ABSTRACT CITATION ID: NOAE064.436
LGG-45. LOW DOSE CARBOPLATIN – ETOPOSIDE REGIMEN IN PEDIATRIC PATIENTS WITH LOW GRADE GLIOMA
Marco Tellini, Marco Di Nicola, Carla Fonte, Barbara Castelli, Milena Guidi, Flavio Giordano, Ludovico D’Incerti, Federico Balducci, Maria Lucia Censullo, Piero Scagnotto, Lorenzo Genitori, Anna Maira Bucoliero, Benedetta Bianchi, Iacopo Sardi, Neuro-Oncology Unit Meyer Children’s Hospital, Florence, Italy, Neurosurgery Unit Meyer Children’s Hospital, Florence, Italy, Radiology Unit Meyer Children’s Hospital, Florence, Italy, UOC Istituto di Radiologia, Azienda Ospedale-Università, Padua, Italy, Psychology Unit – Meyer Children’s Hospital, Florence, Italy, Psychology Unit Meyer Children’s Hospital, Florence, Italy, Audiology Unit Meyer Children’s Hospital, Florence, Italy

INTRODUCTION: Chemotherapy remains the cornerstone in case of incompletely resected pediatric Low Grade Glioma (pLGGs) and for recurrent tumors in unfavorable locations. Based on previous cisplatin etoposide regimen (NT Milan strategy), we tried to reduce toxicity and achieve a similar tumor control using a modified regimen composed of CBCDA-etoposide. METHODS: From August 2012 to December 2023 we treated 79 pLGGs (45 F (57%), 34 M (43%)) with carboplatin (400 mg/m2 day 1) and etoposide (100 mg/2 day 1-3) at 4-6 weeks interval with 10 cycles in one year or until disease progression. Median age at diagnosis is 7 years. Seventeen patients were affected by neurofibromatosis type 1 (21.3%). 28 pLGGs affected visual pathway (35.4%). Treatment was delivered for clinical symptoms and/or radiological evidence of progression. RESULTS: According to RAPNO criteria, on brain magnetic resonance imaging (MRI) at the end of treatment 40 patients had stable disease (50.6%), 10 had partial response (12.7%), 7 had major response (8.9%), 5 had minor response (6.3%), 2 presented complete remission (2.5%), 13 patient had disease progression (16.5%), 2 patients are undergoing treatment (2.5%). Acute toxicity was unremarkable. During follow up (median time 39.3 months) 9 children (11.4%) developed audiological alterations but 2 of them also received radiotherapy. 14 patients presented hematological toxicity CTCAE grade 3 or 4 (17.7%). During follow up 30 patients developed a progressive disease (38%) and require further treatments and only one patients died because of progressive disease. Overall survival was 98.7% (78/79). CONCLUSIONS: The combination of low doses CBCDA-etoposide seems equally effective with a lower hematological and audiological toxicity compared to other regimens.