miR 105

MiR-105 was identified as a remarkably decreased MicroRNA in glioblastoma compared with WHO grade 3 gliomas (P=0.012, fold change =0.04).

Guan et al. subsequently examined its expression levels in an independent series of gliomas, and statistically analyzed the associations between miR-105 expression and clinicopathological characteristics and survivals of these glioma patients. MiR-105 showed remarkably decreased expression in gliomas as compared to non-neoplastic brains. And grade 4 gliomas had significantly lower miR-105 expression compared with grade III and WHO grade 2 gliomas (both P<0.001). Additionally, low miR-105 expression was statistically associated with advanced tumor grade, advanced patient's age and low pre-operative Karnofsky performance score (all P<0.001). Furthermore, patients with low miR-105 expression had significantly poorer survival by Kaplan-Meier method (P<0.001). Multivariate analysis indicated miR-105 as an independent prognostic indicator for glioma patients (P=0.018, risk ratio =4.2).

The results suggested that low expression of miR-105 may correlate with unfavorable clinical outcome and be involved in tumorigenesis and aggressive progression of glioma. And miR-105 may be a novel biomarker in prognostic prediction for glioma [1)]

1)
Guan Y, Chen L, Bao Y, Li Z, Cui R, Li G, Wang Y. Identification of low miR-105 expression as a novel poor prognostic predictor for human glioma. Int J Clin Exp Med. 2015 Jul 15;8(7):10855-10864. eCollection 2015. PubMed PMID: 26379879.