Abstract

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Targeted Therapy for BRAF Mutant Brain Tumors.

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Molecular heterogeneity has confounded attempts to target individual pathways in brain tumors. However, gliomas with BRAF mutations have been identified as being uniquely vulnerable to targeted therapies. Such mutations are predominantly seen in brain tumors of the adolescent and young adult population. Given that accurate and timely identification of such mutations is essential for offering appropriate treatment, treatment centers should offer both immunohistochemical and sequencing methods for detection of these mutations to guide treatment. Additional studies of these tumors at recurrence would also allow identification of breakthrough resistance mechanisms that may also be targetable for treatment. Due to the relative rarity of these tumors, multicenter collaborative studies will be essential in achieving long term control of these tumors.

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