42 Patients were analysed for clinicopathological characteristics. qRT-PCR showed that miR-215 was up-regulated in glioma tissues compared with non-neoplastic brain tissues ($P < 0.05$). The up-regulated miR-215 was closely associated with high grade glioma ($P < 0.01$) and poor overall survival ($P < 0.01$). Transwell assay showed that re-expression of miR-215 enhanced migration and invasion of glioma cells. miR-215 also down-regulated retinoblastoma tumor suppressor gene 1 (RB1) expression by targeting its 3'-UTR. Reversely, re-expression of RB1 inhibited partial effect of miR-215 on migration and invasion in vitro.

Re-expression of miR-215 promoted cell migration and invasion of glioma by targeting RB1. miR-215 can thus be used as a biomarker for tumor progression and prognosis in human high grade glioma [1].

1)
Wei Y, Sun J, Li X. MicroRNA-215 enhances invasion and migration by targeting retinoblastoma tumor suppressor gene 1 in high-grade glioma. Biotechnol Lett. 2016 Nov 11. [Epub ahead of print] PubMed PMID: 27837373.