**Supplementary files**

Table S1: Embase.com search strategy for Embase® and MEDLINE®

| # | Search History |
| --- | --- |
| 1. | 'rheumatoid arthritis'/exp |
| 2. | (rheumatoid OR reumatoid OR revmatoid OR rheumatic OR reumatic OR revmatic) NEAR/3 (arthrit\* OR artrit\* OR diseas\* OR condition\* OR nodule\*) |
| 3. | ('rheumatoid pneumoconiosis'/de OR caplan\* NEXT/2 (syndrome OR disease)) |
| 4. | ('felty syndrome'/de OR felty\* NEAR/1 syndrome) OR ('rheumatoid nodule'/de OR rheumat\* NEXT/2 nodule) OR ('adult onset still disease'/de OR still\* NEXT/1 disease) |
| 5. | #1 OR #2 OR #3 OR #4 |
| 6. | 'cohort analysis'/exp OR 'longitudinal study'/exp OR longitudinal:ab,ti |
| 7. | registr\* OR register OR database\* OR 'database'/syn OR 'register'/syn |
| 8. | ARTIS OR 'antirheumatic therapies in sweden' OR STURE OR 'stockholm tumor necrosis factor-a follow-up registry' |
| 9. | SSATG OR 'south swedish arthritis treatment group' |
| 10. | BSRBR OR 'british society for rheumatology biologics register' |
| 11. | 'register RABBIT' or 'german biologics register' or RABBIT |
| 12. | BIOBADASER OR 'spanish biologics register' |
| 13. | 'spanish registry of adverse events of biological therapies in rheumatic diseases' |
| 14. | EMECAR OR 'NOR DMARD' OR DANBIO OR ATTRA OR SCQM OR 'swiss clinical quality management' |
| 15. | 'hellenic registry' OR 'GISEA' OR 'LOHREN' |
| 16. | 'dutch rheumatoid arthritis monitoring' OR 'french ratio registry' OR RATIO OR DREAM |
| 17. | ‘ROB-FIN’ OR ROBFIN OR ‘Register of Biological Treatment in Finland’ |
| 18. | #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 |
| 19. | 'tumor necrosis factor'/de OR 'tumor necrosis factor antibody'/de OR 'anti tumour necrosis factor':ab,ti OR 'anti tumor necrosis factor':ab,ti OR 'anti tnf':ab,ti OR ('tnfr-fc fusion' NEXT/1 protein\*):ab,ti OR ('tnf receptor fusion' NEXT/1 protein\*):ab,ti OR 'tnf receptor fc fusion protein':ab,ti OR 'interleukin 6 receptor':ab,ti OR 'interleukin 6r':ab,ti OR 'il 6 receptor':ab,ti OR 'il 6r':ab,ti |
| 20. | 'adalimumab'/de OR adalimumab:ab,ti OR humira:ab,ti OR 'monoclonal antibody d2e7':ab,ti OR trudexa:ab,ti |
| 21. | 'certolizumab pegol'/de OR certolizumab:ab,ti OR 'cdp 870':ab,ti OR cdp870:ab,ti OR cimzia:ab,ti OR 'pha 738144':ab,ti OR pha738144:ab,ti |
| 22. | 'etanercept'/de OR etanercept:ab,ti OR enbrel:ab,ti OR 'tnr 001':ab,ti OR tnr001:ab,ti |
| 23. | 'infliximab'/de OR infliximab:ab,ti OR avakine:ab,ti OR remicade:ab,ti |
| 24. | 'rituximab'/de OR rituximab:ab,ti OR 'idec c2b8':ab,ti OR mabthera:ab,ti OR ritux?n:ab,ti |
| 25. | 'tocilizumab'/de OR tocilizumab:ab,ti OR actemra:ab,ti OR atlizumab:ab,ti OR 'r 1569':ab,ti OR r1569:ab,ti OR roactemra:ab,ti |
| 26. | 'abatacept'/de OR abatacept:ab,ti OR orencia:ab,ti OR 'bms 188667':ab,ti OR bms188667:ab,ti OR 'ctla4 ig':ab,ti OR 'ctla4 immunoglobulin':ab,ti OR ctla4ig:ab,ti OR 'ctla-4ig':ab,ti OR 'ctla-4-ig':ab,ti OR 'recombinant interleukin 1 receptor blocking agent'/de OR ('interleukin 1 receptor' NEXT/1 (antagonist OR block\*)):ab,ti |
| 27. | 'golimumab'/de OR golimumab:ab,ti OR simponi:ab,ti |
| 28. | 'anti rheumatic':ab,ti OR biologic:ab,ti |
| 29. | #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 |
| 30. | (#5 AND #18 AND #29) |
| 31. | (#5 AND #18 AND #29) AND ([article]/lim OR [article in press]/lim OR [conference abstract]/lim OR [conference paper]/lim OR [conference review]/lim OR [editorial]/lim OR [erratum]/lim OR [letter]/lim OR [note]/lim OR [short survey]/lim) |

Table S2: Study protocol listing the eligibility criteria for inclusion/exclusion of studies in the review as per the PRISMA guidelines

|  |  |
| --- | --- |
| **Studies to include** | |
| Countries and registries | Major RA registries from the following European countries will be included:   * Czech Republic (ATTRA) * Denmark (DANBIO) * Finland (ROB-FIN) * France (RATIO) * Germany (RABBIT) * Greece (Hellenic Registry for Biologic Therapies) * Italy (GISEA/LOHREN) * Netherlands (DREAM) (local biologics registry of 11 hospitals) * Norway (NOR-DMARD) * Spain (BIOBADASER, EMECAR) * Switzerland (SCQM) * Sweden (ARTIS, STURE, SSATG) * UK (BSRBR) |
| Population | * Age: adults (≥16 years) * Gender: any * Race: any * Disease: RA |
| Interventions | Following interventions will be extracted:   * ABA * ADA * Certolizumab pegol * ETN * Golimumab * INF * RIT * TOC |
| Language | * English language only |
| Publication timeframe | * Database start to present date (16 April 2012) |
| **Data sources** | |
| Databases | * Embase® * MEDLINE® * MEDLINE® In-Process * Cochrane Central Register of Controlled trials (CENTRAL) * WHO: International Clinical Trials Registry Platform Search portal |
| Conference proceedings | Abstracts from three conference proceedings will be searched for the last two years:   * ACR * EULAR * BSR |

ABA: Abatacept; ACR: American College of Rheumatology; ADA: Adalimumab; ARTIS: Anti-rheumatic Therapies In Sweden; ATTRA: Anti-TNF Treatment of Rheumatoid Arthritis; BIOBADASER: Base de Datos de Productos Biológicos de la Sociedad Española de Reumatología; BSR: British Society of Rheumatology; BSRBR: British Society for Rheumatology Biologics Register; DANBIO: Danish Biologic Registry; DREAM: Dutch Rheumatoid Arthritis Monitoring; EMBASE: Excerpta Medica Database; EMECAR: Estudio de la Morbilidad y Expresión Clínica de la Artritis Reumatoide; ETN: Etanercept; EULAR: European League against Rheumatism; GISEA: Italian Group for the Study of Early Arthritis; INF: Infliximab; LOHREN: Lombardy Rheumatology Network; MEDLINE: Medical Literature Analysis and Retrieval System Online; MS: Microsoft; NOR-DMARD: Norwegian Disease-Modifying Anti-rheumatic Drugs; RABBIT: Rheumatoid Arthritis oBservation of BIologic Therapy; RA: Rheumatoid Arthritis; RATIO: French Research Axed on Tolerance of Biotherapies; RIT: Rituximab; ROB-FIN: Register of Biological Treatment in Finland; SCQM: Swiss Clinical Quality Management in Rheumatic Diseases; SSATG: Southern Sweden Anti-rheumatic Therapy Group; STURE: Stockholm Tumour Necrosis Factor-a Follow-up Registry; TOC: Tocilizumab; UK: United Kingdom; WHO: World Health Organisation