

PubMed

U.S. National Library of Medicine
National Institutes of Health



Display Settings: Abstract

[J Neurooncol.](#) 2011 Apr 24. [Epub ahead of print]

Delayed initiation of radiotherapy for glioblastoma: how important is it to push to the front (or the back) of the line?

[Lawrence YR](#), [Blumenthal DT](#), [Matcseyevsky D](#), [Kanner AA](#), [Bokstein E](#), [Corn BW](#).

Center for Translational Research in Radiation Oncology, Sheba Medical Center, 52621, Tel Hashomer, Israel.

Abstract

Glioblastoma is a malignant tumor characterized by a rapid proliferation rate. Contemporary multi-modality treatment consists of maximal surgical resection followed by radiation therapy (RT) combined with cytotoxic chemotherapy. The optimal timing of these different steps is not known. Four studies from the pre-temozolomide era, encompassing a total of 4,584 subjects, have examined the consequences of a delay between resection and starting RT. Whereas the two small single-institution studies found this delay to be detrimental, two large multi-institutional studies found delay to be either slightly beneficial or at least not harmful. Here, we critically compare the methodologies and results presented in these studies, and include a novel analysis of the combined datasets. We conclude that moderate wait periods (up to 4-6 weeks post-operatively) are safe and may be modestly beneficial. Conversely, there is no evidence to justify waiting longer than 6 weeks. Underlying radiobiological principles are discussed.

PMID: 21516461 [PubMed - as supplied by publisher]

[LinkOut - more resources](#)