Many studies have reported that circular RNAs play a vital role in the malignant progression of human cancers. However, the role and underlying mechanism of circRNAs in the development of gliomas have not been fully clarified.

In a study, Liu et al. found that circ_0001367 was downregulated in glioma tissues and showed a close correlation with glioma patient survival. Functional assays demonstrated that upregulation of circ_0001367 could suppress the proliferation, migration, and invasion of glioma cells in vitro and inhibit glioma growth in vivo. Furthermore, bioinformatics analysis, a luciferase reporter assay, and RNA immunoprecipitation assay indicated that circ_0001367 can serve as a sponge for miR 431 and that miR-431 acts as an oncogene by regulating neurexin 3 (NRXN3). In addition, rescue experiments verified that circ_0001367 could regulate both the expression and function of NRXN3 in a miR-431-dependent manner. In conclusion, circ_0001367 functions as a suppressor in glioma by targeting the miR-431/NRXN3 axis and may be a promising therapeutic target against gliomas [1].

1)
Liu L, Zhang P, Dong X, Li H, Li S, Cheng S, Yuan J, Yang X, Qian Z, Dong J. Circ_0001367 inhibits glioma proliferation, migration and invasion by sponging miR-431 and thus regulating NRXN3. Cell Death Dis. 2021 May 25;12(6):536. doi: 10.1038/s41419-021-03834-1. PMID: 34035217.