

# Advancing Your Solid Tumor Trials With Our Cutting-Edge Assay Portfolio



Cerba Research conducted ~200 oncology trials in the past 5 years alone, with 55%+ being solid tumors such as lung, breast and colorectal cancers. The central and specialty laboratories' expertise includes specialized assays such as next-generation sequencing, flow cytometry, immunohistochemistry, Al in image analysis, and NanoString®. Notably, Cerba Research has played a pivotal role in the approval of 24 innovative oncology drugs for indications like breast and lung cancer.

# Our Oncology Highlights



24
Approved oncology medications



~200 Oncology trials since 2018



~75%

Trials include specialty testing



29,400+ Patients screened

44%



23,300+
Patients randomized

# Approved Indicatons



- ER+/HER2-ESR1-mutated mBC
- Relapsed or refractory high-risk neuroblastoma
- NSCLC

## Clinical Trial Phases Overview



Phase I/NC Phase II



Phase III



Phase IV

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# Indications By Solid Tumor\*











2%

Glioblastoma

4%

Pancreatic Cancer

4%

Ovarian Cancer

6%

Colorectal Cancer

7%

Non-Small Cell Lung Cancer



9%

**Prostate Cancer** 



14%

**Breast Cancer** 



18%

Bundled Rare Tumor Types



38%

Solid Tumors\*\*

\*% Solid Tumor Trials By Indication

\*\*Solid tumor trials are phase I-FIH for the most part which have no specific indication.

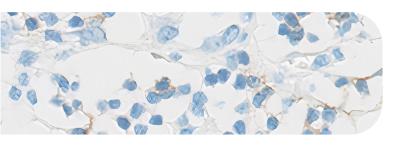
## OncoSign 600+ (638 Genes)

### More Panels Available On Demand

Our comprehensive solid tumor profiling assay, which is CE Marked, supports identification of DNA and RNA fusions implicated in various solid tumor types.

This comprehensive tumor genomic profiling assay evaluates 638 genes for multiple variant types, including SNVs, MNVs, INDELs, CNVs, and 20 fusions genes.

It can also determine the TMB, MSI & HRD status. It covers mutations with established, emerging & exploratory value across lung, ovarian, breast, colon, melanoma, bladder, prostate and more. It is performed on FFPE with at least 20% tumor cells, with 2 tubes containing 5 curls of  $5\mu$  thickness (1 for DNA & 1 for RNA).





### Turnaround Time

• 15 Days



#### Services Included

- DNA/RNA extraction
- · QC
- Library prep
- Sequencing
- Alignment
- Data analysis, including SNVs, MNVs, INDELs, CNVs, gene fusions, etc
- TMB, MSI, HRD



#### Deliverables

Data analysis reports

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### **Turnaround Time**

15 Days



### Services Included

- DNA/RNA extraction
- QC
- Library prep
- Sequencing
- Alignment
- Data analysis, including SNVs, MNVs, INDELs, CNVs, gene fusions, etc
- HRD



#### Deliverables

Data analysis reports

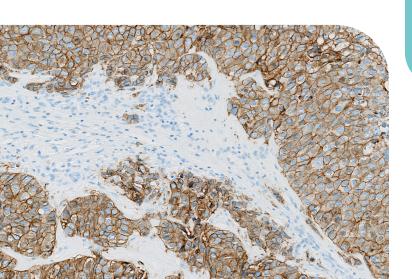




#### More Panels Available On Demand

CERBA OncoSign ctDNA panel covers mutations with established and emerging value across lung, ovarian, breast, colon, melanoma, bladder, neuro and more.

This comprehensive tumor genomic profiling assay evaluates 50 genes for multiple variant types for the detection of AKT1, ALK, AR, ATRX, BAP1, BRAF, BRCA1/2, CDK4/6, CDKN2A, CTNNB1, EGFR, EIF1AX, ERBB2/3, ESR1, FGFR1/2/3, FOXL2, GNA11, GNAQ, GNAS, H3C2/3, H3F3A/B, HRAS, IDH1/2, KEAP1, KIT, KRAS, MAP2K1, MET, MYD88, NRAS, PDGFRA, PIK3CA, POLD1, POLE, PTEN, RAF1, RB1, RET, SF3B1, STK11, TERT, TP53. It is performed on liquid biopsies with 2 tubes of 8.5ml (Streck cell-free DNA BCT®)





## OncoSign FFPE (50 Genes)

### More Panels Available On Demand

Cerba OncoSign FFPE panel covers mutations with established and emerging value across lung, ovarian, breast, colon, melanoma, bladder, prostate, neuro and more. This comprehensive tumor genomic profiling assay evaluates for multiple variant types. It is also performed on FFPE for routine practice, in parallel with HRD status which is CE-IVD marked.

The gene list: AKT1, ALK, AR, ATRX, BAP1, BRAF, BRCA1/2, CDK4/6, CDKN2A, CTNNB1, EGFR, EIF1AX, ERBB2/3, ESR1, FGFR1/2/3, FOXL2, GNA11, GNAQ, GNAS, H3C2/3, H3F3A/B, HRAS, IDH1/2, KEAP1, KIT, KRAS, MAP2K1, MET, MYD88, NRAS, PDGFRA, PIK3CA, POLD1, POLE, PTEN, RAF1, RB1, RET, SF3B1, STK11, TERT, TP53. It is performed on FFPE with 2 tubes containing 5 curls of 5 u thickness (1 for DNA & 1 for RNA).



### Turnaround Time

• 15 Days



#### Services Included

- DNA/RNA extraction
- OC
- Library prep
- Sequencing
- Alignment
- Data analysis, including SNVs, MNVs, INDELs, CNVs, gene fusions, etc



#### Deliverables

Data analysis reports

### PD-L1 ≥ 50%

Cerba Research conducted 65+ trials with I/Os in the past 5 years alone. The lab's expertise extends to mAbs, ADCs, small molecules, and more, with the utilization of specialty testing such as IHC PD-L1 expression among other techniques.



# A Cerba Research Capabilities Snapshot For Your Solid Tumor Trial

### DNA/RNA



- NGS, oncopanels, broad panels, custom panels
- RNA seq
- Single-gene
- ctDNA-based panels
- ddPCR, qPCR
- Whole exome/whole genome
- **HLA** typing
- TCR/BCR seq
- NanoString<sup>®</sup>
- SNP-array
- DNA/RNA extraction
- Streck cell-free DNA BCT®
- PaxGene®, Qiamp kits

### Cell



- **FCM**
- Cytek Aurora
- Receptor occupancy
- MRD detection
- CAR T cell enumeration
- CAR T cell phenotyping
- Intracellular cytokine detection
- Immunophenotyping (including intra-cell markers)
- PBMC isolation
- BMMC isolation
- Optical genome mapping, our next-generation cytogenetics
- PK/ADA/Nab

### **Protein**



- Multiplex cytokine profiling (37-plex)
- 50+ ligand binding assays
- **ELISA**
- ELLA
- MSD
- **ELISpot**
- PK/ADA/Nab

## Routine



- Coagulation
- Hematology
- Biochemistry
- Urinalysis
- Pregnancy test
- COVID test
- Serology
- Thyroid function

### Tissue



- Multiplex/simplex IHC
- 250+ biomarkers/protocols
- Halo®, Visiopharm®, AlForia® Board certified pathologists
- Large biobank
- Strong immuno-oncology simplex & multiplex panels Spatial analysis of the
- tumor microenvironment
- NanoString®, FISH, ISH



### Acronyms

ADA: Antibody-drug antibody, ADC: Antibody-drug conjugate, AI: Artificial intelligence, BCR: B cell receptor, BMMC: Bone marrow mononuclear cells, CART: Chimeric antigen receptor T cell, CNV: Copy number variation, ddPCR: Droplet digital polymerase chain reaction, DNA: Deoxyribonucleic acid, ELISA: Enzyme-linked immunosorbent assay, FCM: Flow cytometry, polymerase chain reaction, DNA: Deoxyribonucleic acid, ELISA: Enzyme-linked immunosorbent assay, FCM: Flow cytometr FFPE: Formalin-fixed paraffin-embedded, FISH: Fluorescence in situ hybridization, HLA: Human leukocyte anitgens, HRD: Homologous recombination deficiency, FIH: First in Human, I/O: Immuno-oncology, IHC: Immunohistochemistry, INDEL: Insertion-deletion, ISH: In situ hybridization, CE-IVD: CE *in vitro diagnostic*, mAb: Monoclonal antibodies, MBC: Metastatic blood mononuclear cells, MNV: Multi-nucleotide variants, MRD: Mlnimal residual disease, MSD: Mesoscale discovery, MSI: Microsatellite instability, Nab: Neutralizing antibody, NC: Not confirmed, NSCLC: Non-small cell lung cancer, PBMC: Periphe blood mononuclear cells, PK: Pharmacokinetics, QC: Quality control, qPCR: Quantitative polymerase chain reaction, RNA: Ribonucleic acid, SNP: Single nucleotide polymorphism, SNV: Single nucleotide variant, TCR: T cell receptor, TMB: Tumor mutational burden mutational burden