

Supplementary information for Wu et al T cell repertoire post ASCT in sJIA

Supplementary Tables

Supplementary Table S1. Primer Sequences.

Primer	Sequence 5' - 3'	Primer	Sequence 5' - 3'
Cb RV	GGGTGTGGGAGATCTCTGC	Vb13a FW	GGTATCGACAAGACCCAGGCA
Cb 5'FAM RV	ACACAGCAGCCTCGGGTGGG	Vb13b FW	AGGCTCATCCATTATTCAAATAC
Vb1 FW	CCGCACAACAGTTCCCTGACTTGC	Vb14 FW	GGGCTGGGCTTAAGGCAGATCTAC
Vb2 FW	CACAACTATGTTTTGGTATCGTC	Vb15 FW	CAGGCACAGGCTAAATTCTCCCTG
Vb3 FW	CGCTTCTCCCTGATTCTGGAGTCC	Vb16 FW	GCCTGCAGAACTGGAGATTCTGG
Vb4 FW	TTCCCATCAGCCGCCCAAACCTAA	Vb17 FW	TCCTCTCACTGTGACATCGGCCCA
Vb5 FW	GATCAAAACGAGAGGACAGC	Vb18 FW	CTGCTGAATTTCCCAAAGAGGGCC
Vb6a FW	GATCCAATTTTCAGGTCATACTG	Vb20 FW	TGCCCCAGAATCTCTCAGCCTCCA
Vb6b FW	1:1 mixture of: CAGGGSCCAGAGTTTCTGAC CAGCTGCGAGAGTTTCTGAC	Vb21 FW	GGAGTAGACTCCACTCTCAAG
Vb7 FW	CCTGAATGCCCAACAGCTCT	Vb22 FW	GATCCGGTCCACAAAGCTGG
Vb8 FW	GGTACAGACAGACCATGATGC	Vb23 FW	ATTCTGAACTGAACATGAGCTCCT
Vb9 FW	TTCCCTGGAGCTTGGTGA CTCTGC	Vb24 FW	GACATCCGCTCACCAGGCCTG
Vb11 FW	GTCAACAGTCTCCAGAATAAGG	M13 FW	GTAAAACGACGGCCAG
Vb12 FW	TCCYCCTCACTCTGGAGTC	M13 RV	CAGGAAACAGCTATGAC

Cb: constant region of the T cell receptor beta chain; Vb: variable region of the T cell receptor beta chain; 5'FAM: 5'FAM labeled primer; RV: reverse; FW: forward; S: represents C or G; Y: represents C or T.

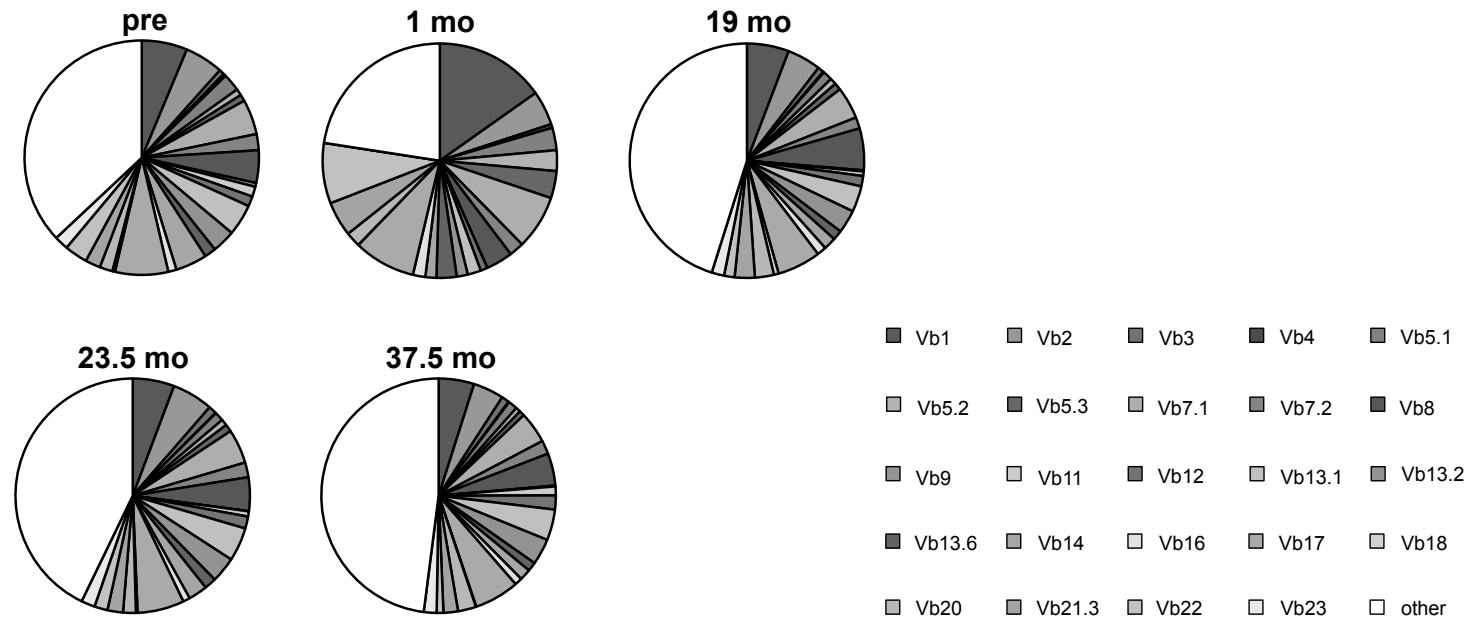
Supplementary Table S2. Absolute cell counts for patient 1.

	full blood count			Lymphocyte subsets			
	white blood cell count [x 10 ⁹ cells/L]	neutrophil count [x 10 ⁹ cells/L (%)] 1.5-8	lymphocyte count [x 10 ⁹ cells/L (%)] 1.5-7	CD19+ [x 10 ⁹ cells/L (%)] 0.2-1.6 (10-31)	CD3+ [x 10 ⁹ cells/L (%)] 0.7-4.2 (55-78)	CD3+ CD4+ [x 10 ⁹ cells/L (%)] 0.3-2.0 (27-53)	CD3+ CD8+ [x 10 ⁹ cells/L (%)] 0.3-1.8 (19-34)
normal range*:	5-15						
1 mo pre	6.82	3.41 (50)	2.73 (40)	N/D	N/D	N/D	N/D
at transplant	2.9	2.7 (93)	0.03 (1)	N/D	N/D	N/D	N/D
1 mo post	4.33	2.21 (51)	1.34 (31)	0.01 (1)	0.98 (73)	0.20 (15)	0.83 (62)
1 yr post	7.66	3.63 (47.3)	2.88 (37.6)	0.75 (26)	1.58 (55)	0.69 (24)	0.86 (30)
2 yr post	6.82	3.62 (53)	2.22 (32.6)	0.64 (29)	1.29 (58)	0.75 (34)	0.42 (19)

N/D: not determined; * according to Commans-Bitter et al 1997¹

Supplementary Figure

Patient 2 CD8⁺ TCRVb family usage



Supplementary Figure S1. TCRVb expression before and after ASCT. Frequency of expression of 24 TCRVb families was assessed using flow cytometry pre (top left), 1 month (mo) (top centre), 19 mo (top right), 23.5 mo (bottom left) and 37.5 mo (bottom centre) post transplant in the CD8⁺ T cell subset in Patient 2. Gated on live CD8⁺ T cells and then each TCRVb population. Pie charts show relative proportion of Frequency of total cells positive for each TCRVb shown (in grayscale), with other (in white) representing frequency of CD8⁺ T cells not accounted for by any of the 24 TCRVb families investigated.

Supplementary Reference

1. Comans-Bitter WM, de Groot R, van den Beemd R, Neijens HJ, Hop WC, Groeneveld K, et al. Immunophenotyping of blood lymphocytes in childhood. Reference values for lymphocyte subpopulations. *J Pediatr* 1997; 130:388-93.