

Gliomas: Molecular Testing Solutions



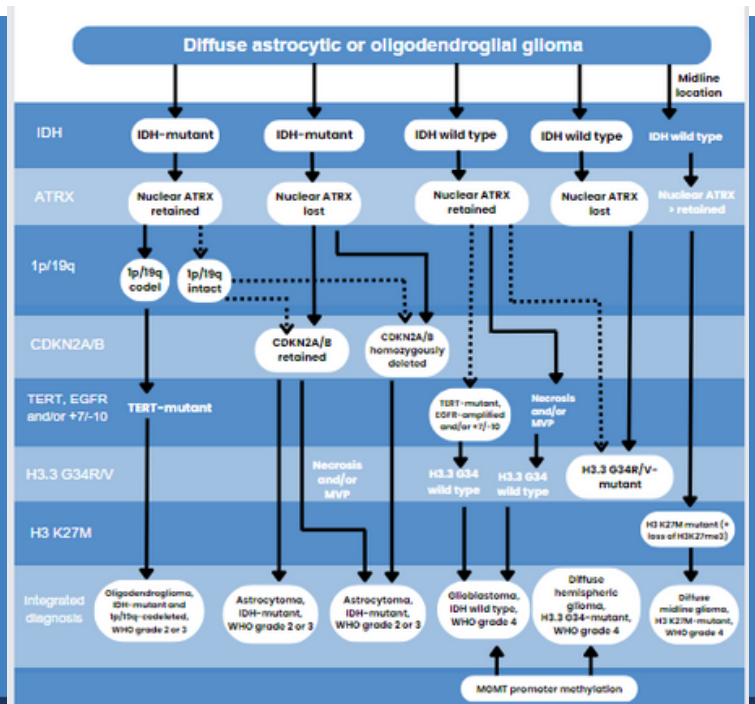
Gliomas are the most frequent primary brain tumors and include a variety of different histological tumor types and malignancy grades which require proper classification (Astrocytoma, Oligodendroglioma, Glioblastoma) and grading. Causes and risk factors may include genetic predisposition, exposure to ionizing radiation, family history of gliomas and certain inherited disorders, such as neurofibromatosis and Li-Fraumeni syndrome

Diagnosis & Classification:

The classification of gliomas for has been based largely on histogenesis and microscopic similarities. Several of the molecular alterations detected in gliomas may have diagnostic and/or prognostic implications, as they are associated with histologically defined tumor types or malignancy grades. The 2016 World Health Organization (WHO) classification of tumors of central nervous system encouraged “integrated diagnosis” and facilitated precise diagnoses of genetically defined entities. WHO CNS 5 2021 classification is 2016 updated fourth edition + work of the Consortium to Inform Molecular and Practical Approaches to CNS Tumor Taxonomy, cIMPACT and introduces major changes that advance the role of molecular diagnostics in CNS tumor classification.



Molecular testing in Diagnosis and classification of CNS tumours



Testing Solutions

We offer a range of molecular testing options for Gliomas.

• Glioma Panel: A combined test includes testing for

- IDH Mutations, ATRX loss (IHC)
- 1p/19q Deletion (FISH)
- Reflex IDH 1 & 2 mutation screening through Sanger Sequencing if IHC testing is negative
- MGMT-Methylation

Sample: Tissue, FFPE Blocks/ Slides. TAT -28 days

• Related Biomarker tests:

- TERT promoter mutation (Sanger Sequencing)
- H3. G34R, H3. K27M mutation (Sanger Sequencing)
- BRAF V600E, TP53 mutations (Sanger Sequencing)
- CDKN2A deletion (FISH)

Sample: Tissue, FFPE Blocks/ Slides. TAT -15 days



• Comprehensive Solid Tumor Panel

comprising of >400 genes based on NGS technology.

Sample: Tissue, FFPE Blocks/ Slides. TAT -21 days

• Pan-Cancer One Liquid Biopsy test

NGS test comprising 52 hotspot gene panel with gene fusions, SNVs, CNVs detectable in single test.

Sample: Whole Blood in cfBCT (Streck/Paxgene). TAT -21 days

• Inherited Cancer Panel

For assessment of familial cases. NGS panel based on >140 genes commonly involved in predisposition risk of various cancers.

Sample: Whole Blood. TAT -28 days

Why Test:

- Molecular testing can help confirm the diagnosis/ better classify and stratify tumor type.
- Personalized treatment planning for better patient outcomes.
- Monitoring treatment response specially in patients where CT scans are not sensitive enough

