

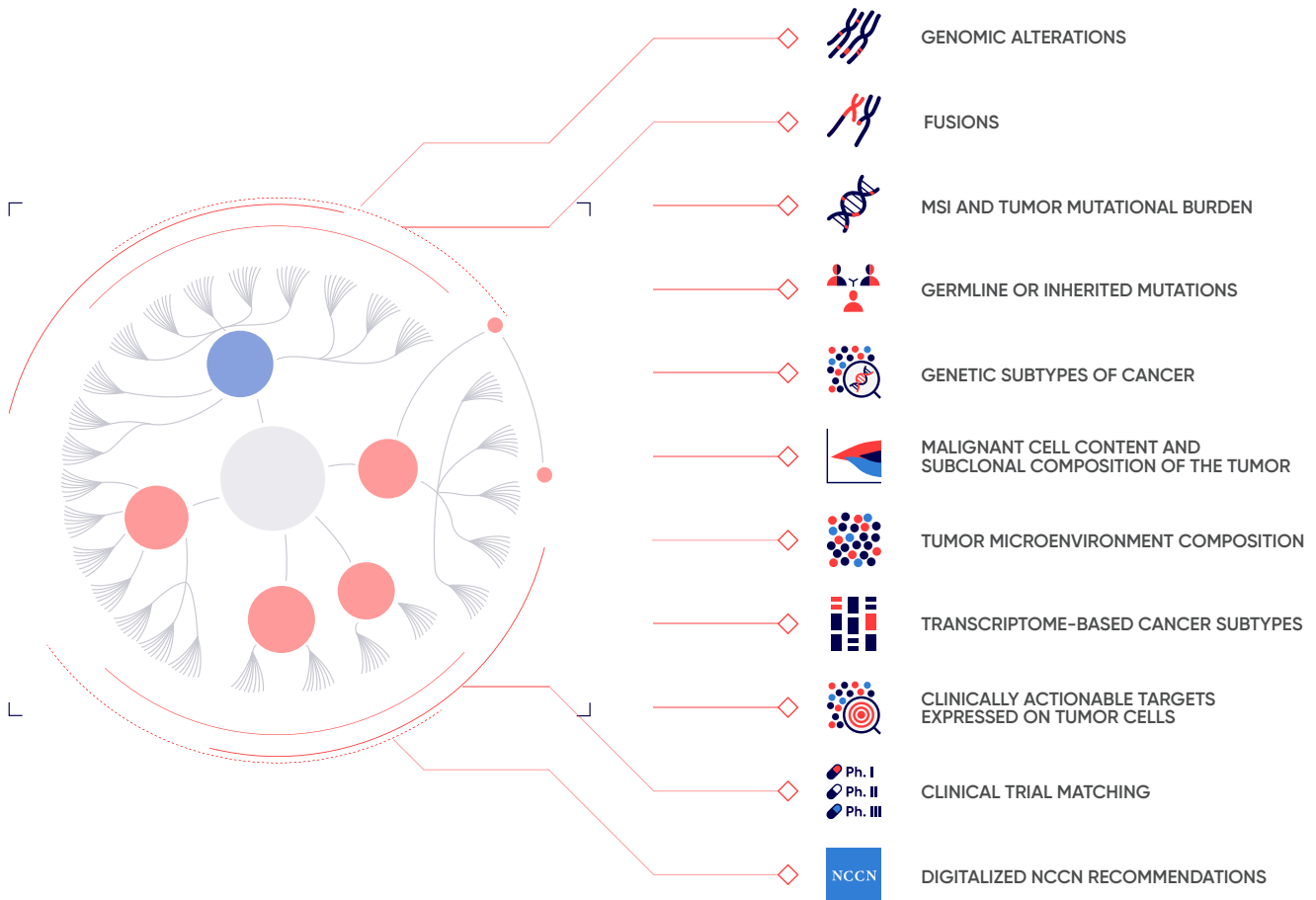
TAKING PERSONALIZED MEDICINE TO THE NEXT LEVEL

FROM TREATING A DIAGNOSIS TO TREATING THE PATIENT

The BostonGene Tumor Portrait Test™, based on integrated genomic and transcriptomic analysis, propels precision medicine into daily clinical practice and supports physicians in actualizing personalized therapy for cancer patients.

BostonGene achieves the most comprehensive overview of a tumor through whole exome (WES) and transcriptome (RNAseq) sequencing to detect genomic alterations such as fusions, single nucleotide variants (SNV), indels, copy number alterations (CNA), tumor mutational burden (TMB), microsatellite instability (MSI), fusions, frameshifts, rearrangements and expression levels of more than 20,000 genes. The BostonGene Tumor Portrait™ test combines precise data-processing and proprietary algorithms to generate easy-to-understand tumor schematics, the Molecular Functional Portrait*.

*Alexander Bagaev, Nikita Kotlov, Krystle Nomie, Viktor Svekolkin, Azamat Gafurov, Olga Isaeva, Nikita Osokin, Ivan Kozlov, Felix Frenkel, Olga Gancharova, Nava Almog, Maria Tsiper, Ravshan Ataullakhanov, Nathan Fowler (2021). Conserved pan-cancer microenvironment subtypes predict response to immunotherapy. *Cancer Cell*, 39(6), 845-865.



KEY ADVANTAGES OF THE BOSTONGENE SOLUTION



DEEP MOLECULAR PROFILING

Integrated RNA and DNA profiling provides a holistic view of the tumor, including tumor microenvironment, genetic and transcriptomic subtypes, leveraging multiple facets of the tumor to develop a clinical solution.



NCCN CLINICAL PRACTICE GUIDELINES IN ONCOLOGY (NCCN GUIDELINES®)

BostonGene helps to select relevant treatment options for each patient based on their clinical parameters, treatment history, and tumor molecular profiling and align those with NCCN recommendations.



AVAILABLE CLINICAL TRIALS

BostonGene supplies potential applicable clinical trials for each patient that are filtered by geography, inclusion criteria and molecular parameters.



TRANSCRIPTOMIC AND GENE SIGNATURES

BostonGene analyzes the expression of all transcripts, single genes, and functional gene signatures to understand multiple aspects of the biology of the tumor and microenvironment.



TUMOR HETEROGENEITY

BostonGene assesses the subclonal heterogeneity and evolution of malignant cells within the tissue to understand tumor progression.



TUMOR MICROENVIRONMENT

BostonGene decodes the tumor microenvironment via deconvolution of cellular components by proprietary machine learning algorithms analyzing bulk RNA-seq, enabling the accurate reconstruction of the microenvironment.



TUMOR ALTERATIONS

BostonGene identifies point mutations, indels, copy number alterations calling using tumor / normal pairing across the entire exome, including overall tumor mutational burden (TMB), homologous recombination deficiency (HRD), genome instability and loss of heterozygosity.



MULTI-PLATFORM ANALYTICS

BostonGene's unique computational pipeline harnesses the power of next generation artificial intelligence and machine learning to decipher the actionable findings of each tumor.



COHORT ANALYSIS

BostonGene analyzes thousands of molecular profiles of patients with different cancers, enabling each patient's tumor to be informed against a database of patients with a similar diagnosis.



KEY AND EMERGING BIOMARKERS

Daily updates of over 8,000 biomarkers in BostonGene's database allow us to quickly bring the patient the most recent scientific advances.

HOW TO ORDER & TEST ORDERING PROCESS

1 Complete provided documents:

- Test Requisition Form
- Informed Consent Form
- Financial Assistance Form

2 Collect patient's blood or saliva using a BostonGene test kit.

3 Package blood/saliva sample and all documents in the provided FedEx bag. Affix shipping label and send overnight to BostonGene.

Gather accompanying documents:

- Pathology report
- Clinical notes
- Copy of insurance

4 BostonGene will contact pathology for the tissue send out request.

5 Sequencing begins once both tissue and blood/saliva samples are received. A report will be delivered via secure portal in 14-21 days.

FINANCIAL ASSISTANCE PROGRAM

BostonGene offers a robust financial assistance program to reduce the financial burden on the patient. The program covers longitudinal testing for up to 18 months. Patients can apply to our Financial Assistance Program by completing the application form (included in the kit).