

Oligodendroglial tumors epidemiology

Incidence of [oligodendroglial tumors](#) is 0.28 per 100,000 for [ages 15–39 years](#) and 0.31 for ages 40 +¹⁾.

Comprise only $\approx 1\%$ of primary brain tumors. Ratio of male:female = 1.3:1²⁾.

Location: > 50% occur in the [frontal lobes](#), followed by [temporal lobe](#), [parietal lobe](#) & [occipital lobes](#).

They constitute together with mixed [oligoastrocytoma](#) 5–20% of all gliomas³⁾.

Data were analyzed from the [Central Brain Tumor Registry of the United States \(CBTRUS\)](#) from 2000 to 2013. Age-adjusted incidence rates per 100,000 person-years with 95% confidence intervals (CI) and annual percent changes (APCs) with 95% CI were calculated for [oligodendroglioma \(OD\)](#) and [anaplastic oligodendroglioma \(AOD\)](#) by age, sex and race. Survival rates were calculated for age, sex and race using a subset of the CBTRUS data. OD and AOD incidence peaked at 36–40 and 56–60 years, respectively. AOD:OD ratio increased up to age 75. Overall, OD and AOD incidence decreased [OD: APC -3.2 (2000–2013), AOD: -6.5 (2000–2007)]. OD incidence was highest in Whites but decreased significantly (2000–2013: APC -3.1) while incidence in Black populations did not significantly decrease (2000–2013: APC -1.6). Survival rates decreased with advancing age for OD, while persons aged 0–24 had the lowest survival for AOD. The current study reports a decrease in overall OD and AOD incidence from 2000 to 2013. Furthermore, AOD makes up an increasing proportion of oligodendroglial tumors up to age 75. Lower AOD survival in 0–24 years old may indicate molecular differences in pediatric cases. Thus, surveillance of tumor-specific trends by age, race and sex can reveal clinically relevant variations⁴⁾.

References

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