

## MANAGEMENT OF CYTOMEGALOVIRUS REACTIVATION IN ACUTE LEUKEMIA PATIENTS AFTER ALLOGENEIC STEM CELL TRANSPLANTATION – SINGLE CENTER EXPERIENCE

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**Introduction:** Cytomegalovirus (CMV) reactivation after allogeneic hematopoietic stem cell transplantation (HSCT) still remains one of the major causes of morbidity and mortality in these vulnerable patients. Patients with CMV positive serology are at increased risk for CMV reactivation and early and late nonrelapse mortality.

**Materials and methods:** We enrolled patients with acute leukemia (AML and ALL) who underwent allogeneic HSCT (related, unrelated or haploidentical) at University Clinic for Hematology – Skopje from 2016 to 2022. CMV reactivation was monitored every two weeks by RQ-PCR in the first 6 months. Preemptive antiviral therapy was administered to all patients with CMV viral load >1000 copies/ml.

**Results:** 60 patients were included in this study, 33 (55%) of them were man and 27 (45%) were women. The median age of the study cohort was 44 years (15 - 68 years). All patients (100%) were CMV seropositive before transplantation. CMV reactivation was diagnosed in 14 patients (23%) and all of them underwent unrelated or haploidentical HSCT. Valganciclovir was first line therapy. Two patients (14%) were Valganciclovir refractory and Foscarnet therapy was added. One was cured and one died after CMV complications. Totally two patients (14%) died from CMV reactivation and both have GvHD complications.

**Conclusion:** Despite high CMV seroprevalence in patients, CMV reactivation in North Macedonia posttransplant patients is on the level like Western European countries. Fact that North Macedonia is part of the region with the highest seroprevalence of CMV in the world, close surveillance in the early posttransplant period and CMV prophylaxis in high-risk patients is needed.