The clinical benefit in patients with glioma treated with Bevacizumab

1 V Villani, 1 A Fabi, 2G Lombardi, 2L Bellu, 2V Zagonel, 1CM Carapella, 1 I Sperduti, 1A Vidiri, 1 A Pace

1. Neurooncology Group of National Cancer Institute Regina Elena
2. Department of Clinical and Experimental Oncology, Medical Oncology 1 - IRCCS, PADUA

Affiliazione

Bevacizumab (BV), a monoclonal antibody for the treatment of recurrence of glioblastoma, was approved in 2009 in USA whereas today no such approval there is in the European Union. BV showed a higher response rates and prolongation of median at 6 month progression free survival (PFS) compared with historical treatment. The aim of this study was to evaluate the clinical benefit (CB) of BV therapy alone or in combination in the treatment of recurrent glioma (RG).

Methods: Data of RG patients treated with BV alone or in combination treated in two Italian Center (National Cancer Institute Regina Elena of Rome and Department of Clinical and Experimental Oncology of PADUA) since 2012 were collected. CB was evaluated measuring reduction of steroid and improvement of Karnosfy Performance Status (KPS) of at least 20 point.

Results: We enrolled 138 RG treated with BV. Of them 52 are female (37%) and 87 are males (63%). The majority of patients were glioblastoma (N=112, 91%) previously treated with three lines of chemotherapy before BV (n=103). At enrolment 113 patients was receiving steroid. 60% of patients showed reduction of steroids dose (in 94% after the first infusion of BV). A CB was observed in 62% of patients without significant differences between patients treated with BV alone or in combination. Also 27 patients presenting progression disease at MRI showed a CB in (42%) during the treatment. Patients with a CB showed a rate of progression free survival (PFS) at 1 years of 17.6%, significantly higher (p 0.0001) than patients without CB (see figure 1). Also OS resulted significantly different (p=0.0009) between group with CB (rate of OS at 1 years 37.9%) respect patients without CB 14.1% (see figure 2).

In this study the majority of patients treated with BV reported a clinical benefit, even in those showing radiographic progression. Moreover, patients with clinical benefit showed a better rate of progression free survival at 1 year and a longer survival. Our results confirm the role of BV in the treatment of recurrent glioma and the favourable impact on patients clinical symptoms.

Figure 1 Clinical benefit and progression free survival at 1 years

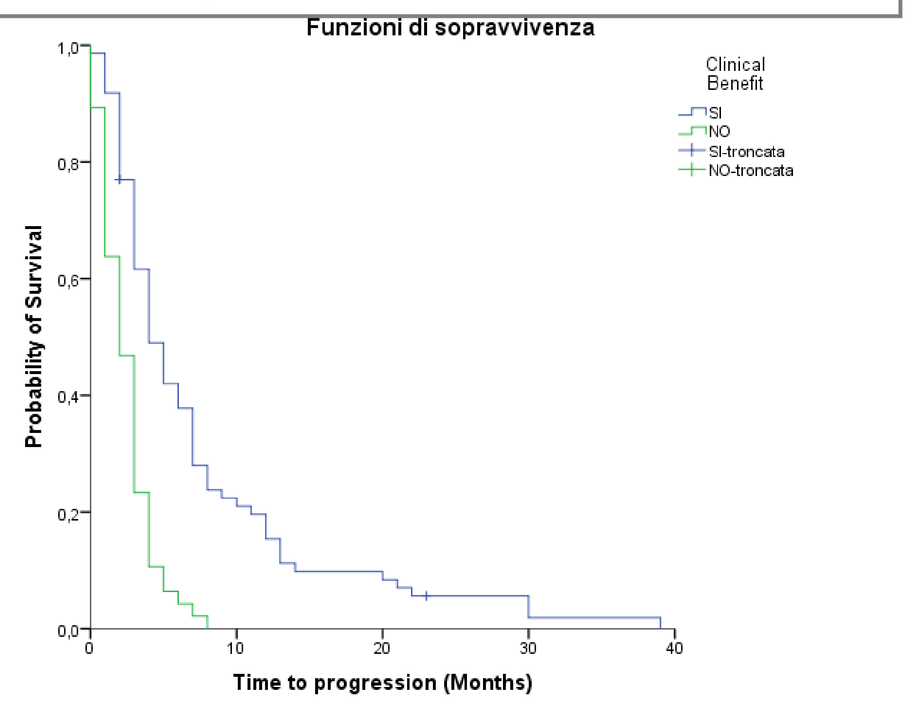
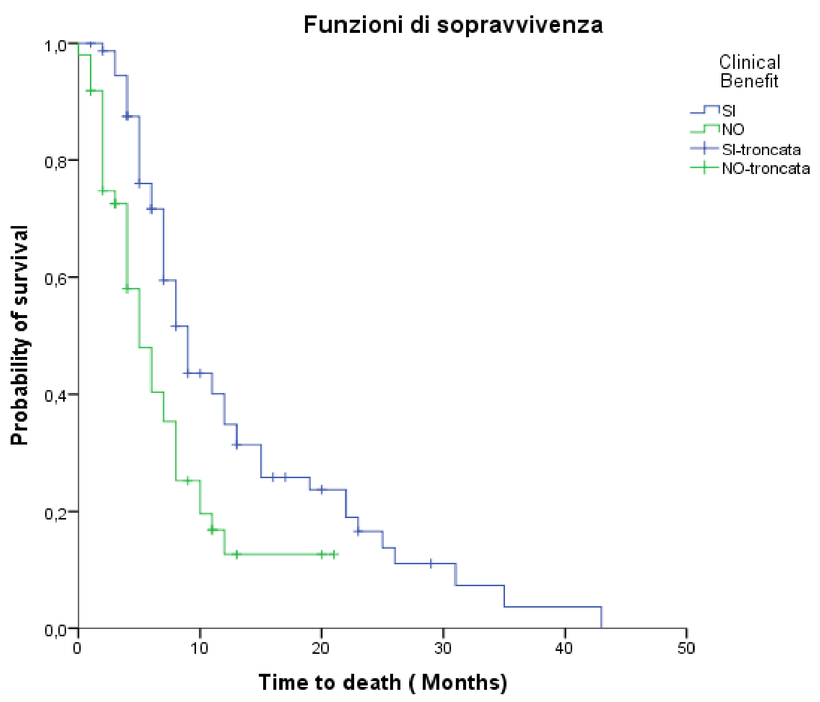


Figure 2 Clinical benefit and overall survival



References: Kathryn M. Field, MD1; Justin T. Jordan, MD2; Patrick Y.Wen, MD2; Mark A. Rosenthal, MD1; and David A. Reardon, MD. Bevacizumab and Glioblastoma: Scientific Review, Newly Reported Updates, and Ongoing Controversies
Riccardo Soffietti •i, Elisa Trevisan • Luca Bertero Paola Cassoni • Isabella Morra • Maria Grazia Fabrini Francesco Pasqualetti • Ivan Lolli • Anna Castiglione Giovannino Ciccone • Roberta Ruda` Bevacizumab and fotemustine for recurrent glioblastoma: a phase II study of AINO (Italian Association of Neuro-Oncology) J Neurooncol (2014) 116:533–541

Sin

XLVI CONGRESSO NAZIONALE
10-13 OTTOBRE 2015 – GENOVA

WebPoster