

*Neuro-Oncology* 17:v78–v85, 2015.  
doi:10.1093/neuonc/nov213.16

## NEURO-ONCOLOGY

### Abstracts

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#### EPID-16. PATTERNS OF CARE AND OUTCOME IN GLIOBLASTOMA PATIENTS IN THE CANTON OF ZURICH: A POPULATION-BASED STUDY (2005-2009)

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A population-based analysis of patterns of care and outcome in glioma patients diagnosed 1980-1994 in the Canton of Zurich, Switzerland, has confirmed the overall poor prognosis of glioblastoma. To explore changes in outcome over the last decades, the registry data were re-evaluated for patients diagnosed in the time frame 2005-2009. Patients diagnosed with glioblastoma in the Canton of Zurich from 2005-2009 were identified by the Cancer Registry Zurich. Clinical and epidemiological data, as well as molecular markers were assessed, and analyzed using the Kaplan-Meier method and the Cox proportional hazards model. In the current database, there were 264 patients with glioblastoma, including 256 primary glioblastomas with an annual incidence of 3.98 compared to 3.55 in the former patient group. Median age at diagnosis was 60.0 years recently as opposed to 61.3 years previously. Overall survival (OS) for all glioblastoma patients was 41.7% at 1 year, 22.7% at 2 years and 13.1% at 3 years in the present study while previously the OS was significantly lower, namely 17.7% at 1 year, 3.3% at 2 years and 1.2% at 3 years, respectively. Median OS for primary glioblastomas was 11.0 months for the period ending 2009 versus 4.7 months for the patient population of 1980-1994. In the present study, by treatment, the median OS for best supportive care, radiotherapy alone, temozolomide alone or radiotherapy plus temozolomide was 2.0, 6.0, 6.0 or 17.0 months, respectively. Multivariate analysis revealed age, KPS, extent of resection, adjuvant treatment regimens, year of diagnosis, IDH-1 mutation status and MGMT promoter methylation status significantly associated with survival. The OS of patients in the Canton of Zurich with newly diagnosed glioblastoma has markedly improved from the period of 1980-1994 to 2005-2009.