

Pilocytic astrocytoma epidemiology

The most common [glioma](#) in [pediatrics](#) (age 0–19 years) with an [incidence](#) of 0.82/100,000 ¹⁾.

Pilocytic astrocytoma, a [WHO Grade I](#) tumor, is the most common [pediatric brain tumor](#) between 5 and 14 years of age and the second most common in children younger than 5 and older than 14. Although classical to the cerebellum and hypothalamic regions, it can also arise in the spinal cord ²⁾.

[Pilocytic astrocytoma](#) is considered the most common subtype of [pediatric intracranial tumor](#). Through [bioinformatics](#) analysis, Wang et al. suggested that NCKAP1L, GPR37L1, CSPG4, PPFA4, and C8orf46 are potential biomarkers for the [pilocytic astrocytoma diagnosis](#) ³⁾.

The incidence progressively declines after age 15. Slight [male](#) predilection. Usually presents during second decade of life (ages 10–20). 75% occur in age < 20 years ⁴⁾.

Its most common location is the cerebellum and it develops during the first two decades of life., and is one of the commonest subtypes of [glioma](#) to affect children.

They are rarely diagnosed in patients over the age of 18 years.

In adults, these tumours appear more frequently [supratentorially](#) than in the [cerebellum](#) and some reports suggest a different clinical course in adults.

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Ostrom QT, Gittleman H, Liao P, et al. CBTRUS statistical report: primary brain and central nervous system tumors diagnosed in the United States in 2007- 2011. Neuro Oncol. 2014; 16 Suppl 4:iv1–i63

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³⁾

Wang G, Jia Y, Ye Y, Kang E, Chen H, Wang J, He X. Clinical and Epidemiological Study of [Intracranial Tumors](#) in Children and Identification of Diagnostic Biomarkers for the Most Common Tumor Subtype and Their Relationship with the Immune Microenvironment Through [Bioinformatics](#) Analysis. J Mol Neurosci. 2022 Mar 28. doi: 10.1007/s12031-022-02003-z. Epub ahead of print. PMID: 35347632.

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Last update: **2024/06/07 02:51**

