remission [CR] 1, CR ≥2, and relapse/primary induction failure) to pts without GO exposure. Marginal Cox regression and marginal logistic regression modeling were used to determine overall survival and the incidence of VOD at 100-d, respectively. A stepwise model building approach was used to identify risk factors associated with VOD and death. In this analysis, 141 pts with GO exposure and 564 pts without GO exposure underwent SCT between 2008 and 2011. Median (range) age for pts with and without GO exposure before SCT was 42 (18-73) y and 38 (18-74) y, respectively. Myeloablative conditioning (MAC) with chemotherapy (with GO, 61%; without GO, 57%) was utilized more frequently than MAC with total body irradiation (with GO, 39%; without GO, 43%). Pts with and without GO exposure were matched according to disease status: 32% of pts in CR1, 31% of pts in CR ≥2, and 37% of pts with relapse/primary induction failure. Median (range) time from GO exposure to transplant was 4 (2-10) mo for pts in CR1, 6 (1-68) mo for pts in ≥CR2, and 3 (<1-76) mo for pts with relapse/primary induction failure. Incidence of VOD at 100-d between pts with and without GO exposure was similar (4% versus 3%), as was the incidence of severe VOD (3% versus 1%). Survival probabilities at 100 d (81% versus 81%), 6 mo (67% versus 69%), and 1 y (52% versus 58%) from SCT were similar in pts with and without GO exposure. Likewise, 100-d (50% versus 43%), 6-mo (33% versus 30%), and 1-y (33% versus 26%) survival probabilities from the onset of VOD were comparable in pts with and without GO exposure before SCT. Of 90 deaths in pts with GO exposure, 3% (n = 3) were attributed to VOD. In multivariate analysis (MVA), GO exposure was not associated with an increased risk of VOD (odds ratio, 1.05; 95% CI, 0.95-1.15). Furthermore, GO exposure was not associated with an increased risk of death (hazard ratio, 0.95; 95% CI, 0.64-1.44). In conclusion, in pediatric pts with AML, GO exposure before SCT was associated with a decreased risk of death (hazard ratio, 1.13; 95% CI, 0.86-1.49; P = 0.39). More pts used a myeloablative conditioning regimen with chemotherapy (with GO, 52%; without GO, 64%) than with total body irradiation (with GO, 48%; without GO, 36%). Overall incidence of VOD and severe VOD at 100 days was higher in pts with GO exposure (16% and 8%, respectively) than in pts without GO exposure (10% and 3%). Overall survival probabilities were generally comparable in pts with and without GO exposure at 100 days (84% versus 87%), 6 months (78% versus 80%), and 1 year (69% versus 69%) from SCT and at 100 days (64% versus 68%), 6 months (54% versus 62%), and 1 year (39% versus 54%) from VOD onset. Based on multivariate analyses, GO exposure was associated with a significant increased risk of VOD (odds ratio, 2.15; 95% CI, 1.25-3.70; P = 0.01) but not an increased risk of death (hazard ratio, 1.13; 95% CI, 0.86-1.49; P = 0.39). In pts with GO exposure, 3/76 deaths (4%) were attributed to VOD. In pts without GO exposure, 1/157 deaths (<1%) was attributed to VOD. In conclusion, in pediatric pts with AML, GO exposure before SCT was associated with a higher incidence of VOD. However, GO exposure was not associated with an increased risk of death. Future analyses will evaluate the impact of GO dose on VOD risk. Funding: Pfizer. The data presented are preliminary and were obtained from the Coordinating Center of the CIBMTR.

Incidence, Risk Factors, and Outcomes of Early Adverse Cardiac Events (EACE) after Allogeneic Hematopoietic Stem Cell Transplantation Stratified by Conditioning Regimen

Majid El-Harasis 1, Mehrdad Hefazi 2, William J. Hogan 3, Mark R. Litzow 2, Minral M. Patnaik 2, Joerg Herrmann 3

1 Internal Medicine, Mayo Clinic, Rochester, MN; 2 Division of Hematology, Mayo Clinic, Rochester, MN; 3 Cardiology, Mayo Clinic, Rochester, MN

Background: The incidence, risk factors, and outcomes of adverse cardiac events early after allogeneic hematopoietic cell transplantation (HCT) are not well-described. We carried out this single-institution, retrospective study to define these events within the first 100 days, in patients with acute myeloid leukemia (AML) undergoing a reduced intensity (RIC) or a myeloablative (MAC) conditioning HCT.

Methods: After IRB approval, medical records of 256 consecutive AML patients that underwent HCT at our institution between 2005 and 2015 were reviewed. Data on demographics, transplant characteristics, cardiac risk factors and adverse events were collected. Cardiovascular adverse events of grade ≥2 per the CTCAE4 criteria were defined as early adverse cardiac events (EACE) if they occurred within 100 days after HCT.

Results: EACEs were identified in 16% of the 256 patients in this study (Table 1). Heart failure was the most common EACE,