**Supplementary Files**

**Table S1: Search terms**

Pubmed

("Spondylitis, Ankylosing" OR "Spondylitis Ankylosing"[Title/Abstract] OR "AS"[Title/Abstract] OR “axial SpA”[Title/Abstract] OR “Ankylosing Spondylitis”[Title/Abstract] OR “axial spondyloarthritis”[Title/Abstract] OR "non-radiographic axial spondyloarthritis"[All Fields] OR "nr-axSpA"[All Fields] OR (“axial” AND “spondyl\*”) OR ("Spond\*" AND (ankylo\* OR rheumat\*)))

AND

("Infliximab" OR infliximab[Title/Abstract] OR remicade[Title/Abstract] OR Inflectra[Title/Abstract] OR "CT-P13" [Supplementary Concept] OR remsima[Title/Abstract] OR "Adalimumab" OR adalimumab[Title/Abstract] OR humira[Title/Abstract] OR "golimumab"[Supplementary Concept] OR golimumab[Title/Abstract] OR simponi[Title/Abstract] OR "Etanercept" OR etanercept[Title/Abstract] OR enbrel[Title/Abstract] OR "Certolizumab Pegol" OR certolizumab[Title/Abstract] OR "certolizumab pegol"[Title/Abstract] OR cimzia[Title/Abstract] OR "Ustekinumab" OR ustekinumab[Title/Abstract] OR stelara[Title/Abstract] OR "secukinumab"[Supplementary Concept] OR secukinumab[Title/Abstract] OR cosentyx[Title/Abstract] OR Apremilast[All Fields] OR "Tumor Necrosis Factor-alpha/antagonists and inhibitors" OR "tumor necrosis factor-alpha antagonists"[Title/Abstract] OR "tumor necrosis factor-alpha inhibitors"[Title/Abstract] OR "anti-tumor necrosis factor-alpha"[Title/Abstract] OR "anti-tnf alpha"[Title/Abstract] OR "anti-tnf"[Title/Abstract])

AND

(BASDAI[Title/Abstract] OR “Bath Ankylosing Spondylitis Disease Activity Index”[Title/Abstract]

OR BASFI[Title/Abstract] OR “Bath Ankylosing Spondylitis Functional Index”[Title/Abstract]

OR BASMI[Title/Abstract] OR “bath ankylosing spondylitis metrology index”[Title/Abstract]

OR ASDAS[Title/Abstract] OR “Ankylosing Spondylitis Disease Activity Score”[Title/Abstract] OR ASAS\*[Title/Abstract] OR “ASAS partial remission”[Title/Abstract]

OR "modified Stoke Ankylosing Spondylitis Spine Score"[Title/Abstract] OR "mSASSS"[Title/Abstract] OR “Modified Stoke Ankylosing Spondylitis Spinal Score”[Title/Abstract])

NOT ("Animals" NOT ("Animals" AND "Humans"))

Filters: Publication date from 2008/01/01 to 2016/12/31; English; French; Spanish

Embase

'ankylosing spondylitis'/de OR 'spondylitis ankylosing':ab,ti OR 'axial spa':ab,ti OR 'ankylosing spondylitis':ab,ti OR 'axial spondyloarthritis':ab,ti OR 'non-radiographic axial spondyloarthritis':ab,ti OR 'nr-axspa':ab,ti OR (axial:ab,ti AND spondyl\*:ab,ti) OR (spond\*:ab,ti AND (ankylo\*:ab,ti OR rheumat\*:ab,ti)) AND ('tumor necrosis factor alpha antagonists':ab,ti OR 'anti-tumor necrosis factor agent':ab,ti OR 'tumor necrosis factor inhibitor'/exp OR 'tumor necrosis factor inhibitor':ab,ti OR 'tumor necrosis factor alpha inhibitor'/exp OR 'tumor necrosis factor alpha inhibitor':ab,ti OR 'anti-tumor necrosis factor-alpha':ab,ti OR 'anti-tnf alpha':ab,ti OR 'anti-tnf':ab,ti OR 'infliximab'/exp OR infliximab:ab,ti OR 'remicade'/exp OR remicade:ab,ti OR inflectra:ab,ti OR 'ct-p13':ab,ti OR remsima:ab,ti OR 'etanercept'/exp OR etanercept:ab,ti OR 'enbrel'/exp OR enbrel:ab,ti OR 'adalimumab'/exp OR adalimumab:ab,ti OR 'humira'/exp OR humira:ab,ti OR 'golimumab'/exp OR golimumab:ab,ti OR 'simponi'/exp OR simponi:ab,ti OR 'certolizumab pegol'/exp OR 'certolizumab':ab,ti OR 'cimzia'/exp OR cimzia:ab,ti OR 'ustekinumab'/exp OR ustekinumab:ab,ti OR stelara:ab,ti OR 'secukinumab'/exp OR secukinumab:ab,ti OR 'apremilast'/exp OR apremilast:ab,ti OR cosentyx:ab,ti)

AND

(BASDAI:ab,ti OR “Bath Ankylosing Spondylitis Disease Activity Index”:ab,ti OR BASFI:ab,ti OR “Bath Ankylosing Spondylitis Functional Index”:ab,ti OR BASMI:ab,ti OR “bath ankylosing spondylitis metrology index”:ab,ti OR ASDAS:ab,ti OR “Ankylosing Spondylitis Disease Activity Score”:ab,ti OR ASAS\*:ab,ti OR “ASAS partial remission”:ab,ti OR "modified Stoke Ankylosing Spondylitis Spine Score":ab,ti OR "mSASSS":ab,ti OR “Modified Stoke Ankylosing Spondylitis Spinal Score”:ab,ti)

NOT ('animals'/exp NOT ('animals'/exp AND 'humans'/exp)) AND [embase]/lim NOT [medline]/lim AND ([english]/lim OR [[25](#_ENREF_25)]/lim OR [[26](#_ENREF_26)]/lim) AND [2008-2016]/py

Cochrane

ID Search Hits

#1 MeSH descriptor: [Spondylitis, Ankylosing] explode all trees

#2 ("Spondylitis Ankylosing" or "Ankylosing Spondylitis" or "axial SpA" or "axial spondyloarthritis" or "non-radiographic axial spondyloarthritis" or "nr-axSpA"):ab,ti

#3 ("axial" near/4 "spondyl\*"):ab,ti

#4 ("Spond\*" near/4 (ankylo\* or rheumat\*)):ab,ti

#5 #1 or #2 or #3 or #4

#6 ("Tumor Necrosis Factor-alpha" or "anti-tumor necrosis factor agent" or "anti-TNF" or infliximab or remicade or Inflectra or "CT-P13" or remsima or etanercept or enbrel or adalimumab or humira or golimumab or Simponi or certolizumab or cimzia or ustekinumab or stelara or secukinumab or cosentyx or apremilast):ab,ti

#7 MeSH descriptor: [Tumor Necrosis Factor-alpha] explode all trees and with qualifier(s): [Antagonists & inhibitors - AI]

#8 #6 or #7

#9 #5 and #8

#10 (BASDAI or "Bath Ankylosing Spondylitis Disease Activity Index" or BASFI or "Bath Ankylosing Spondylitis Functional Index" or BASMI or "bath ankylosing spondylitis metrology index" or ASDAS or "Ankylosing Spondylitis Disease Activity Score" or ASAS\* or "ASAS partial remission" or "modified Stoke Ankylosing Spondylitis Spine Score" or "mSASSS" or "Modified Stoke Ankylosing Spondylitis Spinal Score"):ab,ti

#11 #9 and #10 Publication Year from 2008 to 2016

**Table S2: Exclusion criteria for full-text reviewed articles**

|  |  |
| --- | --- |
| **Reference** | **Exclusion criteria**  |
| Baeten et al, 2013, [1]  | Wrong population |
| Baeten et al, 2015, [2]  | Insufficient data |
| Baraliakos et al, 2016, [3]  | Wrong population |
| Braun et al, 2012, [4]  | Wrong population |
| Braun et al, 2015, [5]  | Wrong population |
| Braun et al, 2015, [6]  | Wrong objective |
| Braun et al, 2011, [7]  | Wrong population |
| Callhoff et al, 2015, [8]  | Wrong population |
| Cheung et al, 2008, [9]  | Wrong population |
| Ciurea et al, 2013, [10]  | Wrong population |
| Coates et al, 2008, [11]  | Wrong population |
| Corbett et al, 2016, [12]  | Wrong design |
| Davis et al, 2008, [13]  | Wrong population |
| Dougados et al, 2012, [14]  | Wrong population |
| Escudero-Vilaplana et al, 2015, [15]  | Insufficient data |
| Glintborg et al, 2010, [16]  | Wrong population |
| Inman et al, 2008, [17]  | Wrong population |
| Kalyoncu et al, 2015, [18]  | Wrong objective |
| Landewé et al, 2014, [19]  | Insufficient data |
| Lekpa et al, 2012, [20]  | Wrong population |
| Lekpa et al, 2012, [21]  | Wrong population |
| Park et al, 2013, [22]  | Wrong population |
| Pathan et al, 2013, [23]  | Wrong population |
| Plasencia et al, 2013, [24]  | Insufficient data |
| Poddubnyy et al, 2013, [25]  | Wrong population |
| Rahman et al, 2016, [26]  | Wrong population |
| Ruwaard et al, 2015, [27]  | Wrong population |
| Sieper et al, 2013, [28]  | Wrong population |
| Sieper et al, 2015, [29]  | Wrong population |
| Sieper et al, 2015, [30]  | Wrong population |
| Sieper et al, 2017, [31]  | Wrong population |
| Song et al, 2010, [32]  | Wrong population |
| Song et al, 2011, [33]  | Wrong population |
| van der Heijde et al, 2008, [34]  | Wrong population |
| van der Heijde et al, 2011. [35]  | Wrong population |
| Wang et al, 2014, [36]  | Wrong population |

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