

Patient	Flow-XM LT/LB (MESF)	Pretransplant DSA Loci (MFI)	At transplantation DSA Loci (MFI)	At belatacept switch DSA loci (MFI)	Banff Allograft biopsy prebelatacept	Postbelatacept DSA loci (MFI)	Outcome after belatacept indication		
							dnDSA (Y/N)	BPAR (Y/N)	Banff Allograft biopsy after belatacept
1	LT (-)/LB (+)	DR52 (541) DR53 (1097) DQ7 (604) DP11 (3101)	DR52 (523) DR53 (1025) DQ7 (682) -	DR52 (571) DP11 (1272) - -	g ₀ v ₀ ptc ₀ t ₀ i ₀ cg ₀ C4d ₁ cv ₁ ah ₁ IF/TA ₀	DR52 (907) DR53 (519) DQ7 (673) DP11 (1733)	N N N N	Y	G ₀ cpt ₀ i ₁ t ₂ v ₀ Cv ₁ ah ₁ IF/TA ₁ c4d ₀ Dx: Borderline lesions
2	NA	-	Cw9 (1000)	-	g ₁ v ₀ ptc ₀ t ₀ i ₀ cg ₀ c4d ₀ cv ₂ ah ₂ IF/TA ₂	-	N	N	
3	NA	DP03 (876)	DP03 (1162)	DP03 (1163)	g ₀ v ₀ ptc ₀ t ₀ i ₀ cg ₀ c4d ₀ cv ₁ ah ₂ IF/TA ₀	-	N	N	g ₀ cpt ₀ t ₀ i ₀ cg ₀ c4d ₀ cv ₁ ah ₁ IF/TA ₀ Dx: mild atherosclerotic and arteriolar hyalinosis
4	NA	Cw7 (879) DP1 (902)	- -	Cw7 (765) DP1 (601)	g ₀ v ₀ ptc ₀ t ₀ i ₀ cg ₀ c4d ₀ cv ₃ ah ₂ IF/TA ₂	- -	N N	Y	G ₀ cpt ₀ i ₁ t ₃ v ₀ c4d ₀ Cv ₂ ah ₂ IF/TA ₂ Dx: Borderline lesions
5	NA	DQ2 (955)	-	-	g ₁ v ₀ ptc ₀ t ₀ i ₀ cg ₀ c4d ₀ cv ₃ ah ₂ IF/TA ₁	-	N	Y	G ₁ cpt ₂ i ₂ t ₁ v ₀ c4d ₀ Cv ₂ ah ₁ IF/TA ₃ Dx: Mixed ABMR
6	NA	B61 (2110) A23 (790)	B61 (1101) A23 (680)	DR13 (802)	g ₀ v ₀ ptc ₀ t ₀ i ₀ cg ₀ c4d ₀ cv ₀ ah ₁ IF/TA ₀	-	N N	N	
7	LT (-)/LB (-)	-	A2 (511)	-	g ₀ v ₀ ptc ₀ t ₀ i ₀ cg ₀ c4d ₀ cv ₃ ah ₂ IF/TA ₃	-	N	N	
8	NA	DQ7 (994)	-	-	g ₁ v ₀ ptc ₀ t ₀ i ₀ cg ₀ c4d ₀ cv ₂ ah ₃ IF/TA ₂	-	N	N	
9	NA	-		A24 (1026)	g ₀ v ₀ ptc ₀ t ₀ i ₀ cg ₀ c4d ₀ cv ₁ ah ₂ IF/TA ₂	A24 (706)	N	N	
10	NA	-		DP5 (1123)	g ₀ v ₀ ptc ₀ t ₀ i ₀ cg ₀ c4d ₀ cv ₃ ah ₂ IF/TA ₃	DP5 (2259)	N	N	
11	NA	DR14 (945) DQ7 (552)	DR14 (698)	-	g ₀ v ₀ ptc ₀ t ₀ i ₀ cg ₀ c4d ₀ cv ₁ ah ₂ IF/TA ₂	-	N	N	
12	LT (-)/LB (-)	-	-	DR13 (1413)	g ₁ v ₀ ptc ₀ t ₀ i ₀ cg ₁ c4d ₁ cv ₁ ah ₂ IF/TA ₂	DR13 (799)	N	N	
13	NA	A24 (601)	-	-	g ₁ v ₀ ptc ₀ t ₀ i ₀ cg ₀ c4d ₀ cv ₂ ah ₂ IF/TA ₁		N	N	
14	NA	DP15 (812)	DP15 (540)	-	g ₁ v ₃ ptc ₀ t ₀ i ₀ cg ₀ c4d ₀ Cv ₂ ah ₃ IF/TA ₂	-	N	N	
15	NA	B45 (907)	-	-	g ₀ v ₀ ptc ₀ t ₀ i ₀ cg ₀ c4d ₀ Cv ₃ ah ₀ IF/TA ₂	-	N	Y	G0cpt0i1t3v0 Cv3 ah2 IF/TA2 c4d (-) Dx: Borderline lesions
16	NA	DQ7 (611)	DQ7 (611)	DQ7 (638)	g ₀ v ₀ ptc ₀ t ₀ i ₀ cg ₀ c4d ₀ cv ₁ ah ₂ IF/TA ₁	-	N	N	
17	LT (+)/LB (-)	-	Cw1 (3471)	Cw1 (3652)	g ₁ v ₀ ptc ₀ t ₀ i ₀ cg ₀ c4d ₀ cv ₂ ah ₂ IF/TA ₁	Cw (3425)	N	N	
18	NA	-	-	A11 (518) Cw5 (1215)	g ₀ v ₀ ptc ₀ t ₀ i ₀ cg ₀ c4d ₁ cv ₃ ah ₂ IF/TA ₂	- -	N N	N	
19	NA	B27 (560)		-	g ₀ v ₀ ptc ₀ t ₀ i ₀ cg ₀ c4d ₁ cv ₃ ah ₂ IF/TA ₂	-	N	N	
20	NA	A29 (782)	A29 (782)	A29 (907)	g ₂ v ₀ ptc ₀ t ₀ i ₀ cg ₀ c4d ₀ cv ₃ ah ₂ IF/TA ₃	A29 (663)	N	N	g ₀ v ₀ cpt ₀ t ₀ i ₀ cg ₀ c4d ₀ cv ₃ ah ₂ IF/TA ₂ Dx: moderate – severe atherosclerotic and arteriolar hyalinosis – Moderate interstitial fibrosis and tubular atrophy

21	NA	DP4 (608)	-	-	g ₀ v ₀ ptc ₀ t ₀ cg ₀ c4d ₁ cv ₀ ah ₂ IF/TA ₁	-	N	N	
22	NA	-	DQ8 (1004)	DQ8 (535)	g ₀ v ₀ ptc ₀ t ₀ cg ₀ c4d ₁ cv ₃ ah ₂ IF/TA ₂	-	N	N	
23	NA	DP3 (771)	-	-	g ₁ v ₀ ptc ₀ t ₀ cg ₀ c4d ₀ Cv ₀ ah ₁ IF/TA ₂	-	N	N	
24	NA	DQ2 (563) -	- DR14 (984)	- DR14 (865)	g ₁ v ₀ ptc ₀ t ₀ cg ₀ c4d ₀ cv ₂ ah ₁ IF/TA ₁	- -	N N	N	
25	NA	- Cw6 (3255)	Cw1 (2711) -	- Cw6 (1273)	g ₁ v ₀ ptc ₀ t ₀ cg ₀ c4d ₀ cv ₂ ah ₂ IF/TA ₂	- -	N N	N	g ₀ v ₀ cpt ₀ t ₀ cg ₀ c4d ₁ cv ₃ ah ₂ IF/TA ₂ Dx: moderate – severe atherosclerotic and arteriolar hyalinosis - Moderate interstitial fibrosis and tubular atrophy. Mild Isolated c4d tinction.
26	NA	Cw8 (1051)	Cw8 (1211)	-	g ₀ v ₁ ptc ₀ t ₀ cg ₀ c4d ₀ cv ₂ ah ₃ IF/TA ₂	Cw8 (1295)	N	N	
27	NA	B35 (505) DR14 (822)	- -	- -	g ₀ v ₁ ptc ₀ t ₂ cg ₀ c4d ₀ cv ₂ ah ₂ IF/TA ₂	- -	N N	N	g ₀ v ₀ cpt ₀ t ₀ cg ₀ c4d ₀ cv ₂ ah ₃ IF/TA ₁ Dx: moderate – severe atherosclerotic and arteriolar hyalinosis - Mild interstitial fibrosis and tubular atrophy
28	NA	-		DP04 (763)	g ₀ v ₀ ptc ₀ t ₂ cg ₀ c4d ₀ cv ₂ ah ₂ IF/TA ₂	-	N	N	
29	NA	-	-	DR52 (659)	g ₀ v ₀ ptc ₁ t ₀ cg ₀ c4d ₀ cv ₃ ah ₃ IF/TA ₃	-	N	N	g ₁ v ₀ cpt ₀ t ₀ cg ₀ c4d ₀ cv ₃ ah ₂ IF/TA ₃ Dx: Isolated mild glomerulitis. moderate – severe atherosclerotic and arteriolar hyalinosis - Severe interstitial fibrosis and tubular atrophy

Table S1: Immunological, histological, outcome data before, at first dose and after belatacept indication in the DSA (+) group.

Summary of the immunological, histological and clinical outcome data before, at first dose and after belatacept indication in the DSA (+) group. Banff scores on the biopsy performed before the switch to belatacept. g: glomerulitis; v: arteritis; ptc: peritubular capillaritis; t: tubulitis; cg: chronic glomerulopathy; c4d: ptc deposition AH: arteriolar hyalinosis; CV: chronic vascular changes (arteriosclerosis); IF/TA: interstitial fibrosis/tubular atrophy. Banff scores on the biopsy for clinical cause performed after the switch to belatacept.