

SUPPLEMENTARY APPENDIX 3: ACR/NPF 2018 Psoriatic Arthritis Guideline Search Strategies

Ovid MEDLINE, Pubmed, Ovid Embase, Cochrane Library

PSORIATIC ARTHRITIS OVID MEDLINE SEARCH STRATEGY – NOVEMBER 15, 2016

Syntax Guide for OVID Medline	
/ = At the end of a word or phrase means that it is searched as a subject heading	Exp = A command to retrieve all narrower subject headings (MeSH)
Adj = Adjacency; terms are adjacent to each other, in either direction ; adj3 = terms are within 3 words of each other, in either direction	\$ = unlimited truncation symbol ? = substitutes for one or no characters
Limit = Command to limit results to age groups, years, language, etc.	In process = Records that do not contain all indexing
ti,ab. = Word or phrase is searched for in the title and abstract	tw. = textword; in Medline, indexed words from title, abstract .kw. – keywords assigned by the author
.fs. = free-floating Medical Subject Heading [MeSH] subheading, i.e. attached to any MeSH in the record, e.g.tu.fs. = free-floating subheading “therapeutic use”; dt = “drug therapy”, ai = “antagonists and inhibitors”	.pt. = publication type, e.g. randomized controlled trial
ed. = in Medline, the year, month and day in which the processing of the record ends, e.g. MeSH headings added. ed=20130913-20140708, entry date in database from 2013 Sept 13 to 2014 Jul 8.	
Additional Syntax Guide for OVID Embase	
.tw. = Words from title, abstract, and drug trade names .hw. = includes every EMTREE subject heading that includes a particular word	em = entry week, contains the year and week number in which a document was added to Embase since the yearly reload completion, e.g. em=201704-201716 is 4 th week of 2017 to and including 16 th week of 2017
Syntax Guide for Cochrane (Wiley)	
MeSH descriptor = Medical Subject Heading	ti,ab,kw = Word appears in title, abstract or keyword field of record; word variations are searched
near/2 = Terms must be within two words of each other, e.g. psoria* near/2 axial SpA	Next = terms must be adjacent, e.g. nonsteroidal next anti-inflammatory* means that the term nonsteroidal must be adjacent to the term anti-inflammatory*
* = truncation symbol	Word variations are searched in title, abstract, keyword search
Boolean Operators	
OR = retrieves results that include at least one of the search terms	AND = retrieves results that include all the search terms
NOT = excludes the retrieval of terms from the	

search	
--------	--

[...] = Explanatory notes, not part of search strategy. For example, a note about the study design filter used

* Abatacept was searched in Medline, Embase, and Cochrane Wiley on Dec 4, 2016

Database: Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present>

Search Strategy:

-
- 1 Arthritis, psoriatic/
 - 2 (psoriatic adj3 arthritis).tw,kw. or (psoria\$ adj3 (arthrit\$ or arthropath\$ or polyarthr\$ or polyarthr\$ or rheumat\$)).ti,ab.
 - 3 psoriasis/ and exp arthritis/
 - 4 or/1-3 [*psoriatic arthritis population*]
 - 5 (axial adj3 (PSA or psoria\$)).tw,kw.
 - 6 (psoria\$ adj3 (axial SpA or axial joint disease or spondylarthritis or spondyloarthritis or spondyloarthropath\$ or arthropath\$ or spondylitis or peripheral arthritis or enthesitis or sacroiliitis or sacroilitis)).tw,kw.
 - 7 psoria\$.tw,kw. and (spondylarthropathies/ or Spondylarthritis/ or spondylitis, ankylosing/ or sacroiliitis/)
 - 8 or/5-7 [*psoriatic spondylitis/axial population*]
 - 9 enthesitis.tw,kw.
 - 10 8 and 9 [*psoriatic arthritis and enthesitis population*]
 - 11 methotrexate/ or salazosulfapyridine/ or Sulfasalazine/ or Phosphodiesterase 4 Inhibitors/ or Cyclosporine/
 - 12 Phosphodiesterase 4.tw,kw. or ((PDE4 or PDE type 4 or PDE type IV) adj5 inhibit\$).ti,ab.
 - 13 (oral small molecule\$ or methotrexate\$ or sulfasalazine\$ or sulphasalazine\$ or salazosulfapyridine\$ or leflunomide\$ or cyclosporine\$ or apremilast or Otezla).tw,kw.
 - 14 or/11-13 [*oral small molecule drugs*]
 - 15 Tumor Necrosis Factor-alpha/ and (tu or dt).fs.
 - 16 exp Receptors, Tumor Necrosis Factor/tu [Therapeutic Use]
 - 17 (tumo?r adj necrosis factor adj (block\$ or inhibit\$)).tw,kw.
 - 18 (TNFi or TNF inhibitor\$ or anti TNF).tw,kw.
 - 19 Adalimumab/ or Etanercept/ or Infliximab/ or Certolizumab Pegol/
 - 20 (adalimumab or etanercept or infliximab or golimumab or certolizumab).tw,kw.
 - 21 (Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or

Remicade or Inflectra or "infliximab-dyyb" or "CT-P13" or Remsima or Inflectra or Simponi or Cimzia).tw,kw.

22 exp antibodies, monoclonal/ and tu.fs.

23 (mab ca2 or monoclonal antibod\$ ca2).tw,kw. and (dt or tu).fs.

24 or/15-23 [*TNFi drugs*]

25 Interleukin-17/ or Receptors, Interleukin-17/ai, tu

26 (interleukin 17 or IL17 or IL 17).tw,kw.

27 (secukinumab or brodalumab or ixekexumab or Cosentyx).tw,kw.

28 or/25-27 [*IL 17 drugs*]

29 exp Interleukin-12/

30 (interleukin 12 or IL12 or IL 12).tw,kw.

31 (ustekinumab or Stelara).tw,kw.

32 or/29-31 [*IL 12 drugs*]

33 exp Interleukin-23/

34 (IL12 adj IL23).tw,kw.

35 or/33-34 [*IL23 or IL 12/23*]

36 14 or 24 or 28 or 32 or 35 [*OSM, TNFi, IL 17, IL 12, IL 12/23 drugs*]

37 (randomized controlled trial or controlled clinical trial).pt. or randomized.ab. or placebo.ab. or drug therapy.fs. or randomly.ab. or trial.ab. or groups.ab. [*Cochrane Highly Sensitive Search Strategy for identifying randomized trials in MEDLINE: sensitivity-maximizing version (2008 revision); Ovid format. Source: Cochrane Handbook for Systematic Reviews of Interventions; online version.*]

38 (MEDLINE or systematic review).tw. or meta analysis.pt. [*McMaster Filter for systematic reviews/meta-analyses (Maximizes specificity)*
http://hiru.mcmaster.ca/hiru/HIRU_Hedges_MEDLINE_Strategies.aspx#Reviews]

39 epidemiologic studies/ or exp case control studies/ or exp cohort studies/ or case control.tw. or cohort analy\$.tw. or longitudinal.tw. or retrospective.tw. or cross sectional.tw. or Cross-sectional studies/

40 (cohort adj (study or studies)).tw.

41 (follow up adj (study or studies)).tw.

42 or/39-41 [*SIGN observational studies filter available at*
<http://www.sign.ac.uk/methodology/filters.html#obs> via Intertasc website:
<https://intertasc.org.uk/subgroups/information-specialists>]

43 (observational adj (study or studies)).tw,kw.

44 or/42-43

45 4 and 36 [*Psoriatic arthritis and OSM, TNFi, IL17, IL 12, IL 12/23 drugs*]

46 45 and (37 or 38 or 44) [*Psoriatic arthritis and (OSM, TNFi, IL 17, IL 12, IL 12/23 drugs) and*

(*RCT, systematic reviews, observational study filter*)

47 limit 45 to in process

48 8 and 36 [*Psoriatic spondylitis/axial population and OSM, TFi, IL 17, IL 12.. IL 12/23 drugs*]

49 48 and (37 or 38 or 44) [*Psoriatic spondylitis/axial population and (OSM, TFi, IL 17, IL 12, IL 12/23 drugs) and (RCT or systematic review, or observational study filter)*]

50 limit 48 to in process

51 exp Anti-Inflammatory Agents, Non-Steroidal/ or exp Cyclooxygenase 2 inhibitors/
 52 Aspirin/ or Diclofenac/ or Diflunisal/ or Epirizole/ or Fenoprofen/ or Flurbiprofen/ or
 Ibuprofen/ or Indomethacin/ or Meclofenamic Acid/ or Naproxen/ or Piroxicam/ or Sulindac/
 or Etodolac/ or oxaprozin/

53 ((non-steroidal or nonsteroidal) adj (anti-inflammator\$ or antiinflammator\$)).tw,kw.
 54 (NSAID\$ or aspirin or diclofenac or diflunisal or etodolac or epirizole or fenoprofen or
 flurbiprofen or ibuprofen or indomethacin or meclofenamic acid or meloxicam or naproxen
 or piroxicam or salsalate\$ or nabumetone or oxaprozin or sulindac).tw,kw.
 55 ((cyclooxygenase or cyclo-oxygenase or COX2) adj inhibit\$).tw,kw.
 56 (celecoxib or Celebrex).tw,kw.
 57 or/51-56 [*NSAIDs*]

58 10 and (14 or 56) [*Psoriatic arthritis and enthesitis and (OSM or NSAIDs drugs)*]
 [*See correction in update search*]

59 58 and (37 or 38 or 44) [*Psoriatic arthritis and enthesitis and (OSM or NSAIDs drugs) and
 (rct, systematic review, observational filters)*]

60 limit 58 to in process

61 10 and (24 or 28 or 32 or 35) [*Psoriatic arthritis and enthesitis and (TNFi or IL 17 or
 IL 12/23 drugs)*]

62 61 and (37 or 38 or 44) [*Psoriatic arthritis and enthesitis and (TNFi or IL 17 or IL 12/23 drugs)
 and (rct, systematic review, observational study filter)*]

63 limit 61 to in process

64 (tofacitinib or Xeljanz).tw,kw. or (Janus Kinase 3/ and tu.fs.) [*Tofacitinib*]

65 10 and (14 or 64) [*Psoriatic arthritis and enthesitis and (OSM or tofacitinib drugs)*]

66 65 and (37 or 38 or 33) [*Psoriatic arthritis and enthesitis and (OSM or tofacitinib drugs) and
 (rct, systematic review, observational study filter)*] [*See correction in update search*]

67 limit 65 to in process

68 Vaccination/ or Vaccines, Inactivated/ or Vaccines, attenuated/ or Vaccines, live,
 unattenuated/

69 (vaccin\$ or immuniz\$ or immunis\$).tw,kw.
70 or/68-69 [*Vaccines, etc.*]
71 4 and 70 [*Psoriatic arthritis and vaccines*]
72 71 and (37 or 38 or 44) [*Psoriatic arthritis and vaccines and (rct,systematic, observational filter)*]
73 limit 71 to in process
74 exp Exercise/ or exp Exercise Therapy/ or exp Physical Therapy Modalities/ or Occupational Therapy/ or Weight Loss/ or Smoking/ or Smoking Cessation/ or "Tobacco Use Cessation"/ or Massage/ or exp Acupuncture/ or Tai Ji/ or Yoga/
75 sports/ or exp physical endurance/ or exp physical fitness/ or bicycling/ or golf/ or tennis/ or exp running/ or skiing/ or walking/ or weight lifting/
76 (exercise\$ or physical therapy or physiotherapy or occupational therapy or weight loss or smoking or acupuncture or Tai Ji or Tai Chi or yoga or swimming or massage\$ or walking or jogging or running or swimming or weight training or resistance training or muscle strengthening or aerobic exercise\$ or bicycling or cycling).tw,kw.
77 or/74-76 [*Non-pharmaceutical interventions*]
78 4 and 77 [*Psoriatic arthritis and non-pharmaceutical interventions*]
79 78 and (37 or 38 or 44) [*Psoriatic arthritis and non-pharmaceutical interventions and (rct,systematic reviews, observational studies filter)*]
80 limit 78 to in process
81 Remission Induction/
82 (treat to target or remission or tight control).tw,kw.
83 ((low or minimal) adj disease activity).tw,kw.
84 (intensive adj (treatment or therapy)).tw,kw.
85 or/81-84 [*Treat to target, etc.*]
86 4 and 85 [*Psoriatic arthritis and treat to target, etc.*]
87 86 and (37 or 38 or 44) [*Psoriatic arthritis and treat to target,etc. and (rct, systematic review, observational studies filter)*]
88 limit 86 to in process
89 exp Drug-Induced Liver Injury/ or exp Liver Diseases/ or exp Herpes Zoster/ or exp Neoplasms/ or exp Cardiovascular Diseases/ or exp Inflammatory Bowel Diseases/ or exp Uveitis/ or depression/ or exp Diabetes Mellitus/
90 exp bacterial infections/ or exp central nervous system infections/ or exp infection/ or exp mycoses/ or exp zoonoses/ or exp virus diseases/ or exp parasitic diseases/
91 (infection\$ or (liver adj2 disease\$) or zoster or cancer\$ or malignanc\$ or carcinoma\$ or IBD or inflammatory bowel or uveitis or depression or diabetes).tw,kw.

- 92 ((heart or cardiovascular) adj2 disease\$.tw,kw.
- 93 or/89-92 [*Co-morbidities*]
- 94 4 and 93 [*Psoriatic arthritis and co-morbidities*]
- 95 94 and (36 or 37 or 44) [*Psoriatic arthritis and co-morbidities and (rct, systematic review, observational studies filter)*]
- 96 limit 94 to in process
- 97 46 or 49 or 59 or 62 or 66 or 72 or 79 or 87 or 95
- 98 exp animals/ not humans.sh.
- 99 97 not 98 [*exclusively animal studies excluded*]
- 100 limit 99 to english language
- 101 limit 100 to "all adult (19 plus years)"
- 102 47 or 50 or 60 or 63 or 67 or 73 or 80 or 96 [*See correction in update search*]
- 103 limit 102 to english language
- 104 101 or 103

PSORIATIC ARTHRITIS OVID EMBASE SEARCH STRATEGY – NOVEMBER 15, 2016

Database: Embase <1974 to 2016 November 15>

Search Strategy:

- 1 psoriatic arthritis/
- 2 (psoriatic adj3 arthritis).tw,kw.
- 3 (psoria\$ adj3 (arthrit\$ or arthropath\$ or polyarthrit\$ or poly-arthrit\$ or rheumat\$)).ti,ab.
- 4 psoriasis/ and arthritis/
- 5 or/1-4 [*psoriatic arthritis population*]
- 6 (axial adj3 (PSA or psoria\$)).tw,kw.
- 7 psoria\$.tw,kw. and (Spondylarthritis/ or spondyloarthropathy/ or spondylitis/ or anklosing spondylitis/ or sacroiliitis/)
- 8 (psoriatic adj3 (axial joint disease or spondylarthritis or spondyloarthrit or spondylarthropath\$ or spondyloarthropath\$ or spondylitis)).tw,kw.
- 9 (psoriatic adj3 (axial arthritis or enthesitis or peripheral arthritis or sacroiliitis or sacroilitis)).tw,kw.
- 10 or/6-9 [*Psoriatic spondylitis/axial population*]
- 11 enthesitis/ or enthesitis.kw,tw.
- 12 5 and 11 [*psoriatic arthritis and enthesitis population*]

- 13 methotrexate/ or salazosulfapyridine/ or apremilast/ or Phosphodiesterase IV inhibitor/ or cyclosporin/ or leflunomide/
- 14 (oral small molecule or methotrexate or salazosulfapyridine or sulfasalazine\$ or sulphasalazine\$ or leflunomide\$ or apremilast\$ or Otezia or cyclosporin\$).kw,tw.
- 15 (phosphodiesterase 4 inhibitor\$ or ((PDE4 or PDE type 4 or PDE type IV) adj5 inhibit\$)).tw,kw.
- 16 or/13-15 [*oral small molecule drugs*]
- 17 tumor necrosis factor alpha/ or tumor necrosis factor inhibitor/ or tumor necrosis factor receptor/ or tumour necrosis factor receptor 2/
- 18 (tum?or adj necrosis factor\$ adj (block\$ or inhibit\$)).tw,kw.
- 19 (TNFi or TNF Inhibit\$ or anti TNF).tw,kw.
- 20 adalimumab/ or etanercept/ or infliximab/ or golimumab/ or certolizumab pegol/
- 21 (adalimumab or etanercept or infliximab or golimumab or certolizumab).tw,kw.
- 22 (Humira or Enbrel or Remicade or Simponi or Cimzia or Amjevita or adalimumab-atto or Erelzi or etanercept-szss or Inflectra or infliximab-dyyb or "CT-P13" or Remsima).tw,kw.
- 23 5 and biosimilar agent/
- 24 exp monoclonal antibody/
- 25 monoclonal antibod\$.tw,kw.
- 26 (mab ca2 or monoclonal antibod\$).tw,kw. and dt.fs.
- 27 or/17-26 [*TNFi drugs*]
- 28 interleukin 17/ or interleukin 17 receptor/ or secukinumab/
- 29 (IL17 or IL 17 or interleukin 17 or Cosentyx).tw,kw.
- 30 or/28-29 [*IL 17 drugs*]
- 31 interleukin 12/ or interleukin 12/dt [Drug Therapy]
- 32 ustekinumab/ or ixekizumab/ or brodalumab/
- 33 (ustekinumab or Stelara or brodalumab or ixekizumab).tw,kw.
- 34 or/31-33 [*IL 12 drugs*]
- 35 interleukin 23/ or interleukin 23/ or (Interleukin 23 or IL23).tw,kw.
- 36 16 or 27 or 30 or 34 or 35 [*OSM, TNFi, IL 17, IL 12, IL 12/23 drugs*]
- 37 (random: or placebo: or double-blind:).tw. [*RCT filter*]
- 38 MEDLINE.tw. or exp systematic review/ or systematic review.tw. or meta-analysis/ or intervention\$.ti. [*systematic review filter*]
- 39 exp cohort analysis/ or exp longitudinal study/ or exp prospective study/ or exp follow up/ or exp case control study/
- 40 (cohort\$ or (case\$ and control\$)).tw.
- 41 or/39-40

42 observational stud\$.tw,kw.
 43 or/41-42 [*observational study filter*]
 44 5 and 36 [*Psoriatic arthritis and (OSM, TNFi, IL17, IL12, IL23 drugs)*]
 45 44 and (37 or 38 or 43) [*Psoriatic arthritis and (OSM, TNFi, IL17, IL12, IL23 drugs) and (rct, or systematic review, or observational studies filter)*]
 46 10 and 16 [*Psoriatic spondylitis/axial population and (OSM, TNF, IL17, IL12, IL23 drugs)*]
 47 46 and (37 or 38 or 43) [*Psoriatic spondylitis/axial population and (OSM, TNFi, IL17, IL12, IL23 drugs) and (rct, systematic review, observational filter)*]
 48 exp nonsteroid antiinflammatory agent/
 49 acetylsalicylic acid/ or diclofenac/ or diflunisal/ or epirizole/ or fenoprofen/ or flurbiprofen/ or ibuprofen/ or indomethacin/ or meclofenamic acid/ or naproxen/ or piroxicam/ or etodolac/ or nabumetone/ or oxaprozin/
 50 (NSAID\$ or aspirin or diclofenac or diflunisal or etodolac or epirizole or fenoprofen or fluriprofen or ibuprofen or indomethacin or meclofenamic acid or meloxicam or naproxen or piroxicam or salsalate\$ or nabumetone or oxaprozine or sulindac).tw,kw.
 51 exp cyclooxygenase 2 inhibitor/
 52 ((cyclooxygenase or cyclo-oxygenase) adj2 inhibitor\$).tw,kw.
 53 (celecoxib or Celebrex).tw,kw.
 54 or/48-53 [*NSAIDs*]
 55 12 and (16 or 54) [*Psoriatic arthritis and enthesitis and (OSM or NSAIDs)*]
 56 55 and (37 or 38 or 43) [*Psoriatic arthritis and enthesitis and (OSM or NSAIDs) and (rct, systematic review, observational studies filter)*]
 57 tofacitinib/ or Janus kinase 3 inhibitor/ or Xeljanz.tw,kw.
 58 12 and (27 or 30 or 34 or 35) [*Psoriatic arthritis and enthesitis and (TNFi, IL17, IL12/23 drugs)*]
 59 58 and (37 or 38 or 43) [*Psoriatic arthritis and enthesitis and (TNFi, IL17, IL12/23 drugs), and (rct, systematic review, observational filter)*]
 60 exp immunization/
 61 exp vaccine/
 62 (vaccin\$ or immunis\$ or immuniz\$).tw,kw.
 63 or/60-62 [*Vaccine terms*]
 64 5 and 63 [*Psoriatic arthritis and vaccine terms*]
 65 64 and (37 or 38 or 43) [*Psoriatic arthritis and vaccine terms and (rct, systematic review, observation studies filter)*]

66 exp exercise/ or exp physiotherapy/ or occupational therapy/ or weight reduction/ or smoking cessation/ or weight reduction/ or exp acupuncture/ or Tai Chi/ or yoga/ or massage/ or exp sport/ or exp kinesiotherapy/

67 (exercise\$ or physical therapy or physiotherapy or occupational therapy or weight loss or smoking or acupuncture or Tai Ji or Tai Chi or yoga or swimming or massage\$ or kinesiotherap\$ or running or jogging or aerobics or weight training or resistance training or muscle strengthening or bicycling or cycling).tw,kw.

68 or/66-67 [*Non-pharmaceutical interventions*]

69 5 and 68 [*Psoriatic arthritis and non-pharmaceutical interventions*]

70 69 and (37 or 38 or 43) [*Psoriatic arthritis and non-pharmaceutical interventions and (rct, systematic review, observational study filter)*]

71 remission/

72 (treat to target or remission or tight control).tw,kw.

73 ((low or minimal) adj disease activity).tw,kw.

74 (intensive adj (treatment or therapy)).tw,kw.

75 or/71-74 [*Treat to target, etc.*]

76 5 and 75

77 76 and (37 or 38 or 43) [*Psoriatic arthritis and treat to target terms and (rct, systematic review, observational study filter)*]

78 exp liver disease/ or exp cardiovascular disease/ or exp herpes zoster/ or exp neoplasm/ or exp infection/ or exp inflammatory bowel disease/ or exp uveitis/ or exp diabetes mellitus/ or exp depression/

79 (malignan\$ or cancer\$ or carcinoma\$ or liver disease\$ or heart disease\$ or cardiovascular disease\$ or herpes zoster or serious infection\$ or inflammatory bowel disease or uveitis or diabetes or depression).tw,kw.

80 or/78-79 [*Co-morbidities*]

81 5 and 80 [*Psoriatic arthritis and comorbidities*]

82 81 and (35 or 37 or 43) [*Psoriatic arthritis and comorbidities and (rct, systematic review, observational study filter)*]

83 45 or 47 or 56 or 59 or 65 or 70 or 77 or 82

84 ((animal\$ or nonhumans) not human\$.sh,hw.

85 83 not 84 [*Excludes exclusively animal studies*]

86 limit 85 to conference abstract

87 limit 85 to conference paper

88 limit 85 to conference proceeding

89 limit 85 to "conference review"

- 90 or/86-89
- 91 85 not 90 [*Excludes conference abstracts, etc.*]
- 92 limit 91 to adult <18 to 64 years>
- 93 limit 91 to aged <65+ years>
- 94 92 or 93 [*Limits retrieval to above age groups*]
- 95 limit 94 to english language [*Limits retrieval to English language articles*]
- 96 limit 95 to embase [*Limits retrieval to articles unique to Embase*]

PSA COCHRANE LIBRARY (DATABASE OF SYSTEMATIC REVIEWS, CLINICAL TRIALS, OTHER REVIEWS, TECHNOLOGY ASSESSMENTS) SEARCH STRATEGY – NOVEMBER 15, 2016

- #1 MeSH descriptor: [Arthritis, Psoriatic] this term only
- #2 psoriatic arthritis:ti,ab,kw
- #3 psoriatic arthropathy:ti,ab,kw
- #4 psoriatic polyarthritis:ti,ab,kw
- #5 MeSH descriptor: [Psoriasis] this term only
- #6 MeSH descriptor: [Arthritis] 1 tree(s) exploded
- #7 #5 and #6
- #8 {or #1-#4, #7}
- #9 (axial PsA) or (axial psoria*):ti,ab,kw
- #10 (psoria*) near/2 (axial SpA or axial joint disease or spondylarthritis or spondyloarthritis or spondyloarthropath* or arthropath* or spondylitis or peripheral arthritis or enthesitis or sacroiliitis or sacroiliitis):ti,ab,kw
- #11 MeSH descriptor: [Spondylarthropathies] this term only
- #12 MeSH descriptor: [Spondylarthritis] this term only
- #13 MeSH descriptor: [Spondylitis, Ankylosing] this term only
- #14 MeSH descriptor: [Sacroiliitis] this term only
- #15 {or #11-#14}
- #16 psoria*:ti,ab,kw
- #17 #15 and #16
- #18 {or #9-#10, #17}
- #19 enthesitis:ti,ab,kw
- #20 #8 and #19
- #21 MeSH descriptor: [Methotrexate] this term only
- #22 MeSH descriptor: [Sulfasalazine] this term only

- #23 MeSH descriptor: [Phosphodiesterase 4 Inhibitors] explode all trees
- #24 MeSH descriptor: [Cyclosporine] this term only
- #25 "Phosphodiesterase 4" or "PDE4" or "PDE type 4" or "PDE type IV":ti,ab,kw
- #26 "oral small molecule" or methotrexate* or sulfasalazine* or sulphasalazine* or salazosulfapyridine* or leflunomide* or cyclosporin* or apremalast or Otezia:ti,ab,kw
- #27 {or #21-#26}
- #28 MeSH descriptor: [Tumor Necrosis Factor-alpha] explode all trees
- #29 MeSH descriptor: [Receptors, Tumor Necrosis Factor] explode all trees
- #30 (tumor or tumour) near/2 (necrosis factor) near 2 (block* or inhibit*):ti,ab,kw
- #31 TNFi or "TNF inhibitor*" or "anti TNF":ti,ab,kw
- #32 MeSH descriptor: [Adalimumab] this term only
- #33 MeSH descriptor: [Etanercept] this term only
- #34 MeSH descriptor: [Infliximab] this term only
- #35 MeSH descriptor: [Certolizumab Pegol] this term only
- #36 adalimumab or etanercept or infliximab or golimumab or certolizumab:ti,ab,kw
- #37 Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or Remicade or "Infliximab-dyyb" or "CT-P-13" or Remsima or Inflectra or Simponi or Cimzia:ti,ab,kw
- #38 MeSH descriptor: [Antibodies, Monoclonal] explode all trees
- #39 "mab ca2" or "monoclonal antibod*":ti,ab,kw
- #40 {or #28-#39}
- #41 MeSH descriptor: [Interleukin-17] this term only
- #42 MeSH descriptor: [Receptors, Interleukin-17] this term only
- #43 "interleukin 17" or IL17 or "IL 17":ti,ab,kw
- #44 secukinumab or brodalumab or ixekexumab or Cosentyx:ti,ab,kw
- #45 {or #41-#44}
- #46 MeSH descriptor: [Interleukin-12] explode all trees
- #47 "interleukin 12" or IL12 or "IL 12":ti,ab,kw
- #48 ustekinumab or Stelara:ti,ab,kw
- #49 {or #46-#48}
- #50 MeSH descriptor: [Interleukin-23] explode all trees
- #51 IL12 next IL23
- #52 {or #50-#51}
- #53 {or #27, #40, #45, #49, #52}
- #54 #8 and #53
- #55 #18 and #53

- #56 MeSH descriptor: [Anti-Inflammatory Agents, Non-Steroidal] explode all trees
- #57 MeSH descriptor: [Cyclooxygenase 2 Inhibitors] explode all trees
- #58 MeSH descriptor: [Aspirin] explode all trees
- #59 MeSH descriptor: [Diclofenac] this term only
- #60 MeSH descriptor: [Diflunisal] this term only
- #61 MeSH descriptor: [Epirizole] this term only
- #62 MeSH descriptor: [Fenoprofen] this term only
- #63 MeSH descriptor: [Flurbiprofen] this term only
- #64 MeSH descriptor: [Ibuprofen] this term only
- #65 MeSH descriptor: [Indomethacin] explode all trees
- #66 MeSH descriptor: [Meclofenamic Acid] this term only
- #67 MeSH descriptor: [Naproxen] this term only
- #68 MeSH descriptor: [Piroxicam] this term only
- #69 MeSH descriptor: [Sulindac] this term only
- #70 MeSH descriptor: [Etodolac] this term only
- #71 (non-steroidal or nonsteroidal) next (anti-inflammator* or antiinflammator*):ti,ab,kw
- #72 NSAID* or aspirin or diclofenac or diflunisal or etodolac or epirizole or fenoprofen or flurbiprofen or ibuprofen or indomethacin or meclofenamic acid or meloxicam or naproxen or piroxicam or salsalate* or nabumetone or oxaprozin or sulindac:ti,ab,kw
- #73 (cyclooxygenase or cyclo-oxygenase) next "2" next inhibit*:ti,ab,kw
- #74 celecoxib or Celebrex:ti,ab,kw
- #75 {or #56-#74}
- #76 #20 and {or #27, #75}
- #77 tofacitinib or Xeljanz:ti,ab,kw
- #78 MeSH descriptor: [Janus Kinase 3] this term only
- #79 {or #77-#78}
- #80 #20 and {or #27, #79}
- #81 MeSH descriptor: [Vaccination] this term only
- #82 [mh immunization]
- #83 MeSH descriptor: [Vaccines] explode all trees
- #84 MeSH descriptor: [Vaccines, Inactivated] explode all trees
- #85 MeSH descriptor: [Vaccines, Attenuated] this term only
- #86 MeSH descriptor: [Vaccines, Live, Unattenuated] this term only
- #87 vaccin* or immuniz* or immunis*:ti,ab,kw
- #88 {or #81-#87}
- #89 #8 and #88

- #90 MeSH descriptor: [Exercise] explode all trees
- #91 MeSH descriptor: [Exercise Therapy] explode all trees
- #92 MeSH descriptor: [Physical Therapy Modalities] explode all trees
- #93 MeSH descriptor: [Occupational Therapy] this term only
- #94 MeSH descriptor: [Weight Loss] this term only
- #95 MeSH descriptor: [Tobacco Use Cessation] explode all trees
- #96 MeSH descriptor: [Massage] this term only
- #97 MeSH descriptor: [Acupuncture] this term only
- #98 MeSH descriptor: [Tai Ji] this term only
- #99 MeSH descriptor: [Yoga] this term only
- #100 MeSH descriptor: [Sports] this term only
- #101 MeSH descriptor: [Physical Endurance] explode all trees
- #102 MeSH descriptor: [Physical Fitness] this term only
- #103 MeSH descriptor: [Bicycling] this term only
- #104 MeSH descriptor: [Golf] this term only
- #105 MeSH descriptor: [Tennis] this term only
- #106 MeSH descriptor: [Running] explode all trees
- #107 MeSH descriptor: [Skiing] this term only
- #108 MeSH descriptor: [Swimming] this term only
- #109 MeSH descriptor: [Walking] explode all trees
- #110 MeSH descriptor: [Weight Lifting] this term only
- #111 exercis* or "physical therapy" or physiotherap* or "occupational therapy" or "weight loss" or smoking or acupuncture or "Tai Ji" or "Tai Chi" or yoga or swimming or massage* or walking or jogging or running or "weight training" or "resistance training" or "muscle strengthening" or aerobics or bicycling or cycling:ti,ab,kw
- #112 {or #90-#111}
- #113 #8 and #112
- #114 MeSH descriptor: [Remission Induction] explode all trees
- #115 "treat to target" or remission or "tight control" or "intensive control":ti,ab,kw
- #116 (low or minimal) next "disease activity":ti,ab,kw
- #117 intensive next (treatment or therapy):ti,ab,kw
- #118 {or #114-#117}
- #119 #8 and #118
- #120 MeSH descriptor: [Drug-Induced Liver Injury] explode all trees
- #121 MeSH descriptor: [Liver Diseases] explode all trees
- #122 MeSH descriptor: [Herpes Zoster] explode all trees

- #123 MeSH descriptor: [Neoplasms] explode all trees
- #124 MeSH descriptor: [Cardiovascular Diseases] explode all trees
- #125 MeSH descriptor: [Inflammatory Bowel Diseases] explode all trees
- #126 MeSH descriptor: [Uveitis] explode all trees
- #127 MeSH descriptor: [Depression] this term only
- #128 MeSH descriptor: [Diabetes Mellitus] explode all trees
- #129 MeSH descriptor: [Bacterial Infections] explode all trees
- #130 MeSH descriptor: [Central Nervous System Infections] explode all trees
- #131 MeSH descriptor: [Infection] explode all trees
- #132 MeSH descriptor: [Mycoses] explode all trees
- #133 MeSH descriptor: [Zoonoses] explode all trees
- #134 MeSH descriptor: [Parasitic Diseases] explode all trees
- #135 [mh "virus diseases"]
- #136 infection* or "liver disease*" or zoster or cancer* or malignanc* or carcinoma* or IBD or
"inflammatory bowel disease*" or uveitis or depression or diabetes:ti,ab,kw
- #137 (heart or cardiovascular) next disease*:ti,ab,kw
- #138 {or #120-#137}
- #139 #8 and #138
- #140 {or #54-#55, #76, #80, #89, #113, #119, #139}

PSORIASIS (RCTS) OVID MEDLINE SEARCH STRATEGY – JANUARY 24, 2017

Database: Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R)
Daily and Ovid MEDLINE(R) <1946 to Present>

Search Strategy:

-
- 1 psoriasis/ or psoria\$.tw,kw.
 - 2 methotrexate/ or salazosulfapyridine/ or Sulfasalazine/ or Phosphodiesterase 4 Inhibitors/ or
Cyclosporine/
 - 3 Phosphodiesterase 4.tw,kw. or ((PDE4 or PDE type 4 or PDE type IV) adj5 inhibit\$.ti,ab.
 - 4 (oral small molecule\$ or methotrexate\$ or sulfasalazine\$ or sulphasalazine\$ or
salazosulfapyridine\$ or leflunomide\$ or cyclosporine\$ or apremilast or Otezla).tw,kw.
 - 5 or/2-4 [*oral small molecule drugs*]
 - 6 Tumor Necrosis Factor-alpha/ and (tu or dt).fs.
 - 7 exp Receptors, Tumor Necrosis Factor/tu [*Therapeutic Use*]
 - 8 (tumo?r adj necrosis factor adj (block\$ or inhibit\$)).tw,kw.
 - 9 (TNFi or TNF inhibitor\$ or anti TNF).tw,kw.

10 Adalimumab/ or Etanercept/ or Infliximab/ or Certolizumab Pegol/
11 (adalimumab or etanercept or infliximab or golimumab or certolizumab).tw,kw.
12 (Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or
Remicade or Inflectra or "infliximab-dyyb" or "CT-P13" or Remsima or Inflectra or Simponi
or Cimzia).tw,kw.
13 exp antibodies, monoclonal/ and tu.fs.
14 (mab ca2 or monoclonal antibod\$ ca2).tw,kw. and (dt or tu).fs.
15 or/6-14 [*TNFi drugs*]
16 Interleukin-17/ or Receptors, Interleukin-17/ai, tu [*Antagonists & Inhibitors, Therapeutic Use*]
17 (interleukin 17 or IL17 or IL 17).tw,kw.
18 (secukinumab or brodalumab or ixekexumab or Cosentyx).tw,kw.
19 or/16-18 [*IL 17 drugs*]
20 exp Interleukin-12/
21 (interleukin 12 or IL12 or IL 12).tw,kw.
22 (ustekinumab or Stelara).tw,kw.
23 or/20-22 [*IL 12 drugs*]
24 exp Interleukin-23/
25 (IL12 adj IL23).tw,kw.
26 or/24-25 [*IL23 or IL 12/23*]
27 Abatacept/ or (abatacept or Orencia).tw,kw.
28 (tofacitinib or Xeljanz).tw,kw. or (Janus Kinase 3/ and tu.fs.) [*Tofacitinib*]
29 5 or 15 or 19 or 23 or 26 or 27 or 28 [*Drugs OSM, TNFi, IL17, IL12, IL12/23, abatacept,*
tofacitinib]
30 1 and 29
31 limit 30 to randomized controlled trial
32 limit 31 to english language
33 limit 32 to "all adult (19 plus years)"
34 limit 30 to in process
35 random\$.tw.
36 34 and 35
37 33 or 36

PSORIASIS (RCTS) OVID EMBASE SEARCH STRATEGY – JANUARY 24, 2017

Database: Embase <1974 to 2017 January 24>

Search Strategy:

-
- 1 exp psoriasis/ or psoria\$.tw,kw.
 - 2 methotrexate/ or salazosulfapyridine/ or apremilast/ or Phosphodiesterase IV inhibitor/ or cyclosporin/ or leflunomide/
 - 3 (oral small molecule or methotrexate or salazosulfapyridine or sulfasalazine\$ or sulphasalazine\$ or leflunomide\$ or apremilast\$ or Otezia or cyclosporin\$).kw,tw.
 - 4 (phosphodiesterase 4 inhibitor\$ or ((PDE4 or PDE type 4 or PDE type IV) adj5 inhibit\$)).tw,kw.
 - 5 or/2-4
 - 6 tumor necrosis factor alpha/ or tumor necrosis factor inhibitor/ or tumor necrosis factor receptor/ or tumour necrosis factor receptor 2/ or tumor necrosis factor alpha/dt or tumor necrosis factor receptor/dt
 - 7 (tum?or adj necrosis factor\$ adj (block\$ or inhibit\$)).tw,kw.
 - 8 (TNFi or TNF Inhibit\$ or anti TNF).tw,kw.
 - 9 adalimumab/ or etanercept/ or infliximab/ or golimumab/ or certolizumab pegol/
 - 10 (adalimumab or etanercept or infliximab or golimumab or certolizumab).tw,kw.
 - 11 (Humira or Enbrel or Remicade or Simponi or Cimzia or Amjevita or adalimumab-atto or Erelzi or etanercept-szszs or Inflectra or infliximab-dyyb or "CT-P13" or Remsima).tw,kw.
 - 12 exp monoclonal antibody/dt or monoclonal antibody/
 - 13 monoclonal antibod\$.tw,kw.
 - 14 (mab ca2 or monoclonal antibod\$).tw,kw. and dt.fs.
 - 15 or/6-14
 - 16 interleukin 17/ or interleukin 17 receptor/ or secukinumab/
 - 17 (IL17 or IL 17 or interleukin 17 or Cosentyx).tw,kw.
 - 18 or/16-17 [*IL 17 drugs*]
 - 19 interleukin 12/ or interleukin 12/dt [*Drug Therapy*]
 - 20 ustekinumab/ or ixekizumab/ or brodalumab/
 - 21 (ustekinumab or Stelara or brodalumab or ixekizumab).tw,kw.
 - 22 or/19-21 [*IL 12 drugs*]
 - 23 interleukin 23/ or interleukin 23/ or (Interleukin 23 or IL23).tw,kw.
 - 24 Abatacept/ or (abatacept or Orencia).tw,kw.
 - 25 tofacitinib/ or Janus kinase 3 inhibitor/ or Xeljanz.tw,kw.

- 26 5 or 15 or 18 or 22 or 23 or 24 or 25
- 27 1 and 26
- 28 limit 27 to randomized controlled trial
- 29 limit 28 to conference abstract
- 30 limit 28 to conference paper
- 31 limit 28 to conference proceeding
- 32 limit 28 to "conference review"
- 33 or/29-32
- 34 28 not 33 [*Exclude conference abstracts, etc.*]
- 35 limit 34 to adult <18 to 64 years>
- 36 limit 34 to aged <65+ years>
- 37 35 or 36 [*Limit articles to above age groups*]
- 38 limit 37 to english language [*Limit to English language articles*]
- 39 limit 38 to embase [*Limit to articles unique to Embase*]

PSORIASIS COCHRANE (CLINICAL TRIALS DATABASE) SEARCH STRATEGY – JANUARY 24, 2017

- #1 MeSH descriptor: [Psoriasis] this term only
- #2 psoriasis or psoriatic:ti,ab,kw
- #3 #1 or #2
- #4 MeSH descriptor: [Methotrexate] this term only
- #5 MeSH descriptor: [Sulfasalazine] this term only
- #6 MeSH descriptor: [Phosphodiesterase 4 Inhibitors] explode all trees
- #7 MeSH descriptor: [Cyclosporine] this term only
- #8 "Phosphodiesterase 4" or "PDE4" or "PDE type 4" or "PDE type IV":ti,ab,kw
- #9 "oral small molecule" or methotrexate* or sulfasalazine* or sulphasalazine* or salazosulfapyridine* or leflunomide* or cyclosporin* or apremalast or Otezia:ti,ab,kw
- #10 {or #4-#9}
- #11 MeSH descriptor: [Tumor Necrosis Factor-alpha] explode all trees
- #12 MeSH descriptor: [Receptors, Tumor Necrosis Factor] explode all trees
- #13 (tumor or tumour) near/2 (necrosis factor) near 2 (block* or inhibit*):ti,ab,kw
- #14 TNFi or "TNF inhibitor*" or "anti TNF":ti,ab,kw
- #15 MeSH descriptor: [Adalimumab] this term only
- #16 MeSH descriptor: [Etanercept] this term only
- #17 MeSH descriptor: [Infliximab] this term only

- #18 MeSH descriptor: [Certolizumab Pegol] this term only
- #19 adalimumab or etanercept or infliximab or golimumab or certolizumab:ti,ab,kw
- #20 Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or Remicade or "Infliximab-dyyb" or "CT-P-13" or Remsima or Inflectra or Simponi or Cimzia:ti,ab,kw
- #21 MeSH descriptor: [Antibodies, Monoclonal] explode all trees
- #22 "mab ca2" or "monoclonal antibod*":ti,ab,kw
- #23 {or #11-#22}
- #24 MeSH descriptor: [Interleukin-17] this term only
- #25 MeSH descriptor: [Receptors, Interleukin-17] this term only
- #26 "interleukin 17" or IL17 or "IL 17":ti,ab,kw
- #27 secukinumab or brodalumab or ixekexumab or Cosentyx:ti,ab,kw
- #28 {or #24-#27}
- #29 MeSH descriptor: [Interleukin-12] explode all trees
- #30 "interleukin 12" or IL12 or "IL 12":ti,ab,kw
- #31 ustekinumab or Stelara:ti,ab,kw
- #32 {or #29-#31}
- #33 MeSH descriptor: [Interleukin-23] explode all trees
- #34 IL12 next IL23
- #35 {or #33-#34}
- #36 MeSH descriptor: [Abatacept] this term only
- #37 abatacept or Orencia
- #38 #36 or #37
- #39 {or #10, #23, #28, #32, #35, #38}
- #40 #3 and #39
- #41 MeSH descriptor: [Anti-Inflammatory Agents, Non-Steroidal] explode all trees
- #42 MeSH descriptor: [Cyclooxygenase 2 Inhibitors] explode all trees
- #43 MeSH descriptor: [Aspirin] explode all trees
- #44 MeSH descriptor: [Diclofenac] this term only
- #45 MeSH descriptor: [Diflunisal] this term only
- #46 MeSH descriptor: [Epirizole] this term only
- #47 MeSH descriptor: [Fenoprofen] this term only
- #48 MeSH descriptor: [Flurbiprofen] this term only
- #49 MeSH descriptor: [Ibuprofen] this term only
- #50 MeSH descriptor: [Indomethacin] explode all trees
- #51 MeSH descriptor: [Meclofenamic Acid] this term only

- #52 MeSH descriptor: [Naproxen] this term only
- #53 MeSH descriptor: [Piroxicam] this term only
- #54 MeSH descriptor: [Sulindac] this term only
- #55 MeSH descriptor: [Etodolac] this term only
- #56 (non-steroidal or nonsteroidal) next (anti-inflammator* or antiinflammator*):ti,ab,kw
- #57 NSAID* or aspirin or diclofenac or diflunisal or etodolac or eprizole or fenoprofen or flurbiprofen or ibuprofen or indomethacin or meclofenamic acid or meloxicam or naproxen or piroxicam or salsalate* or nabumetone or oxaprozin or sulindac:ti,ab,kw
- #58 (cyclooxygenase or cyclo-oxygenase) next "2" next inhibit*:ti,ab,kw
- #59 celecoxib or Celebrex:ti,ab,kw
- #60 {or #41-#59}
- #61 tofacitinib or Xeljanz:ti,ab,kw
- #62 MeSH descriptor: [Janus Kinase 3] this term only
- #63 {or #61-#62}
- #64 {or #60, #63}
- #65 #3 and #64
- #66 #40 or #65

PSORIASIS OR RHEUMATOID ARTHRITIS AND DRUGS AND VACCINES OVID MEDLINE SYSTEMATIC REVIEWS SEARCH STRATEGY – FEBRUARY 3, 2017

Database: Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present>

Search Strategy:

- 1 Psoriasis/ or psoria\$.tw,kw.
- 2 exp Arthritis, rheumatoid/ or (rheumatoid adj2 arthriti\$).tw,kw.
- 3 or/1-2
- 4 Adalimumab/ or Etanercept/ or Infliximab/ or Certolizumab Pegol/
- 5 (adalimumab or etanercept or infliximab or golimumab or certolizumab).tw,kw.
- 6 (Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or Remicade or Inflectra or "infliximab-dyyb" or "CT-P13" or Remsima or Simponi or Cimzia).tw,kw.)
- 7 (secukinumab or Cosentyx or ixekizumab or Taltz).tw,kw.
- 8 (ustekinumab or Stelara).tw,kw.

9 Abatacept/ or (abatacept or Orencia).tw,kw.
10 or/4-9
11 Vaccination/ or Vaccines, Inactivated/ or Vaccines, attenuated/ or Vaccines, live,
unattenuated/
12 (vaccin\$ or immuniz\$ or immunis\$).tw,kw.
13 or/11-12
14 3 and 10 and 13 (129)
15 (randomized controlled trial or controlled clinical trial).pt. or randomized.ab. or placebo.ab.
or drug therapy.fs. or randomly.ab. or trial.ab. or groups.ab. [*Cochrane Highly Sensitive
Search Strategy for identifying randomized trials in MEDLINE: sensitivity-maximizing version
(2008 revision); Ovid format. Source: Cochrane Handbook for Systematic Reviews of
Interventions; online version.*]
16 14 and 15
17 (MEDLINE or systematic review).tw. or meta analysis.pt. [*McMaster Filter for systematic
reviews/meta-analyses (Maximizes specificity)*
http://hiru.mcmaster.ca/hiru/HIRU_Hedges_MEDLINE_Strategies.aspx#Reviews]
18 14 and 17
19 epidemiologic studies/ or exp case control studies/ or exp cohort studies/ or case control.tw.
or cohort analy\$.tw. or longitudinal.tw. or retrospective.tw. or cross sectional.tw. or
Cross-sectional studies/
20 (cohort adj (study or studies)).tw.
21 (follow up adj (study or studies)).tw.
22 or/19-21 [*SIGN observational studies filter available at*
<http://www.sign.ac.uk/methodology/filters.html#obs> via Intertasc website:
<https://intertasc.org.uk/subgroups/information-specialists>
23 (observational adj (study or studies)).tw,kw.
24 or/22-23
25 14 and 24
26 16 or 18 or 25
27 exp animals/ not humans.sh.
28 26 not 27
29 limit 28 to english language
30 limit 26 to in process
31 29 or 30

PSORIASIS OR RHEUMATOID ARTHRITIS AND VACCINE COCHRANE (DATABASE OF SYSTEMATIC REVIEWS, CLINICAL TRIALS, OTHER REVIEWS, TECHNOLOGY ASSESSMENTS) SEARCH STRATEGY – FEBRUARY 3, 2017

- #1 MeSH descriptor: [Psoriasis] this term only
- #2 psoria*:ti,ab,kw
- #3 MeSH descriptor: [Arthritis, Rheumatoid] explode all trees
- #4 rheumatoid next arthritis
- #5 {or #1-#4}
- #6 MeSH descriptor: [Adalimumab] this term only
- #7 MeSH descriptor: [Etanercept] this term only
- #8 MeSH descriptor: [Infliximab] this term only
- #9 MeSH descriptor: [Certolizumab Pegol] this term only
- #10 adalimumab or etanercept or infliximab or golimumab or certolizumab:ti,ab,kw
- #11 Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or Remicade or "Infliximab-dyyb" or "CT-P-13" or Remsima or Inflectra or Simponi or Cimzia:ti,ab,kw
- #12 secukinumab or ustekinumab or ixekizumab or Cosentyx or Stelara or Taltz:ti,ab,kw
- #13 {or #6-#12}
- #14 #5 and #13
- #15 MeSH descriptor: [Vaccination] this term only
- #16 [mh immunization]
- #17 MeSH descriptor: [Vaccines] explode all trees
- #18 MeSH descriptor: [Vaccines, Inactivated] explode all trees
- #19 MeSH descriptor: [Vaccines, Attenuated] this term only
- #20 MeSH descriptor: [Vaccines, Live, Unattenuated] this term only
- #21 vaccin* or immuniz* or immunis*:ti,ab,kw
- #22 {or #15-#21}
- #23 #14 and #22

CROHN'S OR ULCERATIVE COLITIS AND DRUGS OVID MEDLINE SEARCH STRATEGY – FEBRUARY 2, 2017

Database: Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present>
Search Strategy:

1 colitis, ulcerative/
 2 (ulcerative adj2 colitis).kw,tw.
 3 crohn disease/
 4 Crohn\$.kw,tw.
 5 or/1-4
 6 Tumor Necrosis Factor-alpha/ and (tu or dt).fs.
 7 exp Receptors, Tumor Necrosis Factor/tu
 8 (tumo?r adj necrosis factor adj (block\$ or inhibit\$)).tw,kw.
 9 (TNFi or TNF inhibitor\$ or anti TNF).tw,kw.
 10 Adalimumab/ or Etanercept/ or Infliximab/ or Certolizumab Pegol/
 11 (adalimumab or etanercept or infliximab or golimumab or certolizumab).tw,kw.
 12 (Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or
 Remicade or Inflectra or "infliximab-dyyb" or "CT-P13" or Remsima or Inflectra or Simponi
 or Cimzia).tw,kw.
 13 exp antibodies, monoclonal/ and tu.fs.
 14 (mab ca2 or monoclonal antibod\$ ca2).tw,kw. and (dt or tu).fs.
 15 or/6-14 [*TNFi drugs*]
 16 Interleukin-17/ or Receptors, Interleukin-17/ai, tu
 17 (interleukin 17 or IL17 or IL 17).tw,kw.
 18 (secukinumab or brodalumab or ixekexumab or Cosentyx).tw,kw.
 19 or/16-18 [*IL 17 drugs*]
 20 exp Interleukin-12/
 21 (interleukin 12 or IL12 or IL 12).tw,kw.
 22 (ustekinumab or Stelara).tw,kw.
 23 or/20-22 [*IL 12 drugs*]
 24 exp Interleukin-23/
 25 (IL12 adj IL23).tw,kw.
 26 or/24-25 [*IL23 or IL 12/23*]
 27 Abatacept/ or (abatacept or Orencia).tw,kw.
 28 15 or 19 or 23 or 26 or 27
 29 5 and 28
 30 (systematic adj3 review\$).kw,tw.
 31 (meta-analy\$ or metaanaly\$).kw,tw.
 32 or/30-31
 33 29 and 32
 34 limit 29 to meta analysis
 35 limit 29 to systematic reviews

- 36 33 or 34 or 35
37 limit 36 to english language

CROHN'S OR RHEUMATOID ARTHRITIS AND DRUGS OVID EMBASE SEARCH STRATEGY
– FEBRUARY 1, 2017

Database: Embase <1974 to 2017 February 01>

Search Strategy:

-
- 1 exp Crohn disease/
 - 2 Crohn\$.kw,tw.
 - 3 ulcerative colitis/
 - 4 (ulcerative adj2 colitis).kw,tw.
 - 5 or/1-4
 - 6 tumor necrosis factor alpha/ or tumor necrosis factor inhibitor/ or tumor necrosis factor receptor/ or tumour necrosis factor receptor 2/
 - 7 (tum?or adj necrosis factor\$ adj (block\$ or inhibit\$)).tw,kw.
 - 8 (TNFi or TNF Inhibit\$ or anti TNF).tw,kw.
 - 9 adalimumab/ or etanercept/ or infliximab/ or golimumab/ or certolizumab pegol/
 - 10 (adalimumab or etanercept or infliximab or golimumab or certolizumab).tw,kw.
 - 11 (Humira or Enbrel or Remicade or Simponi or Cimzia or Amjevita or adalimumab-atto or Erelzi or etanercept-szszs or Inflectra or infliximab-dyyb or "CT-P13" or Remsima).tw,kw.
 - 12 exp monoclonal antibody/
 - 13 monoclonal antibod\$.tw,kw.
 - 14 (mab ca2 or monoclonal antibod\$).tw,kw. and dt.fs.
 - 15 or/6-14
 - 16 interleukin 17/ or interleukin 17 receptor/ or secukinumab/
 - 17 (IL17 or IL 17 or interleukin 17 or Cosentyx).tw,kw.
 - 18 or/16-17
 - 19 interleukin 12/ or interleukin 12/dt
 - 20 ustekinumab/ or ixekizumab/
 - 21 (ustekinumab or Stelara or ixekizumab).tw,kw.
 - 22 or/19-21
 - 23 interleukin 23/ or interleukin 23/ or (Interleukin 23 or IL23).tw,kw.
 - 24 Abatacept/ or (abatacept or Orencia).tw,kw.
 - 25 15 or 18 or 22 or 23 or 24
 - 26 5 and 25

- 27 (systematic adj3 review\$).kw,tw.
- 28 (meta-analy\$ or metaanaly\$).kw,tw.
- 29 or/27-28
- 30 26 and 29
- 31 limit 26 to meta analysis
- 32 limit 26 to "systematic review"
- 33 30 or 31 or 32
- 34 limit 33 to conference abstract
- 35 limit 33 to conference paper
- 36 limit 33 to conference proceeding
- 37 limit 33 to "conference review"
- 38 or/34-37
- 39 33 not 38
- 40 limit 39 to english language
- 41 limit 40 to embase

CROHN'S OR ULCERATIVE COLITIS AND DRUGS (SYSTEMATIC REVIEWS) COCHRANE (DATABASE OF SYSTEMATIC REVIEWS) SEARCH STRATEGY – FEBRUARY 2, 2017

- #1 MeSH descriptor: [Colitis, Ulcerative] explode all trees
- #2 MeSH descriptor: [Crohn Disease] explode all trees
- #3 Crohn*
- #4 ulcerative next colitis
- #5 {or #1-#4}
- #6 MeSH descriptor: [Tumor Necrosis Factor-alpha] explode all trees
- #7 MeSH descriptor: [Receptors, Tumor Necrosis Factor] explode all trees
- #8 (tumor or tumour) near/2 (necrosis factor) near 2 (block* or inhibit*):ti,ab,kw
- #9 TNFi or "TNF inhibitor*" or "anti TNF":ti,ab,kw
- #10 MeSH descriptor: [Adalimumab] this term only
- #11 MeSH descriptor: [Etanercept] this term only
- #12 MeSH descriptor: [Infliximab] this term only
- #13 MeSH descriptor: [Certolizumab Pegol] this term only
- #14 adalimumab or etanercept or infliximab or golimumab or certolizumab:ti,ab,kw
- #15 Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or Remicade or Inflectra or "Infliximab-dyyb" or "CT-P-13" or Remsima or Inflectra or Simponi or Cimzia:ti,ab,kw
- #16 MeSH descriptor: [Antibodies, Monoclonal] explode all trees

- #17 "mab ca2" or "monoclonal antibod*":ti,ab,kw
- #18 {or #6-#17}
- #19 MeSH descriptor: [Interleukin-17] this term only
- #20 MeSH descriptor: [Receptors, Interleukin-17] this term only
- #21 "interleukin 17" or IL17 or "IL 17":ti,ab,kw
- #22 secukinumab or ixekexumab or Cosentyx:ti,ab,kw
- #23 {or #19-#22}
- #24 MeSH descriptor: [Interleukin-12] explode all trees
- #25 "interleukin 12" or IL12 or "IL 12":ti,ab,kw
- #26 ustekinumab or Stelara:ti,ab,kw
- #27 {or #24-#26}
- #28 MeSH descriptor: [Interleukin-23] explode all trees
- #29 IL12 next IL23
- #30 {or #28-#29}
- #31 MeSH descriptor: [Abatacept] this term only
- #32 abatacept or Orencia
- #33 {or #31-#32}
- #34 {or #18, #23, #27, #30, #33}
- #35 #5 and #34

UPDATE SEARCHES

COMBINED SEARCH – PSORIATIC ARTHRITIS; PSORIASIS; PSORIASIS OR RHEUMATOID ARTHRITIS/VACCINES; CROHN’S OR ULCERATIVE COLITIS/DRUGS – UPDATE OVID MEDLINE SEARCH STRATEGY – APRIL 24, 2017

Database: Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present>

Search Strategy:

-
- 1 Arthritis, psoriatic/
 - 2 (psoriatic adj3 arthritis).tw,kw. or (psoria\$ adj3 (arthrit\$ or arthropath\$ or polyarthr\$ or polyarthr\$ or rheumat\$)).ti,ab.
 - 3 psoriasis/ and exp arthritis/
 - 4 or/1-3 [*psoriatic arthritis population*]
 - 5 (axial adj3 (PSA or psoria\$)).tw,kw.
 - 6 (psoria\$ adj3 (axial SpA or axial joint disease or spondylarthritis or spondyloarthritis or spondyloarthropath\$ or arthropath\$ or spondylitis or peripheral arthritis or enthesitis or sacroiliitis or sacroilitis)).tw,kw.
 - 7 psoria\$.tw,kw. and (spondylarthropathies/ or Spondylarthritis/ or spondylitis, ankylosing/ or sacroiliitis/)
 - 8 or/5-7 [*psoriatic spondylitis/axial population*]
 - 9 enthesitis.tw,kw.
 - 10 8 and 9 [*psoriatic arthritis and enthesitis population*]
 - 11 methotrexate/ or salazosulfapyridine/ or Sulfasalazine/ or Phosphodiesterase 4 Inhibitors/ or Cyclosporine/
 - 12 Phosphodiesterase 4.tw,kw. or ((PDE4 or PDE type 4 or PDE type IV) adj5 inhibit\$).ti,ab.
 - 13 (oral small molecule\$ or methotrexate\$ or sulfasalazine\$ or sulphasalazine\$ or salazosulfapyridine\$ or leflunomide\$ or cyclosporine\$ or apremilast or Otezla).tw,kw.
 - 14 or/11-13 [*oral small molecule drugs*]
 - 15 Tumor Necrosis Factor-alpha/ and (tu or dt).fs.
 - 16 exp Receptors, Tumor Necrosis Factor/tu
 - 17 (tumo?r adj necrosis factor adj (block\$ or inhibit\$)).tw,kw.
 - 18 (TNFi or TNF inhibitor\$ or anti TNF).tw,kw.
 - 19 Adalimumab/ or Etanercept/ or Infliximab/ or Certolizumab Pegol/
 - 20 (adalimumab or etanercept or infliximab or golimumab or certolizumab).tw,kw.

21 (Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or Remicade or Inflectra or "infliximab-dyyb" or "CT-P13" or Remsima or Inflectra or Simponi or Cimzia).tw,kw.

22 exp antibodies, monoclonal/ and tu.fs.

23 (mab ca2 or monoclonal antibod\$ ca2).tw,kw. and (dt or tu).fs.

24 or/15-23 [*TNFi drugs*]

25 Interleukin-17/ or Receptors, Interleukin-17/ai,tu

26 (interleukin 17 or IL17 or IL 17).tw,kw.

27 (secukinumab or brodalumab or ixekexumab or Cosentyx or Taltz).tw,kw.

28 or/25-27 [*IL 17 drugs*]

29 exp Interleukin-12/

30 (interleukin 12 or IL12 or IL 12).tw,kw.

31 (ustekinumab or Stelara).tw,kw.

32 or/29-31 [*IL 12 drugs*]

33 exp Interleukin-23/

34 (IL12 adj IL23).tw,kw.

35 or/33-34 [*IL23 or IL 12/23*]

36 Abatacept/ or (abatacept or Orencia).tw,kw.

37 14 or 24 or 28 or 32 or 35 or 36 [*OSM, TNFi, IL 17, IL 12, IL 12/23 Drugs*]

38 (randomized controlled trial or controlled clinical trial).pt. or randomized.ab. or placebo.ab. or drug therapy.fs. or randomly.ab. or trial.ab. or groups.ab. [*Cochrane Highly Sensitive Search Strategy for identifying randomized trials in MEDLINE: sensitivity-maximizing version (2008 revision); Ovid format. Source: Cochrane Handbook for Systematic Reviews of Interventions; online version.*]

39 (MEDLINE or systematic review).tw. or meta analysis.pt. [*McMaster Filter for systematic reviews/meta-analyses (Maximizes specificity)*
http://hiru.mcmaster.ca/hiru/HIRU_Hedges_MEDLINE_Strategies.aspx#Reviews]

40 epidemiologic studies/ or exp case control studies/ or exp cohort studies/ or case control.tw. or cohort analy\$.tw. or longitudinal.tw. or retrospective.tw. or cross sectional.tw. or Cross-sectional studies/

41 (cohort adj (study or studies)).tw.

42 (follow up adj (study or studies)).tw.

43 or/40-42 [*SIGN observational studies filter available at*
<http://www.sign.ac.uk/methodology/filters.html#obs> via Intertasc website:
<https://intertasc.org.uk/subgroups/information-specialists>]

44 (observational adj (study or studies)).tw,kw.

45 or/43-44

46 4 and 37 [*Psoriatic arthritis and OSM, TNFi, IL 17, IL 12, IL 12/23 drugs*]

47 46 and (38 or 39 or 45) [*Psoriatic arthritis and (OSM, TNFi, IL 17, IL 12, IL 12/23 drugs) and (RCT, systematic reviews, observational study filter)*]

48 limit 46 to in process

49 8 and 37 [*Psoriatic spondylitis/axial population and (OSM, TFi, IL 17, IL 12, IL 12/23 drugs)*]

50 49 and (38 or 39 or 45) [*Psoriatic spondylitis/axial population and (OSM, TFi, IL 17, IL 12, IL 12/23 drugs) and (RCT, systematic review, observational study filter)*]

51 limit 49 to in process

52 exp Anti-Inflammatory Agents, Non-Steroidal/ or exp Cyclooxygenase 2 inhibitors/

53 Aspirin/ or Diclofenac/ or Diflunisal/ or Epirizole/ or Fenoprofen/ or Flurbiprofen/ or Ibuprofen/ or Indomethacin/ or Meclofenamic Acid/ or Naproxen/ or Piroxicam/ or Sulindac/ or Etodolac/ or oxaprozin/

54 ((non-steroidal or nonsteroidal) adj (anti-inflammator\$ or antiinflammator\$)).tw,kw.

55 (NSAID\$ or aspirin or diclofenac or diflunisal or etodolac or epirizole or fenoprofen or flurbiprofen or ibuprofen or indomethacin or meclofenamic acid or meloxicam or naproxen or piroxicam or salsalate\$ or nabumetone or oxaprozin or sulindac).tw,kw.

56 ((cyclooxygenase or cyclo-oxygenase or COX2) adj inhibit\$).tw,kw.

57 (celecoxib or Celebrex).tw,kw.

58 or/52-57 [*NSAIDs*]

59 10 and (14 or 58) [*Psoriatic arthritis and enthesitis and (OSM or NSAIDs)*]

60 59 and (38 or 39 or 45) [*Psoriatic arthritis and enthesitis and (OSM or NSAIDs) and rct, systematic review, observational filters*]

61 limit 59 to in process

62 10 and (24 or 28 or 32 or 35 or 36) [*Psoriatic arthritis and enthesitis and (TNFi or IL 17 or IL 12/23 drugs)*]

63 62 and (38 or 39 or 45) [*Psoriatic arthritis and enthesitis and (TNFi or IL 17 or IL 12/23 drugs) and (rct, systematic review, observational study filter)*]

64 limit 62 to in process

65 (tofacitinib or Xeljanz).tw,kw. or (Janus Kinase 3/ and tu.fs.) [*Tofacitinib*]

66 10 and (14 or 65) [*Psoriatic arthritis and enthesitis and (OSM or tofacitinib drugs)*]

67 66 and (38 or 39 or 45) [*Psoriatic arthritis and enthesitis and (drugs OSM or tofacitinib) and rct, systematic review, observational study filter*]

68 limit 66 to in process

69 Vaccination/ or Vaccines, Inactivated/ or Vaccines, attenuated/ or Vaccines, live, unattenuated/

70 (vaccin\$ or immuniz\$ or immunis\$).tw,kw.
71 or/69-70 [*Vaccines, etc.*]
72 4 and 71 [*Psoriatic arthritis and vaccines, etc.*]
73 72 and (38 or 39 or 45) [*Psoriatic arthritis and vaccines, etc. and (rct, systematic, observational filter)*]
74 limit 72 to in process
75 exp Exercise/ or exp Exercise Therapy/ or exp Physical Therapy Modalities/ or Occupational Therapy/ or Weight Loss/ or Smoking/ or Smoking Cessation/ or "Tobacco Use Cessation"/ or Massage/ or exp Acupuncture/ or Tai Ji/ or Yoga/
76 sports/ or exp physical endurance/ or exp physical fitness/ or bicycling/ or golf/ or tennis/ or exp running/ or skiing/ or walking/ or weight lifting/
77 (exercise\$ or physical therapy or physiotherapy or occupational therapy or weight loss or smoking or acupuncture or Tai Ji or Tai Chi or yoga or swimming or massage\$ or walking or jogging or running or swimming or weight training or resistance training or muscle strengthening or aerobic exercise\$ or bicycling or cycling).tw,kw.
78 or/75-77 [*Non-pharmaceutical interventions*]
79 4 and 78 [*Psoriatic arthritis and non-pharmaceutical interventions*]
80 79 and (38 or 39 or 45) [*Psoriatic arthritis and non-pharmaceutical interventions and (rct,systematic reviews, observational studies filter)*]
81 limit 79 to in process
82 Remission Induction/
83 (treat to target or remission or tight control).tw,kw.
84 ((low or minimal) adj disease activity).tw,kw.
85 (intensive adj (treatment or therapy)).tw,kw.
86 or/82-85 [*Treat to target, etc.*]
87 4 and 86 [*Psoriatic arthritis and treat to target, etc.*]
88 87 and (38 or 39 or 45) [*Psoriatic arthritis and treat to target,etc. terms and (rct, systematic review, observational studies filter)*]
89 limit 87 to in process
90 exp Drug-Induced Liver Injury/ or exp Liver Diseases/ or exp Herpes Zoster/ or exp Neoplasms/ or exp Cardiovascular Diseases/ or exp Inflammatory Bowel Diseases/ or exp Uveitis/ or depression/ or exp Diabetes Mellitus/
91 exp bacterial infections/ or exp central nervous system infections/ or exp infection/ or exp mycoses/ or exp zoonoses/ or exp virus diseases/ or exp parasitic diseases/
92 (infection\$ or (liver adj2 disease\$) or zoster or cancer\$ or malignanc\$ or carcinoma\$ or IBD or inflammatory bowel or uveitis or depression or diabetes).tw,kw.

93 ((heart or cardiovascular) adj2 disease\$.tw,kw.
 94 or/90-93
 95 4 and 94 [*Psoriatic arthritis and co-morbidities*]
 96 95 and (37 or 38 or 45) [*Psoriatic arthritis and co-morbidities and (rct,systematic review, observational studies filter)*]
 97 limit 95 to in process
 98 47 or 50 or 60 or 63 or 67 or 73 or 80 or 88 or 96
 99 exp animals/ not humans.sh.
 100 98 not 99
 101 limit 100 to english language
 102 limit 101 to "all adult (19 plus years)"
 103 48 or 51 or 64 or 68 or 74 or 81 or 97
 104 limit 103 to english language
 105 102 or 104
 106 limit 105 to ed=20161116-20170420
 107 Psoriasis/ or psoria\$.tw,kw.
 108 107 and (37 or 65) [*Psoriasis and drugs of interest*]
 109 limit 108 to randomized controlled trial
 110 random\$.tw.
 111 108 and 110
 112 109 or 111 [*Psoriasis and drugs of interest and pragmatic rct filter*]
 113 112 not 99
 114 limit 113 to "all adult (19 plus years)"
 115 limit 112 to in process
 116 114 or 115
 117 limit 116 to english language
 118 limit 117 to ed=20170125-20170420
 119 Arthritis, rheumatoid/ or (rheumatoid adj2 arthriti\$).tw,kw.
 120 (107 or 119) and (19 or 20 or 21 or 27 or 31 or 36 or 65) and 71 and (38 or 39 or 45)
 [*Psoriasis or rheumatoid arthritis and drugs of interest and vaccines, etc. and study design filters*]
 121 120 not 99
 122 limit 121 to "all adult (19 plus years)"
 123 limit 120 to in process
 124 122 or 123
 125 limit 124 to english language

- 126 colitis, ulcerative/
- 127 (ulcerative adj2 colitis).kw,tw.
- 128 crohn disease/
- 129 Crohn\$.kw,tw.
- 130 or/126-129 [Crohn disease or ulcerative colitis]
- 131 ((systematic adj3 review\$) or (meta-analy\$ or metaanaly\$)).kw,tw. [*pragmatic filter to identify systematic reviews or meta-analyses*]
- 132 130 and (24 or 28 or 32 or 35 or 36 or 65) and 131 [*Crohn disease or UC and drugs of interest and systematic review/meta-analyses pragmatic filter*]
- 133 125 or 132
- 134 limit 133 to ed=20170203-20170420
- 135 60 or 61 or 89 or 106 or 118 or 134

COMBINED SEARCH – PSORIATIC ARTHRITIS; PSORIASIS; PSORIASIS OR RHEUMATOID ARTHRITIS/VACCINES; CROHN’S OR ULCERATIVE COLITIS/DRUGS – UPDATE OVID EMBASE SEARCH STRATEGY – APRIL 21, 2017

Database: Embase <1974 to 2017 April 21>

Search Strategy:

-
- 1 psoriatic arthritis/
 - 2 (psoriatic adj3 arthritis).tw,kw.
 - 3 (psoria\$ adj3 (arthrit\$ or arthropath\$ or polyarthrit\$ or poly-arthrit\$ or rheumat\$)).ti,ab.
 - 4 psoriasis/ and arthritis/
 - 5 or/1-4 [*psoriatic arthritis population*]
 - 6 (axial adj3 (PSA or psoria\$)).tw,kw.
 - 7 psoria\$.tw,kw. and (Spondylarthritis/ or spondyloarthropathy/ or spondylitis/ or anklosing spondylitis/ or sacroiliitis/)
 - 8 (psoriatic adj3 (axial joint disease or spondylarthritis or spondyloarthritis or spondylarthropath\$ or spondyloarthropath\$ or spondylitis)).tw,kw.
 - 9 (psoriatic adj3 (axial arthritis or enthesitis or peripheral arthritis or sacroiliitis or sacroilitis)).tw,kw.
 - 10 or/6-9 [*Psoriatic spondylitis/axial population*]
 - 11 enthesitis/ or enthesitis.kw,tw.
 - 12 5 and 11 [*psoriatic arthritis and enthesitis population*]

- 13 methotrexate/ or salazosulfapyridine/ or apremilast/ or Phosphodiesterase IV inhibitor/ or cyclosporin/ or leflunomide/
- 14 (oral small molecule or methotrexate or salazosulfapyridine or sulfasalazine\$ or sulphasalazine\$ or leflunomide\$ or apremilast\$ or Otezia or cyclosporin\$).kw,tw.
- 15 (phosphodiesterase 4 inhibitor\$ or ((PDE4 or PDE type 4 or PDE type IV) adj5 inhibit\$)).tw,kw.
- 16 or/13-15 [*oral small molecule drugs*]
- 17 tumor necrosis factor alpha/ or tumor necrosis factor inhibitor/ or tumor necrosis factor receptor/ or tumour necrosis factor receptor 2/
- 18 (tum?or adj necrosis factor\$ adj (block\$ or inhibit\$)).tw,kw.
- 19 (TNFi or TNF Inhibit\$ or anti TNF).tw,kw.
- 20 adalimumab/ or etanercept/ or infliximab/ or golimumab/ or certolizumab pegol/
- 21 (adalimumab or etanercept or infliximab or golimumab or certolizumab).tw,kw.
- 22 (Humira or Enbrel or Remicade or Simponi or Cimzia or Amjevita or adalimumab-atto or Erelzi or etanercept-szsz or Inflectra or infliximab-dyyb or "CT-P13" or Remsima).tw,kw.
- 23 5 and biosimilar agent/
- 24 exp monoclonal antibody/
- 25 monoclonal antibod\$.tw,kw.
- 26 (mab ca2 or monoclonal antibod\$).tw,kw. and dt.fs.
- 27 or/17-26 [*TNFi drugs*]
- 28 interleukin 17/ or interleukin 17 receptor/ or secukinumab/
- 29 (IL17 or IL 17 or interleukin 17 or Cosentyx).tw,kw.
- 30 or/28-29 [*IL 17 drugs*]
- 31 interleukin 12/ or interleukin 12/dt
- 32 ustekinumab/ or ixekizumab/ or brodalumab/
- 33 (ustekinumab or Stelara or brodalumab or ixekizumab or Cosentyx or Taltz).tw,kw.
- 34 or/31-33 [*IL 12 drugs*]
- 35 interleukin 23/ or interleukin 23/ or (Interleukin 23 or IL23).tw,kw. [*IL23 drugs*]
- 36 abatacept/ or (abatacept or Orencia).tw,kw.
- 37 16 or 27 or 30 or 34 or 35 or 36 [Drugs OSM, TNFi, IL17, IL12, IL12/23 [Corrected]
- 38 (random: or placebo: or double-blind:).tw. [*RCT filter*]
- 39 MEDLINE.tw. or exp systematic review/ or systematic review.tw. or meta-analysis/ or intervention\$.ti. [*Systematic review filter*]
- 40 exp cohort analysis/ or exp longitudinal study/ or exp prospective study/ or exp follow up/ or exp case control study/
- 41 (cohort\$ or (case\$ and control\$)).tw.

42 or/40-41 [*observational study filter*]
 43 observational stud\$.tw,kw.
 44 or/42-43
 45 5 and 37 [*Psoriatic arthritis and (OSM, TNFi, IL17, IL12, IL23 drugs)*]
 46 45 and (38 or 39 or 44) [*Psoriatic arthritis and (OSM, TNFi, IL17, IL12, IL23 drugs) and (rct, systematic review, observational studies filter)*]
 47 10 and (27 or 30 or 34 or 35 or 36) [*Psoriatic spondylitis/axial population and (TNF, IL17, IL12, IL23 drugs)*]
 48 47 and (38 or 39 or 44) [*Psoriatic spondylitis/axial population and (OSM, TNFi, IL17, IL12, IL23 drugs) and (rct, systematic review, observational filter)*]
 49 exp nonsteroid antiinflammatory agent/
 50 acetylsalicylic acid/ or diclofenac/ or diflunisal/ or epirizole/ or fenoprofen/ or flurbiprofen/ or ibuprofen/ or indomethacin/ or meclofenamic acid/ or naproxen/ or piroxicam/ or etodolac/ or nabumetone/ or oxaprozin/
 51 (NSAID\$ or aspirin or diclofenac or diflunisal or etodolac or epirizole or fenoprofen or fluriprofen or ibuprofen or indomethacin or meclofenamic acid or meloxicam or naproxen or piroxicam or salsalate\$ or nabumetone or oxaprozine or sulindac).tw,kw.
 52 exp cyclooxygenase 2 inhibitor/
 53 ((cyclooxygenase or cyclo-oxygenase) adj2 inhibitor\$).tw,kw.
 54 (celecoxib or Celebrex).tw,kw.
 55 or/49-54 [*NSAIDs*]
 56 tofacitinib/ or Janus kinase 3 inhibitor/ or Xeljanz.tw,kw.
 57 12 and (16 or 55) [*Psoriatic arthritis and enthesitis and (OSM or NSAIDs)*]
 58 57 and (38 or 39 or 44) [*Psoriatic arthritis and enthesitis and (OSM or NSAIDs) and (rct, systematic review, observational studies filter)*]
 59 12 and (27 or 30 or 34 or 35 or 36) [*Psoriatic arthritis and enthesitis and (TNFi, IL17, IL12/23 drugs)*]
 60 59 and (38 or 39 or 44) [*Psoriatic arthritis and enthesitis and (TNFi, IL17, IL12/23 drugs), and (rct, systematic review, observational filter)*]
 61 12 and 56
 62 61 and (38 or 39 or 44) [*Psoriatic arthritis and enthesitis and tofacitinib and (rct, systematic review, observational filter)*]
 63 exp immunization/
 64 exp vaccine/
 65 (vaccin\$ or immunis\$ or immuniz\$).tw,kw.
 66 or/63-65 [*Vaccine terms*]

67 5 and 66 [*Psoriatic arthritis and vaccine terms*]

68 67 and (38 or 39 or 44) [*Psoriatic arthritis and vaccine terms and (rct,systematic review, observational studies filter)*]

69 exp exercise/ or exp physiotherapy/ or occupational therapy/ or weight reduction/ or smoking cessation/ or weight reduction/ or exp acupuncture/ or Tai Chi/ or yoga/ or massage/ or exp sport/ or exp kinesiotherapy/

70 (exercise\$ or physical therapy or physiotherapy or occupational therapy or weight loss or smoking or acupuncture or Tai Ji or Tai Chi or yoga or swimming or massage\$ or kinesiotherap\$ or running or jogging or aerobics or weight training or resistance training or muscle strengthening or bicycling or cycling).tw,kw.

71 or/69-70 [*Non-pharmaceutical interventions*]

72 5 and 71 [*Psoriatic arthritis and non-pharmaceutical interventions*]

73 72 and (38 or 39 or 44) [*Psoriatic arthritis and non-pharmaceutical interventions and (rct, systematic review, observational study filter)*]

74 remission/

75 (treat to target or remission or tight control).tw,kw.

76 ((low or minimal) adj disease activity).tw,kw.

77 (intensive adj (treatment or therapy)).tw,kw.

78 or/74-77 [*Treat to target, etc. terms*]

79 5 and 78

80 79 and (38 or 39 or 44) [*Psoriatic arthritis and treat to target and (rct, systematic review, observational study filter)*]

81 exp liver disease/ or exp cardiovascular disease/ or exp herpes zoster/ or exp neoplasm/ or exp infection/ or exp inflammatory bowel disease/ or exp uveitis/ or exp diabetes mellitus/ or exp depression/

82 (malignan\$ or cancer\$ or carcinoma\$ or liver disease\$ or heart disease\$ or cardiovascular disease\$ or herpes zoster or serious infection\$ or inflammatory bowel disease or uveitis or diabetes or depression).tw,kw.

83 or/81-82 [*Comorbidities*]

84 5 and 83 [*Psoriatic arthritis and comorbidities*]

85 84 and (38 or 39 or 44) [*Psoriatic arthritis and various serious comorbidities and (rct, systematic review, observational study filter)*]

86 46 or 58 or 60 or 68 or 73 or 80

87 ((animal\$ or nonhumans) not human\$).sh,hw.

88 86 not 87

89 limit 88 to conference abstract

90 limit 88 to conference paper
 91 limit 88 to conference proceeding
 92 limit 88 to "conference review"
 93 or/89-92
 94 88 not 93
 95 limit 94 to adult <18 to 64 years>
 96 limit 94 to aged <65+ years>
 97 95 or 96
 98 limit 97 to english language
 99 limit 98 to em=201645-201716
 100 limit 99 to embase
 101 exp psoriasis/ or psoria\$.tw,kw.
 102 101 and 37 [*Psoriasis and drugs of interest*]
 103 limit 102 to randomized controlled trial
 104 limit 103 to conference abstract
 105 limit 103 to conference paper
 106 limit 103 to conference proceeding
 107 limit 103 to "conference review"
 108 or/104-107
 109 103 not 108
 110 limit 109 to adult <18 to 64 years>
 111 limit 109 to aged <65+ years>
 112 110 or 111
 113 limit 112 to english language
 114 limit 113 to em=201704-201716
 115 limit 114 to embase
 116 exp rheumatoid arthritis/ or rheumatoid arthritis.kw,tw.
 117 101 or 116
 118 117 and 37 [*RA or psoriasis and drugs of interest*]
 119 118 and 66 and (38 or 39 or 44) [*RA or psoriasis and drugs of interest and vaccines and study design filters*]
 120 ((animal\$ or nonhuman) not human\$.sh,hw.
 121 119 not 120
 122 exp Crohn disease/
 123 Crohn\$.kw,tw.
 124 ulcerative colitis/

125 (ulcerative adj2 colitis).kw,tw.
126 or/122-125
127 126 and 37 [*Crohn or UC and drugs*]
128 ((systematic adj 3 review) or meta-analys\$ or metaanaly\$).kw,tw.
129 127 and 128
130 limit 127 to meta analysis
131 limit 127 to "systematic review"
132 129 or 130 or 131
133 121 or 132
134 limit 133 to conference abstract
135 limit 133 to conference paper
136 limit 133 to conference proceeding
137 limit 133 to "conference review"
138 or/134-137
139 133 not 138
140 limit 139 to english language
141 limit 140 to em=201705-201716
142 limit 141 to embase
143 48 or 62 or 85 [*corrections to original searches*]
144 limit 143 to conference abstract
145 limit 143 to conference paper
146 limit 143 to conference proceeding
147 limit 143 to "conference review"
148 or/144-147
149 143 not 148
150 limit 149 to adult <18 to 64 years>
151 limit 149 to aged <65+ years>
152 150 or 151 (866)
153 limit 152 to english language
154 limit 153 to embase
155 100 or 115 or 142 or 154

PSORIATIC ARTHRITIS – UPDATE COCHRANE SEARCH STRATEGY – APRIL 24, 2017

- #1 MeSH descriptor: [Arthritis, Psoriatic] this term only
- #2 psoriatic arthritis:ti,ab,kw
- #3 psoriatic arthropathy:ti,ab,kw
- #4 psoriatic polyarthritis:ti,ab,kw
- #5 MeSH descriptor: [Psoriasis] this term only
- #6 MeSH descriptor: [Arthritis] 1 tree(s) exploded
- #7 #5 and #6
- #8 {or #1-#4, #7}
- #9 (axial PsA) or (axial psoria*):ti,ab,kw
- #10 (psoria*) near/2 (axial SpA or axial joint disease or spondylarthritis or spondyloarthritis or spondyloarthropath* or arthropath* or spondylitis or peripheral arthritis or enthesitis or sacroiliitis or sacroiliitis):ti,ab,kw
- #11 MeSH descriptor: [Spondylarthropathies] this term only
- #12 MeSH descriptor: [Spondylarthritis] this term only
- #13 MeSH descriptor: [Spondylitis, Ankylosing] this term only
- #14 MeSH descriptor: [Sacroiliitis] this term only
- #15 {or #11-#14}
- #16 psoria*:ti,ab,kw
- #17 #15 and #16
- #18 {or #9-#10, #17}
- #19 enthesitis:ti,ab,kw
- #20 #8 and #19
- #21 MeSH descriptor: [Methotrexate] this term only
- #22 MeSH descriptor: [Sulfasalazine] this term only
- #23 MeSH descriptor: [Phosphodiesterase 4 Inhibitors] explode all trees
- #24 MeSH descriptor: [Cyclosporine] this term only
- #25 "Phosphodiesterase 4" or "PDE4" or "PDE type 4" or "PDE type IV":ti,ab,kw
- #26 "oral small molecule" or methotrexate* or sulfasalazine* or sulphasalazine* or salazosulfapyridine* or leflunomide* or cyclosporin* or apremalast or Otezia:ti,ab,kw
- #27 {or #21-#26}
- #28 MeSH descriptor: [Tumor Necrosis Factor-alpha] explode all trees
- #29 MeSH descriptor: [Receptors, Tumor Necrosis Factor] explode all trees
- #30 (tumor or tumour) near/2 (necrosis factor) near 2 (block* or inhibit*):ti,ab,kw
- #31 TNFi or "TNF inhibitor*" or "anti TNF":ti,ab,kw

- #32 MeSH descriptor: [Adalimumab] this term only
- #33 MeSH descriptor: [Etanercept] this term only
- #34 MeSH descriptor: [Infliximab] this term only
- #35 MeSH descriptor: [Certolizumab Pegol] this term only
- #36 adalimumab or etanercept or infliximab or golimumab or certolizumab:ti,ab,kw
- #37 Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or Remicade or "Infliximab-dyyb" or "CT-P-13" or Remsima or Inflectra or Simponi or Cimzia:ti,ab,kw
- #38 MeSH descriptor: [Antibodies, Monoclonal] explode all trees
- #39 "mab ca2" or "monoclonal antibod*":ti,ab,kw
- #40 {or #28-#39}
- #41 MeSH descriptor: [Interleukin-17] this term only
- #42 MeSH descriptor: [Receptors, Interleukin-17] this term only
- #43 "interleukin 17" or IL17 or "IL 17":ti,ab,kw
- #44 secukinumab or brodalumab or ixekexumab or Cosentyx or Taltz:ti,ab,kw
- #45 {or #41-#44}
- #46 MeSH descriptor: [Interleukin-12] explode all trees
- #47 "interleukin 12" or IL12 or "IL 12":ti,ab,kw
- #48 ustekinumab or Stelara:ti,ab,kw
- #49 {or #46-#48}
- #50 MeSH descriptor: [Interleukin-23] explode all trees
- #51 IL12 next IL23
- #52 {or #50-#51}
- #53 MeSH descriptor: [Abatacept] this term only
- #54 abatacept or Orencia
- #55 #53 or #54
- #56 {or #27, #40, #45, #49, #52, #55}
- #57 #8 and #56
- #58 #18 and #56
- #59 MeSH descriptor: [Anti-Inflammatory Agents, Non-Steroidal] explode all trees
- #60 MeSH descriptor: [Cyclooxygenase 2 Inhibitors] explode all trees
- #61 MeSH descriptor: [Aspirin] explode all trees
- #62 MeSH descriptor: [Diclofenac] this term only
- #63 MeSH descriptor: [Diflunisal] this term only
- #64 MeSH descriptor: [Epirizole] this term only
- #65 MeSH descriptor: [Fenoprofen] this term only

- #66 MeSH descriptor: [Flurbiprofen] this term only
- #67 MeSH descriptor: [Ibuprofen] this term only
- #68 MeSH descriptor: [Indomethacin] explode all trees
- #69 MeSH descriptor: [Meclofenamic Acid] this term only
- #70 MeSH descriptor: [Naproxen] this term only
- #71 MeSH descriptor: [Piroxicam] this term only
- #72 MeSH descriptor: [Sulindac] this term only
- #73 MeSH descriptor: [Etodolac] this term only
- #74 (non-steroidal or nonsteroidal) next (anti-inflammatory* or antiinflammator*):ti,ab,kw
- #75 NSAID* or aspirin or diclofenac or diflunisal or etodolac or eprizole or fenoprofen or flurbiprofen or ibuprofen or indomethacin or meclofenamic acid or meloxicam or naproxen or piroxicam or salsalate* or nabumetone or oxaprozin or sulindac:ti,ab,kw
- #76 (cyclooxygenase or cyclo-oxygenase) next "2" next inhibit*:ti,ab,kw
- #77 celecoxib or Celebrex:ti,ab,kw
- #78 {or #59-#77}
- #79 #20 and {or #27, #78}
- #80 tofacitinib or Xeljanz:ti,ab,kw
- #81 MeSH descriptor: [Janus Kinase 3] this term only
- #82 {or #80-#81}
- #83 #20 and {or #27, #82}
- #84 MeSH descriptor: [Vaccination] this term only
- #85 [mh immunization]
- #86 MeSH descriptor: [Vaccines] explode all trees
- #87 MeSH descriptor: [Vaccines, Inactivated] explode all trees
- #88 MeSH descriptor: [Vaccines, Attenuated] this term only
- #89 MeSH descriptor: [Vaccines, Live, Unattenuated] this term only
- #90 vaccin* or immuniz* or immunis*:ti,ab,kw
- #91 {or #84-#90}
- #92 #8 and #91
- #93 MeSH descriptor: [Exercise] explode all trees
- #94 MeSH descriptor: [Exercise Therapy] explode all trees
- #95 MeSH descriptor: [Physical Therapy Modalities] explode all trees
- #96 MeSH descriptor: [Occupational Therapy] this term only
- #97 MeSH descriptor: [Weight Loss] this term only
- #98 MeSH descriptor: [Tobacco Use Cessation] explode all trees
- #99 MeSH descriptor: [Massage] this term only

- #100 MeSH descriptor: [Acupuncture] this term only
- #101 MeSH descriptor: [Tai Ji] this term only
- #102 MeSH descriptor: [Yoga] this term only
- #103 MeSH descriptor: [Sports] this term only
- #104 MeSH descriptor: [Physical Endurance] explode all trees
- #105 MeSH descriptor: [Physical Fitness] this term only
- #106 MeSH descriptor: [Bicycling] this term only
- #107 MeSH descriptor: [Golf] this term only
- #108 MeSH descriptor: [Tennis] this term only
- #109 MeSH descriptor: [Running] explode all trees
- #110 MeSH descriptor: [Skiing] this term only
- #111 MeSH descriptor: [Swimming] this term only
- #112 MeSH descriptor: [Walking] explode all trees
- #113 MeSH descriptor: [Weight Lifting] this term only
- #114 exercis* or "physical therapy" or physiotherap* or "occupational therapy" or "weight loss" or smoking or acupuncture or "Tai Ji" or "Tai Chi" or yoga or swimming or massage* or walking or jogging or running or "weight training" or "resistance training" or "muscle strengthening" or aerobics or bicycling or cycling:ti,ab,kw
- #115 {or #93-#114}
- #116 #8 and #115
- #117 MeSH descriptor: [Remission Induction] explode all trees
- #118 "treat to target" or remission or "tight control" or "intensive control":ti,ab,kw
- #119 (low or minimal) next "disease activity":ti,ab,kw
- #120 intensive next (treatment or therapy):ti,ab,kw
- #121 {or #117-#120}
- #122 #8 and #121
- #123 MeSH descriptor: [Drug-Induced Liver Injury] explode all trees
- #124 MeSH descriptor: [Liver Diseases] explode all trees
- #125 MeSH descriptor: [Herpes Zoster] explode all trees
- #126 MeSH descriptor: [Neoplasms] explode all trees
- #127 MeSH descriptor: [Cardiovascular Diseases] explode all trees
- #128 MeSH descriptor: [Inflammatory Bowel Diseases] explode all trees
- #129 MeSH descriptor: [Uveitis] explode all trees
- #130 MeSH descriptor: [Depression] this term only
- #131 MeSH descriptor: [Diabetes Mellitus] explode all trees
- #132 MeSH descriptor: [Bacterial Infections] explode all trees

- #133 MeSH descriptor: [Central Nervous System Infections] explode all trees
- #134 MeSH descriptor: [Infection] explode all trees
- #135 MeSH descriptor: [Mycoses] explode all trees
- #136 MeSH descriptor: [Zoonoses] explode all trees
- #137 MeSH descriptor: [Parasitic Diseases] explode all trees
- #138 [mh "virus diseases"]
- #139 infection* or "liver disease*" or zoster or cancer* or malignanc* or carcinoma* or IBD or "inflammatory bowel disease*" or uveitis or depression or diabetes:ti,ab,kw
- #140 (heart or cardiovascular) next disease*:ti,ab,kw
- #141 {or #123-#140}
- #142 #8 and #141
- #143 {or #57-#58, #79, #83, #92, #116, #122, #142}

PSORIASIS – UPDATE (CLINICAL TRIALS) COCHRANE SEARCH STRATEGY – APRIL 24, 2017

- #1 MeSH descriptor: [Psoriasis] this term only
- #2 psoriasis or psoriatic:ti,ab,kw
- #3 #1 or #2
- #4 MeSH descriptor: [Methotrexate] this term only
- #5 MeSH descriptor: [Sulfasalazine] this term only
- #6 MeSH descriptor: [Phosphodiesterase 4 Inhibitors] explode all trees
- #7 MeSH descriptor: [Cyclosporine] this term only
- #8 "Phosphodiesterase 4" or "PDE4" or "PDE type 4" or "PDE type IV":ti,ab,kw
- #9 "oral small molecule" or methotrexate* or sulfasalazine* or sulphasalazine* or salazosulfapyridine* or leflunomide* or cyclosporin* or apremalast or Otezia:ti,ab,kw
- #10 {or #4-#9}
- #11 MeSH descriptor: [Tumor Necrosis Factor-alpha] explode all trees
- #12 MeSH descriptor: [Receptors, Tumor Necrosis Factor] explode all trees
- #13 (tumor or tumour) near/2 (necrosis factor) near 2 (block* or inhibit*):ti,ab,kw
- #14 TNFi or "TNF inhibitor*" or "anti TNF":ti,ab,kw
- #15 MeSH descriptor: [Adalimumab] this term only
- #16 MeSH descriptor: [Etanercept] this term only
- #17 MeSH descriptor: [Infliximab] this term only
- #18 MeSH descriptor: [Certolizumab Pegol] this term only

- #19 adalimumab or etanercept or infliximab or golimumab or certolizumab:ti,ab,kw
- #20 Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or Remicade or "Infliximab-dyyb" or "CT-P-13" or Remsima or Inflectra or Simponi or Cimzia:ti,ab,kw
- #21 MeSH descriptor: [Antibodies, Monoclonal] explode all trees
- #22 "mab ca2" or "monoclonal antibod*":ti,ab,kw
- #23 {or #11-#22}
- #24 MeSH descriptor: [Interleukin-17] this term only
- #25 MeSH descriptor: [Receptors, Interleukin-17] this term only
- #26 "interleukin 17" or IL17 or "IL 17":ti,ab,kw
- #27 secukinumab or brodalumab or ixekexumab or Cosentyx or Taltz:ti,ab,kw
- #28 {or #24-#27}
- #29 MeSH descriptor: [Interleukin-12] explode all trees
- #30 "interleukin 12" or IL12 or "IL 12":ti,ab,kw
- #31 ustekinumab or Stelara:ti,ab,kw
- #32 {or #29-#31}
- #33 MeSH descriptor: [Interleukin-23] explode all trees
- #34 IL12 next IL23
- #35 {or #33-#34}
- #36 MeSH descriptor: [Abatacept] this term only
- #37 abatacept or Orencia
- #38 #36 or #37
- #39 tofacitinib or Xeljanz:ti,ab,kw
- #40 MeSH descriptor: [Janus Kinase 3] this term only
- #41 #39 or #40
- #42 {or #10, #23, #28, #32, #35, #38, #41}
- #43 #3 and #42

**PSORIASIS OR RHEUMATOID ARTHRITIS AND VACCINE – UPDATE COCHRANE
(DATABASE OF SYSTEMATIC REVIEWS) SEARCH STRATEGY – APRIL 24, 2017**

- #1 MeSH descriptor: [Psoriasis] this term only
- #2 psoria*:ti,ab,kw
- #3 MeSH descriptor: [Arthritis, Rheumatoid] explode all trees
- #4 rheumatoid next arthritis

- #5 {or #1-#4}
- #6 MeSH descriptor: [Adalimumab] this term only
- #7 MeSH descriptor: [Etanercept] this term only
- #8 MeSH descriptor: [Infliximab] this term only
- #9 MeSH descriptor: [Certolizumab Pegol] this term only
- #10 adalimumab or etanercept or infliximab or golimumab or certolizumab:ti,ab,kw
- #11 Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or Remicade or "Infliximab-dyyb" or "CT-P-13" or Remsima or Inflectra or Simponi or Cimzia:ti,ab,kw
- #12 secukinumab or ustekinumab or ixekizumab or Cosentyx or Stelara or Taltz:ti,ab,kw
- #13 {or #6-#12}
- #14 #5 and #13
- #15 MeSH descriptor: [Vaccination] this term only
- #16 [mh immunization] [*MeSH descriptor, immunization*]
- #17 MeSH descriptor: [Vaccines] explode all trees
- #18 MeSH descriptor: [Vaccines, Inactivated] explode all trees
- #19 MeSH descriptor: [Vaccines, Attenuated] this term only
- #20 MeSH descriptor: [Vaccines, Live, Unattenuated] this term only
- #21 vaccin* or immuniz* or immunis*:ti,ab,kw
- #22 {or #15-#21}
- #23 #14 and #22

CROHN'S OR ULCERATIVE COLITIS – UPDATE COCHRANE (DATABASE OF SYSTEMATIC REVIEWS) SEARCH STRATEGY – APRIL 24, 2017

- #1 MeSH descriptor: [Colitis, Ulcerative] explode all trees
- #2 MeSH descriptor: [Crohn Disease] explode all trees
- #3 Crohn*
- #4 ulcerative next colitis
- #5 {or #1-#4}
- #6 MeSH descriptor: [Tumor Necrosis Factor-alpha] explode all trees
- #7 MeSH descriptor: [Receptors, Tumor Necrosis Factor] explode all trees
- #8 (tumor or tumour) near/2 (necrosis factor) near 2 (block* or inhibit*):ti,ab,kw
- #9 TNFi or "TNF inhibitor*" or "anti TNF":ti,ab,kw
- #10 MeSH descriptor: [Adalimumab] this term only

- #11 MeSH descriptor: [Etanercept] this term only
- #12 MeSH descriptor: [Infliximab] this term only
- #13 MeSH descriptor: [Certolizumab Pegol] this term only
- #14 adalimumab or etanercept or infliximab or golimumab or certolizumab:ti,ab,kw
- #15 Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or Remicade or Inflectra or "Infliximab-dyyb" or "CT-P-13" or Remsima or Inflectra or Simponi or Cimzia:ti,ab,kw
- #16 MeSH descriptor: [Antibodies, Monoclonal] explode all trees
- #17 "mab ca2" or "monoclonal antibod*":ti,ab,kw
- #18 {or #6-#17}
- #19 MeSH descriptor: [Interleukin-17] this term only
- #20 MeSH descriptor: [Receptors, Interleukin-17] this term only
- #21 "interleukin 17" or IL17 or "IL 17":ti,ab,kw
- #22 secukinumab or ixekexumab or Cosentyx:ti,ab,kw
- #23 {or #19-#22}
- #24 MeSH descriptor: [Interleukin-12] explode all trees
- #25 "interleukin 12" or IL12 or "IL 12":ti,ab,kw
- #26 ustekinumab or Stelara:ti,ab,kw
- #27 {or #24-#26}
- #28 MeSH descriptor: [Interleukin-23] explode all trees
- #29 IL12 next IL23
- #30 {or #28-#29}
- #31 MeSH descriptor: [Abatacept] this term only
- #32 abatacept or Orencia
- #33 {or #31-#32}
- #34 {or #18, #23, #27, #30, #33}
- #35 #5 and #34

UPDATE SEARCHES

COMBINED SEARCH – PSORIATIC ARTHRITIS; PSORIASIS; PSORIASIS OR RHEUMATOID ARTHRITIS/VACCINES; CROHN’S OR ULCERATIVE COLITIS/DRUGS – UPDATE OVID MEDLINE SEARCH STRATEGY – MARCH 6, 2018

Database: Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) <1946 to Present>

Search Strategy:

-
- 1 Arthritis, psoriatic/
 - 2 (psoriatic adj3 arthritis).tw,kw. or (psoria\$ adj3 (arthrit\$ or arthropath\$ or polyarthr\$ or poly-arthr\$ or rheumat\$)).ti,ab.
 - 3 psoriasis/ and exp arthritis/
 - 4 or/1-3 [*psoriatic arthritis population*]
 - 5 (axial adj3 (PSA or psoria\$)).tw,kw.
 - 6 (psoria\$ adj3 (axial SpA or axial joint disease or spondylarthritis or spondyloarthritis or spondyloarthropath\$ or arthropath\$ or spondylitis or peripheral arthritis or enthesitis or sacroiliitis or sacroilitis)).tw,kw.
 - 7 psoria\$.tw,kw. and (spondylarthropathies/ or Spondylarthritis/ or spondylitis, ankylosing/ or sacroiliitis/)
 - 8 or/5-7 [*psoriatic spondylitis/axial population*]
 - 9 enthesitis.tw,kw.
 - 10 8 and 9 [*psoriatic arthritis and enthesitis population*]
 - 11 methotrexate/ or salazosulfapyridine/ or Sulfasalazine/ or Phosphodiesterase 4 Inhibitors/ or cyclosporine/
 - 12 Phosphodiesterase 4.tw,kw. or ((PDE4 or PDE type 4 or PDE type IV) adj5 inhibit\$).ti,ab.
 - 13 (oral small molecule\$ or methotrexate\$ or sulfasalazine\$ or sulphasalazine\$ or salazosulfapyridine\$ or leflunomide\$ or cyclosporine\$ or apremilast or Otezla).tw,kw.
 - 14 or/11-13 [*oral small molecule drugs*]
 - 15 Tumor Necrosis Factor-alpha/ and (tu or dt).fs.
 - 16 exp Receptors, Tumor Necrosis Factor/tu [Therapeutic Use]
 - 17 (tumo?r adj necrosis factor adj (block\$ or inhibit\$)).tw,kw.
 - 18 (TNFi or TNF inhibitor\$ or anti TNF).tw,kw.
 - 19 Adalimumab/ or Etanercept/ or Infliximab/ or Certolizumab Pegol/
 - 20 (adalimumab or etanercept or infliximab or golimumab or certolizumab).tw,kw.
 - 21 (Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or

Remicade or Inflectra or "infliximab-dyyb" or "CT-P13" or Remsima or Inflectra or Simponi or Cimzia).tw,kw.

22 exp antibodies, monoclonal/ and tu.fs.

23 (mab ca2 or monoclonal antibod\$ ca2).tw,kw. and (dt or tu).fs.

24 or/15-23 [*TNFi drugs*]

25 Interleukin-17/ or Receptors, Interleukin-17/ai, tu [*Antagonists & Inhibitors, Therapeutic Use*]

26 (interleukin 17 or IL17 or IL 17).tw,kw.

27 (secukinumab or brodalumab or ixekexumab or Cosentyx or Taltz).tw,kw.

28 or/25-27 [*IL 17 drugs*]

29 exp Interleukin-12/

30 (interleukin 12 or IL12 or IL 12).tw,kw.

31 (ustekinumab or Stelara).tw,kw.

32 or/29-31 [*IL 12 drugs*]

33 exp Interleukin-23/

34 (IL12 adj IL23).tw,kw.

35 or/33-34 [*IL23 or IL 12/23*]

36 Abatacept/ or (abatacept or Orencia).tw,kw.

37 14 or 24 or 28 or 32 or 35 or 36 [*Drugs OSM, TNFi, IL 17, IL 12, IL 12/23*]

38 (randomized controlled trial or controlled clinical trial).pt. or randomized.ab. or placebo.ab. or drug therapy.fs. or randomly.ab. or trial.ab. or groups.ab. [*Cochrane Highly Sensitive Search Strategy for identifying randomized trials in MEDLINE: sensitivity-maximizing version (2008 revision); Ovid format*]

39 (MEDLINE or systematic review).tw. or meta analysis.pt. [*McMaster Filter for systematic reviews/meta-analyses*
http://hiru.mcmaster.ca/hiru/HIRU_Hedges_MEDLINE_Strategies.aspx#Reviews]

40 epidemiologic studies/ or exp case control studies/ or exp cohort studies/ or case control.tw. or cohort analy\$.tw. or longitudinal.tw. or retrospective.tw. or cross sectional.tw. or Cross-sectional studies/

41 (cohort adj (study or studies)).tw.

42 (follow up adj (study or studies)).tw.

43 or/40-42 [*SIGN observational studies filter available on Intertasc website*]

44 (observational adj (study or studies)).tw,kw.

45 or/43-44

46 4 and 37 [*Psoriatic arthritis and drugs OSM, TNFi, IL 17, IL 12, IL 12/23*]

47 46 and (38 or 39 or 45) [*Psoriatic arthritis and drugs OSM, TNFi, IL 17, IL 12, IL 12/23 and RCT, systematic reviews, observational study filter*]

48 limit 46 to in process

49 8 and 37 [*Psoriatic spondylitis/axial population and drugs OSM, TFi, IL17, IL12.. IL12/23*]
50 49 and (38 or 39 or 45) [*Psoriatic spondylitis/axial population and drugs OSM, TFi, IL17, IL12, IL12/23 and RCT, systematic review, observational study filter*]
51 limit 49 to in process
52 exp Anti-Inflammatory Agents, Non-Steroidal/ or exp Cyclooxygenase 2 inhibitors/
53 Aspirin/ or Diclofenac/ or Diflunisal/ or Epirizole/ or Fenoprofen/ or Flurbiprofen/ or
Ibuprofen/ or Indomethacin/ or Meclofenamic Acid/ or Naproxen/ or Piroxicam/ or Sulindac/
or Etodolac/ or oxaprozin/
54 ((non-steroidal or nonsteroidal) adj (anti-inflammator\$ or antiinflammator\$)).tw,kw.
55 (NSAID\$ or aspirin or diclofenac or diflunisal or etodolac or epirizole or fenoprofen or
flurbiprofen or ibuprofen or indomethacin or meclofenamic acid or meloxicam or naproxen
or piroxicam or salsalate\$ or nabumetone or oxaprozin or sulindac).tw,kw.
56 ((cyclooxygenase or cyclo-oxygenase or COX2) adj inhibit\$).tw,kw.
57 (celecoxib or Celebrex).tw,kw.
58 or/52-57
59 10 and (14 or 58) [*Psoriatic arthritis and enthesitis and (drugs OSM or NSAIDs)*]
60 59 and (38 or 39 or 45) [*Psoriatic arthritis and enthesitis and (drugs OSM or NSAIDs) and
rct, systematic review, observational filters*]
61 limit 59 to in process
62 10 and (24 or 28 or 32 or 35 or 36) [*Psoriatic arthritis and enthesitis and (drugs TNFi or IL17
or IL12/23)*]
63 62 and (38 or 39 or 45) [*Psoriatic arthritis and enthesitis and (drugs TNFi or IL17 or IL12/23)
and rct, systematic review, observational study filter*]
64 limit 62 to in process
65 (tofacitinib or Xeljanz).tw,kw. or (Janus Kinase 3/ and tu.fs.) [*Tofacitinib*]
66 10 and (14 or 65) [*Psoriatic arthritis and enthesitis and (drugs OSM or tofacitinib)*]
67 66 and (38 or 39 or 45) [*Psoriatic arthritis and enthesitis and (drugs OSM or tofacitinib) and
rct, systematic review, observational study filter*]
68 limit 66 to in process
69 Vaccination/ or Vaccines, Inactivated/ or Vaccines, attenuated/ or Vaccines, live,
unattenuated/
70 (vaccin\$ or immuniz\$ or immunis\$).tw,kw.
71 or/69-70 [*Vaccines, etc.*]
72 4 and 71 [*Psoriatic arthritis and vaccines, etc.*]
73 72 and (38 or 39 or 45) [*Psoriatic arthritis and vaccines, etc. and rct,systematic,
Observational filter*]
74 limit 72 to in process

75 exp Exercise/ or exp Exercise Therapy/ or exp Physical Therapy Modalities/ or Occupational Therapy/ or Weight Loss/ or Smoking/ or Smoking Cessation/ or "Tobacco Use Cessation"/ or Massage/ or exp Acupuncture/ or Tai Ji/ or Yoga/

76 sports/ or exp physical endurance/ or exp physical fitness/ or bicycling/ or golf/ or tennis/ or exp running/ or skiing/ or walking/ or weight lifting/

77 (exercise\$ or physical therapy or physiotherapy or occupational therapy or weight loss or smoking or acupuncture or Tai Ji or Tai Chi or yoga or swimming or massage\$ or walking or jogging or running or swimming or weight training or resistance training or muscle strengthening or aerobic exercise\$ or bicycling or cycling).tw,kw. (713084)

78 or/75-77 [*Non-pharm interventions*]

79 4 and 78 [*Psoriatic arthritis and non-pharm interventions*]

80 79 and (38 or 39 or 45) [*Psoriatic arthritis and non-pharm interventions and rct,systematic reviews, observational studies filter*]

81 limit 79 to in process

82 Remission Induction/

83 (treat to target or remission or tight control).tw,kw.

84 ((low or minimal) adj disease activity).tw,kw.

85 (intensive adj (treatment or therapy)).tw,kw.

86 or/82-85 [*Treat to target*]

87 4 and 86 [*Psoriatic arthritis and treat to target*]

88 87 and (38 or 39 or 45) [*Psoriatic arthritis and treat to target terms and rct, systematic review, observational studies filter*]

89 limit 87 to in process

90 exp Drug-Induced Liver Injury/ or exp Liver Diseases/ or exp Herpes Zoster/ or exp Neoplasms/ or exp Cardiovascular Diseases/ or exp Inflammatory Bowel Diseases/ or exp Uveitis/ or depression/ or exp Diabetes Mellitus/

91 exp bacterial infections/ or exp central nervous system infections/ or exp infection/ or exp mycoses/ or exp zoonoses/ or exp virus diseases/ or exp parasitic diseases/

92 (infection\$ or (liver adj2 disease\$) or zoster or cancer\$ or malignanc\$ or carcinoma\$ or IBD or inflammatory bowel or uveitis or depression or diabetes).tw,kw.

93 ((heart or cardiovascular) adj2 disease\$).tw,kw.

94 or/90-93

95 4 and 94 [*Psoriatic arthritis and infection, etc*]

96 95 and (37 or 38 or 45) [*Psoriatic arthritis and infection and rct,systematic review,observational studies filter*]

97 limit 95 to in process

98 47 or 50 or 60 or 63 or 67 or 73 or 80 or 88 or 96

99 exp animals/ not humans.sh.
 100 98 not 99
 101 limit 100 to english language
 102 limit 101 to "all adult (19 plus years)"
 103 48 or 51 or 61 or 64 or 68 or 74 or 81 or 89 or 97
 104 limit 103 to english language
 105 102 or 104
 106 limit 105 to ed=20170420-20180306
 107 Psoriasis/ or psoria\$.tw,kw.
 108 107 and (37 or 65) [*Psoriasis and drugs of interest*]
 109 limit 108 to randomized controlled trial
 110 random\$.tw.
 111 108 and 110
 112 109 or 111 [*Psoriasis and drugs of interest and pragmatic rct filter*]
 113 112 not 99
 114 limit 113 to "all adult (19 plus years)"
 115 limit 112 to in process
 116 114 or 115
 117 limit 116 to english language
 118 limit 117 to ed=20170420-20180306
 119 Arthritis, rheumatoid/ or (rheumatoid adj2 arthriti\$).tw,kw.
 120 (107 or 119) and (19 or 20 or 21 or 27 or 31 or 36 or 65) and 71 and (38 or 39 or 45)
 [*Psoriasis or rheumatoid arthritis and drugs of interest and vaccination and study design
 filters*]
 121 120 not 99
 122 limit 121 to "all adult (19 plus years)"
 123 limit 120 to in process
 124 122 or 123
 125 limit 124 to english language
 126 colitis, ulcerative/
 127 (ulcerative adj2 colitis).kw,tw.
 128 crohn disease/
 129 Crohn\$.kw,tw.
 130 or/126-129 [Crohn disease or ulcerative colitis]
 131 ((systematic adj3 review\$) or (meta-analy\$ or metaanaly\$)).kw,tw. [pragmatic filter to
 identify systematic reviews or meta-analyses]
 132 130 and (24 or 28 or 32 or 35 or 36) and 131 [*Crohn disease or UC and drugs of interest*

and systematic review/meta-analyses pragmatic filter]

133 125 or 132

134 limit 133 to ed=20170420-20180306

135 106 or 118 or 134

COMBINED SEARCH – PSORIATIC ARTHRITIS; PSORIASIS; PSORIASIS OR RHEUMATOID ARTHRITIS/VACCINES; CROHN’S OR ULCERATIVE COLITIS/DRUGS – UPDATE OVID EMBASE SEARCH STRATEGY – MARCH 6, 2018

Database: Embase <1974 to 2018 March 06>

Search Strategy:

-
- 1 psoriatic arthritis/
 - 2 (psoriatic adj3 arthritis).tw,kw.
 - 3 (psoria\$ adj3 (arthrit\$ or arthropath\$ or polyarthrit\$ or poly-arthrit\$ or rheumat\$)).ti,ab.
 - 4 psoriasis/ and arthritis/
 - 5 or/1-4 [*psoriatic arthritis population*]
 - 6 (axial adj3 (PSA or psoria\$)).tw,kw.
 - 7 psoria\$.tw,kw. and (Spondylarthritis/ or spondyloarthropathy/ or spondylitis/ or anklosing spondylitis/ or sacroiliitis/)
 - 8 (psoriatic adj3 (axial joint disease or spondylarthritis or spondyloarthrit or spondylarthropath\$ or spondyloarthropath\$ or spondylitis)).tw,kw.
 - 9 (psoriatic adj3 (axial arthritis or enthesitis or peripheral arthritis or sacroiliitis or sacroilitis)).tw,kw.
 - 10 or/6-9 [*Psoriatic spondylitis/axial population*]
 - 11 enthesitis/ or enthesitis.kw,tw.
 - 12 5 and 11 [*psoriatic arthritis and enthesitis population*]
 - 13 methotrexate/ or salazosulfapyridine/ or apremilast/ or Phosphodiesterase IV inhibitor/ or cyclosporin/ or leflunomide/
 - 14 (oral small molecule or methotrexate or salazosulfapyridine or sulfasalazine\$ or sulphasalazine\$ or leflunomide\$ or apremalast\$ or Otezia or cyclosporin\$).kw,tw.
 - 15 (phosphodiesterase 4 inhibitor\$ or ((PDE4 or PDE type 4 or PDE type IV) adj5 inhibit\$)).tw,kw.
 - 16 or/13-15 [*oral small molecule drugs*]
 - 17 tumor necrosis factor alpha/ or tumor necrosis factor inhibitor/ or tumor necrosis factor receptor/ or tumour necrosis factor receptor 2/
 - 18 (tum?or adj necrosis factor\$ adj (block\$ or inhibit\$)).tw,kw.

19 (TNFi or TNF Inhibit\$ or anti TNF).tw,kw.
 20 adalimumab/ or etanercept/ or infliximab/ or golimumab/ or certolizumab pegol/
 21 (adalimumab or etanercept or infliximab or golimumab or certolizumab).tw,kw.
 22 (Humira or Enbrel or Remicade or Simponi or Cimzia or Amjevita or adalimumab-atto or
 Erelzi or etanercept-szszs or Inflectra or infliximab-dyyb or "CT-P13" or Remsima).tw,kw.
 23 5 and biosimilar agent/
 24 exp monoclonal antibody/
 25 monoclonal antibod\$.tw,kw.
 26 (mab ca2 or monoclonal antibod\$).tw,kw. and dt.fs.
 27 or/17-26 [*TNFi drugs*]
 28 interleukin 17/ or interleukin 17 receptor/ or secukinumab/
 29 (IL17 or IL 17 or interleukin 17 or Cosentyx).tw,kw.
 30 or/28-29 [*IL 17 drugs*]
 31 interleukin 12/ or interleukin 12/dt [*Drug Therapy*]
 32 ustekinumab/ or ixekizumab/ or brodalumab/
 33 (ustekinumab or Stelara or brodalumab or ixekezumab or Cosentyx or Taltz).tw,kw.
 34 or/31-33 [*IL 12 drugs*]
 35 interleukin 23/ or interleukin 23/ or (Interleukin 23 or IL23).tw,kw.
 36 abatacept/ or (abatacept or Orencia).tw,kw.
 37 16 or 27 or 30 or 34 or 35 or 36 [Drugs OSM, TNFi, IL17, IL12, IL12/23 [*Corrected with
 fewer drugs*]
 38 (random: or placebo: or double-blind:).tw. [*Source: McMaster University, Hamilton, ON.
 Health Information Research Unit. Search strategies for EMBASE in Ovid syntax. Best
 balance of sensitivity and specificity.
 http://hiru.mcmaster.ca/hiru/HRU_Hedges_EMBASE_Strategies.aspx*]
 39 MEDLINE.tw. or exp systematic review/ or systematic review.tw. or meta-analysis/ or
 intervention\$.ti. [*McMaster Filter for systematic reviews/meta-analyses*]
 40 exp cohort analysis/ or exp longitudinal study/ or exp prospective study/ or exp follow up/ or
 exp case control study/
 41 (cohort\$ or (case\$ and control\$)).tw.
 42 or/40-41 [*BMJ Clinical Evidence Embase cohort and case-control strategy*]
 43 observational stud\$.tw,kw.
 44 or/42-43
 45 5 and 37 [*Psoriatic arthritis and (drugs OSM, TNFi, IL17, IL12, IL23)*]
 46 45 and (38 or 39 or 44) [*Psoriatic arthritis and drugs (OSM, TNFi, IL17, IL12, IL23) and (rct,
 systematic review, observational studies filter)*]
 47 10 and (27 or 30 or 34 or 35 or 36) [*Psoriatic spondylitis/axial population and drugs (TNF,*

IL 17, IL 12, IL 23]

48 47 and (38 or 39 or 44) [*Psoriatic spondylitis/axial population and drugs (OSM, TNFi, IL 17, IL 12, IL 23) and (rct, systematic review, observational filter)*]

49 exp nonsteroid antiinflammatory agent/

50 acetylsalicylic acid/ or diclofenac/ or diflunisal/ or epirozone/ or fenoprofen/ or flurbiprofen/ or ibuprofen/ or indomethacin/ or meclofenamic acid/ or naproxen/ or piroxicam/ or etodolac/ or nabumetone/ or oxaprozin/

51 (NSAID\$ or aspirin or diclofenac or diflunisal or etodolac or epirozone or fenoprofen or fluriprofen or ibuprofen or indomethacin or meclofenamic acid or meloxicam or naproxen or piroxicam or salsalate\$ or nabumetone or oxaprozine or sulindac).tw,kw.

52 exp cyclooxygenase 2 inhibitor/

53 ((cyclooxygenase or cyclo-oxygenase) adj2 inhibitor\$).tw,kw.

54 (celecoxib or Celebrex).tw,kw.

55 or/49-54 [*NSAIDs*]

56 tofacitinib/ or Janus kinase 3 inhibitor/ or Xeljanz.tw,kw.

57 12 and (16 or 55) [*Psoriatic arthritis and enthesitis and (OSM or NSAIDs)*]

58 57 and (38 or 39 or 44) [*Psoriatic arthritis and enthesitis and (OSM or NSAIDs) and (rct, systematic review, observational studies filter)*]

59 12 and (27 or 30 or 34 or 35 or 36) [*Psoriatic arthritis and enthesitis and (drugs TNFi, IL 17, IL 12/23)*]

60 59 and (38 or 39 or 44) [*Psoriatic arthritis and enthesitis and (drugs TNFi, IL 17, IL 12/23), and (rct, systematic review, observational filter)*]

61 12 and 56

62 61 and (38 or 39 or 44) [*Psoriatic arthritis and enthesitis and tofacitinib and (rct, systematic review, observational filter)*]

63 exp immunization/

64 exp vaccine/

65 (vaccin\$ or immunis\$ or immuniz\$).tw,kw.

66 or/63-65 [*Vaccines terms*]

67 5 and 66 [*Psoriatic arthritis and vaccine terms*]

68 67 and (38 or 39 or 44) [*Psoriatic arthritis and vaccine terms and (rct, systematic review, observation studies filter)*]

69 exp exercise/ or exp physiotherapy/ or occupational therapy/ or weight reduction/ or smoking cessation/ or weight reduction/ or exp acupuncture/ or Tai Chi/ or yoga/ or massage/ or exp sport/ or exp kinesiotherapy/

70 (exercise\$ or physical therapy or physiotherapy or occupational therapy or weight loss or smoking or acupuncture or Tai Ji or Tai Chi or yoga or swimming or massage\$ or

kinesiotherap\$ or running or jogging or aerobics or weight training or resistance training or muscle strengthening or bicycling or cycling).tw,kw.
 71 or/69-70 [*Non-pharmaceutical interventions*]
 72 5 and 71 [*Psoriatic arthritis and non-pharm interventions*]
 73 72 and (38 or 39 or 44) [*Psoriatic arthritis and non-pharm interventions and (rct, systematic review, observational study filter)*]
 74 remission/
 75 (treat to target or remission or tight control).tw,kw.
 76 ((low or minimal) adj disease activity).tw,kw.
 77 (intensive adj (treatment or therapy)).tw,kw.
 78 or/74-77 [*Treat to target terms*]
 79 5 and 78
 80 79 and (38 or 39 or 44) [*Psoriatic arthritis and treat to target and (rct, systematic review, observational study filter)*]
 81 exp liver disease/ or exp cardiovascular disease/ or exp herpes zoster/ or exp neoplasm/ or exp infection/ or exp inflammatory bowel disease/ or exp uveitis/ or exp diabetes mellitus/ or exp depression/
 82 (malignan\$ or cancer\$ or carcinoma\$ or liver disease\$ or heart disease\$ or cardiovascular disease\$ or herpes zoster or serious infection\$ or inflammatory bowel disease or uveitis or diabetes or depression).tw,kw.
 83 or/81-82 [*Comorbidities*]
 84 5 and 83 [*Psoriatic arthritis and comorbidities*]
 85 84 and (38 or 39 or 44) [*Psoriatic arthritis and various serious comorbidities and (rct, systematic review, observational study filter)*]
 86 46 or 48 or 58 or 60 or 62 or 68 or 73 or 80 or 85
 87 ((animal\$ or nonhumans) not human\$).sh,hw.
 88 86 not 87
 89 limit 88 to conference abstract
 90 limit 88 to conference paper
 91 limit 88 to conference proceeding
 92 limit 88 to "conference review"
 93 or/89-92
 94 88 not 93
 95 limit 94 to adult <18 to 64 years>
 96 limit 94 to aged <65+ years>
 97 95 or 96
 98 limit 97 to english language

99 limit 98 to em=201716-201810
 100 limit 99 to embase
 101 exp psoriasis/ or psoria\$.tw,kw.
 102 101 and 37 [*Psoriasis and drugs of interest*]
 103 limit 102 to randomized controlled trial
 104 limit 103 to conference abstract
 105 limit 103 to conference paper
 106 limit 103 to conference proceeding
 107 limit 103 to "conference review"
 108 or/104-107
 109 103 not 108
 110 limit 109 to adult <18 to 64 years>
 111 limit 109 to aged <65+ years>
 112 110 or 111
 113 limit 112 to english language
 114 limit 113 to em=201716-201810
 115 limit 114 to embase
 116 exp rheumatoid arthritis/ or rheumatoid arthritis.kw,tw.
 117 101 or 116
 118 117 and 37 [*RA or psoriasis and drugs of interest*]
 119 118 and 66 and (38 or 39 or 44) [*RA or psoriasis and drugs of interest and vaccines and study design filters*]
 120 ((animal\$ or nonhuman) not human\$.sh,hw.
 121 119 not 120
 122 exp Crohn disease/
 123 Crohn\$.kw,tw.
 124 ulcerative colitis/
 125 (ulcerative adj2 colitis).kw,tw.
 126 or/122-125
 127 126 and 37 [*Crohn or UC and drugs*]
 128 ((systematic adj 3 review) or meta-analys\$ or metaanaly\$).kw,tw.
 129 127 and 128
 130 limit 127 to meta analysis
 131 limit 127 to "systematic review"
 132 129 or 130 or 131
 133 121 or 132
 134 limit 133 to conference abstract

- 135 limit 133 to conference paper
- 136 limit 133 to conference proceeding
- 137 limit 133 to "conference review"
- 138 or/134-137
- 139 133 not 138
- 140 limit 139 to english language
- 141 limit 140 to em=201716-201810
- 142 limit 141 to embase
- 143 100 or 115 or 142

PSORIASIS – COCHRANE (CLINICAL TRIALS DATABASE) – MARCH 5, 2018

- #1 MeSH descriptor: [Psoriasis] this term only
- #2 psoriasis or psoriatic:ti,ab,kw
- #3 #1 or #2
- #4 MeSH descriptor: [Methotrexate] this term only
- #5 MeSH descriptor: [Sulfasalazine] this term only
- #6 MeSH descriptor: [Phosphodiesterase 4 Inhibitors] explode all trees
- #7 MeSH descriptor: [Cyclosporine] this term only
- #8 "Phosphodiesterase 4" or "PDE4" or "PDE type 4" or "PDE type IV":ti,ab,kw
- #9 "oral small molecule" or methotrexate* or sulfasalazine* or sulphasalazine* or salazosulfapyridine* or leflunomide* or cyclosporin* or apremalast or Otezia:ti,ab,kw
- #10 {or #4-#9}
- #11 MeSH descriptor: [Tumor Necrosis Factor-alpha] explode all trees
- #12 MeSH descriptor: [Receptors, Tumor Necrosis Factor] explode all trees
- #13 (tumor or tumour) near/2 (necrosis factor) near 2 (block* or inhibit*):ti,ab,kw
- #14 TNFi or "TNF inhibitor*" or "anti TNF":ti,ab,kw
- #15 MeSH descriptor: [Adalimumab] this term only
- #16 MeSH descriptor: [Etanercept] this term only
- #17 MeSH descriptor: [Infliximab] this term only
- #18 MeSH descriptor: [Certolizumab Pegol] this term only
- #19 adalimumab or etanercept or infliximab or golimumab or certolizumab:ti,ab,kw
- #20 Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or Remicade or "Infliximab-dyyb" or "CT-P-13" or Remsima or Inflectra or Simponi or Cimzia:ti,ab,kw
- #21 MeSH descriptor: [Antibodies, Monoclonal] explode all trees
- #22 "mab ca2" or "monoclonal antibod*":ti,ab,kw

- #23 {or #11-#22}
- #24 MeSH descriptor: [Interleukin-17] this term only
- #25 MeSH descriptor: [Receptors, Interleukin-17] this term only
- #26 "interleukin 17" or IL17 or "IL 17":ti,ab,kw
- #27 secukinumab or brodalumab or ixekexumab or Cosentyx or Taltz:ti,ab,kw
- #28 {or #24-#27}
- #29 MeSH descriptor: [Interleukin-12] explode all trees
- #30 "interleukin 12" or IL12 or "IL 12":ti,ab,kw
- #31 ustekinumab or Stelara:ti,ab,kw
- #32 {or #29-#31}
- #33 MeSH descriptor: [Interleukin-23] explode all trees
- #34 IL12 next IL23
- #35 {or #33-#34}
- #36 MeSH descriptor: [Abatacept] this term only
- #37 abatacept or Orencia
- #38 #36 or #37
- #39 tofacitinib or Xeljanz:ti,ab,kw
- #40 MeSH descriptor: [Janus Kinase 3] this term only
- #41 #39 or #40
- #42 {or #10, #23, #28, #32, #35, #38, #41}
- #43 #3 and #42 Publication Year from 2017 to 2018

PSORIATIC ARTHRITIS – COCHRANE LIBRARY (DATABASE OF SYSTEMATIC REVIEWS, CLINICAL TRIALS, OTHER REVIEWS, TECHNOLOGY ASSESSMENTS) – MARCH 8, 2018

- #1 MeSH descriptor: [Arthritis, Psoriatic] this term only
- #2 psoriatic arthritis:ti,ab,kw
- #3 psoriatic arthropathy:ti,ab,kw
- #4 psoriatic polyarthritis:ti,ab,kw
- #5 MeSH descriptor: [Psoriasis] this term only
- #6 MeSH descriptor: [Arthritis] 1 tree(s) exploded
- #7 #5 and #6
- #8 {or #1-#4, #7}
- #9 (axial PsA) or (axial psoria*):ti,ab,kw
- #10 (psoria*) near/2 (axial SpA or axial joint disease or spondylarthritis or spondyloarthritis or spondyloarthropath* or arthropath* or spondylitis or peripheral arthritis or enthesitis or sacroiliitis or sacroiliitis):ti,ab,kw

- #11 MeSH descriptor: [Spondylarthropathies] this term only
- #12 MeSH descriptor: [Spondylarthritis] this term only
- #13 MeSH descriptor: [Spondylitis, Ankylosing] this term only
- #14 MeSH descriptor: [Sacroiliitis] this term only
- #15 {or #11-#14}
- #16 psoria*:ti,ab,kw
- #17 #15 and #16
- #18 {or #9-#10, #17}
- #19 enthesitis:ti,ab,kw
- #20 #8 and #19
- #21 MeSH descriptor: [Methotrexate] this term only
- #22 MeSH descriptor: [Sulfasalazine] this term only
- #23 MeSH descriptor: [Phosphodiesterase 4 Inhibitors] explode all trees
- #24 MeSH descriptor: [Cyclosporine] this term only
- #25 "Phosphodiesterase 4" or "PDE4" or "PDE type 4" or "PDE type IV":ti,ab,kw
- #26 "oral small molecule" or methotrexate* or sulfasalazine* or sulphasalazine* or salazosulfapyridine* or leflunomide* or cyclosporin* or apremalast or Otezia:ti,ab,kw
- #27 {or #21-#26}
- #28 MeSH descriptor: [Tumor Necrosis Factor-alpha] explode all trees
- #29 MeSH descriptor: [Receptors, Tumor Necrosis Factor] explode all trees
- #30 (tumor or tumour) near/2 (necrosis factor) near 2 (block* or inhibit*):ti,ab,kw
- #31 TNFi or "TNF inhibitor*" or "anti TNF":ti,ab,kw
- #32 MeSH descriptor: [Adalimumab] this term only
- #33 MeSH descriptor: [Etanercept] this term only
- #34 MeSH descriptor: [Infliximab] this term only
- #35 MeSH descriptor: [Certolizumab Pegol] this term only
- #36 adalimumab or etanercept or infliximab or golimumab or certolizumab:ti,ab,kw
- #37 Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or Remicade or "Infliximab-dyyb" or "CT-P-13" or Remsima or Inflectra or Simponi or Cimzia:ti,ab,kw
- #38 MeSH descriptor: [Antibodies, Monoclonal] explode all trees
- #39 "mab ca2" or "monoclonal antibod*":ti,ab,kw
- #40 {or #28-#39}
- #41 MeSH descriptor: [Interleukin-17] this term only
- #42 MeSH descriptor: [Receptors, Interleukin-17] this term only
- #43 "interleukin 17" or IL17 or "IL 17":ti,ab,kw
- #44 secukinumab or brodalumab or ixekexumab or Cosentyx or Taltz:ti,ab,kw

#45 {or #41-#44}

#46 MeSH descriptor: [Interleukin-12] explode all trees

#47 "interleukin 12" or IL12 or "IL 12":ti,ab,kw

#48 ustekinumab or Stelara:ti,ab,kw

#49 {or #46-#48}

#50 MeSH descriptor: [Interleukin-23] explode all trees

#51 IL12 next IL23

#52 {or #50-#51}

#53 MeSH descriptor: [Abatacept] this term only

#54 abatacept or Orencia

#55 #53 or #54

#56 {or #27, #40, #45, #49, #52, #55}

#57 #8 and #56

#58 #18 and #56

#59 MeSH descriptor: [Anti-Inflammatory Agents, Non-Steroidal] explode all trees

#60 MeSH descriptor: [Cyclooxygenase 2 Inhibitors] explode all trees

#61 MeSH descriptor: [Aspirin] explode all trees

#62 MeSH descriptor: [Diclofenac] this term only

#63 MeSH descriptor: [Diflunisal] this term only

#64 MeSH descriptor: [Epirizole] this term only

#65 MeSH descriptor: [Fenoprofen] this term only

#66 MeSH descriptor: [Flurbiprofen] this term only

#67 MeSH descriptor: [Ibuprofen] this term only

#68 MeSH descriptor: [Indomethacin] explode all trees

#69 MeSH descriptor: [Meclofenamic Acid] this term only

#70 MeSH descriptor: [Naproxen] this term only

#71 MeSH descriptor: [Piroxicam] this term only

#72 MeSH descriptor: [Sulindac] this term only

#73 MeSH descriptor: [Etodolac] this term only

#74 (non-steroidal or nonsteroidal) next (anti-inflammatory* or antiinflammator*):ti,ab,kw

#75 NSAID* or aspirin or diclofenac or diflunisal or etodolac or epirizole or fenoprofen or flurbiprofen or ibuprofen or indomethacin or meclofenamic acid or meloxicam or naproxen or piroxicam or salsalate* or nabumetone or oxaprozin or sulindac:ti,ab,kw

#76 (cyclooxygenase or cyclo-oxygenase) next "2" next inhibit*:ti,ab,kw

#77 celecoxib or Celebrex:ti,ab,kw

#78 {or #59-#77}

#79 #20 and {or #27, #78}

- #80 tofacitinib or Xeljanz:ti,ab,kw
- #81 MeSH descriptor: [Janus Kinase 3] this term only
- #82 {or #80-#81}
- #83 #20 and {or #27, #82}
- #84 MeSH descriptor: [Vaccination] this term only
- #85 [mh immunization]
- #86 MeSH descriptor: [Vaccines] explode all trees
- #87 MeSH descriptor: [Vaccines, Inactivated] explode all trees
- #88 MeSH descriptor: [Vaccines, Attenuated] this term only
- #89 MeSH descriptor: [Vaccines, Live, Unattenuated] this term only
- #90 vaccin* or immuniz* or immunis*:ti,ab,kw
- #91 {or #84-#90}
- #92 #8 and #91
- #93 MeSH descriptor: [Exercise] explode all trees
- #94 MeSH descriptor: [Exercise Therapy] explode all trees
- #95 MeSH descriptor: [Physical Therapy Modalities] explode all trees
- #96 MeSH descriptor: [Occupational Therapy] this term only
- #97 MeSH descriptor: [Weight Loss] this term only
- #98 MeSH descriptor: [Tobacco Use Cessation] explode all trees
- #99 MeSH descriptor: [Massage] this term only
- #100 MeSH descriptor: [Acupuncture] this term only
- #101 MeSH descriptor: [Tai Ji] this term only
- #102 MeSH descriptor: [Yoga] this term only
- #103 MeSH descriptor: [Sports] this term only
- #104 MeSH descriptor: [Physical Endurance] explode all trees
- #105 MeSH descriptor: [Physical Fitness] this term only
- #106 MeSH descriptor: [Bicycling] this term only
- #107 MeSH descriptor: [Golf] this term only
- #108 MeSH descriptor: [Tennis] this term only
- #109 MeSH descriptor: [Running] explode all trees
- #110 MeSH descriptor: [Skiing] this term only
- #111 MeSH descriptor: [Swimming] this term only
- #112 MeSH descriptor: [Walking] explode all trees
- #113 MeSH descriptor: [Weight Lifting] this term only
- #114 exercis* or "physical therapy" or physiotherap* or "occupational therapy" or "weight loss"
or smoking or acupuncture or "Tai Ji" or "Tai Chi" or yoga or swimming or massage* or
walking or jogging or running or "weight training" or "resistance training" or "muscle

- strengthening" or aerobics or bicycling or cycling:ti,ab,kw
- #115 {or #93-#114}
- #116 #8 and #115
- #117 MeSH descriptor: [Remission Induction] explode all trees
- #118 "treat to target" or remission or "tight control" or "intensive control":ti,ab,kw
- #119 (low or minimal) next "disease activity":ti,ab,kw
- #120 intensive next (treatment or therapy):ti,ab,kw
- #121 {or #117-#120}
- #122 #8 and #121
- #123 MeSH descriptor: [Drug-Induced Liver Injury] explode all trees
- #124 MeSH descriptor: [Liver Diseases] explode all trees
- #125 MeSH descriptor: [Herpes Zoster] explode all trees
- #126 MeSH descriptor: [Neoplasms] explode all trees
- #127 MeSH descriptor: [Cardiovascular Diseases] explode all trees
- #128 MeSH descriptor: [Inflammatory Bowel Diseases] explode all trees
- #129 MeSH descriptor: [Uveitis] explode all trees
- #130 MeSH descriptor: [Depression] this term only
- #131 MeSH descriptor: [Diabetes Mellitus] explode all trees
- #132 MeSH descriptor: [Bacterial Infections] explode all trees
- #133 MeSH descriptor: [Central Nervous System Infections] explode all trees
- #134 MeSH descriptor: [Infection] explode all trees
- #135 MeSH descriptor: [Mycoses] explode all trees
- #136 MeSH descriptor: [Zoonoses] explode all trees
- #137 MeSH descriptor: [Parasitic Diseases] explode all trees
- #138 [mh "virus diseases"]
- #139 infection* or "liver disease*" or zoster or cancer* or malignanc* or carcinoma* or IBD or
"inflammatory bowel disease*" or uveitis or depression or diabetes:ti,ab,kw
- #140 (heart or cardiovascular) next disease*:ti,ab,kw
- #141 {or #123-#140}
- #142 #8 and #141
- #143 {or #57-#58, #79, #83, #92, #116, #122, #142} Publication Year from 2017 to 2018

**PSORIASIS OR RHEUMATOID ARTHRITIS AND DRUGS AND VACCINE – COCHRANE –
DATABASE OF SYSTEMATIC REVIEWS, OTHER REVIEWS, TECHNOLOGY ASSESSMENTS –
MARCH 5, 2018**

- #1 MeSH descriptor: [Psoriasis] this term only

- #2 psoria*:ti,ab,kw
- #3 MeSH descriptor: [Arthritis, Rheumatoid] explode all trees
- #4 rheumatoid next arthritis
- #5 {or #1-#4}
- #6 MeSH descriptor: [Adalimumab] this term only
- #7 MeSH descriptor: [Etanercept] this term only
- #8 MeSH descriptor: [Infliximab] this term only
- #9 MeSH descriptor: [Certolizumab Pegol] this term only
- #10 adalimumab or etanercept or infliximab or golimumab or certolizumab:ti,ab,kw
- #11 Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or Remicade or "Infliximab-dyyb" or "CT-P-13" or Remsima or Inflectra or Simponi or Cimzia:ti,ab,kw
- #12 secukinumab or ustekinumab or ixekizumab or Cosentyx or Stelara or Taltz:ti,ab,kw
- #13 {or #6-#12}
- #14 #5 and #13
- #15 MeSH descriptor: [Vaccination] this term only
- #16 [mh immunization]
- #17 MeSH descriptor: [Vaccines] explode all trees
- #18 MeSH descriptor: [Vaccines, Inactivated] explode all trees
- #19 MeSH descriptor: [Vaccines, Attenuated] this term only
- #20 MeSH descriptor: [Vaccines, Live, Unattenuated] this term only
- #21 vaccin* or immuniz* or immunis*:ti,ab,kw
- #22 {or #15-#21}
- #23 #14 and #22 Publication Year from 2017 to 2018

CROHN'S OR ULCERATIVE COLITIS AND DRUGS – UPDATE – COCHRANE DATABASE OF SYSTEMATIC REVIEWS – MARCH 5, 2018

- #1 MeSH descriptor: [Colitis, Ulcerative] explode all trees
- #2 MeSH descriptor: [Crohn Disease] explode all trees
- #3 Crohn*
- #4 ulcerative next colitis
- #5 {or #1-#4}
- #6 MeSH descriptor: [Tumor Necrosis Factor-alpha] explode all trees
- #7 MeSH descriptor: [Receptors, Tumor Necrosis Factor] explode all trees
- #8 (tumor or tumour) near/2 (necrosis factor) near 2 (block* or inhibit*):ti,ab,kw
- #9 TNFi or "TNF inhibitor*" or "anti TNF":ti,ab,kw (Word variations have been searched)

- #10 MeSH descriptor: [Adalimumab] this term only
- #11 MeSH descriptor: [Etanercept] this term only
- #12 MeSH descriptor: [Infliximab] this term only
- #13 MeSH descriptor: [Certolizumab Pegol] this term only
- #14 adalimumab or etanercept or infliximab or golimumab or certolizumab:ti,ab,kw
- #15 Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or Remicade or Inflectra or "Infliximab-dyyb" or "CT-P-13" or Remsima or Inflectra or Simponi or Cimzia:ti,ab,kw
- #16 MeSH descriptor: [Antibodies, Monoclonal] explode all trees
- #17 "mab ca2" or "monoclonal antibod*":ti,ab,kw
- #18 {or #6-#17}
- #19 MeSH descriptor: [Interleukin-17] this term only
- #20 MeSH descriptor: [Receptors, Interleukin-17] this term only
- #21 "interleukin 17" or IL17 or "IL 17":ti,ab,kw
- #22 secukinumab or ixekexumab or Cosentyx:ti,ab,kw
- #23 {or #19-#22}
- #24 MeSH descriptor: [Interleukin-12] explode all trees
- #25 "interleukin 12" or IL12 or "IL 12":ti,ab,kw
- #26 ustekinumab or Stelara:ti,ab,kw
- #27 {or #24-#26}
- #28 MeSH descriptor: [Interleukin-23] explode all trees
- #29 IL12 next IL23
- #30 {or #28-#29}
- #31 MeSH descriptor: [Abatacept] this term only
- #32 abatacept or Orencia
- #33 {or #31-#32}
- #34 {or #18, #23, #27, #30, #33}
- #35 #5 and #34 Publication Year from 2017 to 2018

CROHN'S OR ULCERATIVE COLITIS AND DRUGS – SYSTEMATIC REVIEWS – COCHRANE DATABASE OF SYSTEMATIC REVIEWS – MARCH 5, 2018

- #1 MeSH descriptor: [Colitis, Ulcerative] explode all trees
- #2 MeSH descriptor: [Crohn Disease] explode all trees
- #3 Crohn*
- #4 ulcerative next colitis
- #5 {or #1-#4}

- #6 MeSH descriptor: [Tumor Necrosis Factor-alpha] explode all trees
- #7 MeSH descriptor: [Receptors, Tumor Necrosis Factor] explode all trees
- #8 (tumor or tumour) near/2 (necrosis factor) near 2 (block* or inhibit*):ti,ab,kw
- #9 TNFi or "TNF inhibitor*" or "anti TNF":ti,ab,kw
- #10 MeSH descriptor: [Adalimumab] this term only
- #11 MeSH descriptor: [Etanercept] this term only
- #12 MeSH descriptor: [Infliximab] this term only
- #13 MeSH descriptor: [Certolizumab Pegol] this term only
- #14 adalimumab or etanercept or infliximab or golimumab or certolizumab:ti,ab,kw
- #15 Humira or Amjevita or "adalimumab-atto" or Enbrel or Erelzi or "etanercept-szszs" or Remicade or Inflectra or "Infliximab-dyyb" or "CT-P-13" or Remsima or Inflectra or Simponi or Cimzia:ti,ab,kw
- #16 MeSH descriptor: [Antibodies, Monoclonal] explode all trees
- #17 "mab ca2" or "monoclonal antibod*":ti,ab,kw
- #18 {or #6-#17}
- #19 MeSH descriptor: [Interleukin-17] this term only
- #20 MeSH descriptor: [Receptors, Interleukin-17] this term only
- #21 "interleukin 17" or IL17 or "IL 17":ti,ab,kw
- #22 secukinumab or ixekexumab or Cosentyx:ti,ab,kw
- #23 {or #19-#22}
- #24 MeSH descriptor: [Interleukin-12] explode all trees
- #25 "interleukin 12" or IL12 or "IL 12":ti,ab,kw
- #26 ustekinumab or Stelara:ti,ab,kw
- #27 {or #24-#26}
- #28 MeSH descriptor: [Interleukin-23] explode all trees
- #29 IL12 next IL23
- #30 {or #28-#29}
- #31 MeSH descriptor: [Abatacept] this term only
- #32 abatacept or Orencia
- #33 {or #31-#32}
- #34 {or #18, #23, #27, #30, #33}
- #35 #5 and #34 Publication Year from 2017 to 2018