

Patterns of relapse and prognosis after bevacizumab (BEV) failure in recurrent glioblastoma (GBM).

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Abstract Disclosures

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Abstract:

Background: BEV has shown promise for recurrent GBM in phase II trials. However, the patterns of relapse and prognosis of patients (pts) with GBM following BEV have not been studied systematically. This may have important implications for efficacy analysis of post-BEV therapies. **Methods:** We reviewed departmental databases to identify pts with recurrent GBM treated with BEV on or off clinical trials following IRB approval of this study. Pts who discontinued BEV for progressive disease (PD) were included. Records were assessed for post-BEV outcomes. **Results:** There were 21 pts (14 men, 7 women; median age 53 yrs, range 30-80) who discontinued BEV for PD. The median number of recurrences prior to starting BEV was 1 (range, 1-2). Patients received BEV alone (n=1) or in combination with irinotecan (n=10), hypo-fractionated re-irradiation (hyRT) (n=8), temozolomide (n=1) or temozolomide plus hyRT (n=1). The median overall survival (OS) after stopping BEV was 2.5 months (95% CI, 1.6 to 5.9); 15 patients have died. At the time BEV was discontinued, seven pts had local recurrence (initial site of disease) whereas 14 had recurred in a multifocal tumor/gliomatosis cerebri pattern. Median KPS at recurrence for those with a local pattern was 70 (range, 70-90) compared to a median of 60 (range, 40-80) in patients with a multifocal pattern (p< 0.001). Multifocal tumor/gliomatosis pattern of relapse was associated with increased risk of death (Hazard Ratio [HR]=13, 95% CI: 1.7- 101, p=0.01) compared to local relapse. KPS ≤ 60 at the time of BEV failure was also associated with increased risk of death (HR=11, 95% CI: 2.3-49, p=0.002). Additional tumor directed therapy following BEV failure was given to 11 pts (8 chemotherapy, 2 resection and chemotherapy, 1 resection). Median PFS for the therapy after BEV failure was 2.3 months (95% CI: 0.7 to 4), median OS was 4.5 months (95% CI:1.4-NR), and 6 month-PFS was 0%. **Conclusions:** A multifocal tumor/gliomatosis cerebri pattern of recurrence/progression is common following treatment with BEV for GBM, and is correlated with poor KPS and short survival. Treatments after BEV failure may provide only transient tumor control.

► Associated Presentation(s):

1. Patterns of relapse and prognosis after bevacizumab (BEV) failure in recurrent

► Glioblastoma (GBM) Sub-Category:

Meeting: 2008 ASCO Annual Meeting
 1. Expression of CD-133+ in the brain of a mouse model with a lacZ reporter knock-in at the CD133 locus.
 Presenter: Andrew B Lassman
 Session: Central Nervous System Tumors (Poster Discussion Session)