Review Brain Tumor Pathol. 2024 Apr 2. doi: 10.1007/s10014-024-00480-1.

Online ahead of print.

Oligodendroglioma, IDH-mutant and 1p/19q-codeleted-prognostic factors, standard of care and chemotherapy, and future perspectives with neoadjuvant strategy

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PMID: 38564040 DOI: 10.1007/s10014-024-00480-1

Abstract

Oligodendroglioma, IDH-mutant and 1p/19q-codeleted is known for their relative chemosensitivity and indolent clinical course among diffuse gliomas of adult type. Based on the data from phase 3 clinical trials, the standard of post-surgical care for those tumors is considered to be initial chemoradiotherapy regardless of histopathological grade, particularly with PCV. However, partly due to its renewed definition in late years, prognostic factors in patients with those tumors are not well established. Moreover, the survival rate declines over 15 years, with only a 37% OS rate at 20 years for grade 3 tumors, even with the current standard of care. Given that most of this disease occurs in young or middle-aged adults, further improvements in treatment and management are necessary. Here, we discuss prognostic factors, standard of care and chemotherapy, and future perspectives with neoadjuvant strategy in those tumors.

Keywords: Chemotherapy; Neoadjuvant; Nimustine; PAV; Staged resection.