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J Neurooncol. 2016 Nov 16. [Epub ahead of print]

## Epidemiology for primary brain tumors: a nationwide population-based study.

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### Erratum in

Erratum to: Epidemiology for primary brain tumors: a nationwide population-based study. [J Neurooncol. 2016]

### Abstract

Primary central nervous system tumors (PCNST) are rare tumors responsible for high mortality and morbidity. Their epidemiology is poorly known, and clinical data are scarcely analyzed at a national level. In this study, we aimed at providing descriptive epidemiological data and incidence rates for all histological subtypes of PCNST according to the WHO classification. We conducted a nationwide population-based study of all newly diagnosed and histologically confirmed PCNST in France, between 2006 and 2011. A total of 57,816 patients were included: male 46.4%, median age at diagnosis 56 years old (range 0-99). For all newly diagnosed PCNST with histological confirmation the crude incidence rate was 15.5/10<sup>5</sup> per 100,000 person-years. To enable international comparisons, standardized rates were calculated: 14.1/10<sup>5</sup> (population of reference: USA), 14.5/10<sup>5</sup> (population of reference: Europe), and 12.0/10<sup>5</sup> (population of reference: world). 23.4% of samples were cryopreserved. Resection was performed in 79.1% of cases. Results are detailed (incidence rate, sex ratio, median age at diagnosis, number of cryopreserved samples, and type of surgery) for each of the 143 histological subtypes of PCNST, including all rare tumors. For example, incidence rates (population of reference: USA) were 0.018/10<sup>5</sup> for anaplastic gangliogliomas, 0.054/10<sup>5</sup> for malignant meningiomas, and 0.036/10<sup>5</sup> for hemangiopericytomas. Our study is the first to describe incidence rates and epidemiological data for all histological subtypes of PCNST, including rare tumors, at a national level. Its methodology ensures the exhaustiveness of the data collection for histologically-proven cases. Histological population-based studies have many perspectives in the field of clinical epidemiology and research.

**KEYWORDS:** Brain tumor; Database; Epidemiology; Incidence; Neuro-oncology; Neuropathology

PMID: 27853959 DOI: [10.1007/s11060-016-2318-3](https://doi.org/10.1007/s11060-016-2318-3)

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