

Special Issue

Pathology of Gliomas

Message from the Guest Editors

Gliomas vary in their pathological characteristics due to their heterogeneous nature. Adult and pediatric gliomas differ dramatically in their pathological origins. Adult-type diffuse gliomas are differentiated on the presence of an isocitrate dehydrogenase 1 (IDH1) mutation, 1p/19q-codeletion, and histological grades. In contrast, aberrations of the mitogen-activated protein kinase pathway in low-grade gliomas, and the presence of histone H3 K27M mutations in diffuse intrinsic pontine and other midline gliomas, are used to differentiate pediatric gliomas. Bioinformatics has provided new insights to potential biomarker targets for gliomas, which may aid in therapeutic interventions. This review will focus on the current pathological characteristics of adult and pediatric gliomas, and touch on some novel therapeutic targets based on recent gene discoveries.

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