was 15 months, median of PFS after 1st-line and 2nd-line treatment was 6 months. PNI ($p < 0.001$), MLR ($p=0.002$) and SII ($p=0.005$) were significantly lower after 1st-line or 2nd-line treatments when compared with the phase before treatment. After implementing ROC curves none of the parameters filled the 70% AUC criterion. However, after examining the results, SIRI after 1st-line treatment and NLR after 2nd-line treatment for OS were the parameters that were most close to that criterion. Hence, we established as cut-offs, SIRI after 1st-line treatment $\geq$ 1292.86 and NLR after 2nd-line treatment $\geq$ 2.58. Kaplan-Meier survival function results show that patients above the established criteria of SIRI and NLR have low OS, $p=0.009$ and $p=0.002$, respectively.

Conclusions: Post-treatment the ratios NLR and SIRI were associated with worse OS. Steroids did not influence the results. The retrospective study design limits the interpretation. A longer follow-up time and a larger sample size are needed to support these findings.

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5P IDH1 mutation status and overall survival in glioblastoma patients: A meta-analysis

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Background: Glioblastoma is the most common and aggressive type of primary brain tumor. The prognosis for patients diagnosed with GBM is unfortunately very poor, with a median overall survival of only 14 months and very limited options for treatment. Several studies have detected a mutation in the isocitrate dehydrogenase 1 (IDH1) gene as a molecular marker associated with improved survival in patients with glioblastoma, but the evidence is inconsistent and inconclusive. We conducted this meta-analysis to investigate the link between IDH1 mutation and overall survival in glioblastoma patients.

Methods: A thorough literature search of databases (PubMed, Scopus, Cochrane, Embase, and Web of Science databases) yielded five studies involving 541 glioblastoma cases that reported overall survival by IDH1 mutation status. The meta-analysis was conducted using Cochrane review manager V 5.4.

Results: Our meta-analysis encompassed five studies, involving a total of 541 patients (480 with IDH1 wild type and 61 with mutant type). Among these, three studies focused on patients with recurrent glioblastoma (GBM), while two studies involved newly diagnosed GBM cases. The treatment modalities varied, with one study employing alkylating agents, two studies utilizing tyrosine kinase inhibitors, one study combining immunotherapy with alkylating agents, and one study not specifying the treatment. The pooled hazard ratio (HR) was 2.37 (95% CI 1.81—3.12; $p < 0.001$; I2=0%), indicating a significant association between IDH1 mutation and prolonged overall survival in glioblastoma patients, irrespective of the therapeutic intervention. For recurrent GBM, the pooled HR was 2.28 (95% CI 1.72—3.03; $p < 0.001$; I2=0%). Additionally, in the context of newly diagnosed GBM, the pooled HR was 3.06 (95% CI 0.48—19.63; $p < 0.001$; I^2=39%).

Conclusions: This study clearly demonstrates that IDH1 mutation in patients with glioblastoma is a favorable prognostic factor for overall survival, regardless of the treatment modality or disease stage. The findings suggest that IDH1 mutation status should be considered in the clinical management and stratification of glioblastoma patients.

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6P Extraosseous central nervous system Ewing sarcoma: A single-center retrospective case series

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Background: Ewing Sarcoma (ES) tumors are malignant tumors mainly affecting pediatric patients. Extra-osseous primary sites are infrequent, being central nervous system (CNS)-ES extremely rare. Diverse differential histological diagnoses for these "small blue round cell" tumors matched to their rareness make diagnosis an arduous challenge.

Methods: Our single-center retrospective study included patients with cranial CNS-ES and defining molecular features between 10/2007-11/2023. We analyzed clinical presentation, radiologic and histologic features, and median survival.

Results: Medical records from twenty-four patients were analyzed. The median age was 22 years (range 2-65); 15 adults (>18). Most patients were male (2:1). Headache was the most frequent symptom (35%), followed by seizures, unilateral numbness/weakness, cerebellar syndrome and visual impairments. Findings in brain Magnetic Resonance Imaging; 11 supratentorial lesions, 7 infratentorial and 6 showed diffuse meningeal infiltration. Histopathology showed in most cases conventional diffuse pattern with small round blue cells (n=12). Confirmatory (11;22) translocation was achieved in all cases: 22 confirmed by Protein-Chain-Reaction analysis and 2 by Fluorescence in situ hybridization for EWSR1 gene rearrangement. One case was confirmed by deoxyribonucleic acid (DNA) methylation profiling. Median overall survival (OS) was 78 months (0-140). 21 patients had an OS exceeding 12 months, while 3 patients suffered rapid progression and died within the year of diagnosis. No significant relations were found between treatment and survival.

Conclusions: Primary CNS-ES is an orphan pathology and its clinical course and treatment options are barely known. In our experience, it is a heterogeneous group in clinical onset, imaging and histopatological findings, treatment response and outcome. Advances in diagnosis technologies such as DNA methylation profiling with subtypes clustering will probably favour further understanding and guide treatment tayloring.

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