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**1:** [Expert Rev Pharmacoecon Outcomes Res.](#) 2009 Jun;9(3):235-41.

**Cost-effectiveness of temozolomide for the treatment of newly diagnosed glioblastoma multiforme.**

[Uyl-de Groot CA](#), [Stupp R](#), [van der Bent M](#).

Institute for Medical Technology Assessment/Department of Health Policy and Management, Erasmus University Medical Center, PO Box 1738, 3000 DR Rotterdam, The Netherlands.  
c.uyl@erasmusmc.nl

**AIM:** To perform a systematic review on the costs and cost-effectiveness of concomitant and adjuvant temozolomide with radiotherapy for the treatment of newly diagnosed glioblastoma compared with initial radiotherapy alone. **METHODS:** Electronic databases were searched for relevant publications on costs and cost-effectiveness until October 2008. **RESULTS:** We found four relevant clinical trials, one cost study and two economic models. The mean survival benefit in the radiotherapy plus temozolomide group varied between 0.21 and 0.25 life-years. Treatment costs were between 27,365 euros and 39,092 euros. The costs of temozolomide amounted to approximately 40% of the total treatment costs. The incremental cost-effectiveness ratios found in the literature were 37,361 euros per life-year gained and 42,912 euros per quality-adjusted life-year gained. However, the models are not comparable because different outcomes are used (i.e., life-years and quality-adjusted life-years). **CONCLUSION:** Although the models are not comparable according to outcome, the incremental cost-effectiveness ratios found are within acceptable ranges. We concluded that despite the high temozolomide acquisition costs, the costs per life-year gained and the costs per quality-adjusted life-year gained are comparable with other accepted first-line treatments with chemotherapy in patients with cancer.

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