

Study	Incomplete outcome data	Incomplete outcome data	Free of Selective Reporting	Free of Selective Reporting	Other biases- major baseline imbalance	Other biases- major baseline imbalance
	Judgement	Reason	Judgement	Reason	Judgement	Reason
Boyle 2015	Low risk	no missing data	Unclear	insufficient information	Low risk	appears free of other biases
Bresnihan 1998	High Risk	less than 80% completion	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Burmester 2013	High Risk	"The full analysis set for the primary analysis included all randomised patients who received at least one dose of study medication and had at least one post-baseline assessment."	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Combe 2009	High Risk	"Efficacy analyses were based on a modified intent-to-treat population, including patients who received any test article and provided efficacy data at baseline and at any subsequent visit... The last-observation-carried-forward (LOCF) approach was used to account for missing data points. LOCF imputation was also applied to patients who discontinued for unsatisfactory response."	Low Risk	Not enough information provided to assess selective reporting	High Risk	"there were no significant differences among the groups in the baseline characteristics with the exception of the percentage of patients receiving previous corticosteroids and the mean number of previous DMARD"
Coombs 2009	Unclear	No data presented	Unclear	Not enough information provided to assess selective reporting	Unclear	No baseline data presented
Dougados 2013	High Risk	"Efficacy analyses were conducted in the intention-to-treat population (all randomly assigned and treated patients analysed in the arm they were randomly assigned to) with non-responder imputation for categorical variables (eg, DAS28 remission, ACR response), last observation carried forward until patient withdrawal for missing joint counts and no additional imputation of missing values."	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Doyle 2013	Unclear	No data presented	Unclear	Not enough information provided to assess selective reporting	Unclear	No baseline data presented
Edwards 2004	Low Risk	Reasons documented for dropouts. For patients	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Fleschmann 2012 (Aug)	Low Risk	more than 80% completed the study	Unclear	Not enough information provided to assess selective reporting	Low Risk	Baseline characteristics were similar among the treatment groups
Fleschmann 2012 (March)	Low Risk	3 types of imputation were used to address missing data.	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Gabay 2013	High Risk	"The safety population included all patients who received at least one dose of tocilizumab or adalimumab and had at least one post-dose safety assessment. The intention-to-treat population included patients who received at least one dose of tocilizumab or adalimumab and had at least one efficacy measurement. The per-protocol population included patients in the intention-to-treat population who had not had any major protocol violations."	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Genovese 2002	High Risk	Significantly more AE withdrawals in MTX group	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Hobbs 2015	low risk	proportion of missing outcomes compared with observed event risk not enough to induce clinically relevant bias in intervention effect estimate	Unclear risk	insufficient information	high risk	protocol failure - deviation from study protocol
Huizinga 2015	Low Risk	Efficacy analyses were performed in the intent-to-treat (ITT) population (randomised patients who received ≥ 1 administration of study medication) with non-responder imputation of missing data used for binary response variables (eg, DAS28-ESR remission and ACR response)." (p.37). Comment: Withdrawals due to AEs in the tocilizumab group were 8.7% compared to 9.1% in the placebo group. Total withdrawals were 19.9% in the tocilizumab group compared to 27.2% in the placebo group. 553/556 randomised patients were included in the ITT population. 3 people were omitted since they did not receive Tocilizumab.	Unclear	Comment: The protocol is not available.	Low Risk	No major baseline imbalances

Jobanputra 2012	High Risk	At 12 months, the authors provided data for the 39 and 34 patients still remaining in each study group respectively as well as a modified ITT population results. The modified method is described as follows: "Data for the modified intention to treat population with baseline values carried forward for those who discontinued therapy within 1 year."	Unclear	Not enough information provided to assess selective reporting	High Risk	imbalances in concomitant treatments
Johnsen 2006	High Risk	"A patient who had a negative ACR-N or who had missing evaluations due to premature withdrawal from the study (before 24 weeks of treatment) had the ACR-N set to zero for that evaluation. The treatment effect was tested using 2-way analysis of variance (ANOVA). All patients who received at least 1 dose of study medication were included in the efficacy analyses."	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Jones 2010	High Risk	"The intention-to-treat (ITT) population included all randomised patients who received at least one infusion of the study treatment; depending on the purpose of analysis, ITT patients initially randomised to placebo were excluded."	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Kameda 2010	High Risk	"The primary analysis was conducted on an intention-to-treat population... Four patients were withdrawn from the study before the start of treatment, leaving 147 patients for the safety analysis (Fig. 1). Efficacy analysis was performed for 142 patients for whom sufficient clinical data were available. Sixteen patients (twelve in the E group and four in another) were withdrawn from the study by week 24 for the reasons given in Fig. 1." Insufficient data is presented as a reason why efficacy analysis was not performed on 2 patients in the ETN group and 3 patients in the ETN+MTX group. Moreover 12 more patients were lost in the ETN group than in ETN+MTX group.	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Keystone 2009	High Risk	No mention of whether ITT analysis was performed or how missing data was handled.	Low Risk	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Kremer 2009	Low Risk	more than 80% completion	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Kremer 2010	High Risk	"Efficacy data from all randomized patients were analyzed by assigned treatment group using an intent-to-treat approach..." However, patients assigned to lower dosages or inactive control were allowed to escape at 16 weeks to higher dosage or active treatment.	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Kremer 2013	Low Risk	more than 80% completion	Unclear	Not enough information provided to assess selective reporting	High Risk	Imbalance in baseline demographic and disease characteristics
Maclsaac 2014	Low risk	no missing data	Unclear	insufficient information	Low risk	appears free of other biases
Maini 2006	High Risk	"Three hundred fifty-nine patients were randomly allocated to the 7 treatment groups. Patient flow through the trial and randomization to each treatment arm are shown in Figure 1. Approximately equal numbers of patients were randomly allocated to each arm of the study. During the trial, 60 patients withdrew (34 patients withdrew due to adverse events and/or possible drug-related toxicity). Of the 359 patients randomized to receive study medication, all were included in the safety population, and 354 patients were included in the full-analysis set (5 patients were excluded from the full-analysis set because of a protocol violation)."	Low Risk	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Mathias 2000	Unclear	No data presented	Unclear	Not enough information provided to assess selective reporting	Low Risk	"Differences between the groups did not otherwise achieve statistical significance..."
Miyasaka 2008	Low Risk	"A total of 34 (9.7%) of 352 patients discontinued treatment (7, 7, 16, and 4 in the placebo and adalimumab 20, 40, and 80 mg groups, respectively)."	Unclear	Not enough information provided to assess selective reporting	High Risk	Imbalance in baseline disease characteristics

Moreland 1999	Low Risk	Reasons for withdrawal clearly specified with methods stated to deal with missing data	Unclear	Not enough information provided to assess selective reporting	Low Risk	Aside from differences in concurrent medications (more patients in the 25-mg group were receiving corticosteroids and more placebo recipients were receiving NSAIDs), no baseline imbalances were detected.
Moreland 2012	Low Risk	statistical analysis was performed using the intention-to-treat approach fashion	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Nishimoto 2004	High Risk	Many placebo dropouts	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Nishimoto 2007	High Risk	"All patients receiving at least one dose of study drug were included in the efficacy and safety analysis."	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Ohta 2014	Low risk	no missing data	Unclear risk	insufficient information	Low risk	appears free of other biases
Ostergaard 2015	low risk	proportion of missing outcomes compared with observed event risk not enough to induce clinically relevant bias in intervention effect estimate	Unclear risk	insufficient information	Low risk	appears free of other biases
Pavelka 2009	High Risk	"Intent-to-treat analyses with the last observation carried forward (LOCF) were used to compare the two treatment arms."	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Pope 2014	High risk	High withdrawal rate and per protocol analysis was used	Unclear	insufficient information	Low risk	No major baseline imbalances
Strand 2006	Low Risk	more than 80% completion at 24 weeks	Unclear	Not enough information provided to assess selective reporting	Low Risk	"Baseline demographics and disease characteristics were comparable across treatment groups."
Tada 2012	Unclear	No mention of whether ITT analysis was performed or how missing data was handled.	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Takeuchi 2013	High Risk	less than 80% completion	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Takeuchi 2013a	Low Risk	more than 80% completion	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Takeuchi 2013b	Low Risk	more than 80% completion	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
van der Heijde 2006	Low Risk	more than 80% completion	Low Risk	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
van der Heijde (TEMPO) 2007	High Risk	See table	High Risk	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
van de Putte 2003	High Risk	"Efficacy analyses were performed for the intention to treat (ITT) population, defined as all randomised patients who received at least one double blind injection of study drug and for whom any assessment of efficacy under double blind conditions was available... All patients randomly allocated to receive adalimumab and who received at least one dose of adalimumab were included in the safety analyses."	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
van de Putte 2004	High Risk	Patients who dropped out were followed up at 1, 2, 3, and 6 months after treatment; An intention to treat analysis was performed that included patients who were randomised and who received at least one injection of the randomised study drug. Patients not completing the trial (that is, who were withdrawn or required rescue) despite fulfilling ACR criteria were considered nonresponders upon withdrawing or entering rescue. Withdrawals occurred in 118/434 (27.2%) adalimumab treated patients and 62/110 (56.4%) placebo treated patients.	Unclear	Not enough information provided to assess selective reporting	Low Risk	There were no statistically significant differences in the demographic characteristics and baseline disease activity between the treatment groups
van Riel 2006	Low Risk	"One patient in the ETN group did not receive drug and was withdrawn from the study, leaving 314 patients in the intent-to-treat analysis."	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
van Riel 2008	High Risk	Patient reported outcomes were analyzed from Riel 2006 trial. The number of patients included in analysis for HAQ did not match those that were originally randomized to the treatment arms.	Unclear	Not enough information provided to assess selective reporting	Low Risk	No major baseline imbalances
Yamamoto 2014b	Low Risk	missing data was imputed	Unclear	Comment: The protocol is not available.	Low Risk	No major baseline imbalances