

ABSTRACT

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The Efficacy of Adjuvant Chloroquine for Glioblastoma: A Meta-Analysis of Randomized Controlled Studies.

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Introduction The efficacy of adjuvant chloroquine for glioblastoma remains controversial. We conduct a systematic review and meta-analysis to explore the influence of adjuvant chloroquine on treatment efficacy for recurrent glioblastoma.

Methods We search PubMed, Embase, Web of science, EBSCO, and Cochrane library databases through January 2020 for randomized controlled trials (RCTs) assessing the efficacy of adjuvant chloroquine for glioblastoma. This meta-analysis is performed using the random-effect model.

Results Three RCTs are included in the meta-analysis. Overall, compared with control group for glioblastoma, adjuvant chloroquine is associated with significantly reduced mortality (risk ratio [RR] = 0.59; 95% confidence interval [CI] = 0.47-0.72; $p < 0.00001$), improved remission (RR = 11.53; 95% CI = 1.53-86.57; $p = 0.02$), and prolonged survival time (Std.MD = 11.53; 95% CI = 1.53-86.57; $p = 0.02$), but has no substantial effect on recurrence (RR = 0.42; 95% CI = 0.12-1.49; $p = 0.18$).

Conclusion Adjuvant chloroquine may provide additional benefits for the treatment of glioblastoma.

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