



Biology of Blood and Marrow Transplantation

journal homepage: www.bbmt.org



Erratum

Addendum to: Haploidentical Related Donor Hematopoietic Stem Cell Transplantation for DOCK8 Deficiency Using Post-Transplantation Cyclophosphamide

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Article history:

Received 9 November 2018

Accepted 15 November 2018

The authors wish to add back an eighth patient, the sixth transplant recipient in the study, who was underwent contemporaneous hematopoietic stem cell transplantation (HSCT) during the same period. This patient received a tandem living donor liver and bone marrow transplant, with

both organs procured from the same haploidentical related maternal donor. Due to complications of veno-occlusive disease, acyclovir-resistant herpes simplex virus, and graft failure, this patient did not survive HSCT. This case was omitted because it is sufficiently different from the others but will be reported separately to fully discuss important implications when considering tandem solid organ transplantation preceding HSCT. Tables 1 and 2 have been amended to incorporate this patient.

Table 1

Baseline Characteristics of Patients with DOCK8 Deficiency Undergoing Haploidentical HSCT

Patient	Donor	Age at HSCT, yr/Sex	Type of Infections		Pulmonary Complications	Other	IgE	DOCK8 Mutation
			Viral	Other				
1	Brother	20/F	HPV-skin, <i>Molluscum contagiosum</i>	Recurrent bacterial sinusitis, pneumonias/ otitis, candida vaginitis (azole-resistant), <i>Pseudomonas</i> colonization	Bronchiectasis	DLBCL with CNS involvement at age 15 yr, eosinophilic esophagitis, renal artery stenosis, non-ischemic cardiomyopathy (EF, 30%–35%), chronic kidney disease, mild eczema	5970	Compound Het Del exons 1–13 R249X
2	Mother	19/F	HPV-skin, HSV reactivation	Recurrent bacterial sinusitis/pneumonias/otitis	Bronchiectasis	Vulvar SCC, CNS vasculitis, right MCA stroke × 2 (age 17 and 18 yr), ectatic thoracic aorta and focal narrowing and wall thickening of the abdominal aorta, severe eczema	>6000	Homozygous Del exon 37

(continued)

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DOI of original article: <http://dx.doi.org/10.1016/j.bbmt.2017.03.016>

<https://doi.org/10.1016/j.bbmt.2018.11.014>

1083-8791/Published by Elsevier Inc. on behalf of American Society for Blood and Marrow Transplantation.

Table 1 (Continued)

Patient	Donor	Age at HSCT, yr/Sex	Type of Infections		Pulmonary Complications	Other	IgE	DOCK8 Mutation
			Viral	Other				
3	Mother	25/F	HPV-skin, CMV viremia	Recurrent bacterial sinusitis/pneumonias, MRSA infections (skin), candidiasis (vaginal), abnormal Pap smears	Asthma, pulmonary fibrosis secondary to bleomycin	Hodgkin lymphoma (nodular sclerosing), bleomycin lung toxicity, alopecia, recurrent pancreatitis, chronic cholestatic liver disease, severe eczema	639	Compound Het c.325-1A>G c.325-2delAinsTG
4	Father	20/M	HPV-skin, <i>M contagiosum</i> , EBV viremia, varicella	Recurrent bacterial sinusitis/pneumonias		Eczema	1536	Compound Het c.1805G>A, p.W602X c.4540delG, p.E1514Kfs8
5	Father	7/M	EBV viremia, varicella	Recurrent bacterial sinusitis/pneumonias/otitis, oral candidiasis	Asthma	Cerebral artery stenosis of basilar and right posterior cerebral arteries, previous left posterior cerebral artery CVA	1128	Compound Het c.3194delC, P.T1065fs
6	Mother	10/M	EBV viremia, CMV viremia	Recurrent bacterial sinusitis/pneumonias <i>Pneumocystis jirovecii</i> pneumonia	Asthma, eosinophilic pneumonia	Eczema	794	Homozygous Del exons 1-36
7	Father	18/M	Varicella <i>M contagiosum</i>	MRSA skin infection, recurrent bacterial sinusitis/pneumonia osteomyelitis	Pneumonia	Severe eczema	4849	Compound Het Del exons 1-45
8*	Mother	11/F	HSV-skin <i>M. contagiosum</i>	Recurrent bacterial sinusitis/pneumonia/ otitis/ <i>Pseudomonas</i> infection	Bronchiectasis, pneumonia	End-stage liver disease from sclerosing cholangitis due to chronic <i>Cryptosporidium</i> spp, s/p a living donor left lobe transplant from haploidentical maternal donor 70 d before haploidentical BMT (same maternal donor)	2331	Compound Het c.5815_5816insT, p.Y1939LfsX12 (Exon 45), large deletion (exon 39-47)

BMT indicates bone marrow transplantation; CNS, central nervous system; CVA, cerebrovascular accident; DLBCL, diffuse large B cell lymphoma; EBV, Epstein-Barr virus; EF, ejection fraction; Het, heterozygote; HSCT, hematopoietic stem cell transplantation; HSV, herpes simplex virus; HPV, human papilloma virus; MCA, middle cerebral artery; MRSA, methicillin-resistant *Staphylococcus aureus*; SCC, squamous cell carcinoma; PCA, posterior cerebral artery; VZV, varicella zoster virus.

* Published as a separate case series and was chronologically the sixth transplant recipient in this series.

Table 2
Characteristics of Hematopoietic Stem Cell Grafts and Outcome of HSCT

Patient	Haploidentical Donor	Cell Source	HLA Match	CMV Match, R/D	Busulfan Dose AUC Targeted	Composition of Donor Graft		Day of Engraftment		Infections Post-HSCT	Acute GVHD*	Outcome Follow-Up, mo
						BU Dose, mg/kg/d × 3 d	CD34* × 10 ⁶ /kg	CD3* × 10 ⁷ /kg	Neutrophils			
1	Brother	BM	5/10	+/-	AUC 4500 3.1 mg/kg/d	6.7	3.8	13	24	HHV6 viremia and CSF without sequelae, BK viremia	Acute grade I skin	Alive/31.7
2	Mother	BM	6/10	+/+	AUC 4100 3.2 mg/kg/d	6.1	6.8	17	21	CMV reactivation	None	Alive/24.7
3	Mother	BM	5/10	+/+	AUC 3800 2.8 mg/kg/d	2.8	4.8	18	35	CMV reactivation, BK viruria with cystitis	Acute grade II GI, grade I skin, grade II lung	Death/5.5
4	Father	BM	5/10	+/+	AUC 3800 2.2 mg/kg/d	4.8	10.4	15	14	CMV reactivation, BK cystitis	Acute grade III GI	Alive/20.9
5	Father	BM	6/10	+ [†] /-	AUC 4000 3 mg/kg/d	7.7	7.6	14	17	None	None	Alive/20.6
6	Mother	BM	5/10	+/+	AUC 3769 3.6 mg/kg/d	7.5	9.2	15	14	CMV reactivation	None	Alive/15.1
7	Father	BM	5/10	+/+	AUC 4000 2.3 mg/kg/d	6.2	3.9	14	17	CMV reactivation, adenoviremia, BK hemorrhagic cystitis	Acute grade II GI, grade I skin	Alive/9.5
8	Mother [‡]	BM	5/10	+/+	AUC 4000 2.7 mg/kg/d	2.4	8.3	N/A	N/A	Continued treatment for chronic <i>Cryptosporidium</i> spp, HSV viremia	None	Death/1.5

MRD indicates matched related donor; URD, unrelated donor, GVHD, graft-versus-host disease; URI, upper respiratory infection; HHV-6, human herpesvirus 6.

* Cytomegalovirus IgG-negative before initiation of IVIG replacement.

[†] No patients have developed chronic GVHD.

[‡] Published as a separate case series and was chronologically the sixth transplant recipient in this series.