

## Adult Hematology Abstract Categories, Stem Cell Transplant

OP 08

## FLUDARABINE-INDUCED BRADYCARDIA IN ALLOGENEIC HEMATOPOIETIC STEM CELL TRANSPLANTATION

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**Objective:** Fludarabine, a purine analog, is getting more attention with the increasing use of reduced intensive conditioning regimens in allogeneic hematopoietic stem cell transplantation (allo-HSCT). Bradycardia was observed in only a few cases reported in the literature. In clinical practice, bradycardia can be asymptomatic or cause syncope and cardiac arrest. This study aimed to evaluate the bradycardia side effect of fludarabine used in allo-HSCT recipients and to increase awareness of this issue. **Methodology:** This retrospective study included 73 patients who received fludarabine in the allo-HSCT conditioning regimen between January 2015 and January 2021. Patients with and without bradycardia were compared regarding demographic data, allo-HSCT characteristics, electrolyte values, fludarabine administration dose and duration, and survival. Univariate and multivariate analyzes were performed to evaluate independent predictors for fludarabine-induced bradycardia (FIB). **Results:** Fludarabine doses were higher in the bradycardia group, but not statistically significant. Age was the only independent predictor of FIB (OR 0.93, 95% CI: 0.89-0.98,  $p=0.007$ ). The median age in the group with bradycardia was 19 years younger than those without bradycardia (34 (19-49) vs 53 (19-69),  $p=0.005$ ). In 11 (84.6%) of the patients who had bradycardia, bradycardia improved with the discontinuation of fludarabine alone, but atropine was administered in 2 (15.4%) patients. **Conclusion:** Bradycardia was observed in 17.8% of our patients who used fludarabine in the conditioning regimen. Age was the only independent predictor of fludarabine-induced bradycardia; therefore, close heart rate monitoring is recommended during fludarabine administration, especially in younger patients. Although our results are promising, further studies evaluating the fludarabine intermediate fluoroadenosine are needed to support our results.

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## Adult Hematology Abstract Categories, Other Diseases

OP 09

## A STRATEGY FOR DIRECT DELIVERY OF ANTIGENIC CONSTRUCTS TO DENDRITIC CELL RECEPTORS

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**Objective:** C-type lectin receptors (CLRs) expressed by DC are considered attractive targets for effective targeting of antigen to antigen-presenting cells, since the participation of CLRs can additionally stimulate antigen presentation and, accordingly, subsequent activation of T cells. To study the ability of DC to enhance antigen capture and presentation using a library of fluorescein-labeled polyacrylamide glycoconjugates. **Methodology:** DC was obtained by culturing human peripheral blood monocytes in a complete RPMI-1640 nutrient medium containing GM-CSF, IL-4 and TNF $\alpha$ . Immunophenotypes were analyzed using flow cytometric analysis. In our study, synthetic FSL (Function-Spacer-Lipid) constructs will be used: polyacrylamide glycoconjugate (Adi-sp)3- $\beta$ DD-PAA-Fluo, conjugate N-acetylglucosamine, glycolipid (Adi-sp)3- $\beta$ DD ((Adi-sp)3- $\beta$ DD-DOPE). Next, the binding of these cells to glycoprobes was investigated. **Results:** A new class of glycoconjugates specific for binding to C-type lectin receptors has been synthesized. The key cytokines for the cultivation of DC are GM-CSF (final concentration 80 ng/ml), IL-4 (final concentration 10 ng/ml), as well as differentiation inducers: TNF $\alpha$ , PGE2. Mapping of human blood cells using a library of fluorescein-labeled polyacrylamide glycoconjugates showed that the studied glycoprobes bind to more than 15% of the human leukocyte population. **Conclusion:** In our proposed research project, a new approach will be used to study the strategy of enhancing the capture and presentation of antigen by dendritic cells by targeting C-type lectin receptors.

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OP 10

## SHIFTING PARADIGMS: EXPLORING ENARODUSTAT FOR ANEMIA IN CHRONIC KIDNEY DISEASE IN A META ANALYSIS OF RANDOMIZED CONTROLLED TRIALS

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