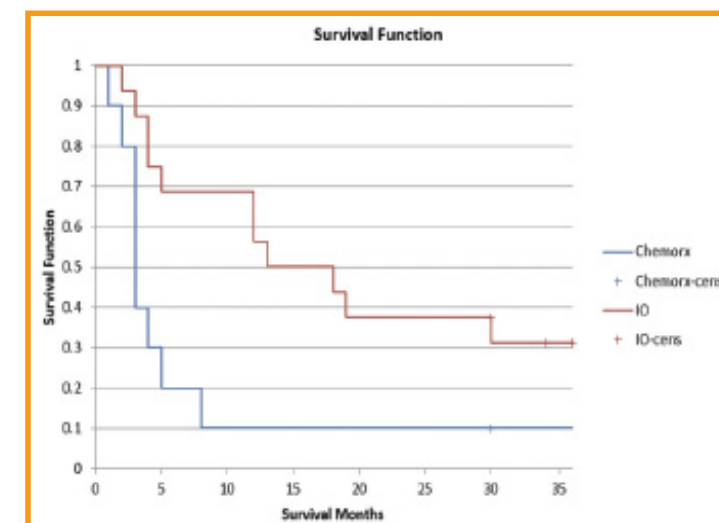


CIRCULOGENE OFFERS THE ONLY LIQUID PD-L1

PD-L1 expression has been correlated with clinical effectiveness and improved survival rates when treated with immunotherapy. Utilizing KEYNOTE-042 as a baseline comparison, plasma PD-L1 parallels tissue PD-L1 clinical trial outcomes with a 30% survival over 3 years.

Study demonstrates plasma cfRNA PD-L1 is predictive of immunotherapy benefit in advanced NSCLC of (compared to chemotherapy).

The ECU study demonstrated that Plasma PD-L1 expression was predictive of significant survival benefit of immunotherapy treatment over chemotherapy in advanced NSCLC patients. Using pembrolizumab monotherapy study as a baseline comparison, plasma PD-L1 parallels tissue PD-L1 clinical trial outcomes with a 30% survival over 3 years.



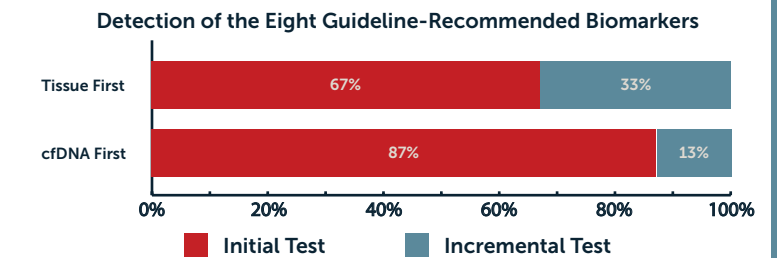
Combination of Liquid and Tissue Biopsy

THE COMBINATION OF LIQUID AND TISSUE BIOPSY IDENTIFIES MORE ACTIONABLE MUTATIONS

Tissue-only molecular testing only detects 67% of National Comprehensive Cancer Network (NCCN) guideline mutations, missing 33%. Liquid biopsy detects 87% of guideline mutations.

Used together, liquid and tissue biopsy provides a more complete picture of the tumor's molecular makeup.

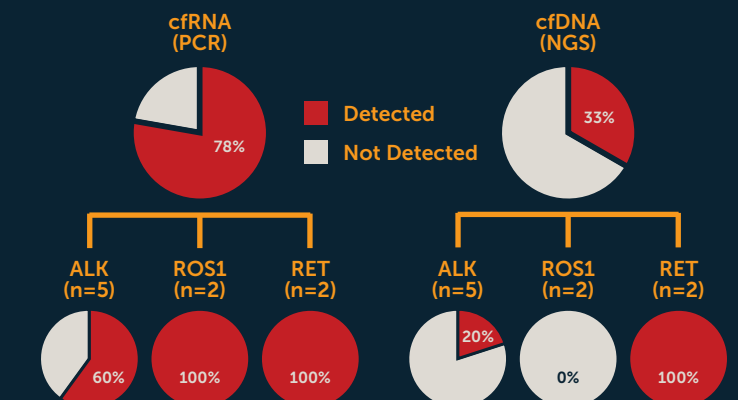
Liquid biopsy has the advantage of detecting a multitude of biomarkers which may be an indication of metastasis away from the primary tumor.



COMBINING PCR AND NGS LEADS TO MOST COMPREHENSIVE ASSAY

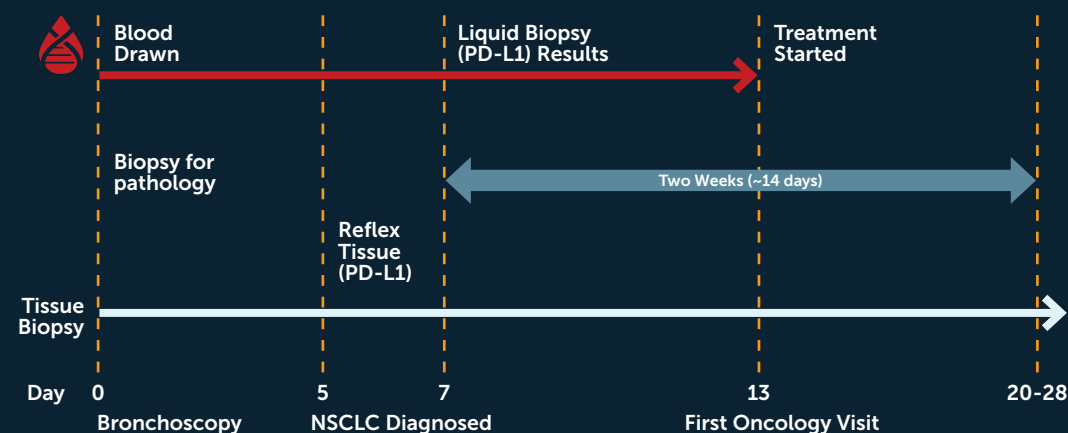
Highly sensitive RNA fusions are best detected by PCR versus NGS. CIRCULOGENE's best-in-class approach provides a multi-modality approach combining the breadth of NGS for DNA and accuracy of PCR for RNA.

The fusion detection sensitivities of the cfRNA with PCR and cfDNA with NGS were compared. cfRNA with PCR detected 78% (7/9) of the fusions while cfDNA with NGS only detected 33% (3/9).



AS QUICK AS 7 DAYS TO RESULTS - FASTER TIME TO TREATMENT

LIQUID v. TISSUE TIME TO TREATMENT (NSCLC)



Patients deserve the Best!

Each patient's cancer is unique, understanding the origins and severity of the cancers aids oncologists to personalize the patient's treatment plan at the time of diagnosis and throughout their cancer journey.

Patients deserve the right treatment for their cancer and within a time frame that improves their outcomes and chance for survival. Understanding the patient's tumor(s) molecular profile aids oncologists to prescribe the right first-line treatment.