IQlung™
TREATMENT GUIDANCE

Expedite time to results.

Equipping providers with biological information that supports care decisions at any stage of lung cancer from a simple blood draw.

biodesix®

THE CHALLENGE

Delayed time to treatment and a lack of biomarker information

26
days is the average time from tissue availability to molecular testing results[1]

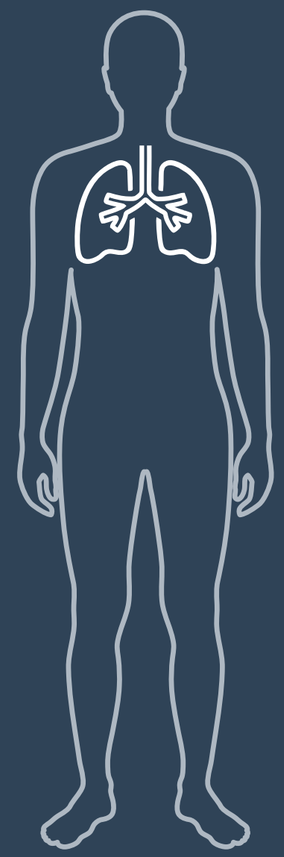
51%
of NSCLC patients have insufficient tissue for molecular testing[2]

~50%
of NSCLC patients do not have biomarker results prior to starting first-line treatment[3]

How does this impact patients?

Overall time to treatment has shown to be linked to test result availability.[4] Starting first-line care without biomarkers to inform the best treatment path may lead to worse patient outcomes.

35
days is the median time from metastatic NSCLC diagnosis to first-line therapy[3]



IQLUNG™ TREATMENT GUIDANCE TESTING

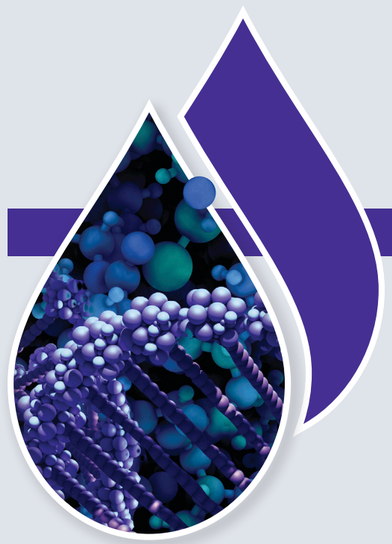
In the fight against cancer every minute matters

IQlung™ TREATMENT GUIDANCE

Our powerful combination of genomic and proteomic testing reveals a broader view of each patient's disease state.

72 Hour Results or Less

	DIAGNOSIS	TREATMENT
	Confirm Diagnosis Pulmonologist	Treatment Decisions Medical Oncologist
IQLung Testing	72 hours Blood	Results
Other On-Market Blood-Based NGS		Blood — Results 7–14 Days[1]
On-Market Tissue-Based NGS Tests		Tissue — 7–26 Days[1] — Results

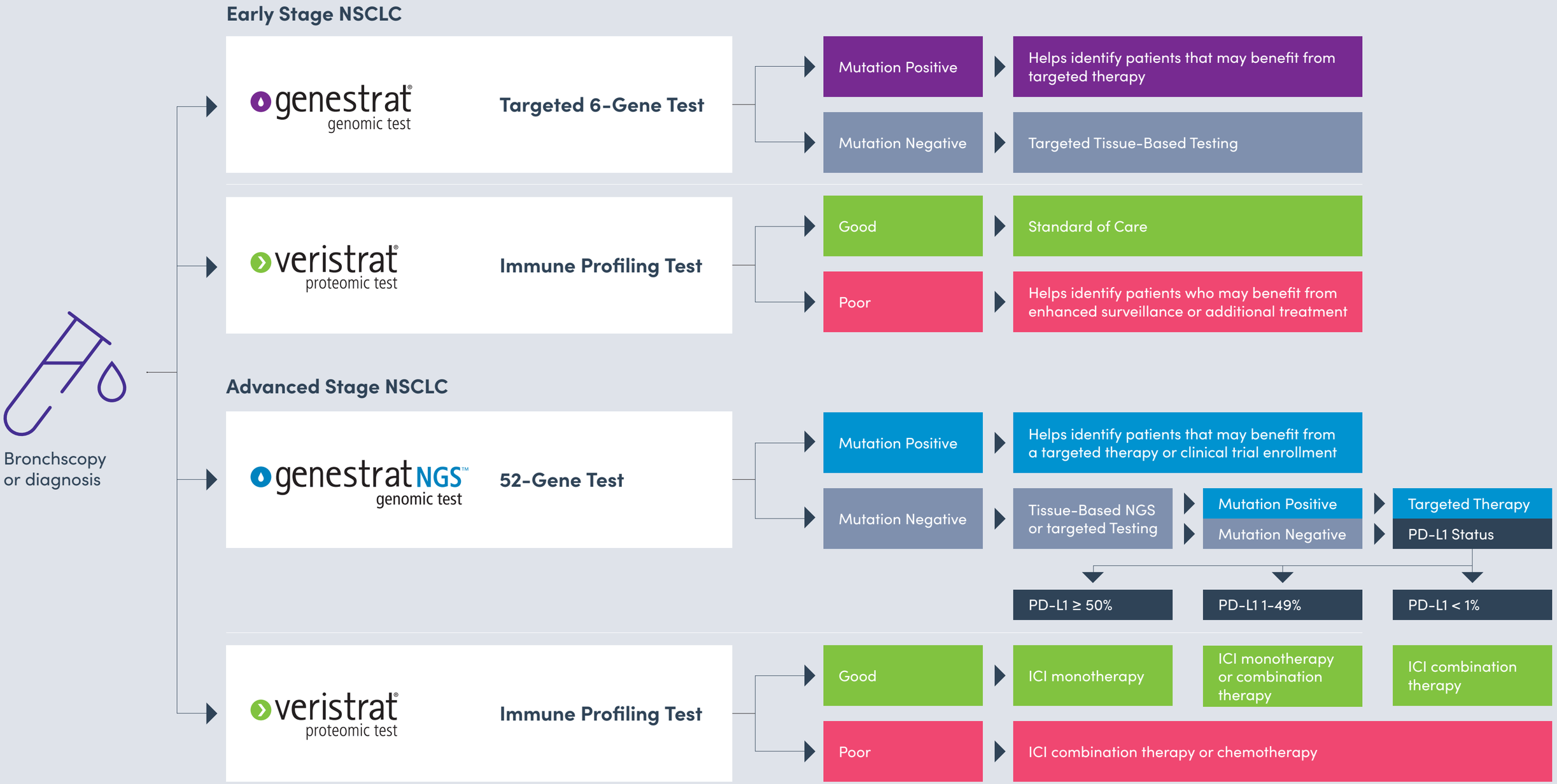


IQLung Treatment Guidance Testing

TIME ON YOUR SIDE.
IQLung provides pivotal information with an unprecedented turnaround time coupled with a multidisciplinary strategy to help get treatment relevant information for patients faster.

IQLUNG TESTING WORKFLOW

When patients receive personalized therapy from the very beginning of their care they have the best chance to fight cancer.



GENESTRAT® GENOMIC TEST

The GeneStrat targeted test detects six of the most common driver mutations in NSCLC per guideline recommendations[5], thereby identifying early-stage patients who may benefit from adjuvant targeted therapy.

Available Mutations	Clinical Sensitivity	Clinical Specificity	Concordance
EGFR Sensitizing Exon 19 ΔE746-A750 | Exon 21 L858R	96%	100%	99%
Exon 18 G719A, G719C, G719S Exon 20 S768I | Exon 21 L861Q			
EGFR Resistance T790M	87%	100%	96%
ALK Fusions EML4	85%	100%	92%
KRAS G12C | G12D | G12V	88%	100%	96%
ROS1* CD74 | SDC4 | SLC34A2 | EZR | TPM3	--	100%	--
RET* KIF5B | CCDC6 | TRIM33	--	100%	--
BRAF* V600E	--	100%	--
GeneStrat Combined variants results	91%	100%	97%

* Clinical sensitivity and specificity were not calculated for ROS1, RET, and BRAF due to availability of samples with rare mutations (ROS1, RET) and treatment-naive samples (BRAF). Performance characteristics were evaluated in advanced stage patients.

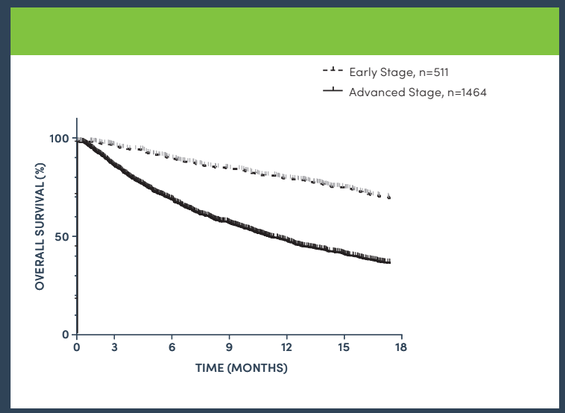
GENESTRAT AND VERISTRAT TESTS ARE COVERED BY MEDICARE AND MANY PRIVATE PAYERS.

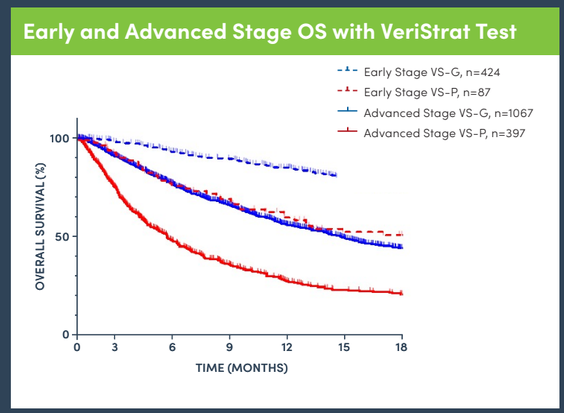
- Not restricted by stage of NSCLC or recurrence
- Multiple tests per patient per cancer when medically necessary

VERISTRAT® PROTEOMIC TEST

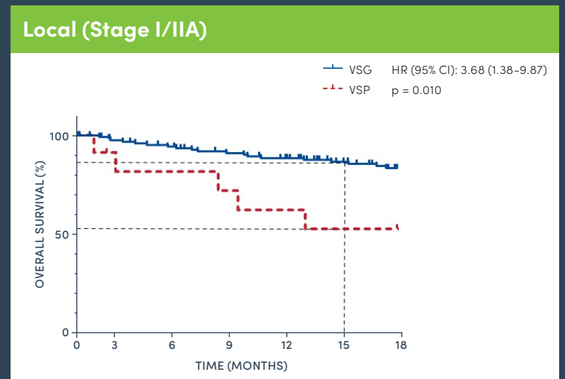
The VeriStrat Immune Profiling test identifies a chronic inflammatory disease state associated with aggressive cancer[6] and helps identify early-stage patients who may benefit from enhanced disease surveillance or additional treatment.*

OVERALL SURVIVAL BY STAGE[8]

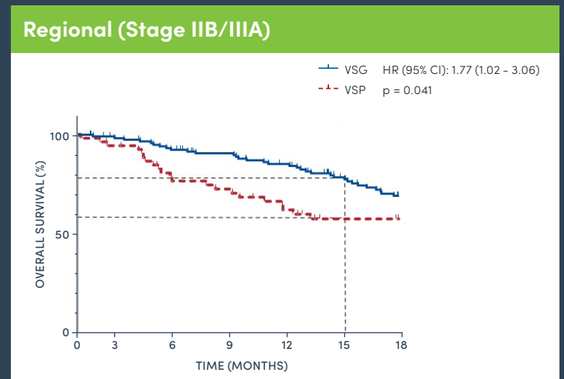




OVERALL SURVIVAL OF PATIENTS WITH EARLY-STAGE NSCLC[7]



	Median Survival in Months (95% CI)	12 Months OS Rate (95% CI)	15 Months OS Rate (95%)
Good = 138	Not Reached (Undefined)	89% (82–93)	87% (80–92)
Poor = 12	Not Reached (2.2–und)	64% (30–85)	55% (23–78)



	Median Survival in Months (95% CI)	12 Months OS Rate (95% CI)	15 Months OS Rate (95%)
Good = 128	Not Reached (Undefined)	85% (77–90)	79% (70–85)
Poor = 57	Not Reached (11.5–und)	64% (49–75)	60% (45–72)

*The Impact of Blood-Based Host Immune Profiling to Identify Aggressive Early-Stage NSCLC. Schaefer, E, et al. WCLC poster (01/2021).

GENESTRATNGS™ GENOMIC TEST

The GeneStrat NGS test is a broad 52 gene panel composed of guideline recommended variants that helps identify advanced stage patients eligible for targeted therapy or clinical trial enrollment.

AKT1	CCND3	ERBB3	*FGFR4*	KIT	***NTRK1***	SF3B1
ALK	CDK4	*ERG*	FLT3	**KRAS**	***NTRK3***	SMAD4
APC	CDK6	ESR1	GNA11	MAP2K1	PDGFRA	SMO
AR	CHEK2	*ETV1*	GNAQ	MAP2K2	PIK3CA	TP53
ARAF	CTNNB1	FBXW7	GNAS	**MET**	PTEN	
BRAF	DDR2	*FGFR1*	HRAS	MTOR	RAF-1	
CCND1	**EGFR**	*FGFR2*	IDH1	MYC	***RET***	
CCND2	**ERBB2**	*FGFR3*	IDH2	NRAS	***ROS1***	

* Guideline recommended mutations for advanced stage NSCLC highlighted blue with fusions italicized and CNVs underlined.

THERE IS ZERO OUT OF POCKET FOR MEDICAID AND COVERED MEDICARE BENEFICIARIES

Targeted Next-Generation Sequencing of Liquid Biopsy Samples from Patients with NSCLC. Mellert H, et al. *Diagnostics*, 2021 Jan 21;11(2):155.

SWIFT

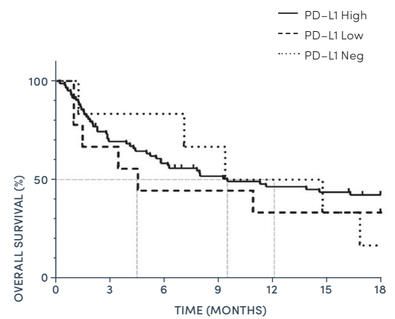
CONFIDENT

PATIENT-CENTRIC

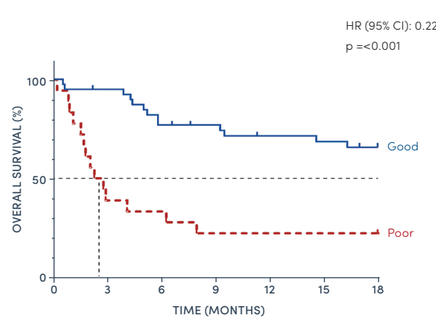
VERISTRAT® PROTEOMIC TEST

Studies have shown VeriStrat results may be predictive of outcomes in patients treated with immunotherapy at all lines of therapy in advanced stage NSCLC, independent of PD-L1 expression.[7]

ICI Monotherapy



PD-L1 High
PS 0-1

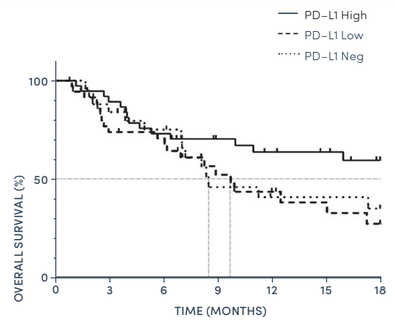


Median survival in months (95% CI)	mOS (m0)
PD-L1 High, N=83	9.5 (5.5–und)
PD-L1 Low, N=9	4.5 (1.0–und)
PD-L1 Negative, N=6	12.1 (1.3–und)

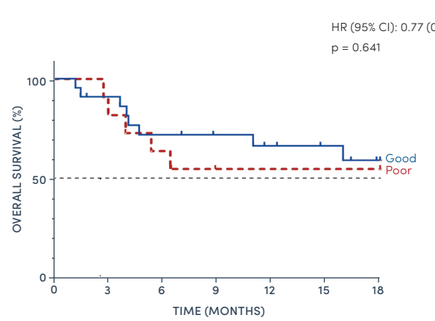
	mOS (m0)
VS Good, N = 40	NR (16.3-und)
VS Poor, N = 18	2.6 (1.5-6.3)

NR=Not Reached | und=unidentified

ICI+ Chemotherapy



PD-L1 High
PS 0-1



Median survival in months (95% CI)	mOS (m0)
PD-L1 High, N=39	NR (10.0–und)
PD-L1 Low, N=36	9.7 (6.1–17.2)
PD-L1 Negative, N=25	8.5 (7.0–und)

	mOS (m0)
VS Good, n=22	NR (4.7-und)
VS Poor, N=11	NR (3.0-und)

NR=Not Reached | und=unidentified

Real- world performance of blood- based proteomic profiling in first- line immunotherapy treatment in advanced stage non-small cell lung cancer. Rich P, Mitchell R, Schaefer E et al. *J Immunother Cancer.* 2021; 9(e002989).

Prognostic performance of proteomic testing in advanced non-small cell lung cancer: a systematic literature review and meta-analysis. (2020) Leal, et al. Current Medical Research and Opinion, 36:9, 1497-1505, DOI: 10.1080/03007995.2020.1790346

WHEN DO I ORDER IQLUNG TESTING?

AT DIAGNOSIS

- At time of biopsy or surgery
- Upon confirmed lung cancer diagnosis
- At the first oncology visit

AT PROGRESSION

- For longitudinal monitoring of resistance mutations and changes in disease state
- At oncology visit for lung cancer progression

WHO IS ELIGIBLE FOR TESTING?

NSCLC

ALL STAGES

ALL HISTOLOGIES

ALL LINES OF THERAPY

Resources and Support

SPECIMEN COLLECTION SUPPORT

We offer convenient sample collection through **our network of certified phlebotomists** at local laboratory locations or from the comfort of your patient's home.

MANAGED CARE AND REIMBURSEMENT

We develop and publish scientific data to support an evidence-based approach to care. We work directly with health plans to ensure all patients have access to our services.

BIODESIX ASSIST™ FINANCIAL SUPPORT PROGRAM FOR PATIENTS

We are committed to making Biodesix testing available to all patients. The Biodesix Assist Financial Support Program is available to all patients. Patients may apply to pre-qualify for financial assistance at any point, including before the test is performed.

PLEASE CONTACT BIODESIX CUSTOMER CARE TO ORDER TEST KITS AND RECEIVE ACCESS TO THE ONLINE BIODESIX PHYSICIAN PORTAL

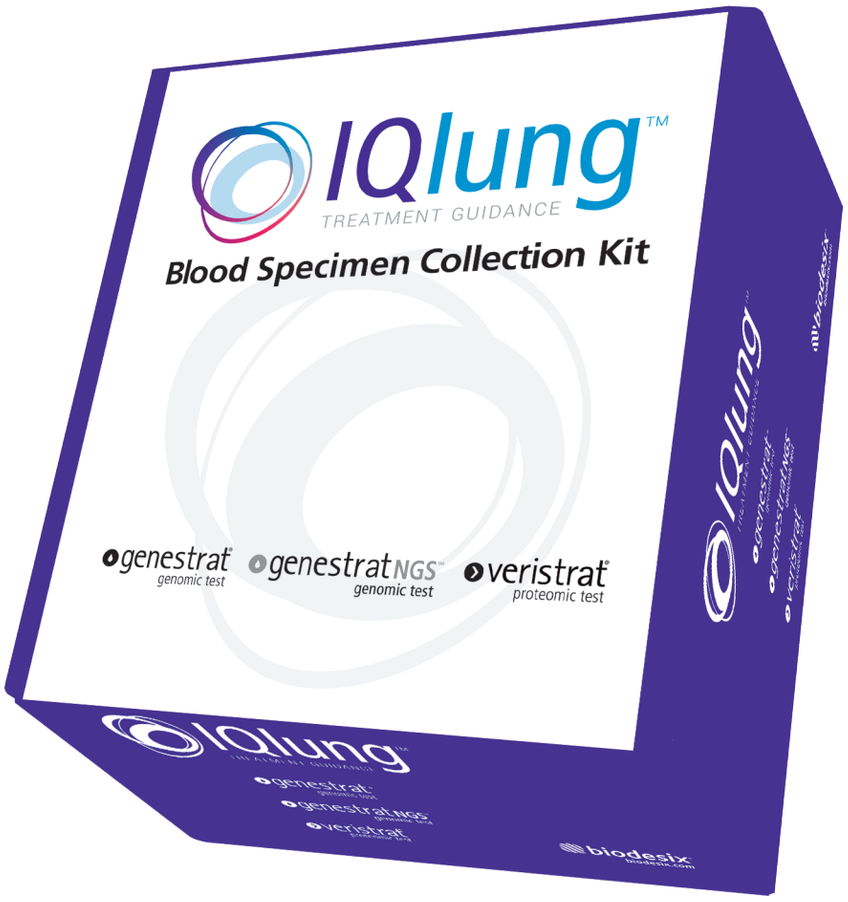
biodesix®

Call: 1.866.432.5930

Visit: biodesix.com/order-test-kit

Complete your IQLung testing order using the Blood Specimen Collection Kit and enclosed IQLung Test Request Form.

IQLung testing is performed in a CLIA/CAP accredited, NYS CLEP approved, and ISO 13485:2016 certified clinical laboratory in Boulder, Colorado.



Swift. Confident. Patient-centric.

IQLUNG TESTING CAN HELP YOU:

Expedite the personalized time to treatment for each patient

Drive optimal treatment decisions with genomic and proteomic insights

Enhance existing workflows with a simple blood draw

Ensure that each patient has the best chance to fight cancer

REFERENCES

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2. Thompson, J., et al. 2016. *Clin Cancer Res.* 22(23); 5772–82.
3. Robert NJ et al. Biomarker tissue journey among patients (pts) with untreated metastatic non-small cell lung cancer (metastatic NSCLC) in the U.S. Oncology Network community practices. *J Clin Oncol.* 2021;39:(suppl 15; abstr 9004). doi:10.1200/JCO.2021.39.15_suppl.9004
4. Santos, E. Turnaround Time and Variant Prevalence of a Blood-based KRAS Test in patients with NSCLC.WCLC poster (09/2021).
5. For additional information regarding mutation variants or clinical sensitivity and specificity, please visit www.biodesix.com.
6. Fidler MJ, et al. *BMC Cancer* (2018) 18:310
7. Rich P, Mitchell R, Schaefer E et al. *J Immunother Cancer.* 2021; 9(e002989).
8. Data on file from the INSIGHT clinical study.

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