

CLINICAL CANCER GENOMICS

Whole Exome Sequencing (WES) Analysis Services

PRECISION MEDICINE for Better Cancer Care

Comprehensive genomic analysis through Whole Exome Sequencing to identify clinically relevant genetic variants associated with cancer diagnosis, prognosis, treatment selection and hereditary cancer risk.



3. OUR CANCER GENOMIC SERVICES

- Whole Exome Sequencing (WES)**
Comprehensive analysis of coding regions to identify clinically actionable variants.
- Whole Genome Sequencing (WGS)**
Complete genomic profiling for SNVs, CNVs, structural variants & more.
- Targeted Cancer Gene Panels**
High-depth sequencing of cancer-associated genes for accurate and cost-effective insights.
- Hereditary Cancer Panels**
Evaluation of inherited cancer risk genes including BRCA1, BRCA2, TP53, etc.
- Lung Cancer Panel**
Comprehensive genomic profiling for NSCLC and small cell lung cancer.
- Colorectal Cancer Panel**
Detection of genomic alterations in colorectal cancer.
- Hematological Malignancy Panel**
Genomic testing for leukemias, lymphomas & other blood cancers.
- Pharmacogenomics (Oncology)**
Drug response analysis to optimize treatment and minimize toxicity.
- Liquid Biopsy (ctDNA)**
Non-invasive detection of tumor mutations for monitoring & early detection.
- Somatic & Germline Analysis**
Comprehensive profiling for somatic mutations and hereditary variants.

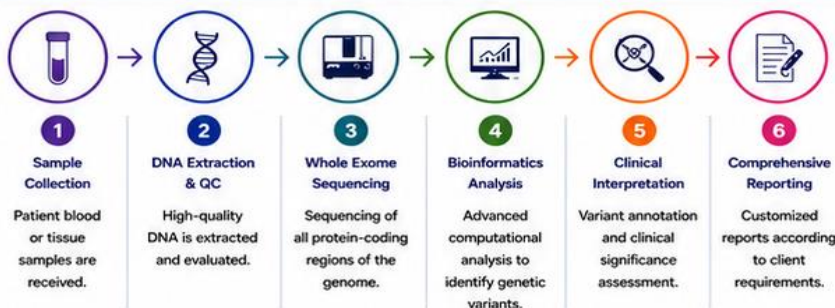
5. DELIVERABLES

COMPREHENSIVE GENETIC REPORT



- ✓ Variant Summary
- ✓ Clinical Significance
- ✓ ACMG Classification
- ✓ Literature-Supported Findings
- ✓ Risk Assessment Information
- ✓ Therapeutic Implications

1. OUR WORKFLOW



2. WHAT WE CAN IDENTIFY

CANCER-ASSOCIATED VARIANTS

- Single Nucleotide Variants (SNVs)
- Insertions & Deletions (Indels)
- Copy Number Variations (CNVs)
- Rare and Novel Variants

HEREDITARY CANCER RISK

Assessment of genes associated with inherited cancer susceptibility.

Examples include:

BRCA1 BRCA2
TP53 PALB2
ATM CHEK2
and many more.

PRECISION ONCOLOGY INSIGHTS

- Clinically Relevant Mutations
- Actionable Genetic Findings
- Personalized Analysis
- Research-Based Interpretation

4. HOW TO SUBMIT YOUR SAMPLE

SAMPLE TYPE	RECOMMENDED FOR	SAMPLE REQUIREMENTS
WHOLE BLOOD (Germline Testing)	• Hereditary Cancer Panels • BRCA1/BRCA2 Testing • Whole Exome Sequencing (Germline)	• 3–5 mL peripheral blood • EDTA (Purple-top) tube • Store at 2–8°C • Ship within 48 hours • Do not freeze whole blood
FFPE TISSUE (Block Only)	• Somatic Variant Analysis • Solid Tumor Genomic Profiling • Cancer Gene Panels	• Submit FFPE block (clearly labeled) • Include pathology report if available
FRESH TISSUE	• Whole Exome Sequencing • Whole Genome Sequencing • Research Applications	• Fresh tumor tissue • Sterile container • Keep chilled (2–8°C) • Ship immediately • Avoid repeated freeze-thaw cycles
PURIFIED DNA	• Whole Exome Sequencing • Whole Genome Sequencing • Customized Bioinformatics Analysis	• ≥500 ng high-quality genomic DNA • A260/A280 ratio: 1.8–2.0 • Concentration ≥20 ng/μL • Submit in nuclease-free tube

SAMPLE TRANSPORT & COLLECTION



Please notify NCRO before dispatch.

6. WHY CHOOSE NCRO?



KEY BENEFITS



FROM SAMPLE TO INSIGHT

Providing reliable genomic analysis solutions to support cancer research and precision medicine initiatives.



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