

Supplementary Table 1. Prior distribution used in the analyses of the primary outcome in placebo group.

	Missing data imputation	Beta(alpha,beta) tocilizumab	Beta(alpha,beta) placebo	Toc - Pla (percent 97.5%)"
1	No	Be(1,1)	Be(1,1)	-10.4 [-29.8 ; 9.2]
2	No	Be(10·0.55,10·0.45)*	Be(10·0.25,10·0.75)*	-14.3 [-32.0 ; 4.0]
3	No	Be(30·0.55,30·0.45)*	Be(30·0.25,30·0.75)*	-18.44 [-33.7 ; -2.1]
4	No	Be(55·0.55,55·0.45)*	Be(55·0.25,55·0.75)*	-21.3 [-34.5 ; -7.7]
5	Non responder imputation	Be(1,1)	Be(1,1)	-8.8 [-26.7 , 9.5]
6	Maximum bias (MNAR1) Missing = success in placebo, Failure in tocilizumab	Be(1,1)	Be(1,1)	-24.5 [-41.4 ; -6.5]
7	Maximum bias (MNAR2). Missing = success in tocilizumab, Failure in placebo	Be(1,1)	Be(1,1)	7.0 [-11.1 ; 24.8]
8	MAR assumption (logistic regression)	-	-	-11.4 [-30.6 ; 9.0]

*: Prior distribution based on the JOQUER study³, with the number of additional pseudo cases in each group equal to 10, 30 or 55. This last situation gives the same weight to the prior distribution and to the data.