

GENOMIC TEST FOR PAEDIATRIC CANCER



imegen

*Reliability
in genetics*

PAEDIATRIC CANCER PANEL

Childhood and adult tumours are very different and therefore, the way to approach them should be adapted to each malignancy. To this end, Imegen has developed a specific solution to help in the clinical care of paediatric cancer patients. This panel is a comprehensive molecular diagnostic test that interrogates all the genomic regions with relevant clinical utility in the diagnostic, prognostic and therapeutic landscapes. It is indicated for primary tumours, recurring and follow-up of patients.



Clinical utility:

- To analyse the tumour before the first-line treatment to know somatic mutations related to prognosis and possible therapies, also considering the relevant variants in pharmacogenomics.
- To diagnose recurring cases analysing *de novo* tumour alterations that could change the therapeutic strategy.
- To detect those pathogenic and likely pathogenic germline variants acquired by the patient during his development or inherited from his parents. Genetic counselling is available if needed.

Technical features:



- **Complete sequencing of 255 genes** associated with paediatric tumours, including *driver* genes.
- Analysis of **SNVs** (somatic mutations and SNPs) and **CNVs** (copy-number gain from one copy to gene amplification and deletions).
- Identification of **somatic and germline** mutations.
- Available for **FFPE, frozen samples and cell lines**.
- **Analysis of gene fusions**, with particular focus on those that are actionable in adults and those in validation stage for paediatric patients.
- Detection of **microsatellite instability** with direct implications in immunotherapy treatments.