<u>Title</u>: Interactions between rheumatoid arthritis antibodies are associated with the response to anti-Tumor Necrosis Factor therapy.

Supplementary Table S1. Association results for the four antibodies and anti-TNF response at week 12 in the prospective cohort (independent effects).

Variable	Regression coefficient	P value
	(95%CI)	
Anti-CCP negative	Reference	-
Anti-CCP positive	-0.22 (-1.02 to 0.58)	0.59
RF negative	Reference	-
RF positive	-0.23 (-1.01 to 0.54)	0.55
Anti-CarP	-1.07e-4 (-8e-4 to 6e-4)	0.77
Anti-PAD4	-5.77e-6 (-2.1e-4 to 2.1e4)	0.96
Baseline DAS28	0.42 (0.16 to 0.67)	0.0015
Sex: Female	Reference	-
Sex: Male	0.19 (-0.60 to 0.99)	0.62
Age	-0.017 (-0.041 to 0.0061)	0.14

Multivariate linear regression analysis for anti-cyclic citrullinated peptide (CCP), rheumatoid factor (RF), anti-carbamylated protein (CarP) and anti-peptidylarginine deiminase type 4 (PAD4) antibodies with anti-TNF response (i.e. change in DAS28 from week 0 to week 12). Adjustment was performed for baseline DAS28, sex and age. None of the four antibodies were associated independently with the anti-TNF response. As expected, the baseline DAS28 was significantly associated with the change in DAS28. DAS28: 28-joint disease activity score; Reference: reference group.