

**381PD Comprehensive geriatric assessment (CGA) for outcome prediction in elderly patients (PTS) with glioblastoma (GBM): A mono-institutional experience**

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**Background:** Treatment for GBM elderly PTS is still a challenge in neuro-oncology. Clinical tools, including CGA, are needed for improving treatment decision and outcome. To date, few studies exploring the impact of CGA on outcome have been performed in these PTS. The aim of this study was to evaluate CGA as a prognostic tool in terms of PFS and OS in elderly GBM PTS.

**Methods:** We performed a retrospective analysis of elderly PTS  $\geq 65$  years, treated at Veneto Institute of Oncology between January 2011 and January 2018, with newly histologically diagnosed GBM and receiving a baseline CGA after 3-4 weeks from surgery. CGA included the following domains: age, activities and instrumental activities of daily living (ADL, IADL), cognitive status (MMSE), mood (GDS), nutritional status (MNA), number of drugs, comorbidity (cumulative Illness Rating Scale-CIRS), presence of geriatric syndromes, presence of caregiver. PTS were classified according to Balducci's criteria into Fit or Unfit (Frail and Vulnerable).

**Results:** 113 PTS were enrolled: 72 (64%) were male, KPS were  $\geq 70$  in 90 PTS (80%); 37 PTS (33%) had a radical surgery, 63% partial surgery and 4% received a biopsy. 90 PTS (80%) received Stupp treatment, 16 (14%) temozolomide or radiotherapy alone and, only 7 (6%) received no treatment. MGMT methylation status was analyzed in 96 PTS: 44% were metMGMT. According to CGA evaluation: 40 PTS (35.4%) were classified as Fit and 73 PTS (64.6%) Unfit. PFS was 11.2 (95% CI 6.0-16.4) and 7.2 (95% CI 5.8-8.6) months for Fit and Unfit PTS ( $p = 0.1$ ). On multivariate analysis, adjusted for type of surgery, MGMT methylation status and type of therapy, PFS was significantly different between the two groups (HR = 0.6, 95% CI 0.2-0.9;  $p = 0.04$ ). OS was 16.4 (95% CI 14.6-18.2) and 10.6 (95% CI 8.3-12.8) ms for Fit and Unfit PTS ( $p = 0.04$ ); on multivariate analysis the HR was 0.51 (95% CI 0.2-0.9;  $p = 0.04$ ).

**Conclusions:** CGA demonstrated significant outcome prediction in terms of OS and PFS, regardless of therapy. It could be a useful treatment decision-tool suggesting to treat FIT PTS with radiochemotherapy while a prospective study to evaluate the best treatment in Unfit PTS should be warrant.

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