

ABSTRACT

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The association of BMI and sarcopenia with survival in patients with glioblastoma multiforme.

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BACKGROUND: The association between obesity and sarcopenia (via temporal muscle thickness) with overall survival (OS) has been evaluated in several glioblastoma multiforme studies, however, the data are inconclusive.

METHODS: The authors conducted meta-analyses via the generic inverse-variance method with a random-effects model.

RESULTS: In the pooled analysis of five studies, including 973 patients, patients with lower temporal muscle thickness had significantly decreased OS (HR: 1.62, 95% CI: 1.16-2.28, $p = 0.005$). The pooled analysis of five studies, including 2131 patients, demonstrated decreased OS in patients with lower BMI compared with patients with obesity (HR: 1.45, 95% CI: 1.12-1.88, $p = 0.005$).

CONCLUSION: Readily available body composition parameters could be used for prognosis prediction and to aid in treatment decisions in patients with glioblastoma multiforme.

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