	Before IPTW adjustment			After IPTW adjustment		
-	Tofacitinib	Tocilizumab	ASD*	Tofacitinib	Tocilizumab	ASD*
Age, years	66.7	61.6	0.43	64.8	63.9	0.075
Male sex, %	21	19	0.051	20	18	0.043
RA duration, years	13.9	11.2	0.29	12.8	12.5	0.035
Advanced stage, %	63	53	0.17	58	58	0.006
Anti-CCP-positive, %	88	87	0.007	88	88	0.013
RF-positive, %	83	85	0.049	84	84	0.012
Initial CDAI	23.1	22.6	0.050	23.6	24.1	0.054
MTX use at baseline, %	55	70	0.25	59	61	0.034
MTX use at 3 months, %	56	65	0.18	59	60	0.021
MTX use at 6 months, %	51	53	0.040	50	48	0.022
MTX use at 9 months, %	51	55	0.082	51	51	0.004
MTX use at 11 months, %	45	47	0.038	45	45	0.006
PSL use at baseline, %	27	46	0.33	36	40	0.072
PSL use at 3 months, %	38	47	0.20	41	42	0.027
PSL use at 6 months, %	37	41	0.083	38	38	0.010
PSL use at 9 months, %	42	45	0.074	42	43	0.020
PSL use at 11 months, %	39	51	0.23	42	43	0.016

**Table S12.** Balance in the use of MTX and PSL at each timepoint in previous bDMARD-failure patients (n = 249), after time-varying IPTW adjustment

\*Balance in baseline covariates as well as use of MTX and PSL at each timepoint was checked between the tofacitinib and tocilizumab groups before and after time-varying IPTW adjustment in previous bDMARD-failure patients. ASD of <0.10 indicates

that the covariates were well balanced between the two treatment groups. Missing data on dropout patients at each timepoint were handled using the multiple imputation method.

RA, rheumatoid arthritis; bDMARD, biological disease-modifying antirheumatic drug; anti-CCP, anti-cyclic citrullinated peptide antibodies; RF, rheumatoid factor; MTX, methotrexate; PSL, prednisolone; CDAI, clinical disease activity index; IPTW, inverse probability of treatment weighting; ASD, absolute standardized difference