

SNO and EANO practice guideline update: Anticonvulsant prophylaxis in patients with newly diagnosed brain tumors.

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terms of the Oxford University Press, Standard Journals Publication Model (https://academic.oup.com/journals/pages/open_access/funder_policies/chorus/standard_publication_model) Abstract
Objective To update the 2000 American Academy of Neurology (AAN) practice parameter on
anticonvulsant prophylaxis in patients with newly diagnosed brain tumors.

Following the 2017 AAN methodologies, a systematic literature review utilizing PubMed, EMBASE Library, Cochrane, and Web of Science databases was performed. The studies were rated based on the AAN therapeutic or causation classification of evidence (class I-IV).

Thirty-seven articles were selected for final analysis. There were limited high-level, class I studies and mostly class II and III studies. The AAN affirmed the value of these guidelines.

In patients with newly diagnosed brain tumors who have not had a seizure, clinicians should not prescribe antiepileptic drugs (AEDs) to reduce the risk of seizures (level A). In brain tumor patients undergoing surgery, there is insufficient evidence to recommend prescribing AEDs to reduce the risk of seizures in the peri- or postoperative period (level C). There is insufficient evidence to support prescribing valproic acid or levetiracetam with the intent to prolong progression-free or overall survival (level C). Physicians may consider the use of levetiracetam over older AEDs to reduce side effects (level C). There is insufficient evidence to support using tumor location, histology, grade, molecular/imaging features when deciding whether or not to prescribe prophylactic AEDs (level U).