

Supplemental figures and tables

Supplemental table 1: Detailed clinical data for patients with drug-free long-term graft function (TOL), kidney recipients with stable graft function under standard immunosuppression (STA) and healthy volunteers (HV).

Supplemental Figure 1: B cells GzmB expression before and after activation. (A) Dot plot of secretion of GzmB by unstimulated B cells at day 0 and stimulated B cells at day 3 of coculture with CD4⁺CD25⁻ T cells. (B) Percentage of GzmB⁺ B cells at day 0 and day 3 in HV (n=6), TOL (n=6) and STA (n=6) (**p<0.01; ***p<0.005). (C) Dot plot of secretion of GzmB by stimulated B cells at day 3 of coculture with CD4⁺CD25⁻ T cells in HV, TOL and STA.

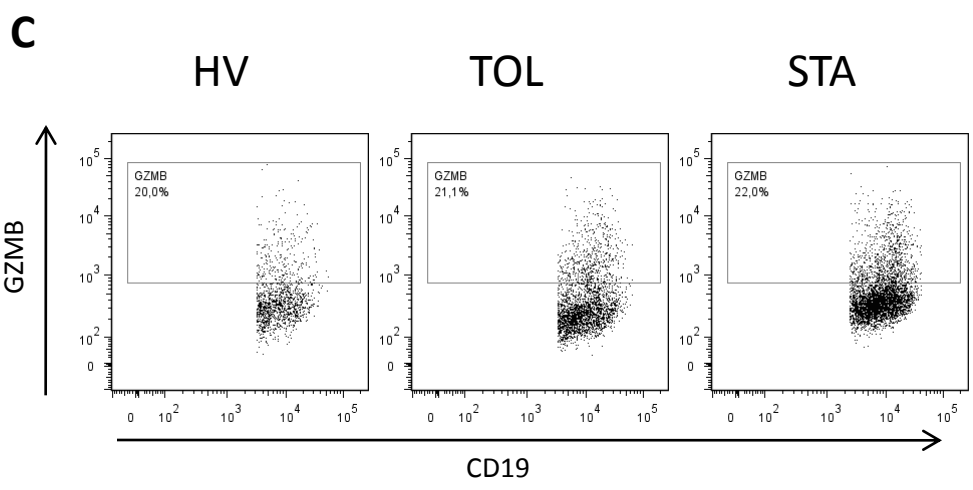
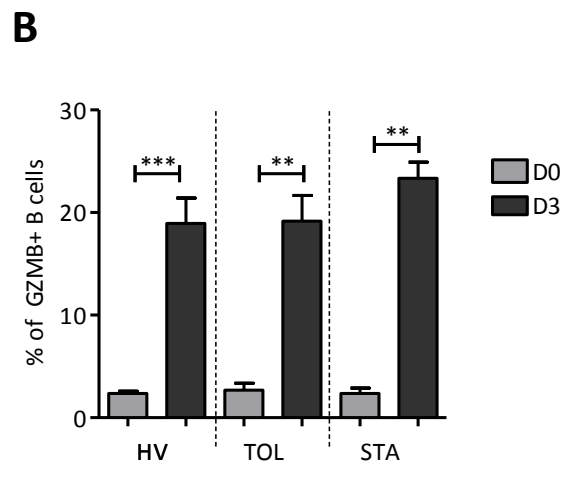
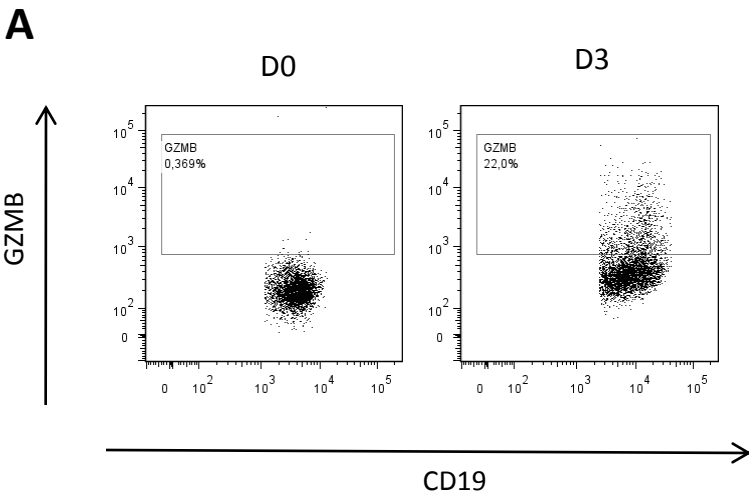
Supplemental Figure 2: Comparative expression of B-cell regulatory molecules (A, B) and tolerance-related markers (C, D) across B-cell (A, C) and PBMC samples (B, D). For each subset (A, B, C, D), gene expression data are represented by a heat map in which each row represents a gene, and each column represents a sample from the Healthy Volunteer (HV), Tolerant (TOL) or Stable patient (STA) group. Each cell in the matrix corresponds to an expression level, with red for over-expression, green for under-expression, and black for gene expression close to the median (see green/red color scale). For each gene, the absolute expression (see purple color scale, Quartile) and the significance of the variations (1: TOL vs. STA; 2: TOL vs. HV; 3: STA vs. HV) between groups (see blue color scale, P-value) are given. Diamond (◆) shows preferential expression in B-cell subsets.

Supplemental figure 3: Absolute number of blood B cells. Number of B cells per μL of blood in HV (n=6), TOL (n=9) and STA (n=6) (* p<0.05).

Supplemental table 1

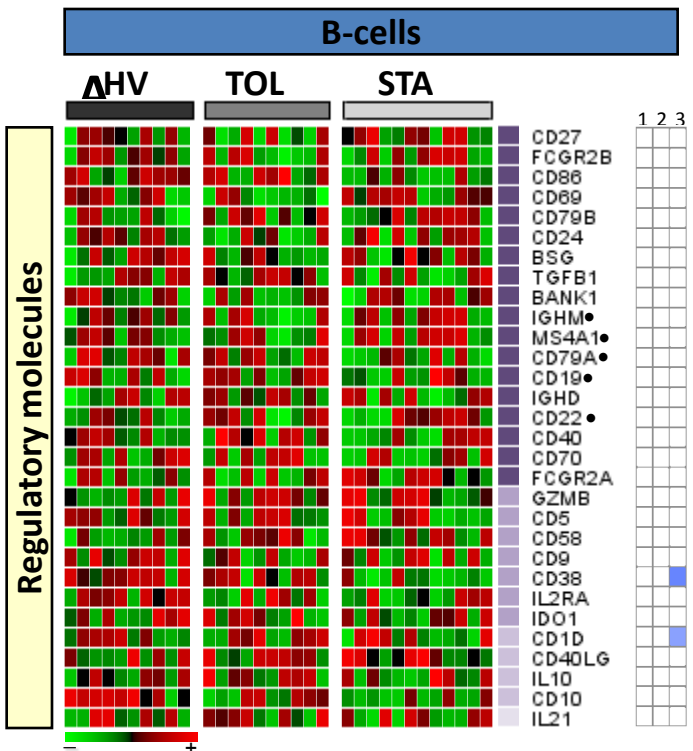
		Age (years)	Gender	Previous episode of acute rejection	Lymphoma status, cancer	Episode of acute infection (CMV)	Time between graft and analysis (months)	Creatinemia (umol/L)	Proteinuria g/24h	Donor (living vs deceased)	Number of HLA mismatches	Medical treatment	Medical treatment before immunosuppression withdrawal	Time between immunosuppression withdrawal and analysis (years)	Reason of immunosuppression withdrawal	Ab aHLA	Donor specific Abs	
TOL		68,9	M	0,0	0,0	1,0	325,2	112,0	0,04	NLD	4,0	0,0	AZA+CNI+CS	13,0	uncompliance	-	-	
		58,2	F	2,0	1,0	1,0	244,0	87,0	ND	NLD	3,0	0,0	CC+CNI+CS	19,0	Csa toxicity	+ (CL II)	+ (CL II)	
		47,7	M	0,0	0,0	0,0	180,6	103,0	0,04	LD	0,0	0,0	CC+CNI+CS	13,0	uncompliance	-	-	
		61,2	F	0,0	0,0	1,0	358,4	71,0	0,09	LD	0,0	0,0	AZA+CNI+CS	12,0	uncompliance	-	-	
		59,2	M	0,0	0,0	0,0	197,3	280,0	0,10	LD	0,0	0,0	CNI+CS	13,0	uncompliance	-	-	
		49,8	F	0,0	0,0	0,0	136,6	80,0	0,19	NLD	1,0	0,0	MMF+CNI+CS	9,0	uncompliance	+ (CL I - CL II)	-	
		85,3	M	0,0	0,0	1,0	246,4	144,0	0,36	NLD	3,0	0,0	CNI+CS	8,0	uncompliance	-	-	
		56,8	F	0,0	1,0	1,0	261,9	66,0	0,10	NLD	4,0	0,0	CNI+AZA	4,0	PTLD	+ (CL II)	-	
		50,8	M	1,0	0,0	1,0	385,3	79,0	0,08	NLD	4,0	0,0	AZA+CS	18,0	uncompliance	-	-	
		44,8	M	0,0	0,0	0,0	168,5	205,0	0,59	NLD	0,0	0,0	CC+CNI	5,0	meningo-encephalitis	-	-	
		61,0	F	0,0	0,0	1,0	147,8	93,0	0,00	NLD	4,0	0,0	CC+CNI	7,0	uncompliance	-	-	
		31,4	F	0,0	0,0	0,0	71,4	75,0	0,00	LD	0,0	0,0	CC+CNI	1,0	uncompliance	+ (CL II)	ND	
		Mean	58,0	6F/12	0,0	0,0	220,6	90,0	0,10	4LD/12	3,0			10,5				
		SD	15,8		0,3	0,4	0,5	94,9	64,7	0,20				5,5				
		min	31,4		0,0	0,0	71,4	66,0	0,00					1,0				
	max	85,3		2,0	1,0	385,3	280,0	0,59					19,0					
STA		51,9	F	0,0	0,0	1,0	129,0	81,0	0,10	NLD	5,0	CNI+CS				-	-	
		53,7	M	0,0	0,0	0,0	97,0	112,0	0,16	LD	4,0	CS+CC				-	-	
		44,1	M	0,0	0,0	0,0	63,4	164,0	0,14	NLD	4,0	CNI+CC				-	-	
		60,6	M	0,0	0,0	0,0	98,0	102,0	0,14	NLD	5,0	CNI+CC				-	-	
		47,0	M	0,0	0,0	1,0	140,7	93,0	0,16	NLD	1,0	CS+CC				+ (CL II)	-	
		54,0	M	0,0	0,0	1,0	192,5	132,0	0,05	NLD	4,0	CNI+CS				+ (CL II)	-	
		71,3	M	0,0	0,0	1,0	133,7	175,0	0,14	NLD	5,0	CNI+CC				-	-	
		40,4	M	0,0	0,0	0,0	95,5	92,0	0,24	NLD	2,0	CNI+CC				-	-	
		52,8	M	1	0,0	0,0	93,1	146,0	0,24	NLD	5,0	CNI+CC+CS				+ (CL II)	-	
		44,1	M	0,0	0,0	1,0	142,6	131,0	0,11	NLD	1,0	CNI				-	-	
		61,3	M	0,0	0,0	0,0	89,0	133,0	0,20	NLD	4,0	CNI+CC				-	-	
		66,3	F	1	0,0	1,0	66,4	74,0	0,04	NLD	5,0	CNI+CS				-	-	
		74,9	F	0,0	1	1,0	143,8	88,0	0,18	NLD	4,0	CNI+CC				-	-	
		59,8	M	0,0	0,0	0,0	115,9	149,0	0,00	NLD	3,0	CNI+CC				-	-	
		53,5	F	0,0	0,0	0,0	109,7	100,0	0,04	NLD	4,0	CNI+CC				-	-	
		71,5	M	0,0	0,0	0,0	124,8	117,0	0,04	NLD	5,0	CNI+CC				+ (CL I)	-	
		55,4	F	0,0	0,0	1,0	182,9	115,0	0,08	NLD	2,0	CNI+CS				+ (CL II)	-	
		Mean	57,7	5F/17	0,0	0,0	0,5	120,4	124,0	0,10	1LD/17	4,0						
		SD	10,8		0,4	0,3	0,5	37,6	29,1	0,10		1,4						
		min	40,4		0,0	0,0	0,0	66,4	74,0	0,00		1,0						
	max	74,9		1,0	1,0	1,0	192,5	175,0	0,24		5,0							

Supplemental figure 1

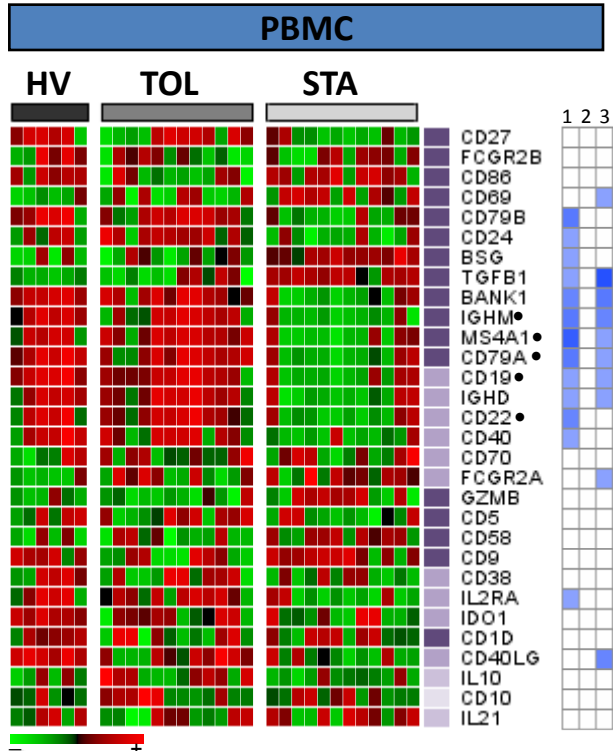


Supplemental figure 2

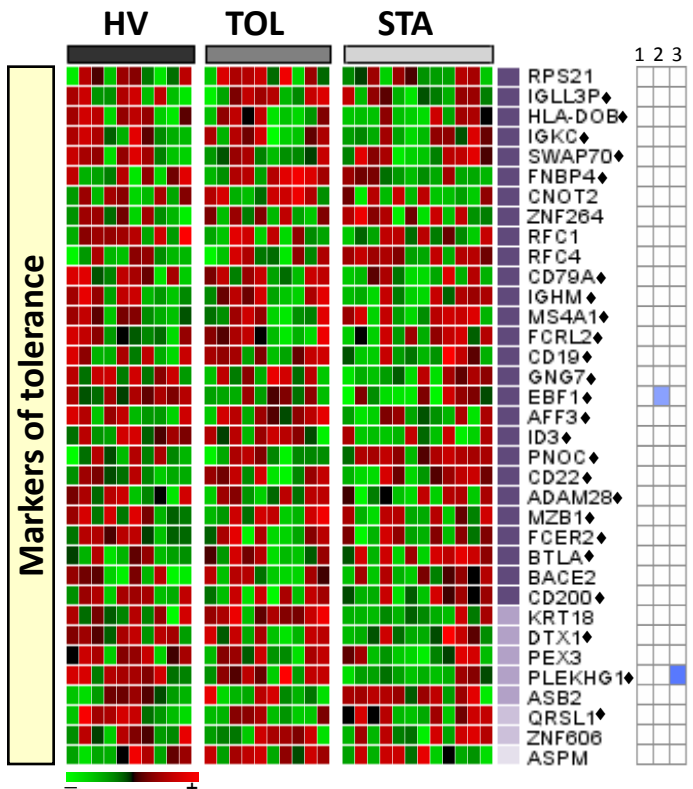
A



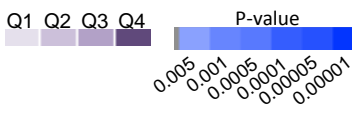
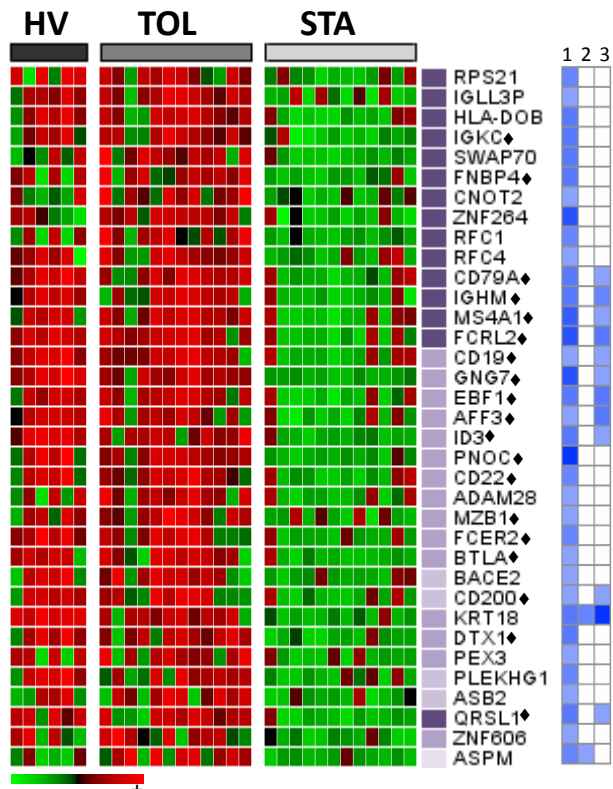
B



C



D



Supplemental figure 3

