



# Suggestions for “14-3-3zeta Positive Cells Show More Tumorigenic Characters in Human Glioblastoma”

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To the Editor,

We read with interest the article ‘14-3-3zeta Positive Cells Show More Tumorigenic Characters in Human Glioblastoma’.

Glioblastoma is a type of glioma in astrocytic tumors, and is the most common and fatal primary brain tumor in adults (2). The median survival period is only 10-20 months (4-6). According to the Central Brain Tumor Registry of the United States (CBTRUS) statistics, incidence of glioblastoma is 3.2 per 100,000 population, increases with age, and 5.5% of patients survive 5 years post diagnosis (3).

Luo et al. reported that 14-3-3zeta positive cells displayed oncogenic properties, more tumorigenic characteristics, high invasiveness, and tumorspheres (1). The authors explored the possible mechanism of 14-3-3zeta positive cell participation in the occurrence of glioblastoma, thus providing a scientific basis for more rational clinical diagnosis and treatment.

Here, we share our views and suggestions.

1. Were the 6 patients being treated for the first time, or had they received chemotherapy or other antitumor treatment?
2. Was the expression of 14-3-3zeta correlated with clinicopathological factors such as gender, age, TNM stage, differentiation degree, affected side, pathological grade, and tumor size?
3. What is the relationship between 14-3-3zeta and overall survival of patients?

Molecular targeted therapy is currently a hot topic for the treatment of glioma, in which finding effective gene targets

is key. Neurooncologists have long been focused on finding biomarkers for glioma prognosis. It was recently reported that 14-3-3zeta is a possible important prognostic biomarker and potential therapeutic target for glioblastoma (7).

Using 14-3-3zeta as a target for new drugs, that inhibit its expression in tumor cells by improving immune inhibition and limiting proliferation of tumor cells, could provide new avenues for the treatment of glioblastoma.

Further experiments will help unravel the mechanisms of 14-3-3zeta in glioblastoma, identify its signaling pathways and other related molecules, and better guide future diagnosis and treatment of glioblastoma.

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