

SUPPLEMENTARY TABLE Ia: Individual characteristics at time of diagnosis of SCID for patients undergoing URD HCT

Case #	Gender	Age (Days)	Race / Ethnicity	ALC	CD3	CD4	CD8	B Cells	NK	PHA	IgG	IgM	IgA	TME	Diagnostic Trigger	Mutation
				(x 10 ⁶ /L)							(mg/dL)					
IL2RG SCID																
1	M	0	Caucasian	620	6	4	3	355	26	NT	820	0	0	0%	Family History	c.355delG
2	M	110	Caucasian	272	253	166	90	5	8	NT	520	24	7	0%	Paraflu3, Lymphoma	IVS3-11bp C>G
3	M	271	Caucasian	1661	124	3	49	1528	0	2%	330	67	20	0%	PCP	c.284 (del2): a--g
4	M	169	Caucasian	682	6	0	0	613	6	NT	400	19	0	0%	Thrush, PNA, Perianal Abscess	c.1-3318_594+455del5157
5	M	270	Caucasian	1700	605	553	52	605	415	10%	104	28	0	0%	RSV, PCP	c.129(+5) G>A
6	M	228	Caucasian	300	0	0	0	160	100	NT	357	36	0	0%	PCP, Paraflu, Astro	11 bp deletion from intron 4 to first 6 bp of exon 5
7	M	25	Hispanic	780	0	0	0	1096	45	0%	320	14	0	0%	Newborn Screen	c.822-840del119
8	M	426	Caucasian	8200	321	89	194	7786	25	0%	10	14	0	84%	VZV	p.Q81X
9	M	0	Caucasian	847	8	0	8	NT	NT	NT	NT	NT	NT	0%	Family History	NR
10	M	120	Caucasian	1836	293	36	110	1468	73	2%	400	23	0	25%	Thrush	c.640C>T
11	M	274	Caucasian	4914	49	9	4	4766	0	NT	80	34	0	0%	RSV, hMPV, Noro	c.509T>C
12	M	185	Caucasian	2100	0	0	0	2000	0	0%	NT	NT	NT	0%	PCP, RSV	NR
13	M	149	Caucasian	2065	4	2	6	2034	64	0%	93	0	0	0%	Thrush, FluB	delc.772, changing 3' splice site
14	M	209	Caucasian	930	37	9	9	893	NT	1%	572	14	7	NT	RSV, Paraflu, S. aureus bacteremia	NR
15	M	97	Caucasian	2900	3	2	3	433	8	0%	576	35	0	0%	Adeno, Paraflu, Rota	NR
16	M	157	Asian	1760	18	0	0	1707	0	NT	426	36	7	NT	Thrush, RSV	c.633A>T
17	M	328	Caucasian	1100	0	0	0	1090	0	NT	330	38	0	0%	PCP	c.268T>C
18	M	0	Caucasian	1970	60	10	40	1520	20	NT	801	5	0	0%	Family History	c.822_823delCAinsdup833_845
19	M	229	Caucasian	2170	0	0	0	2130	20	NT	658	0	0	0%	PCP	c.670C>T
20	M	184	Caucasian	2870	10	1	1	2840	3	NT	801	21	0	0%	PCP	c.854G>A
21	M	236	Caucasian	2180	240	170	70	1610	220	0%	NT	NT	NT	NT	PCP	c.720G>T

Case #	Gender	Age (Days)	Race / Ethnicity	ALC	CD3	CD4	CD8	B Cells	NK	PHA	IgG	IgM	IgA	TME	Diagnostic Trigger	Mutation
				(x 10 ⁶ /L)							(mg/dL)					
ADA SCID																
1	F	200	Hispanic	170	56	31	22	22	88	0%	49	0	0	0%	PCP, Rota	p.L107P + p.C262Y
2	F	74	Caucasian	200	0	0	0	0	0	NT	776	5	0	0%	RSV	NR, Level = 0
3	F	30	Caucasian	350	14	12	3	0	0	NT	684	8	0	0%	PCP, Paraflu3	NR, Level = 0
4	M	24	Caucasian	380	9	6	3	2	76	NT	280	5	0	0%	PCP	NR, Level = 0
5	F	68	Caucasian	60	0	0	0	9	28	0%	200	8	0	0%	PNA	NR, Level = 0
6	M	11	Asian	250	5	5	0	3	9	NT	840	0	0	0%	Family History	c.256-258 ins T
7	F	23	Asian	200	4	1	0	2	15	NT	370	17	25	0%	PNA	NR, Level = 0
OTHER SCID																
1	M	2	Caucasian	1200	0	0	0	0	1200	NT	NT	NT	NT	0%	Family History	Unknown
2	M	38	Caucasian	1720	17	0	0	860	757	0%	1360	47	0	0%	PNA	Unknown
3	F	121	Caucasian	210	0	0	0	0	210	NT	120	NT	NT	0%	FluA, FTT	RAG2; c.1643C>T
4	F	947	Caucasian	1670	0	0	0	1486	167	0%	0	14	0	0%	Paraflu3, HHV-6, ALL	Unknown
5	F	302	Caucasian	3267	510	421	49	23	699	NT	NT	NT	NT	0%	PCP, Mycobacteria	Unknown
6	M	5	Mid. East.	400	0	0	0	0	390	NT	927	0	0	0%	Family History -> CMV	Artemis; NR
7	M	11	Mid. East.	1200	189	101	25	0	781	0%	131	3	3	100%	Family History	RAG2; NR
8	M	147	Caucasian	660	173	120	20	20	445	3%	41	172	0	0%	PCP	LIG4; compound hetero
9	M	109	Caucasian	660	30	10	10	550	50	0%	NT	NT	NT	NT	PCP, CMV, Paraflu	Unknown

ADA, adenosine deaminase; ALC, absolute lymphocyte count; NK, Natural Killer; PHA, phytohemagglutinin; TME, transplacental maternal engraftment; PCP, Pneumocystis jiroveci; PNA, pneumonia; VZV, varicella zoster virus; RSV, respiratory syncytial virus; CMV, cytomegalovirus; HHV-6, human herpes virus-6; NT, not tested; NR, not reported

SUPPLEMENTARY TABLE Ib: Individual HCT characteristics for patients undergoing URD HCT

Case #	Year of HCT	Days from diagnosis	Serotherapy dose (mg/kg)	GVHD Prophylaxis	Source	Matching	TNC (x 10 ⁸ /kg)	CD34 (x 10 ⁶ /kg)	CD3 (x 10 ⁷ /kg)	aGVHD	cGVHD	2nd HCT	Alive	Cause of Death
IL2RG SCID														
1	1993	46	rATG/10	CSA / MTX	BM	6/6	5.5	NT	NT	Grade II	N	N	Y	
2	1997	66	None	CSA	BM	6/6	7.4	4.4	NT	Grade II	N	N	Y	
3	2004	64	rATG/40*	CSA / Steroids	BM	10/10	5.6	10	4.5	Grade II	N	N	Y	
4	2006	42	None	CSA	BM	10/10	3	4.1	4.3	Grade II	NE	Boost (D+21)	N	aGVHD (D+103)
5	2006	74	rATG/9	CSA / Steroids	BM	10/10	10	NT	NT	0	N	N	Y	
6	2008	86	rATG/10	CSA	BM	12/12	NT	20	NT	0	N	N	Y	
7	2011	54	rATG/8	CSA / MMF	BM	12/12	2.9	5.9	72	0	N	Boost (D+48)	Y	
8	2012	34	rATG/10	TAC / MTX	BM	10/10	4.1	6.1	NT	0	N	N	Y	
9	2012	47	hATG/100	TAC	BM	10/10	5.4	8.1	NT	Grade I	Y	Boost (D+40)	Y	
10	2003	281	None	CSA	PBSC (TCD)	9/10 (C)	1.1	10	10	Grade IV	NE	N	N	aGVHD (D+77)
11	2010	60	None	CSA / MMF	PBSC (TCD)	10/10	0.1	10	0.02	Grade II	Y	Full (D+113)	Y	
12	2010	48	None	CSA	PBSC (TCD)	10/10	NT	10	0.01	0	N	N	Y	
13	1996	155	hATG/90	CSA / Steroids	UCB	6/6	2.6	NT	NT	Grade III	Y	N	Y	
14	2000	43	None	CSA / Steroids	UCB	6/6	1	0.5	NT	Grade I	Y	N	Y	
15	2002	28	hATG/120	CSA	UCB	6/6	0.8	0.9	NT	0	N	N	Y	
16	2004	25	None	None	UCB	5/6 (A)	2.3	0.1	NT	Grade II	Y	N	N	cGVHD (D+362)
17	2008	64	rATG/10	CSA	UCB	12/12	0.4	0.4	NT	Grade I	N	N	Y	
18	2008	43	None	CSA	UCB	11/12 (DP)	1.3	1.7	2.1	Grade III	N	N	Y	
19	2010	56	None	CSA / Steroids	UCB	10/10	0.9	0.5	0.4	Grade III	Y	N	Y	
20	2010	78	None	CSA / MMF / Steroids	UCB	10/10	0.8	0.3	0.4	Grade II	Y	N	Y	
21	2011	74	None	CSA / MMF / Steroids	UCB	8/10 (A+DQ)	1.1	0.3	0.1	0	NE	N	N	Ongoing Neuro (D+39)

Case #	Year of HCT	Days from diagnosis	Serotherapy dose (mg/kg)	GVHD Prophylaxis	Source	Matching	TNC	CD34	CD3	aGVHD	cGVHD	2nd HCT	Alive	Cause of Death
							(x 10 ⁸ /kg)	(x 10 ⁶ /kg)	(x 10 ⁷ /kg)					
ADA SCID														
1	2011	530^	rATG/8	CSA / MMF	BM	12/12	4	2.5	46	Grade I	Y	N	Y	
2	2000	20	None	CSA	UCB	6/6	1.3	0.7	6.3	0	N	N	Y	
3	2002	40	None	CSA / Steroids	UCB	6/6	2	0.6	NT	Grade III	N	N	N	Ongoing Paraflu (D+166)
4	2002	16	None	CSA	UCB	6/6	1.3	0.4	NT	0	N	N	Y	
5	2006	31	None	CSA / Steroids	UCB	10/10	1.6	0.5	6.3	Grade III	NE	N	N	Ongoing Neuro (D+101)
6	2010	32	None	CSA / MMF	UCB	10/10	3	1	9.2	Grade II	N	N	Y	
7	2011	62^	None	CSA / MMF	UCB	10/10	2.4	0.9	6.2	0	N	N	Y	
OTHER SCID														
1	1995	67	None	CSA	BM	6/6	4	NT	NT	Grade I	Y	N	N	cGVHD, AIHA, ITP (D+1024)
2	1998	100	None	CSA	BM	6/6	NT	14	15.5	0	NE	N	N	IntraOp (D+71)
3	2005	96	Campath/1	CSA / MTX	BM	10/10	3.3	3.7	NT	0	NE	Full (D+90)	Y	
4	2009	49	None	CSA / MTX	BM	12/12	6.4	7	3.5	Grade II	N	N	Y	
5	2011	44	None	TAC	BM	10/10	2	4.2	3.4	Grade III	Y	N	Y	
6	2012	111	None	CSA	BM	10/10	9	6.8	NT	Grade III	Y	N	N	cGVHD, RSV (D+145)
7	1998	55	rATG/20	CSA / MTX	UCB	6/6	1.5	NT	NT	NE	NE	Full (D+241)	Y	
8	2007	33	Campath/1	CSA	UCB	5/6 (A)	1.3	0.4	NT	NE	NE	Full (D+139)	Y	
9	2010	16	None	CSA / Steroids	UCB	10/10	0.6	0.2	0.9	NE	NE	N	N	Ongoing Resp. Failure (D+9)

^PEG-ADA pre-HCT; TNC, total nucleated cell; rATG, rabbit antithymocyte globulin; hATG, horse ATG; *Fresenius; CSA, cyclosporine; MTX, methotrexate; MMF, mycophenolate mofetil; TAC, tacrolimus; BM, bone marrow; PBSC, peripheral blood stem cells; TCD; T cell depletion; UCB, umbilical cord blood; AIHA, autoimmune hemolytic anemia; ITP, idiopathic thrombocytopenic purpura; RSV, respiratory syncytial virus; NE, not evaluable

SUPPLEMENTARY TABLE Ic: Individual immunologic data at 1 year post URD HCT

Case #	ALC	CD3	CD4	CD8	B cells	NK Cells	CD4 / CD45RA	PHA	IgG	IgM	IgA	On IG
	(x 10 ⁶ /L)								(mg/dL)			
IL2RG SCID												
1	5916	4673	2839	1656	946	297	9%	100%	NT	8	53	Y
2	3365	3161	1632	1394	68	136	NT	NT	671	85	0	Y
3	3354	3250	940	2350	0	40	NT	100%	573	50	7	Y
5	1820	839	401	201	912	36	70%	100%	NT	NT	NT	Y
6	4000	3520	2310	930	330	140	57%	NT	373	34	0	Y
7	2960	2516	1362	770	397	0	94%	100%	870	31	9	Y
8	6300	2604	1241	1250	3602	120	57%	69%	482	31	7	Y
9	1031	979	381	526	0	0	NT	75%	NT	0	0	Y
<i>11</i>	<i>2832</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>N</i>
12	5388	2186	3027	1460	1460	99	68%	NT	540	60	18	Y
13	337	66	21	45	151	120	50%	100%	1283	253	50	N
15	2600	764	402	361	248	52	16%	NT	840	9	0	Y
17	5100	3910	2580	1280	1150	30	60%	NT	501	37	0	Y
18	2560	2120	1410	560	280	80	88%	NT	839	42	45	Y
19	520	460	360	60	30	5	32%	NT	479	0	10	Y
20	490	420	270	80	40	10	24%	NT	929	27	138	Y
ADA SCID												
1	2210	2144	530	1503	22	44	8%	72%	663	N/A	N/A	Y
2	830	NT	NT	NT	NT	NT	NT	NT	301	86	50	N
4	580	540	277	214	28	42	80%	NT	781	29	20	Y
6	640	551	309	192	0	78	55%	100%	410	40	0	Y
7	636	593	272	199	30	10	NT	NT	950	14	4	Y
OTHER SCID												
1	590	421	308	189	11	184	19%	NT	NT	NT	NT	Y
3	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>Y</i>
4	2080	1414	853	541	333	291	NT	85%	NT	34	35	Y
5	4560	3233	2221	857	150	251	32%	NT	1130	46	6	Y
7	<i>1300</i>	<i>623</i>	<i>496</i>	<i>114</i>	<i>13</i>	<i>458</i>	<i>0%</i>	<i>NT</i>	<i>880</i>	<i>7</i>	<i>3</i>	<i>Y</i>
8	<i>520</i>	<i>120</i>	<i>109</i>	<i>21</i>	<i>16</i>	<i>390</i>	<i>NT</i>	<i>3%</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>Y</i>

Bold Italics: After Conditioned 2nd HCT (Not counted in Table IV)

ALC, absolute lymphocyte count; NK, natural killer; PHA, phytohemagglutinin; IG, immunoglobulin; NT, not tested

SUPPLEMENTARY TABLE Id: Individual immunologic data at last follow-up post URD HCT

Case #	ALC	CD3	CD4	CD8	B Cells	NK Cells	CD4 / CD45RA	PHA	IgG	IgM	IgA	On IG	PBMC	CD3	B Cell	Myeloid	Other Complications
	(x 10 ⁶ /L)								(mg/dL)								
IL2RG SCID																	
1	1909	1798	355	1101	111	9	4%	65%	643	38	0	Y	NT	99%	0%	0%	None
2	2928	2249	1059	1069	400	48	43%	100%	8.7	88	0	N	NT	100%	18%	16%	None
3	908	742	314	423	139	22	NT	100%	3820	40	7	N	28%	99%	100%	12%	AIHA, AINutropenia, Bacterial infections, HepB
5	1800	919	362	226	804	29	NT	100%	NA	124	54	Y	4%	NT	NT	NT	None
6	1000	315	144	154	70	40	35%	100%	429	63	24	Y	77%	NT	NT	1%	None
7	2960	2516	1362	770	397	0	94%	100%	870	31	9	Y	41%	97%	9%	5%	None
8	6300	2604	1241	1250	3602	120	57%	69%	482	31	7	Y	NT	100%	NT	0%	None
9	1031	979	381	526	0	0	NT	75%	NT	0	0	Y	74%	NT	NT	NT	FTT
11	2397	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	N	100%	NT	NT	NT	TTP
12	4000	3159	1046	1853	1072	0	71%	NT	820	74	65	Y	78%	100%	2%	0%	None
13	1800	1165	502	569	389	194	NT	100%	1010	135	69	N	100%	100%	100%	100%	None
14	2700	1930	1360	550	460	NT	NT	74	NT	29	7	Y	25%	NT	NT	NT	None
15	2500	764	402	361	248	52	16%	NT	1067	83	0	Y	NT	NT	0%	NT	None
17	10000	3150	1440	1540	700	40	35%	NT	482	82	39	N	71%	NT	NT	31%	None
18	5070	4210	2330	1670	710	100	86%	100%	832	29	32	Y	NT	100%	12%	0%	None
19	2890	2310	1620	580	400	29	77%	100%	NA	60	0	Y	NT	100%	NT	0%	Pneumatisis, NTM bacteremia
20	1150	1070	840	80	3	10	8%	NT	NA	28	14	Y	NT	100%	NT	0%	Vertebral fractures

Case #	ALC	CD3	CD4	CD8	B Cells	NK Cells	CD4 / CD45RA	PHA	IgG	IgM	IgA	On IG	PBMC	CD3	B Cell	Myeloid	Other Complications
	(x 10 ⁶ /L)								(mg/dL)								
ADA SCID																	
1	6140	6017	1105	4851	0	61	8%	72%	884	22	0	Y	6%	98%	35%	1%	CMV
2	1760	1277	408	650	47	363	4%	NT	610	61	76	N	NT	NT	NT	NT	Pneumonitis
4	1570	1328	506	613	137	98	8%	NT	730	55	138	N	NT	96%	91%	14%	Pneumonitis
6	1690	1574	981	353	48	98	41%	NT	870	31	0	Y	NT	95%	NT	0%	Pneumonitis, Nephrotic Syndrome
7	636	593	272	199	30	10	NT	NT	950	14	4	Y	NT	100%	NT	0%	None
OTHER SCID																	
<i>3</i>	<i>2110</i>	<i>1393</i>	<i>781</i>	<i>570</i>	<i>338</i>	<i>338</i>	<i>NT</i>	<i>85%</i>	<i>NT</i>	<i>98</i>	<i>66</i>	<i>N</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>	<i>Seizures</i>
4	12474	10790	6999	3443	1696	274	51%	NT	1970	21	14	N	100%	100%	100%	100%	None
5	525	368	247	63	5	84	0%	NT	NT	NT	NT	Y	NT	NT	NT	NT	None
7	<i>1190</i>	<i>757</i>	<i>467</i>	<i>201</i>	<i>257</i>	<i>127</i>	<i>12%</i>	<i>NT</i>	<i>1430</i>	<i>30</i>	<i>88</i>	<i>Y</i>	<i>56%</i>	<i>NT</i>	<i>NT</i>	<i>6%</i>	<i>None</i>
8	<i>4360</i>	<i>2566</i>	<i>1846</i>	<i>634</i>	<i>189</i>	<i>156</i>	<i>75%</i>	<i>100%</i>	<i>NT</i>	<i>0</i>	<i>0</i>	<i>Y</i>	<i>100%</i>	<i>NT</i>	<i>NT</i>	<i>NT</i>	<i>None</i>

Bold Italics: After Conditioned 2nd HCT (Not counted in Table IV)

ALC, absolute lymphocyte count; NK, natural killer; PHA, phytohemagglutinin; IG, immunoglobulin; AIHA, autoimmune hemolytic anemia; AI, autoimmune; FTT, failure to thrive; TTP, thrombotic thrombocytopenic purpura; NTM, non-tuberculous mycobacteria; CMV, cytomegalovirus; NT, not tested

SUPPLEMENTARY TABLE IIa: Individual characteristics at time of diagnosis of SCID for patients undergoing MSD HCT

Case #	Gender	Age (days)	Race / Ethnicity	ALC	CD3	CD4	CD8	B Cells	NK Cells	PHA	IgG	IgM	IgA	TME	Diagnostic Trigger	Mutation
				(x 10 ⁶ /L)							(mg/dL)					
IL2RG & JAK3 SCID																
1	M	57	Caucasian	1656	34	23	11	1424	30	2%	850	0	0	0%	Family History	p.Glu109
2	M	5	Caucasian	800	16	16	0	336	24	NT	710	80	0	0%	Family History	c.676C>T
3	M	242	Caucasian	2496	20	15	5	2172	17	0%	460	0	0	0%	Rota	NR
4	M	0	Caucasian	NR	0	0	0	NR	NR	0%	NR	NR	NR	0%	Family History	NR
5	M	90	Caucasian	1530	245	15	153	1193	8	0%	NR	NR	NR	+	HSV, PNA	NR
6	M	209	Caucasian	930	37	9	9	865	0	0%	572	14	7	NT	RSV, Paraflu, S. aureus sepsis	NR
7	M	186	Caucasian	1410	8	8	0	1120	20	0%	362	109	14	+	Skin Abscesses, GVHD	p.S225R
8	M	130	African	1938	504	17	165	1345	215	11%	18	22	116	+	Paraflu, GVHD	c.691G>A
9	M	30	African	2301	449	46	318	1719	21	2%	225	0	0	+	Enterovirus	c.269del7
10	M	209	Caucasian	1610	0	0	0	1562	0	NT	NR	NR	NR	0%	PNA	NR
11	M	209	Caucasian	NR	NR	NR	NR	NR	NR	NT	NR	NR	NR	+	Paraflu, Thrush	NR
12	M	0	Caucasian	1880	130	10	150	850	60	NT	NR	NR	NR	0%	Family History	NR
13	M	414	Hispanic	1763	10	5	5	1739	14	1%	7	61	0	NT	Aspergillus, Enterococcus	c.806del23
14	M	158	Asian	1224	12	0	0	1187	0	0%	426	36	7	0%	RSV, Enterobacter PNA	c.633A>T
15	M	60	Asian	620	0	0	0	560	20	0%	NR	NR	NR	0%	CMV, Thrush	NR
16	M	134	Caribbean	3000	650	50	490	1780	130	NT	0	0	0	100%	PNA	c.215G>A
17	M	198	Caucasian	486	13	12	0	361	87	NT	40	0	0	0%	hMPV, Noro	c.437T>C
18	M	0	Caucasian	726	0	0	0	0	30	NT	90	0	0	0%	Family History	NR
19	M	0	Caucasian	1067	14	11	0	990	53	NT	730	18	0	0%	Family History	Exon 3 IVs3+1G>C
20	M	162	Caucasian	2784	0	0	0	2728	28	NT	790	26	0	0%	PCP	c.545G>A
21	F	106	Caucasian	915	146	82	46	613	101	NT	0	128	0	0%	CMV, PCP	JAK3; NR
22	F	106	Caucasian	1730	13	13	0	1249	13	NT	0	0	0	0%	PCP, Vaccine Polio	JAK3; NR
23	M	202	Asian	3102	40	30	0	3015	43	NT	1100	0	0	1%	PCP, Rota, BCG	JAK3; NR

Case #	Gender	Age (days)	Race / Ethnicity	ALC	CD3	CD4	CD8	B Cells	NK Cells	PHA	IgG	IgM	IgA	TME	Diagnostic Trigger	Mutation
				(x 10 ⁶ /L)							(mg/dL)					
ADA SCID																
1	F	9	Asian	NR	NR	NR	NR	NR	52	NT	NR	NR	NR	0%	Family History	NR
2	M	30	Asian	350	67	4	63	7	147	0%	NR	NR	NR	0%		NR
3	M	34	Asian	200	158	134	24	10	26	NT	NR	NR	NR	0%	PNA	NR
4	F	60	African	410	70	33	37	25	45	0%	NR	NR	NR	0%		NR
5	M	30	Caucasian	1540	92	15	77	1201	185	0%	NR	NR	NR	0%		NR
6	M	383	Hispanic	300	60	10	50	20	10	0%	406	11	NT	NT	Candidemia, PCP, CMV	NR, Level = 0
7	M	20	Caucasian	30	5	5	2	8	9	0%	381	40	0	0%	Int. Pneumonitis	NR, Level = 0
8	F	0	Asian	170	6	4	0	3	132	0%	332	0	0	0%	Family History	NR, Level = 0
9	F	74	Caucasian	369	4	0	0	15	339	0%	168	10	0	0%	ParvoB19, H. Flu	NR, Level = 0
10	F	63	Caucasian	660	455	59	172	26	60	0%	NR	NR	NR	+		NR
11	F	48	Caucasian	640	13	1	5	13	115	NT	NR	NR	NR	0%	CMV Pneumonitis	NR
12	F	21	Caucasian	110	NR	NR	NR	NR	NR	NR	NR	NR	NR	0%		NR
13	F	31	Caucasian	200	10	0	0	NT	NT	NT	417	3	5	NT	Pseudomonas	NR, Level = 0
14	M	49	Middle Eastern	378	8	2	4	4	102	NT	218	7	0	0%	RSV, Rota	c.164_172del9
15	M	28	African	470	10	10	0	30	340	0%	NR	NR	NR	0%	Cytopenias, Rash	NR
16	M	20	Asian	0	0	0	0	0	0	NT	NR	NR	NR	0%	PNA	NR
17	M	34	Asian	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0%	PNA	NR, Level = 0
18	M	490	Middle Eastern	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0%	PNA	NR, Level = 0
19	M	88	Caucasian	300	240	60	170	30	30	0%	1570	85	37	0%	Skin Abscesses	NR, Level = 0
20	F	194	African	200	140	120	40	10	30	NT	NR	NR	NR	0%	PNA	NR
21	F	165	African	30	2	1	5	8	8	0%	NT	0	0	NT	Paraflu, Rota	NR, Level = 0
22	F	122	Caucasian	41	0	0	0	0	36	NT	820	0	0	0%	RSV, BCG	c.648G>A
23	F	18	Caucasian	190	12	9	2	4	168	0%	NT	NT	NT	0%	Int. Pneumonitis	c.646G>A

Case #	Gender	Age (days)	Race / Ethnicity	ALC	CD3	CD4	CD8	B Cells	NK Cells	PHA	IgG	IgM	IgA	TME	Diagnostic Trigger	Mutation
				(x 10 ⁶ /L)							(mg/dL)					
Other SCID																
1	M	0	Hispanic	147	0	0	0	0	144	0%	170	18	26	0%	Family History	Artemis; c.326C>T
2	M	0	Native American	500	0	0	0	0	500	0%	NT	NT	NT	0%	Family History	Artemis; c.597C>A
3	M	76	Native American	2574	283	219	64	52	2239	0%	100	0	0	14%	GVHD	Artemis; c.597C>A
4	M	367	Hispanic	759	457	125	332	7	240	NT	361	40	284	+	Aspergillosis, Pseudomonas	RAG2; c.217C>T
5	F	101	Asian	16054	8076	2935	5079	0	7848	NT	0	9	0	+	CMV, ParaFlu3, BCG	Artemis; NR
6	M	156	Asian	1324	0	0	0	0	1324	0%	89	9	0	0%	Paraflu3, BCG	RAG1; c.2146C>T
7	M	147	Asian	1120	4	4	0	2	960	NT	NR	NR	NR	NT	PNA, Thrush	RAG1; NR
8	M	194	Middle Eastern	1634	392	180	180	0	1095	NT	93	0	0	0%	RSV, H. flu	RAG1; g.1455C>T
9	M	0	Caucasian	690	18	16	2	2	667	0%	NT	0	NT	0%	Family History	RAG1; c.1303A>G
10	M	0	Asian	950	304	133	152	38	504	NT	NR	NR	NR	0%	Family History	RAG1; NR
11	F	63	Caucasian	38	7	7	0	26	5	0%	190	NT	NT	+	CMV	Artemis: Exon1del + Exons1-3del
12	F	141	Middle Eastern	1000	0	0	0	0	980	0%	490	0	0	0%	PCP	Unknown
13	M	150	Caucasian	400	90	47	47	20	300	NT	220	42	25	75%	Diarrhea	Unknown
14	F	125	Caucasian	360	133	86	32	58	166	0%	NR	NR	NR	+	NR	Unknown
15	M	110	Caucasian	140	34	25	9	46	57	1%	179	8	287	NT	Family History	Unknown
16	M	851	Middle Eastern	1376	248	179	69	757	248	60%	NT	7	0	0%	Enterovirus, BCG, Crypto	Unknown
17	F	106	Asian	390	70	60	10	120	250	0%	NR	NR	NR	0%	FluA, Rota	Unknown
18	M	6	Asian	2610	310	210	30	1440	780	0%	NR	NR	NR	+	Family History	Unknown
19	M	510	Middle Eastern	2401	432	120	192	624	1200	8%	NT	36	13	0%	Bronchitis	Unknown
20	F	15	Asian	1630	410	310	70	330	820	0%	NR	NR	NR	NT	Family History, Omenn	Unknown

ADA, adenosine deaminase; ALC, absolute lymphocyte count; NK, Natural Killer; PHA, phytohemagglutinin; TME, transplacental maternal engraftment; HSV, herpes simplex virus; PCP, Pneumocystis jiroveci; PNA, pneumonia; VZV, varicella zoster virus; RSV, respiratory syncytial virus; CMV, cytomegalovirus; NT, not tested; NR, not reported

SUPPLEMENTARY TABLE IIb: Individual HCT characteristics for patients undergoing MSD HCT

Case #	Year of HCT	Days from diagnosis	Serotherapy dose (mg/kg)	GVHD Prophylaxis	Source	Matching	TNC (x 10 ⁸ /kg)	CD34 (x 10 ⁶ /kg)	CD3 (x 10 ⁷ /kg)	aGVHD	cGVHD	2nd HCT	Alive	Cause of Death
IL2RG & JAK3 SCID														
1	1993	3	None	None	BM	6/6	10.7	NT	NT	0	N	N	Y	
2	1994	11	None	None	BM	8/8	9	NT	NT	Grade I	N	N	Y	
3	1995	36	None	None	BM	8/8	3.3	NT	NT	Grade II	N	N	Y	
4	1998	1	None	None	BM	6/6	3.5	4.9	0.1	0	N	N	Y	
5	2000	153	None	None	BM	6/6	NT	NT	NT	Grade I	N	N	Y	
6	2000	43	None	CSA/Steroids	UCB	6/6	10.3	5.4	NT	Grade I	N	N	Y	
7	2001	23	None	None	BM	10/10	4.9	10.7	0.5	Grade II	N	N	Y	
8	2001	14	None	TCD	BM	8/8	2.2	8.2	0.3	0	N	N	Y	
9	2002	30	None	TCD	BM	10/10	14	13	0.5	0	N	N	Y	
10	2002	17	None	None	BM	6/6	NT	10.7	3.8	Grade II	N	N	Y	
11	2002	17	None	None	BM	6/6	NT	9.8	3.5	0	N	N	Y	
12	2003	15	None	None	BM	6/6	NT	11.4	9.5	0	N	N	Y	
13	2004	16	None	TCD	BM	10/10	8	4.6	1.8	Grade II	N	N	Y	
14	2004	24	None	None	UCB	5/6 (A)	23.2	9.7	NT	Grade III	Y	N	N	cGVHD & RSV (Day +362)
15	2007	55	None	None	BM	6/6	7.5	8.4	7	Grade III	Y	N	Y	
16	2009	74	None	None	BM	10/10	4	3.3	NT	0	N	N	Y	
17	2009	20	None	TCD	BM	12/12	6.3	6.5	8.8	0	N	N	Y	
18	2010	17	None	CSA	BM	12/12	5	7.1	1.7	0	N	N	Y	
19	2012	34	None	CSA	BM	11/12 (DP)	2.6	9.3	5.5	Grade II	N	N	Y	
20	2012	18	None	None	BM	10/10	5.4	16.3	6.5	NE	NE	Full (D+23)	Y	
21	1996	61	None	None	BM	10/10	4.9	NT	NT	Grade I	N	N	Y	
22	1996	61	None	None	BM	6/6	5.1	NT	NT	Grade II	N	N	Y	
23	2009	47	None	None	BM	10/10	2.4	7.7	0.2	0	N	N	N	Probable Sepsis (Day +928)

Case #	Year of HCT	Days from diagnosis	Serotherapy dose (mg/kg)	GVHD Prophylaxis	Source	Matching	TNC (x 10 ⁸ /kg)	CD34 (x 10 ⁶ /kg)	CD3 (x 10 ⁷ /kg)	aGVHD	cGVHD	2nd HCT	Alive	Cause of Death
ADA SCID														
1	1993	14	None	None	BM	6/6	NT	NT	NT	0	N	N	Y	
2	1994	86	None	None	BM	6/6	NT	NT	NT	0	NE	N	N	Metabolic (Day+96)
3	1994	14	None	None	BM	6/6	NT	NT	NT	0	N	N	Y	
4	1995	121 [^]	None	None	BM	6/6	NT	NT	NT	0	N	N	Y	
5	1996	195 [^]	None	None	BM	6/6	NT	NT	NT	0	N	N	Y	
6	1998	386 [^]	None	CSA	BM	6/6	5	NT	NT	0	N	N	Y	
7	1998	19	None	None	BM	10/10	10	NT	NT	Grade II	N	N	Y	
8	1999	32	None	None	BM	10/10	5	NT	NT	0	N	N	Y	
9	1999	12	None	None	BM	10/10	6.8	11.4	8.3	Grade I	N	N	Y	
10	1999	24	None	None	BM	6/6	NT	NT	NT	0	N	N	Y	
11	2001	15	None	None	BM	6/6	NT	NT	NT	NE	NE	NA	N	CMV (Day +16)
12	2002	26 [^]	None	CSA	BM	6/6	NT	NT	NT	Grade III	N	N	Y	
13	2002	30	None	None	BM	10/10	2	2.92	1	Grade I	N	Full (D+2310)	Y	
14	2002	18	None	None	BM	8/8	12.6	5	NT	0	N	N	Y	
15	2004	45	None	None	BM	10/10	NT	NT	NT	Grade II	N	N	Y	
16	2006	21	None	None	BM	10/10	NT	NT	NT	Grade II	N	Boost (D+343)	Y	
17	2006	65	None	CSA	BM	10/10	NT	NT	NT	0	N	N	Y	
18	2007	30	None	None	BM	10/10	NT	NT	NT	0	N	N	Y	
19	2007	38	None	None	BM	10/10	6.2	2.5	NT	0	N	Boost (D+237)	Y	
20	2008	279 [^]	None	CSA	BM	10/10	NT	NT	NT	0	N	Boost (D+211)	Y	
21	2009	30	None	None	BM	10/10	4.4	NT	NT	Grade I	N	N	Y	
22	2010	37 [^]	None	CSA	BM	12/12	5.6	7.2	2.4	Grade II	N	N	Y	
23	2011	37 [^]	None	CSA	BM	12/12	3	10	3.1	0	N	N	Y	

Case #	Year of HCT	Days from diagnosis	Serotherapy dose (mg/kg)	GVHD Prophylaxis	Source	Matching	TNC (x 10 ⁸ /kg)	CD34 (x 10 ⁶ /kg)	CD3 (x 10 ⁷ /kg)	aGVHD	cGVHD	2nd HCT	Alive	Cause of Death
Other SCID														
1	1998	13	None	CSA/MTX	BM	6/6	11.8	NT	NT	0	N	N	Y	
2	1998	17	None	CSA/MTX	BM	6/6	7.3	NT	NT	0	N	N	Y	
3	1999	19	None	CSA/Steroids	BM	6/6	6	NT	NT	0	N	N	Y	
4	2002	12	None	TCD	BM	8/8	0.7	0.8	0.02	0	Y	Boost (D+586)	Y	
5	2002	35	None	CSA	BM	12/12	12	16	31.7	0	N	N	Y	
6	2004	20	None	None	BM	10/10	7.2	5.6	29	0	N	N	Y	
7	2005	29	None	None	BM	10/10	6.9	14.8	NT	0	N	Boost (D+2311)	Y	
8	2006	87	None	CSA	BM	5/6 (A)	4.4	NT	NT	0	NE	Full (D+89)	Y	
9	2007	15	None	CSA/MTX	BM	10/10	7.5	29.1	9	0	N	N	Y	
10	2010	41	None	None	BM	10/10	8.6	18.4	4.4	0	N	Full (D+837)	N	Unknown (Day +1002)
11	2011	64	Campath/1.2	None	BM	10/10	1.4	8.3	1.12	0	N	Boost (D+71)	Y	
12	1998	25	None	None	BM	6/6	NT	7.3	NT	0	N	N	Y	
13	1998	56	None	CSA/MTX	BM	6/6	2	NT	NT	0	N	N	Y	
14	2000	12	None	CSA	BM	6/6	NT	NT	NT	0	N	N	Y	
15	2000	18	hATG/90	CSA	BM	6/6	6.9	9.9	NT	0	N	N	Y	
16	2002	1389	None	None	BM	8/8	10	NT	NT	0	N	N	Y	
17	2004	40	None	CSA/MMF	BM	10/10	NT	3.6	11.8	0	N	N	Y	
18	2005	47	None	None	BM	10/10	NT	NT	NT	Grade II	N	N	N	Unknown (Day +1916)
19	2006	160	None	None	BM	10/10	1.8	NT	NT	0	N	N	Y	
20	2010	60	None	CSA	BM	10/10	NT	8.5	5.6	0	N	N	Y	

[^]PEG-ADA pre-HCT; TNC, total nucleated cell; rATG, rabbit antithymocyte globulin; hATG, horse ATG; *Fresenius; CSA, cyclosporine; MTX, methotrexate; MMF, mycophenolate mofetil; TCD, T cell depletion; BM, bone marrow; UCB, umbilical cord blood; CMV, cytomegalovirus; NE, not evaluable

SUPPLEMENTARY TABLE IIc: Individual immunologic data at 1 year post MSD HCT

Case #	ALC	CD3	CD4	CD8	B Cells	NK Cells	CD4 / CD45RA	PHA	IgG	IgM	IgA	On IG
	(x 10 ⁶ /L)								(mg/dL)			
IL2RG & JAK3 SCID												
1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NR
2	6142	4361	2580	1167	1536	553	NT	NT	610	40	10	N
3	4736	3078	2179	758	1373	142	NT	NT	300	61	51	N
4	NR	4140	1783	NR	NR	NR	NR	NR	NR	NR	NR	N
5	NR	3040	1820	NR	NR	NR	NR	NR	NR	NR	NR	N
6	2335	1751	1191	444	537	47	NT	8%	NT	29	7	Y
7	4720	2440	1460	850	2020	210	NT	100%	550	28	0	Y
8	6180	3955	2559	1267	2126	80	78%	99%	514	103	114	N
9	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NR
10	5690	3700	2110	1480	1710	170	NR	NR	NR	NR	NR	N
11	7270	4940	2620	2250	1890	220	NR	NR	NR	NR	NR	N
12	5480	4270	1750	2300	1100	50	NR	NR	NR	NR	NR	N
13	4248	3428	2014	1160	599	115	55%	59%	605	67	9	N
15	2810	2390	1210	1180	30	280	NR	NR	NR	NR	NR	N
16	5600	3500	1600	1600	1200	170	75%	NT	580	85	34	N
17	6100	3390	1646	1451	2571	93	21%	NT	1150	22	13	Y
18	2390	1769	921	824	561	47	33%	NT	820	27	12	Y
19	2200	1981	1083	793	83	52	42%	NT	600	7	4	Y
20	5375	2956	1827	1075	2150	161	74%	NT	610	72	17	N
21	10449	9287	2653	6302	1879	221	17%	NT	1750	116	21	N
22	4736	3680	1766	2012	834	392	20%	NT	1380	128	97	N
23	2456	1966	1025	889	423	57	26%	NT	870	68	44	Y

Case #	ALC	CD3	CD4	CD8	B Cells	NK Cells	CD4 / CD45RA	PHA	IgG	IgM	IgA	On IG
	(x 10 ⁶ /L)								(mg/dL)			
ADA SCID												
1	NR	1008	405	NR	NR	NR	NR	NR	NR	NR	NR	N
3	NR	1659	NR	NR	NR	NR	NR	NR	NR	NR	NR	N
4	NR	1279	570	NR	NR	NR	NR	NR	NR	NR	NR	N
5	NR	2030	577	NR	NR	NR	NR	NR	NR	NR	NR	N
6	1780	1246	463	694	249	231	NT	100%	NT	99	14	N
7	2000	1274	404	626	14	97	NT	NT	1050	30	0	Y
8	1960	1814	716	1114	144	82	NT	NT	800	101	45	N
9	2582	1764	593	958	333	358	NT	NT	397	33	17	N
10	NR	2360	368	NR	NR	NR	NR	NR	NR	NR	NR	N
12	NR	760	240	NR	NR	NR	NR	NR	NR	NR	NR	N
13	400	364	132	214	9	20	7%	NT	893	36	25	Y
14	1824	985	383	474	73	602	22%	58%	520	52	14	N
15	620	500	250	240	40	20	NR	NR	NR	NR	NR	N
16	810	640	280	370	30	40	NR	NR	NR	NR	NR	N
17	NR	730	330	NR	NR	NR	NR	NR	NR	NR	NR	N
18	NR	2500	1330	NR	NR	NR	NR	NR	NR	NR	NR	N
19	800	730	460	250	50	20	NT	NT	721	24	15	Y
20	620	520	240	240	30	10	NR	NR	NR	NR	NR	N
21	864	597	280	257	106	84	20%	76%	793	133	31	N
22	974	772	510	194	157	30	3%	NT	810	0	23	Y
23	2322	2256	1214	851	47	0	NT	NT	890	13	0	Y

Case #	ALC	CD3	CD4	CD8	B Cells	NK Cells	CD4 / CD45RA	PHA	IgG	IgM	IgA	On IG
	(x 10 ⁶ /L)								(mg/dL)			
Other SCID												
1	1560	744	450	248	0	682	NT	100%	NT	29	45	Y
2	470	244	103	141	5	174	NT	46%	NT	11	0	Y
3	488	326	189	122	4	158	NT	31%	NT	NT	NT	Y
4	468	27	17	8	0	400	NT	49%	NT	8	115	Y
5	9043	8157	1559	6646	0	804	1%	NT	843	11	16	Y
6	936	743	278	348	0	187	4%	100%	854	17	14	Y
7	NR	160	80	NR	NR	NR	NR	NR	NR	NR	NR	Y
8	4180	1463	502	794	2132	543	39%	43%	800	91	67	N
9	590	354	136	212	12	207	NT	31%	NT	21	NT	Y
10	480	250	100	50	0	230	NR	NR	NR	NR	NR	NR
11	NT	NT	NT	NT	747	NT	NT	NT	NT	NT	NT	N
12	1500	1020	290	770	30	470	NT	NT	644	44	23	N
13	600	490	330	140	0	90	NT	NT	720	49	0	Y
14	NR	2250	1460	NR	NR	NR	NR	NR	NR	NR	NR	N
15	2835	NT	NT	NT	NT	NT	NT	NT	372	59	85	N
16	1558	997	374	608	374	125	12%	16%	1010	26	32	N
17	2630	2000	950	1000	260	290	NR	NR	NR	NR	NR	N
18	NR	1800	520	NR	NR	NR	NR	NR	NR	NR	NR	NR
19	7700	5698	3773	1309	1155	616	82%	97%	960	191	282	N
20	2170	1320	630	520	330	350	NR	NR	NR	NR	NR	N

Bold Italics: After Conditioned 2nd HCT (Not counted in Table IV)

ALC, absolute lymphocyte count; NK, natural killer; PHA, phytohemagglutinin; IG, immunoglobulin; NT, not tested

SUPPLEMENTARY TABLE IId: Individual immunologic data at last follow-up post MSD HCT

Case #	ALC	CD3	CD4	CD8	B Cells	NK Cells	CD4 / CD45RA	PHA	IgG	IgM	IgA	On IG	PBMC	CD3	B Cell	Myeloid	Other Complications
	(x 10 ⁶ /L)								(mg/dL)				Chimerism				
IL2RG SCID																	
1	3172	2632	1586	856	347	95	70%	NT	1540	200	170	N	NT	NT	NT	NT	Warts
2	3608	2417	1335	938	1010	0	54%	66%	470	26	80	N	NT	100%	NT	0%	None
3	2162	1578	713	735	454	65	65%	100%	740	51	89	N	NT	NT	NT	NT	None
4	NT	1650	470	NR	NR	NR	NR	100%	NR	NR	NR	N	52%	NR	NR	NR	Warts
5	2710	2220	1270	NR	330	80	NR	100%	NR	NR	NR	N	34%	100%	5%	0%	None
6	2700	1930	1360	550	460	0	NT	74%	NT	29	7	Y	NT	NT	NT	NT	None
7	2383	1890	1113	727	419	62	NT	100%	921	107	169	N	5%	99%	6%	NT	BCG, Immune Pancytopenia
8	3750	3116	1616	1297	589	128	67%	100%	1080	95	206	N	NT	NT	11%	NT	Transaminitis
9	1520	1190	458	468	248	33	73%	100%	743	57	155	N	NT	NT	29%	NT	None
10	2200	1690	700	NR	350	90	NR	100%	NR	NR	NR	N	33%	100%	0%	0%	None
11	2250	1600	540	NR	450	140	NR	100%	NR	NR	NR	N	44%	100%	0%	0%	NR
12	2840	2240	850	NR	430	NR	NR	100%	NR	NR	NR	N	67%	100%	0%	0%	None
13	4950	4069	1752	1284	822	149	73%	100%	604	41	6	N	NT	NT	18%	NT	Transaminitis
15	3590	2960	1500	NR	790	160	NR	NR	NR	NR	NR	N	30%	100%	18%	NR	None
16	6000	4300	1800	2100	1200	380	80%	NT	810	190	60	N	64%	NT	NT	3%	None
17	5266	3650	1837	1358	1566	0	28%	NT	920	33	27	Y	NT	99%	4%	1%	None
18	2977	1901	836	1026	989	37	16%	NT	770	33	41	Y	NT	94%	0%	0%	None
19	2200	1981	1083	793	83	52	42%	NT	600	7	4	Y	NT	100%	NT	0%	CMV Pneumonitis
20	5375	2956	1827	1075	2150	161	74%	NT	610	72	17	N	100%	100%	100%	100%	None
21	10449	9287	2653	6302	1879	221	17%	NT	1750	116	21	N	50%	90%	10%	50%	Engraftment Syndrome
22	4736	3680	1766	2012	834	392	20%	NT	1380	128	97	N	NT	80%	10%	10%	Engraftment Syndrome

Case #	ALC	CD3	CD4	CD8	B Cells	NK Cells	CD4 / CD45RA	PHA	IgG	IgM	IgA	On IG	PBMC	CD3	B Cell	Myeloid	Other Complications
	(x 10 ⁶ /L)								(mg/dL)				Chimerism				
ADA SCID																	
1	NR	NR	1452	1280	NR	33	NR	NR	NR	NR	NR	N	14%	NR	NR	NR	None
3	NR	2760	1630	1050	580	470	NR	100%	NR	NR	NR	N	45%	100%		34%	NR
4	NR	2140	1630	660	110	340	NR	100%	NR	NR	NR	N	60%	NR	NR	NR	NR
5	NR	4440	3330	2040	750	220	NR	100%	NR	NR	NR	N	23%	100%	54%	0%	NR
6	2150	1613	796	774	194	301	NT	NT	NT	99	14	N	53%	88%	82%	22%	None
7	2169	1886	803	831	213	45	13%	NT	670	61	115	N	NT	92%	60%	10%	None
8	1847	1547	944	493	152	111	2%	NT	890	142	111	N	NT	88%	26%	3%	None
9	2582	1764	593	958	333	358	NT	NT	397	33	17	N	NT	NT	NT	NT	Neurologic Damage
10	NR	2000	1600	740	180	100	NR	100%	NR	NR	NR	N	18%	95%	30%	24%	NR
12	NR	1720	1320	600	190	150	NR	NT	NR	NR	NR	N	32%	100%	59%	0%	NR
13	700	646	273	329	28	21	3%	NT	894	18	44	N	NT	NT	NT	NT	None
14	2440	1171	512	561	122	1025	13%	46%	670	49	27	N	NT	100%	NT	0%	None
15	NR	1380	1190	510	100	10	NR	NT	NR	NR	NR	N	33%	100%	5%	0%	Hearing Loss
16	NR	1370	990	NR	NR	NR	NR	NR	NR	NR	NR	N	NR	100%	0%	0%	NR
17	NR	600	1140	NR	NR	NR	NR	NR	NR	NR	NR	N	NR	100%	NR	NR	NR
18	NR	2390	1240	NR	NR	NR	NR	NR	NR	NR	NR	N	NR	84%	NR	5%	None
19	4300	3830	1420	1720	220	220	NT	NT	667	32	66	N	NT	89%	35%	0%	Seizures
20	NR	1190	330	NR	NR	NR	NR	NR	NR	NR	NR	N	NR	100%	NR	0%	None
21	754	578	298	170	94	54	17%	100%	855	113	51	N	NT	NT	NT	NT	None
22	794	723	368	220	36	27	6%	NT	470	16	30	Y	NT	100%	0%	0%	HCM
23	2572	2459	980	936	78	0	16%	NT	1060	17	0	Y	NT	100%	NT	0%	None

Case #	ALC	CD3	CD4	CD8	B Cells	NK Cells	CD4 / CD45RA	PHA	IgG	IgM	IgA	On IG	PBMC	CD3	B Cell	Myeloid	Other Complications
	(x 10 ⁶ /L)								(mg/dL)								
Other SCID																	
1	2360	1864	1109	755	0	472	3%	95%	812	NT	NT	Y	8%	98%	NT	1%	Chronic Lung Disease
2	1940	1397	407	989	0	524	NT	47%	NT	7	11	Y	28%	96%	NT	1%	None
3	540	439	248	140	4	81	NT	61%	NT	NT	NT	Y	6%	92%	7%	0%	None
4	720	559	305	294	1	37	5%	86%	NT	0	0	Y	NT	NT	NT	NT	None
5	2073	1939	906	1026	0	128	3%	NT	1310	0	7	Y	NT	94%	NT	0%	None
6	1051	861	492	255	18	161	3%	NT	1140	18	82	Y	NT	97%	0%	0%	None
7	NR	230	140	NR	NR	NR	NR	NR	NR	NR	NR	Y	NR	100%	NR	0%	NR
8	3096	2198	1300	867	279	681	18%	100%	860	65	81	N	100%	100%	100%	100%	Chronic Lung Disease
9	610	403	146	256	13	115	20%	77%	644	56	66	N	9%	90%	58%	1%	None
11	3132	2606	1431	955	395	113	36%	100%	1370	31	33	N	NT	100%	100%	63%	None
12	1000	480	230	220	170	340	NT	NT	1150	40	125	N	NT	98%	81%	NT	None
13	1197	728	410	278	87	387	52%	NT	1270	72	NT	N	37%	NT	NT	6%	Hypothyroidism
14	1510	1250	690	NR	170	50	NR	NR	NR	NR	NR	N	35%	42%	NR	19%	NR
15	1200	1140	288	588	24	24	16%	NT	375	48	133	N	NT	99%	57%	NT	None
16	1081	768	432	313	216	65	4%	58%	1120	34	153	N	NT	95%	NT	2%	EBV PTLD
17	1960	1650	900	NR	140	100	NR	100%	NR	NR	NR	N	52%	100%	NR	0%	NR
19	3216	2508	1640	772	418	225	71%	100%	920	138	183	N	NT	100%	NT	0%	None
20	NR	1890	820	NR	NR	NR	NR	NR	NR	NR	NR	N	NR	100%	NR	NR	None

Bold Italics: After Conditioned 2nd HCT (Not counted in Table IV)

ALC, absolute lymphocyte count; NK, natural killer; PHA, phytohemagglutinin; IG, immunoglobulin; AIHA, autoimmune hemolytic anemia; AI, autoimmune; FTT, failure to thrive; CMV, cytomegalovirus; EBV, Epstein-Barr virus; NT, not tested

SUPPLEMENTARY TABLE III: Additional Analysis of Risk for Grade \geq II Acute GVHD

	MSD	P value	URD	P value
Year of HCT				
Before Median	15% (5/34)		53% (9/17)	
After Median	31% (9/29)	0.14	47% (8/17)	1
Known HLA-Mismatches				
Yes	100% (2/2)		75% (3/4)	
No	20% (12/61)	0.05	47% (14/30)	0.6
# of anti-GVHD Agents (non-ATG)				
None	26% (10/39)	0.36	100% (1/1)	1
One	25% (3/12)	1	38% (5/12)	0.72
Two	0% (0/7)	0.33	50% (8/16)	1
Three	NA		50% (1/2)	1
Ex vivo TCD	20% (1/5)	1	67% (2/3)	1

ATG, anti-thymocyte globulin; TCD, T-cell depletion