while related vs. unrelated donor, complete HLA match, ATG use, and recipient age are not. Multivariable analysis was challenging given the correlation among covariates. However, male donor is significantly associated with improved OS for pts with grade 3-4 aGVHD in all models, while time pd is not significant when adjusting for other factors.

**Conclusions:** While OS for pts with grade 3-4 aGVHD has improved, it continues to impact >13% of pts and has poor outcomes. The use of a male donor may predict improved OS for pts with grade 3-4 aGVHD independent of time pd. Additional study is warranted to validate these findings and improve therapies.

### Ethnic Variation in Chronic Graft-Versus-Host Disease (cGVHD) Manifestations

Maria Elvira Correa1, Eliana Miranda2, Afonso Vigorito2, Luis Fernando S. Bouzas3, Vaneuza Funke4, Vergilio Antonio Colturato5, Maria Claudia R. Moreira6, Rita Tavares7, Marcos A. Mauad5, Mair Pedro De Souza8, Sally Arai9, Stephanie J. Lee10, Barry Storer11, Mary E.D. Flowers1.

**Clinical Research, Fred Hutchinson Cancer Research Center, Seattle, WA; 2 Hemocentro, University of Campinas, Campinas, Brazil; 3 National Institute of Cancer INCA, Rio de Janeiro, Brazil; 4 Universidade do Parana - UFPR, Curitiba, Brazil; 5 Hospital Amaral Carvalho - HAC, Jau, Brazil; 6 National Institute of Cancer INCA, Rio de Janeiro, Brazil; 7 BMT Unit, Instituto Nacional de Cancer - INCA, Rio de Janeiro, Brazil; 8 Hospital Amaral de Carvalho - HAC, Jau, Brazil; 9 Stanford University, Stanford, CA; 10 Clinical Transplant Research, Fred Hutchinson Cancer Research Center, Seattle, WA; 11 Division of Clinical Research, Fred Hutchinson Cancer Research Center, Seattle, WA.**

Risk of acute GVHD varies among different ethnic population. Thus, we evaluated potential differences in cGVHD manifestations in two ethnic distinct cohorts. The study included a Brazilian cohort diagnosed with cGVHD by 2005 NIH criteria who were enrolled in a prospective multicenter longitudinal study at 5 centers in Brazil and compared with a North American cohort reported by the GVHD consortium (Arai S. et al. Blood 2011). Pts. were assessed using standardized clinical data forms every 3 months (124 visits). Any elevation of liver function tests was scored as cGVHD. The Brazilian study cohort included 36 pts. with a median age of 44 (13-64) years and 21 (58%) were male. At study enrollment, 24 (67%) had classic cGVHD, and 12 (33%) pts. had overlap subtype (with feature of both acute and chronic). Distribution of organ involvement attributed to cGVHD for the Brazilian and the North American cohorts at study enrollment is shown in the Figure. Liver severity scores at study enrollment was mild in 10 (34%), moderate in 12 (40%) and severe in 8 (26%) pts. among Brazilian cohort, and it was mild in 113 (76%), moderate in 36 (24%) and none severe in the North American cohort. Overall, cGVHD global severity at study enrollment was calculated from reported data as mild in 2 (5.5%), moderate in 17 (47%) and severe in 17 (47%) of Brazilian cohort compared to 32 (10%), 175 (59%) and 91 (31%) in the North American cohort, respectively. Similar to North American cohort, distribution of global severity was similar in the Brazilian cohort across 22 incident (enrollment < 3 months of cGVHD diagnosis) and 14 prevalent cases (enrollment 3 or 6 months after cGVHD diagnosis) and, between pts. with classic and overlap cGVHD. Prevalence of organs involvement at study enrollment was significant different between the two population. Compared to the North American cohort, the Brazilian cohort had higher rates of liver involvement (83% vs. 50%; p < .001) and lower rate of lung (8% vs. 50%; p < .001), respectively. The cause for the high incidence and severity scores in the liver among the Brazilian cohort is unknown, but we speculated potential contributors. For instance, 100% of Brazilian cohort was CMV positive and pre-emptive treatment for CMV reactivation is not used after day 100 posttransplant, thus reactivation of CMV may have contributed to the elevation of liver function tests. Moreover, it is not standard practice in Brazil to add ursodiol to treat elevation of liver tests attributed to GVHD, thus allowing for further potential increase in liver severity score. The lower rates of lung in the Brazilian cohort may reflect non-standardization of pulmonary function test in Brazil. In conclusion, prevalence of organ manifestations in cGVHD varied between the two ethnic distinct cohort studied. Attention should be taken into consideration when evaluating prognosis and outcomes in cGVHD in different ethnic population.

### Clinical Features of Acute Cutaneous Graft-Versus-Host Disease Following Allogeneic Hematopoietic Stem Cell Transplantation

Daniel Bach1, Elizabeth Damstetter1, Dennis West2, Jayesh Mehta3, Jonathan Cotliar4, 1 Northwestern University Feinberg School of Medicine, Chicago, IL; 2 Northwestern University Feinberg School of Medicine, IL; 3 Northwestern Memorial Hospital, Chicago, IL; 4 Dermatology, Northwestern University Feinberg School of Medicine, Chicago, IL.

**Background:** Acute graft-versus-host disease (aGVHD) is a frequent complication of allogeneic hematopoietic stem cell transplantation (HSCT). Although the presence of a skin eruption is a cornerstone in the diagnosis of aGVHD according to the Glucksberg criteria and the 2005 NIH Consensus Conference, specific cutaneous features such as morphology and anatomic distribution have not been studied in a systematic manner. Subsequently, the relative incidences of specific skin lesions remain unclear and contribute to the ongoing challenge of delineating aGVHD from other commonly seen skin eruptions early after HSCT.

**Methods:** A retrospective review of all patients receiving an allogeneic HSCT from 2010 to 2011 at Northwestern Memorial Hospital identified those individuals with cutaneous aGVHD. Each case of aGVHD was confirmed by both skin