Bortezomib-based immunosuppression after reduced-intensity conditioning hematopoietic stem cell transplantation: randomized phase II results

John Koreth,¹ Haesook T. Kim,² Paulina B. Lange,¹ Samuel J. Poryanda,¹ Carol G. Reynolds,¹ Sharmila Chamling Rai,¹ Philippe Armand,¹Corey S. Cutler,¹ Vincent T. Ho,¹ Brett Glotzbecker,¹ Rushdia Yusuf,¹ Sarah Nikiforow,¹ Yi-Bin Chen,³ Bimalangshu Dey,³ Malgorzata McMasters,⁴ Jerome Ritz,¹ Bruce R. Blazar,⁵ Robert J. Soiffer,¹ Joseph H. Antin¹ and Edwin P. Alyea III¹

¹Division of Hematologic Malignancies, Dana-Farber Cancer Institute and Harvard Medical School, Boston, MA; ²Department of Biostatistics and Computational Biology, Dana-Farber Cancer Institute and Harvard School of Public Health, Boston, MA; ³Massachusetts General Hospital Cancer Center, Boston, MA; ⁴Beth Israel Deaconess Hospital Cancer Center, Boston, MA and ⁵University of Minnesota Masonic Cancer Center and Department of Pediatrics, Division of Blood and Marrow Transplantation, Minneapolis, MN, USA

©2018 Ferrata Storti Foundation. This is an open-access paper. doi:10.3324/haematol.2017.176859

Received: July 18, 2017. Accepted: January 10, 2018. Pre-published: January 11, 2018.

Correspondence: john_koreth@dfci.harvard.edu

Supplementary Table A: Summary of aGVHD Outcome by HLA-match

Legend:

aGVHD: acute graft-versus-host disease

Cum. Incid.: cumulative incidence

CI: confidence interval

Supplementary Figure 1: Cumulative Incidence of Acute GVHD by Treatment Arm and HLAmatch. (A): Grade II-IV acute GVHD for 8/8 match; (B) Severe Grade III-IV acute GVHD for 8/8 match; (C) Grade II-IV acute GVHD for 7/8 match; and (D) Severe Grade III-IV acute GVHD for 7/8 match. Acute GVHD events after relapse with IS taper were included

Black indicates arm A (tac/mtx); red indicates arm B (bort/tac/mtx); and blue indicates arm C (bort/sir/tac). Gray test was used for group comparison.

Legend:

Tac: tacrolimus

Mtx: methotrexate

Bort: bortezomib

Sir: sirolimus

Supplementary Table A. Summary of aGVHD outcome by HLA match.

	Arm			p-value		
	A (Tac/MTX)	B (Bort/Tac/MTX)	C (Bort/Sir/Tac)	A vs B	A vs C	A vs (B&C)
D180 Cum. Inc. of grade II-IV aGVHD						
8/8 matched (95% CI)	33% (17, 49)	16% (6, 30)	19% (7, 34)	0.1	0.21	0.08
7/8 matched (95% CI)	33% (9, 60)	69% (34, 88)	27% (8, 51)	0.16	0.92	0.42
D180 Cum Inc of grade III-IV aGVHD						
8/8 matched (95% CI)	0% (-)	6% (1.1, 18)	9% (2.3, 23)	0.49	0.27	0.33
7/8 matched (95% CI)	8% (0.4, 32)	15% (2.2, 40)	27% (8, 51)	0.93	0.19	0.43
(B) aGVHD after relapse with IS taper ex	cluded					
D180 Cum. Inc. of grade II-IV aGVHD						
8/8 matched (95% CI)	33% (17, 49)	13% (4, 27)	16% (6, 30)	0.046	0.13	0.03
7/8 matched (95% CI)	33% (9, 60)	69% (34, 88)	13% (2, 36)	0.16	0.59	0.66
D180 Cum. Inc. of grade III-IV aGVHD						
8/8 matched (95% CI)	0% (-)	6% (1.1, 18)	9% (2.3, 23)	0.49	0.27	0.33
7/8 matched (95% CI)	8% (0.4, 32)	15% (2.2, 40)	13% (2, 36)	0.93	0.53	0.72

(A) aGVHD after relapse with IS taper included

Gray test was used for group comparison

Figure S1. Cumulative Incidence of Acute GVHD by Treatment Arm and HLA match.

