

About Glioma

A glioma is a type of tumor that develops in the brain or spinal cord. Gliomas may arise from different types of glial cells that surround nerve cells and help them function.¹ Gliomas can be slow growing (low-grade) or rapidly progressing (high-grade).²

Adult-Type Diffuse Gliomas

World Health Organization 2021 Designation^{2,3}

Tumor Type	Median Age at Diagnosis (All Grades)	Median Overall Survival (Years)
Oligodendroglioma IDH mutant and 1p19q codeleted	45	17.5
Astrocytoma IDH mutant	36	9.3
Glioblastoma (GBM)	65	1.2

Disease Burden: Glioma by the Numbers

24%

About 24% of primary brain and other central nervous system tumors are gliomas²

45–65 Years

Glioma is most common in adults between ages 45 and 65 years old¹

~2.3K

At least 2,396 new cases of IDH-mutant glioma were diagnosed in 2019 in the US^{2,4}

~81%

About 81% of primary malignant brain tumors are gliomas²

≥18%

18% or more of malignant brain tumors are IDH-mutant gliomas^{2,4}



Risk Factors¹

While there are no known causes of gliomas, there are some factors that may increase your risk of a brain tumor, including:

- **A family history of glioma, which can double the risk**
- **Exposure to ionizing radiation, including radiation therapy used to treat cancer**



Signs and Symptoms¹

The signs and symptoms of gliomas are not the same for everyone and can vary based on the size and location of the tumor as well as what the affected part of the brain controls. Common signs and symptoms can include:

- **Headaches**
- **Seizures**
- **Personality changes or irritability**
- **Weakness in the arms, face or leg**

1. Mayo Clinic. <https://www.mayoclinic.org/diseases-conditions/glioma/symptoms-causes/syc-20350251> Accessed April 2023
 2. Ostrom, Q., et al. (2022). CBTRUS Statistical Report: Primary Brain and Other Central Nervous System Tumors Diagnosed in the United States in 2015–2019. *Neuro-oncology*, 24(Suppl 5), vi–v95. <https://doi.org/10.1093/neuonc/noac202>
 3. Molinaro, A., Taylor, J., Wiencke, J., & Wrensch, M. (2019). Genetic and molecular epidemiology of adult diffuse glioma. *Nature reviews. Neurology*, 15(7), 405–417. <https://doi.org/10.1038/s41582-019-0220-2>
 4. CBTRUS, Central Brain Tumor Registry of the United States; mIDH, mutated isocitrate dehydrogenase