

**Table S1.** Predictors of seroresponse for three influenza strains in RA patients

Strain	ORs	95% CI	<i>p</i>
A/H1N1			
Prior vaccination	0.38	0.19-0.76	0.006
Prednisolone use	1.87	0.95-3.68	0.071
A/H3N2			
Prior vaccination	0.29	0.15-0.59	0.01
MTX use	0.53	0.29-0.97	0.04
B/B1			
Prior vaccination	0.22	0.11-0.44	< 0.0001
MTX use	0.60	0.30-1.06	0.075

In multivariate logistic regression analysis, seroresponse was used as the response variable for each influenza strain. Age, prior influenza vaccination (2010/2011), RA duration, positive anti-CCP Abs status, positive RF status, CDAI, current MTX use, current prednisolone use, ongoing TCZ use, and lymphocyte counts (< 1000/ $\mu$ l) were entered as the predictor variables (independent variables). The ROC-AUC values for the models to predict seroresponse were 0.62 (95% CI 0.54-0.70,  $p = 0.03$ ) for the A/H1N1 strain; 0.66 (95% CI 0.58-0.74,  $p < 0.005$ ) for the A/H3N2 strain; and 0.67 (95% CI 0.59-0.75,  $p < 0.005$ ) for the B strain, respectively.

RA, rheumatoid arthritis; MTX, methotrexate; TCZ, tocilizumab; RF, rheumatoid factor; anti-CCP Abs, anti-cyclic citrullinated peptide antibodies; CDAI, clinical disease activity index; ORs, odds ratios; 95% CI, 95% confidence interval; ROC-AUC, area under the receiver operating characteristic curve.