Previous studies reported that miR-433 exerts function widely in human tumorigenesis and development. Sun et al further investigate the potential role of miR-433 in glioma. Quantitative real-time PCR demonstrated that miR-433-3p and miR-433-5p were low expressed in glioma tissues and cell lines. Functional studies suggested that the overexpression of miR-433-3p suppressed proliferation, induced apoptosis and inhibited invasion and migration of human glioma cells. But the growth and metastasis of glioma cells were not significantly influenced by overexpression of miR-433-5p. In a xenograft model, we also showed that miR-433-3p had an inhibitory effect on the growth of glioma. Bioinformatics coupled with luciferase and western blot assays revealed that CREB is a direct target of miR-433-3p, and the overexpression of CREB can rescue the phenotype changes induced by miR-433-3p overexpression. Besides, miR-433-3p could increase chemosensitivity of glioma to temozolomide by targeting CREB in vitro and in vivo. Taken together, these results suggest that miR-433-3p may function as a potential marker in diagnostic and therapeutic target for glioma [1].

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Sun S, Wang X, Xu X, Di H, Du J, Xu B, Wang Q, Wang J. MiR-433-3p suppresses cell growth and enhances chemosensitivity by targeting CREB in human glioma. Oncotarget. 2016 Dec 3. doi: 10.18632/oncotarget.13789. [Epub ahead of print] PubMed PMID: 27926502.