

Supplementary Tables

Supplementary Table 1: Antibodies used for flow cytometry

Antibody	Conjugate, Clone	Supplier
CD3	VioGreen, REA613	Miltenyi
CD4	FITC, VIT4	Miltenyi
CD8	PerCP/Cy5.5, RPA-T8	Biolegend
Integrin α4	VioBlue, MZ18-24A9	Miltenyi
Integrin β7	PE, FIB27	Biolegend

Supplementary Table 2: Contingency table of α 4 β 7 expression on CD3⁺ T cells at week 0 in responders and non-responders to vedolizumab treatment

	Responder	Non-Responder	
α 4 ⁺ β 7 ⁺ cells [% CD3 ⁺ at week 0] > 14.95	32	30	NPV: 48.4 %
α 4 ⁺ β 7 ⁺ cells [% CD3 ⁺ at week 0] < 14.95	20	4	PPV: 83.3 %
	Sensitivity: 38.5 %	Specificity: 88.2 %	

Supplementary Table 3: Contingency table of α 4 β 7 expression on CD4⁺ T cells at week 0 in responders and non-responders to vedolizumab treatment

	Responder	Non-Responder	
α 4 ⁺ β 7 ⁺ cells [% CD4 ⁺ at week 0] > 14.7	23	25	NPV: 52.1 %
α 4 ⁺ β 7 ⁺ cells [% CD4 ⁺ at week 0] < 14.7	30	9	PPV: 76.9 %
	Sensitivity: 56.6 %	Specificity: 73.5 %	

Supplementary Table 4: Contingency table of baseline dynamic adhesion of CD4⁺ T cells to MAdCAM-1 in patients in remission and non-remission at T5

	Remission	Non-Remission	
Dynamic adhesion at week 0 [n/3min] > 9.5	14	6	PPV: 70 %
Dynamic adhesion at week 0 [n/3min] < 9.5	20	33	NPV: 62.2 %
	Sensitivity: 41.2 %	Specificity: 84.6 %	

Supplementary Table 5: Contingency table of reduction of baseline dynamic adhesion of CD4⁺ T cells to MAdCAM-1 by VDZ treatment *in vitro* in patients in remission and non-remission at T5

	Remission	Non-Remission	
Reduction of dynamic adhesion at week 0 [n/3min] > 5.5	15	7	PPV: 68.2 %
Reduction of dynamic adhesion at week 0 [n/3min] < 5.5	18	31	NPV: 63.3 %
	Sensitivity: 45.5 %	Specificity: 81.6 %	

Supplementary Table 6: Contingency table of $\alpha 4\beta 7$ expression on CD4⁺ T cells at T5 in patients with sustained or not sustained remission at week 30

	Sustained remission	No sustained remission	
$\alpha 4\beta 7^+$ cells [% CD4 ⁺ at week 3] > 8.8	17	6	NPV: 26.1 %
$\alpha 4\beta 7^+$ cells [% CD4 ⁺ at week 4] < 8.8	16	0	PPV: 100 %
	Sensitivity: 48.5 %	Specificity: 100 %	