Malignant gliomas are the most frequent primary brain tumors in adults. Temozolomide is an oral alkylating cytotoxic agent of second generation, used in the treatment of high-grade gliomas. It is indicated in newly diagnosed glioblastoma multiform as well as in recurrent or progressive malignant gliomas, such as glioblastoma multiform or anaplastic astrocytoma. However, temozolomide is also used, off label, in other clinical situations and the main objective of this study was to establish recommendations and guidelines for relevant prescriptions of temozolomide in primary brain tumors and brain metastasis in adults. The literature review was analysed by experts who determined the evidence level (A to E) according to the scale of recommendations adopted by the "Haute Autorité de santé--HAS--(French National Authority for Health)". For high-grade and low-grade gliomas, based on the level of evidence from the literature, the use of temozolomide can be justified, with a B2 score attributed to these indications. In contrast, for the others indications, the use of temozolomide appeared to be more controversial or even not recommended (score C to E). Regarding the dosing schedule and administration scheme, as well as the co-administration with other anticancer drugs, a C score was attributed for the off label situations.