

# SUPPLEMENTARY MATERIAL

## Association between funding and conclusions of network meta-analyses evaluating targeted therapies in chronic immune-mediated inflammatory diseases: an overview

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### Supplementary material

Supplementary table 1. Inclusion criteria for the treatments of interest .....	3
Supplementary table 2. Search equations for network meta-analysis .....	4
Supplementary table 3. Search equations for clinical practice guidelines .....	6
Supplementary table 4. Extracted data.....	11
Supplementary table 5. Excluded studies with reason for exclusion .....	12
Supplementary table 6. Studies with missing full-text for which study corresponding authors were contacted .....	16
Supplementary table 7. Included studies with their main characteristics .....	18
Supplementary table 8. Included studies with funding status and primary outcome results.....	37
Supplementary table 9. Number of NMAs published each year for each IMID.....	43
Supplementary table 10. Main characteristics of the included network meta-analyses categorized by funding status .....	44
Supplementary table 11. Main NMAs characteristics for each pathology.....	45
Supplementary table 12. Reasons for abstracts being unsupported by the reported results.....	47
Supplementary table 13. Sensitivity analyses evaluating the association between funding and the study main outcomes .....	48
Supplementary table 14. Sensitivity analyses evaluating the association between the presence of COI among the NMAs authors and the study primary and secondary outcomes .....	49
Supplementary table 15. List of the included CPGs. ....	50
Supplementary table 16. Characteristics of the included CPGs.....	65
Supplementary table 17. PRIOR Statement Checklist.....	71
Supplementary table 18. Dissemination metrics given the source of funding .....	74
Supplementary figure 1. Algorithm for the proposition-level assessment.....	75

Supplementary figure 2. Overall algorithm for the assessment of the abstract's coherence.....76

Supplementary table 1. Inclusion criteria for the treatments of interest

Therapeutic class	Interventions
anti-TNF-alpha	<ul style="list-style-type: none"> <li>• etanercept,</li> <li>• infliximab,</li> <li>• adalimumab,</li> <li>• certolizumab,</li> <li>• golimumab</li> </ul>
anti-IL12/23	<ul style="list-style-type: none"> <li>• ustekinumab</li> </ul>
anti-IL17	<ul style="list-style-type: none"> <li>• secukinumab,</li> <li>• ixekizumab,</li> <li>• brodalumab,</li> <li>• bimekizumab</li> </ul>
anti-IL 23	<ul style="list-style-type: none"> <li>• guselkumab,</li> <li>• tildrakizumab,</li> <li>• risankizumab</li> </ul>
anti-IL 6	<ul style="list-style-type: none"> <li>• tocilizumab,</li> <li>• sarilumab</li> </ul>
anti-IL 1	<ul style="list-style-type: none"> <li>• anakinra</li> </ul>
phosphodiesterase 4 inhibitor	<ul style="list-style-type: none"> <li>• apremilast</li> </ul>
B-cell depletors	<ul style="list-style-type: none"> <li>• rituximab</li> </ul>
anti-intégrine $\alpha4/\alpha4\beta7$	<ul style="list-style-type: none"> <li>• natalizumab</li> <li>• vedolizumab</li> </ul>
T-cell co-stimulation inhibitors	<ul style="list-style-type: none"> <li>• abatacept</li> </ul>
JAK inhibitors	<ul style="list-style-type: none"> <li>• tofacitinib,</li> <li>• upadacitinib,</li> <li>• baricitinib,</li> <li>• filgotinib,</li> <li>• deucravacitinib</li> </ul>
sphingosine 1-phosphate receptor modulator	<ul style="list-style-type: none"> <li>• ozanimod</li> </ul>

*The list of authorized targeted therapies was established based on the information from the Food and Drug Administration Website and European Medicines Agency websites.*

## Supplementary table 2. Search equations for network meta-analysis

<b>Psoriasis</b>	
<b>PUBMED/MEDLINE</b>	exp Psoriasis OR psoria\$.ti,ab OR psoriasis[MeSH Terms] OR psoria* and (meta-analys* OR (network [tiab] AND (meta analys*[tiab]) OR indirect comparison*[tiab] OR indirect treatment comparison*[tiab] OR multiple treatment comparison*[tiab] OR mixed treatment comparison*[tiab] OR meta analysis as topic[MeSH Terms]))
<b>EPISTEMONIKOS</b>	“Psoriasis” in the search bar, with no time limit for the publication date, « systematic review » in publication type, « Interventions » as the issue of the systematic review, « all type of meta-analysis »: (advanced_title_en:(psoriasis) OR advanced_abstract_en:(psoriasis)) [Filters: protocol=no, classification=systematic-review, systematic_review_type=sri]
<b>Psoriatic arthritis</b>	
<b>PUBMED/MEDLINE</b>	exp Psoriatic arthritis OR psoriatic\$.ti,ab OR psoriatic arthritis[MeSH Terms] OR psoriatic* and (meta-analys* OR (network [tiab] AND (meta analys*[tiab]) OR indirect comparison*[tiab] OR indirect treatment comparison*[tiab] OR multiple treatment comparison*[tiab] OR mixed treatment comparison*[tiab] OR meta analysis as topic[MeSH Terms]))
<b>EPISTEMONIKOS</b>	“Psoriatic arthritis” in the search bar, with no time limit for the publication date, « systematic review » in publication type, « Interventions » as the issue of the systematic review, « all type of meta-analysis »: (advanced_title_en:(Psoriatic arthritis) OR advanced_abstract_en:(Psoriatic arthritis)) [Filters: protocol=no, classification=systematic-review, systematic_review_type=sri]
<b>Inflammatory bowel disease</b>	
<b>PUBMED/MEDLINE</b>	exp inflammatory bowel disease OR inflammatory bowel disease\$.ti,ab OR inflammatory bowel disease[MeSH Terms] OR inflammatory bowel disease* and (meta-analys* OR (network [tiab] AND (meta analys*[tiab]) OR indirect comparison*[tiab] OR indirect treatment comparison*[tiab] OR multiple treatment comparison*[tiab] OR mixed treatment comparison*[tiab] OR meta analysis as topic[MeSH Terms]))  exp Crohn OR Crohn\$.ti,ab OR crohn disease[MeSH Terms] OR crohn* and (meta-analys* OR (network [tiab] AND (meta analys*[tiab]) OR indirect comparison*[tiab] OR indirect treatment comparison*[tiab] OR multiple treatment comparison*[tiab] OR mixed treatment comparison*[tiab] OR meta analysis as topic[MeSH Terms]))  exp ulcerative colitis OR ulcerative colitis\$.ti,ab OR ulcerative colitis[MeSH Terms] OR ulcerative colitis* and (meta-analys* OR (network [tiab] AND (meta analys*[tiab]) OR indirect comparison*[tiab] OR indirect treatment comparison*[tiab] OR multiple treatment comparison*[tiab] OR mixed treatment comparison*[tiab] OR meta analysis as topic[MeSH Terms]))
<b>EPISTEMONIKOS</b>	“Inflammatory Bowel Disease” in the search bar, with no time limit for the publication date, « systematic review » in publication type, « Interventions » as the issue of the systematic review, « all type of meta-analysis »: (advanced_title_en:(inflammatory bowel disease) OR advanced_abstract_en:(inflammatory bowel disease)) [Filters: protocol=no, classification=systematic-review, systematic_review_type=sri]  “Crohn” in the search bar, with no time limit for the publication date, « systematic review » in publication type, « Interventions » as the issue of the systematic review, « all type of meta-analysis »: (advanced_title_en:(Crohn) OR advanced_abstract_en:(Crohn)) [Filters: protocol=no, classification=systematic-review, systematic_review_type=sri]

	<p>“ulcerative colitis” in the search bar, with no time limit for the publication date, « systematic review » in publication type, « Interventions » as the issue of the systematic review, « all type of meta-analysis »: (advanced_title_en:(ulcerative colitis) OR advanced_abstract_en:(ulcerative colitis)) [Filters: protocol=no, classification=systematic-review, systematic_review_type=sri]</p>
<b>Rheumatoid arthritis</b>	
<b>PUBMED/MEDLINE</b>	<p>exp rheumatoid arthritis OR rheumatoid arthritis\$.ti,ab OR rheumatoid arthritis[MeSH Terms] OR rheumatoid arthritis* and (meta-analys* OR (network [tiab] AND (meta analys*[tiab]) OR indirect comparison*[tiab] OR indirect treatment comparison*[tiab] OR multiple treatment comparison*[tiab] OR mixed treatment comparison*[tiab] OR meta analysis as topic[MeSH Terms]))</p>
<b>EPISTEMONIKOS</b>	<p>“Rheumatoid arthritis” in the search bar, with no time limit for the publication date, « systematic review » in publication type, « Interventions » as the issue of the systematic review, « all type of meta-analysis »: (advanced_title_en:(Rheumatoid arthritis) OR advanced_abstract_en:(Rheumatoid arthritis)) [Filters: protocol=no, classification=systematic-review, systematic_review_type=sri]</p>
<b>Ankylosing spondylitis</b>	
<b>PUBMED/MEDLINE</b>	<p>exp ankylosing spondylitis OR ankylosing spondylitis\$.ti,ab OR ankylosing spondylitis[MeSH Terms] OR ankylosing spondylitis* and (meta-analys* OR (network [tiab] AND (meta analys*[tiab]) OR indirect comparison*[tiab] OR indirect treatment comparison*[tiab] OR multiple treatment comparison*[tiab] OR mixed treatment comparison*[tiab] OR meta analysis as topic[MeSH Terms]))</p>
<b>EPISTEMONIKOS</b>	<p>“Ankylosing spondylitis” in the search bar, with no time limit for the publication date, « systematic review » in publication type, « Interventions » as the issue of the systematic review, « all type of meta-analysis »: (advanced_title_en:(Ankylosing spondylitis) OR advanced_abstract_en:(Ankylosing spondylitis)) [Filters: protocol=no, classification=systematic-review, systematic_review_type=sri]</p>

Supplementary table 3. Search equations for clinical practice guidelines

<b>Psoriasis</b>		
<b>PUBMED/MEDLINE</b>	(exp psoriasis OR psoriasis[Title/Abstract]OR psoriasis[MeSH Terms] OR psoria*) and ("Clinical protocols"[MESH] OR "Consensus"[MESH] OR "Consensus development conferences as topic"[MESH] OR "Critical pathways"[MESH] OR "Guidelines as topic" [Mesh:NoExp] OR "Practice guidelines as topic"[MESH] OR "Health planning guidelines"[MESH] OR "Clinical Decision Rules"[MESH] OR "guideline"[pt] OR "practice guideline"[pt] OR "consensus development conference"[pt] OR "consensus development conference, NIH"[pt] OR "position statement*"[tiab] OR "policy statement*"[tiab] OR "practice parameter*"[tiab] OR "best practice*"[tiab] OR standards[TI] OR guideline[TI] OR guidelines[TI] OR standards[ot] OR guideline[ot] OR guidelines[ot] OR guideline*[cn] OR standards[cn] OR consensus*[cn] OR recommendat*[cn] OR "practice guideline*"[tiab] OR "treatment guideline*"[tiab] OR CPG[tiab] OR CPGs[tiab] OR "clinical guideline*"[tiab] OR "guideline recommendation*"[tiab] OR consensus*[tiab] OR ((critical[tiab] OR clinical[tiab] OR practice[tiab]) AND (path[tiab] OR paths[tiab] OR pathway[tiab] OR pathway[tiab] OR pathways[tiab] OR protocol*[tiab] OR bulletin[tiab] OR bulletins[tiab])) OR recommendat*[ti] OR recommendat*[ot] OR (care[tiab] AND (standard[tiab] OR path[tiab] OR paths[tiab] OR pathway[tiab] OR pathways[tiab] OR map[tiab] OR maps[tiab] OR plan[tiab] OR plans[tiab])) OR (algorithm*[tiab] AND (pharmacotherap*[tiab] OR therap*[tiab] OR treatment*[tiab] OR intervention*[tiab])))	
<b>International Psoriasis Council (IPC) website</b>	Treatment Guidelines section: <a href="https://psoriasisCouncil.org/education/treatment-guidelines/">https://psoriasisCouncil.org/education/treatment-guidelines/</a>	
<b>Psoriatic arthritis</b>		
<b>PUBMED/MEDLINE</b>	(exp psoriatic arthritis OR psoriatic arthritis[Title/Abstract]OR psoriatic arthritis[MeSH Terms] OR psoriatic*) and ("Clinical protocols"[MESH] OR "Consensus"[MESH] OR "Consensus development conferences as topic"[MESH] OR "Critical pathways"[MESH] OR "Guidelines as topic" [Mesh:NoExp] OR "Practice guidelines as topic"[MESH] OR "Health planning guidelines"[MESH] OR "Clinical Decision Rules"[MESH] OR "guideline"[pt] OR "practice guideline"[pt] OR "consensus development conference"[pt] OR "consensus development conference, NIH"[pt] OR "position statement*"[tiab] OR "policy statement*"[tiab] OR "practice parameter*"[tiab] OR "best practice*"[tiab] OR standards[TI] OR guideline[TI] OR guidelines[TI] OR standards[ot] OR guideline[ot] OR guidelines[ot] OR guideline*[cn] OR standards[cn] OR consensus*[cn] OR recommendat*[cn] OR "practice guideline*"[tiab] OR "treatment guideline*"[tiab] OR CPG[tiab] OR CPGs[tiab] OR "clinical guideline*"[tiab] OR "guideline recommendation*"[tiab] OR consensus*[tiab] OR ((critical[tiab] OR clinical[tiab] OR practice[tiab]) AND (path[tiab] OR paths[tiab] OR pathway[tiab] OR pathways[tiab] OR protocol*[tiab] OR bulletin[tiab] OR bulletins[tiab])) OR recommendat*[ti] OR recommendat*[ot] OR (care[tiab] AND (standard[tiab] OR path[tiab] OR paths[tiab] OR pathway[tiab] OR pathways[tiab] OR map[tiab] OR maps[tiab] OR plan[tiab] OR plans[tiab])) OR (algorithm*[tiab] AND (pharmacotherap*[tiab] OR therap*[tiab] OR treatment*[tiab] OR intervention*[tiab])))	
<b>Inflammatory bowel disease</b>		
<b>PUBMED/MEDLINE</b>	(exp inflammatory bowel disease OR inflammatory bowel disease [Title/Abstract]OR inflammatory bowel disease [MeSH Terms]) and ("Clinical protocols"[MESH] OR "Consensus"[MESH] OR "Consensus	

development conferences as topic"[MESH] OR "Critical pathways"[MESH] OR "Guidelines as topic" [Mesh:NoExp] OR "Practice guidelines as topic"[MESH] OR "Health planning guidelines"[MESH] OR "Clinical Decision Rules"[MESH] OR "guideline"[pt] OR "practice guideline"[pt] OR "consensus development conference"[pt] OR "consensus development conference, NIH"[pt] OR "position statement\*"[tiab] OR "policy statement\*"[tiab] OR "practice parameter\*"[tiab] OR "best practice\*"[tiab] OR standards[TI] OR guideline[TI] OR guidelines[TI] OR standards[ot] OR guideline[ot] OR guidelines[ot] OR guideline\*[cn] OR standards[ot] OR consensus\*[cn] OR recommendat\*[cn] OR "practice guideline\*"[tiab] OR "treatment guideline\*"[tiab] OR CPG[tiab] OR CPGs[tiab] OR "clinical guideline\*"[tiab] OR "guideline recommendation\*"[tiab] OR consensus\*[tiab] OR ((critical[tiab] OR clinical[tiab] OR practice[tiab]) AND (path[tiab] OR paths[tiab] OR pathway[tiab] OR pathways[tiab] OR protocol\*[tiab] OR bulletin[tiab] OR bulletins[tiab])) OR recommendat\*[ti] OR recommendat\*[ot] OR (care[tiab] AND (standard[tiab] OR path[tiab] OR paths[tiab] OR pathway[tiab] OR pathways[tiab] OR map[tiab] OR maps[tiab] OR plan[tiab] OR plans[tiab])) OR (algorithm\*[tiab] AND (pharmacotherap\*[tiab] OR therap\*[tiab] OR treatment\*[tiab] OR intervention\*[tiab]))))

(exp Crohn OR Crohn[Title/Abstract]OR Crohn[MeSH Terms] OR Crohn\*) and ("Clinical protocols"[MESH] OR "Consensus"[MESH] OR "Consensus development conferences as topic"[MESH] OR "Critical pathways"[MESH] OR "Guidelines as topic" [Mesh:NoExp] OR "Practice guidelines as topic"[MESH] OR "Health planning guidelines"[MESH] OR "Clinical Decision Rules"[MESH] OR "guideline"[pt] OR "practice guideline"[pt] OR "consensus development conference"[pt] OR "consensus development conference, NIH"[pt] OR "position statement\*"[tiab] OR "policy statement\*"[tiab] OR "practice parameter\*"[tiab] OR "best practice\*"[tiab] OR standards[TI] OR guideline[TI] OR guidelines[TI] OR standards[ot] OR guideline[ot] OR guidelines[ot] OR guideline\*[cn] OR standards[ot] OR consensus\*[cn] OR recommendat\*[cn] OR "practice guideline\*"[tiab] OR "treatment guideline\*"[tiab] OR CPG[tiab] OR CPGs[tiab] OR "clinical guideline\*"[tiab] OR "guideline recommendation\*"[tiab] OR consensus\*[tiab] OR ((critical[tiab] OR clinical[tiab] OR practice[tiab]) AND (path[tiab] OR paths[tiab] OR pathway[tiab] OR pathways[tiab] OR protocol\*[tiab] OR bulletin[tiab] OR bulletins[tiab])) OR recommendat\*[ti] OR recommendat\*[ot] OR (care[tiab] AND (standard[tiab] OR path[tiab] OR paths[tiab] OR pathway[tiab] OR pathways[tiab] OR map[tiab] OR maps[tiab] OR plan[tiab] OR plans[tiab])) OR (algorithm\*[tiab] AND (pharmacotherap\*[tiab] OR therap\*[tiab] OR treatment\*[tiab] OR intervention\*[tiab]))))

(exp ulcerative colitis OR ulcerative colitis[Title/Abstract]OR ulcerative colitis[MeSH Terms]) and ("Clinical protocols"[MESH] OR "Consensus"[MESH] OR "Consensus development conferences as topic"[MESH] OR "Critical pathways"[MESH] OR "Guidelines as topic" [Mesh:NoExp] OR "Practice guidelines as topic"[MESH] OR "Health planning guidelines"[MESH] OR "Clinical Decision Rules"[MESH] OR "guideline"[pt] OR "practice guideline"[pt] OR "consensus development conference"[pt] OR "consensus development conference, NIH"[pt] OR "position statement\*"[tiab] OR "policy statement\*"[tiab] OR "practice parameter\*"[tiab] OR "best practice\*"[tiab] OR standards[TI] OR guideline[TI] OR guidelines[TI] OR standards[ot] OR guideline[ot] OR guidelines[ot] OR guideline\*[cn] OR standards[ot] OR consensus\*[cn] OR recommendat\*[cn] OR "practice guideline\*"[tiab] OR "treatment

	<p>guideline*[tiab] OR CPG[tiab] OR CPGs[tiab] OR "clinical guideline*[tiab] OR "guideline recommendation*[tiab] OR consensus*[tiab] OR ((critical[tiab] OR clinical[tiab] OR practice[tiab]) AND (path[tiab] OR paths[tiab] OR pathway[tiab] OR pathways[tiab] OR protocol*[tiab] OR bulletin[tiab] OR bulletins[tiab])) OR recommendat*[ti] OR recommendat*[ot] OR (care[tiab] AND (standard[tiab] OR path[tiab] OR paths[tiab] OR pathway[tiab] OR pathways[tiab] OR map[tiab] OR maps[tiab] OR plan[tiab] OR plans[tiab])) OR (algorithm*[tiab] AND (pharmacotherap*[tiab] OR therap*[tiab] OR treatment*[tiab] OR intervention*[tiab]))))</p>
<p><b><u>Rheumatoid arthritis</u></b> <b>PUBMED/MEDLINE</b></p>	<p>(exp rheumatoid arthritis OR rheumatoid arthritis[Title/Abstract]OR rheumatoid arthritis[MeSH Terms] OR rheumatoid*) and ("Clinical protocols"[MESH] OR "Consensus"[MESH] OR "Consensus development conferences as topic"[MESH] OR "Critical pathways"[MESH] OR "Guidelines as topic" [Mesh:NoExp] OR "Practice guidelines as topic"[MESH] OR "Health planning guidelines"[MESH] OR "Clinical Decision Rules"[MESH] OR "guideline"[pt] OR "practice guideline"[pt] OR "consensus development conference"[pt] OR "consensus development conference, NIH"[pt] OR "position statement*[tiab] OR "policy statement*[tiab] OR "practice parameter*[tiab] OR "best practice*[tiab] OR standards[TI] OR guideline[TI] OR guidelines[TI] OR standards[ot] OR guideline[ot] OR guidelines[ot] OR guideline*[cn] OR standards[cn] OR consensus*[cn] OR recommendat*[cn] OR "practice guideline*[tiab] OR "treatment guideline*[tiab] OR CPG[tiab] OR CPGs[tiab] OR "clinical guideline*[tiab] OR "guideline recommendation*[tiab] OR consensus*[tiab] OR ((critical[tiab] OR clinical[tiab] OR practice[tiab]) AND (path[tiab] OR paths[tiab] OR pathway[tiab] OR pathways[tiab] OR protocol*[tiab] OR bulletin[tiab] OR bulletins[tiab])) OR recommendat*[ti] OR recommendat*[ot] OR (care[tiab] AND (standard[tiab] OR path[tiab] OR paths[tiab] OR pathway[tiab] OR pathways[tiab] OR map[tiab] OR maps[tiab] OR plan[tiab] OR plans[tiab])) OR (algorithm*[tiab] AND (pharmacotherap*[tiab] OR therap*[tiab] OR treatment*[tiab] OR intervention*[tiab]))))</p>
<p><b><u>Ankylosing spondylitis</u></b> <b>PUBMED/MEDLINE</b></p>	<p>(exp ankylosing spondylitis OR ankylosing spondylitis[Title/Abstract]OR ankylosing spondylitis[MeSH Terms]) and ("Clinical protocols"[MESH] OR "Consensus"[MESH] OR "Consensus development conferences as topic"[MESH] OR "Critical pathways"[MESH] OR "Guidelines as topic" [Mesh:NoExp] OR "Practice guidelines as topic"[MESH] OR "Health planning guidelines"[MESH] OR "Clinical Decision Rules"[MESH] OR "guideline"[pt] OR "practice guideline"[pt] OR "consensus development conference"[pt] OR "consensus development conference, NIH"[pt] OR "position statement*[tiab] OR "policy statement*[tiab] OR "practice parameter*[tiab] OR "best practice*[tiab] OR standards[TI] OR guideline[TI] OR guidelines[TI] OR standards[ot] OR guideline[ot] OR guidelines[ot] OR guideline*[cn] OR standards[cn] OR consensus*[cn] OR recommendat*[cn] OR "practice guideline*[tiab] OR "treatment guideline*[tiab] OR CPG[tiab] OR CPGs[tiab] OR "clinical guideline*[tiab] OR "guideline recommendation*[tiab] OR consensus*[tiab] OR ((critical[tiab] OR clinical[tiab] OR practice[tiab]) AND (path[tiab] OR paths[tiab] OR pathway[tiab] OR pathways[tiab] OR protocol*[tiab] OR bulletin[tiab] OR bulletins[tiab])) OR recommendat*[ti] OR recommendat*[ot] OR (care[tiab] AND (standard[tiab] OR path[tiab] OR paths[tiab] OR pathway[tiab] OR pathways[tiab] OR map[tiab] OR maps[tiab] OR plan[tiab] OR plans[tiab])) OR (algorithm*[tiab] AND (pharmacotherap*[tiab] OR therap*[tiab] OR treatment*[tiab] OR intervention*[tiab]))))</p>



	maps[tiab] OR plan[tiab] OR plans[tiab])) OR (algorithm*[tiab] AND (pharmacotherap*[tiab] OR therap*[tiab] OR treatment*[tiab] OR intervention*[tiab]))))
<b><u>For all IMIDs of interest</u></b>	
<b><u>National Institute for Health and Care Excellence</u></b>	<p>Search in the NICE Guidance section of the published guidelines. Key words used:</p> <ul style="list-style-type: none"> <li>• “psoriasis”</li> <li>• “psoriatic arthritis”</li> <li>• “rheumatoid arthritis”</li> <li>• “Crohn’s disease”</li> <li>• “ulcerative colitis”</li> <li>• “inflammatory bowel disease”</li> <li>• “ankylosing spondylitis”</li> </ul> <p>Applied filters:</p> <ul style="list-style-type: none"> <li>• Type: Guidance</li> <li>• Guidance programme: Clinical Guidelines</li> <li>• Guidance programme: Medicines Practice guidelines</li> <li>• Guidance programme: Cancer service guidelines</li> <li>• Guidance programme: Public health guidelines</li> <li>• Guidance programme: Safe staffing guidelines</li> <li>• Guidance programme: Social care guidelines</li> </ul>
<b><u>Guidelines International Network</u></b>	<p>Search in the international guidelines library, filtered from 2018 to present, key words used:</p> <ul style="list-style-type: none"> <li>• “psoriasis”</li> <li>• “psoriatic arthritis”</li> <li>• “rheumatoid arthritis”</li> <li>• “Crohn’s disease”</li> <li>• “ulcerative colitis”</li> <li>• “inflammatory bowel disease”</li> <li>• “ankylosing spondylitis”</li> </ul>
<b><u>ECRI Guidelines Trust</u></b>	<p>Search in the ECRI guidelines trust library, filtered from 2018 to present, key words used:</p> <ul style="list-style-type: none"> <li>• “psoriasis”</li> <li>• “psoriatic arthritis”</li> <li>• “rheumatoid arthritis”</li> <li>• “Crohn’s disease”</li> <li>• “ulcerative colitis”</li> <li>• “inflammatory bowel disease”</li> <li>• “ankylosing spondylitis”</li> </ul>
<b><u>MAGICapp platform</u></b> <b><u>(<a href="https://app.magicapp.org/#/guidelines">https://app.magicapp.org/#/guidelines</a>)</u></b>	<p>Key words used in the search bar :</p> <ul style="list-style-type: none"> <li>• “psoriasis”</li> <li>• “psoriatic arthritis”</li> <li>• “rheumatoid arthritis”</li> <li>• “Crohn’s disease”</li> <li>• “ulcerative colitis”</li> <li>• “inflammatory bowel disease”</li> <li>• “ankylosing spondylitis”</li> </ul>

<b><u>International Psoriasis Council</u></b>	We screened every guidelines referenced in the “guidelines” section of the website : <a href="https://psoriasisCouncil.org/education/treatment-guidelines/">https://psoriasisCouncil.org/education/treatment-guidelines/</a>
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#### Supplementary table 4. Extracted data

<b><u>Authors' COI</u></b>	Authors' financial conflicts of interest (COI) were extracted (declaration of interest and authors' affiliation sections). When no information could be retrieved regarding the potential COI of their authors were classified as "not reported".
<b><u>CROs</u></b>	CROs were defined following the definition of the International Council for Harmonisation, and we sought their involvement in the affiliation and the acknowledgment section of the manuscript.  (International Council for Harmonisation E6 (R2) Good clinical practice - Scientific guideline [online] <a href="https://www.ema.europa.eu/en/documents/scientific-guideline/ich-guideline-good-clinical-practice-e6r2-step-5_en.pdf">https://www.ema.europa.eu/en/documents/scientific-guideline/ich-guideline-good-clinical-practice-e6r2-step-5_en.pdf</a> (accessed 8 december 2023))
<b><u>Date of approval</u></b>	We searched for the drugs' date of approval on the FDA and/or EMA website. A drug was considered available if its date of approval was before the NMA's date of last literature search.
<b><u>Dissemination</u></b>	We searched for the impact factor of the NMA's journal of publication at the year of the NMA's publication in the Journal Citation Reports from Clarivate ( <a href="https://jcr.clarivate.com">https://jcr.clarivate.com</a> ), the number of citations within the 2 years following the publication of each NMA on Web Of Science ( <a href="http://www.webofscience.com">www.webofscience.com</a> ), the Altmetric Attention Score (AAS) on the Altmetric website ( <a href="https://www.altmetric.com">https://www.altmetric.com</a> ). The later provides an indicator of the amount of attention for a research output across different sources (mainstream medias, social media platforms, etc.).

Supplementary table 5. Excluded studies with reason for exclusion

Donahue 2012	cost effectiveness study
Aiello 2019	cost effectiveness study
Ariza 2014	cost effectiveness study
Armstrong 2013	cost effectiveness study
Athanasakis 2015	cost effectiveness study
Augustin 2022	cost effectiveness study
Bagust 2009	cost effectiveness study
Batticciotto 2016	cost effectiveness study
Bermejo 2017	cost effectiveness study
Bermejo 2018	cost effectiveness study
Betts 2016	cost effectiveness study
Blauvelt 2021	cost effectiveness study
Bloudek 2021	cost effectiveness study
Borse 2018	cost effectiveness study
Botteman 2007	cost effectiveness study
Bouhnik 2022	cost effectiveness study
BravoVergel 2007	cost effectiveness study
Buchanan 2018	cost effectiveness study
CADTH 2020	cost effectiveness study
Cawson 2014	cost effectiveness study
Clark 2004	cost effectiveness study
Claxton 2016	cost effectiveness study
Claxton 2018	cost effectiveness study
Corbett 2017	cost effectiveness study
Cummins 2011	cost effectiveness study
Diamantopoulos 2012	cost effectiveness study
Diamantopoulos 2014	cost effectiveness study
Dilokthornsakul 2022	cost effectiveness study
Essat 2016	cost effectiveness study
Gaultney 2016	cost effectiveness study
Grimm 2021	cost effectiveness study
Hernandez 2020	cost effectiveness study
Hodgson 2018	cost effectiveness study
Huoponen 2015	cost effectiveness study
Jairath 2022	cost effectiveness study
Jia 2022	cost effectiveness study
Jiménez-Morales 2021	cost effectiveness study
Liu 2012	cost effectiveness study
Lubrano 2014	cost effectiveness study
McLeod 2007	cost effectiveness study
Muszbek 2019	cost effectiveness study
Muszbek 2019	cost effectiveness study
Navarro 2020	cost effectiveness study
Nguyen 2012	cost effectiveness study

O'Connor 2016	cost effectiveness study
Petryszyn 2020	cost effectiveness study
Puig 2017	cost effectiveness study
Purmonen 2019	cost effectiveness study
Purmonen 2019	cost effectiveness study
Rafia 2016	cost effectiveness study
Saeki 2022	cost effectiveness study
Sardesai 2021	cost effectiveness study
Schultz 2021	cost effectiveness study
Schweikert 2020	cost effectiveness study
Soini 2012	cost effectiveness study
Stevenson 2017	cost effectiveness study
Tappenden 2016	cost effectiveness study
Taxonera 2022	cost effectiveness study
Tian 2020	cost effectiveness study
Tosh 2011	cost effectiveness study
Tosh 2013	cost effectiveness study
Ueno 2020	cost effectiveness study
Uttley 2018	cost effectiveness study
Wailoo 2008	cost effectiveness study
Wehler 2020	cost effectiveness study
Whittington 2019	cost effectiveness study
Wilson 2018	cost effectiveness study
Wilson 2018	cost effectiveness study
Yang 2011	cost effectiveness study
Yang 2012	cost effectiveness study
Yang 2016	cost effectiveness study
Zhou 2021	cost effectiveness study
Bae 2018	Duplicate
Jiménez-Morales 2020	Duplicate
Biemans 2020	Letter to Editor
Armstrong 2022	Letter to Editor
Bonovas 2015	Letter to Editor
Bourcier 2021	Letter to Editor
Fakhouri 2021	Letter to Editor
Gaudet 2021	Letter to Editor
Lohan 2020	Letter to Editor
Lu 2018	Letter to Editor
Migliore 2012	Letter to Editor
Nash 2018	Letter to Editor
O'Regan 2011	Letter to Editor
Pettitt 2021	Letter to Editor
Pope 2021	Letter to Editor
Song 2019	Letter to Editor
Ward 2016	Letter to Editor
Wu 2018	Letter to Editor
Krüger 2011	methodological study

Bujkiewicz 2022	methodological study
Cameron 2017	methodological study
Cameron 2019	methodological study
Catalá-López 2014	methodological study
Gwon 2020	methodological study
Jansen 2018	methodological study
Mrowietz 2021	methodological study
Nixon 2007	methodological study
Phillippo 2023	methodological study
Salanti 2018	methodological study
Schmitz 2012	methodological study
Schmitz 2013	methodological study
Signorovitch 2010	methodological study
Tremblay 2019	methodological study
Bryant 2015	Not an NMA
Craig 2020	Not an NMA
Holmer 2019	Not an NMA
Naessens 2021	Not an NMA
Poddubnyy 2018	Not an NMA
Puig 2021	Not an NMA
Wei 2016	Not an NMA
Ades 2011	Not an NMA
Battat 2019	Not an NMA
Choy 2019	Not an NMA
Gigliucci 2020	Not an NMA
Hazlewood 2020	Not an NMA
Marzo-Ortega 2021	Not an NMA
Migliore 2021	Not an NMA
Pantavou 2019	Not an NMA
Singh 2019	Not an NMA
Urata 2021	Not an NMA
Migliore 2021	Not an NMA
Hashash 2021	Not an NMA
Carbonnel 2018	Not an NMA
Almohideb 2021	not an NMA
Ash 2012	not an NMA
Azadeh 2022	not an NMA
Beelen 2022	not an NMA
Bilal 2018	not an NMA
Chen 2006	not an NMA
Connock 2010	not an NMA
Favalli 2012	not an NMA
Fried 2022	not an NMA
Gaujoux-Viala 2012	not an NMA
Hampton 2021	not an NMA
Hans 2022	not an NMA
Hawkes 2021	not an NMA

Isaacs 2022	not an NMA
Karpińska-Mirecka 2020	not an NMA
Lemos 2014	not an NMA
Loftus 2022	not an NMA
Papagoras 2015	not an NMA
Peyrin-Biroulet 2008	not an NMA
Peyrin-Biroulet 2022	not an NMA
Ramiro 2016	not an NMA
Svedbom 2017	not an NMA
Wang 2018	not an NMA
Woolacott 2006	not an NMA
Wu 2019	not an NMA
Yu 2022	not an NMA
Zhang 2021	not an NMA
Alves 2020	protocol
Wang 2022	protocol
Zhou 2021	protocol
Bae 2018	Wrong intervention
Hanrahan 2021	Wrong intervention
Mengato 2018	Wrong intervention
Messori 2017	Wrong intervention
Messori 2017	Wrong intervention
Chiumente 2017	Wrong intervention
Haikun 2022	Wrong intervention
Lee 2020	Wrong intervention
Jun 2022	Wrong outcomes
Mandema 2011	Wrong outcomes
Pham 2019	Wrong outcomes
Komaki 2017	Wrong patient population
Poo 2022	Wrong patient population
Gil 2022	Wrong study design
Jansen 2008	Wrong study design
Mauger 2019	Wrong study design
Ren 2018	Wrong study design
Singh 2022	Wrong study design

Supplementary table 6. Studies with missing full-text for which study corresponding authors were contacted

Title	Authors	First contact (Research Gate)	Answer	Second contact (email)	Answer
Comparative efficacy and safety of biologic agents in patients with active rheumatoid arthritis and inadequate response to tumor necrosis factor inhibitors: A Bayesian network meta-analysis of randomized controlled trials	Yoon-Kyoung Sung, Young Ho Lee	23 <sup>rd</sup> January 2023	No	14 <sup>th</sup> February 2023	No
Comparative efficacy and safety of etanercept biosimilars in comparison with etanercept in patients with rheumatoid arthritis who have insufficient response to methotrexate: A network meta-analysis	Young Ho Lee, Gwan Gyu Song	23 <sup>rd</sup> January 2023	No	14 <sup>th</sup> February 2023	No
Comparative efficacy and safety of biosimilar rituximab and originator rituximab in combination with methotrexate in patients with active rheumatoid arthritis: A Bayesian network meta-analysis	Sang-Cheol Bae, Young Ho Lee	23 <sup>rd</sup> January 2023	No	14 <sup>th</sup> February 2023	No
Relative efficacy and safety of secukinumab and guselkumab for the treatment of active psoriatic arthritis: A network meta-analysis	Gwan Gyu Song, Young Ho Lee	23 <sup>rd</sup> January 2023	No	14 <sup>th</sup> February 2023	No
Comparative efficacy and safety of secukinumab 75 mg, 150 mg, and 300 mg in patients with active ankylosing spondylitis	Gwan Gyu Song, Young Ho Lee	23 <sup>rd</sup> January 2023	No	14 <sup>th</sup> February 2023	No
Relative efficacy and safety of tofacitinib for treating psoriasis: A Bayesian network meta-analysis of randomized controlled trials	Gwan Gyu Song, Young Ho Lee	23 <sup>rd</sup> January 2023	No	14 <sup>th</sup> February 2023	No
Comparative efficacy and safety of 100 mg and 200 mg filgotinib administered to patients with active rheumatoid arthritis: A Bayesian network meta-analysis of randomized controlled trials	Gwan Gyu Song, Young Ho Lee	23 <sup>rd</sup> January 2023	No	14 <sup>th</sup> February 2023	No
Cost-effectiveness of tofacitinib for the treatment of moderate to severe active ulcerative colitis in Greece	Vellopoulou, Katerina; Stefanou, Garyfallia; Tzanetakos, Charalampos; Boubouchairopoulou, Nantiab; Nakou, Magdalinib; Gourzoulidis, Georgea; Kourlaba, Georgiia	23 <sup>rd</sup> January 2023	No	14 <sup>th</sup> February 2023	No
Comparative efficacy and safety of secukinumab, ixekizumab, and tofacitinib in patients with active psoriatic arthritis showing insufficient response to tumor necrosis factor inhibitors	Gwan Gyu Song, Young Ho Lee	23 <sup>rd</sup> January 2023	No	14 <sup>th</sup> February 2023	No
Comparison of the efficacy and safety of tocilizumab, sarilumab, and sirukumab in comparison with adalimumab as monotherapy in patients with active rheumatoid arthritis: A Bayesian network meta-analysis of randomized controlled trials	Yoon-Kyoung Sung, Young Ho Lee	23 <sup>rd</sup> January 2023	No	14 <sup>th</sup> February 2023	No
Comparative Efficacy of Biologic Therapies for Inducing Response and Remission in Fistulizing Crohn's Disease:	Mohammad Shehab, MD, FRCPC, Fatema Alrashed, PharmD, BCPS, Valérie	23 <sup>rd</sup> January 2023	No	14 <sup>th</sup> February 2023	No



Systematic Review and Network Meta-Analysis of Randomized Controlled Trials	Heron, MD, FRCPC, Sophie Restellini, MD, Talat Bessissow, MD, FRCPC				
Comparison of the efficacy and safety of tofacitinib and mavrilimumab in patients with active rheumatoid arthritis: A Bayesian network meta-analysis of randomized controlled trials	Yoon-Kyoung Sung, Young Ho Lee	23 <sup>rd</sup> January 2023	No	14 <sup>th</sup> February 2023	No
Efficacy of the biological treatments based on ACR70 response in rheumatoid arthritis: indirect comparison and meta-regression using Bayes-model	Valentin Brodsky	23 <sup>rd</sup> January 2023	No	14 <sup>th</sup> February 2023	No
Risk of Cardiovascular and Venous Thromboembolic Events Associated With Janus Kinase Inhibitors in Rheumatoid Arthritis: A Systematic Review and Network Meta-analysis	Alves, Carlos; Penedones, Ana; Mendes, Diogo; Marques, Francisco Batel	23 <sup>rd</sup> January 2023	No	14 <sup>th</sup> February 2023	Yes, provided full text
The Risk of Infections Associated With JAK Inhibitors in Rheumatoid Arthritis: A Systematic Review and Network Meta-analysis	Alves, Carlos; Penedones, Ana; Mendes, Diogo; Marques, Francisco Batel	23 <sup>rd</sup> January 2023	No	14 <sup>th</sup> February 2023	Yes, provided full text

*In total, 15 full texts were missing. The corresponding authors of the studies were contacted. We first contacted the authors via Research Gate, then via email one month later. All messages were personalised and listed the names of the publication that were requested to the corresponding author. Only one author responded and provided 2 of the missing full texts. Ultimately, 13 full texts were missing.*

Supplementary table 7. Included studies with their main characteristics

Author	Year	Funding	IMID	CRO	Defined primary outcome	Studied outcome	Protocol	COI	Author from industry	Author from CRO
Adas 2021 <sup>1</sup>	2021	none	rheumatoid arthritis	no	yes	safety	yes	yes	no	no
Akkoç 2023 <sup>2</sup>	2023	industry	ankylosing spondylitis	yes	no	efficacy	no	yes	yes	yes
Albert 2015 <sup>3</sup>	2015	none	rheumatoid arthritis	no	no	efficacy	no	no	no	no
Alfonso-Cristancho 2017 <sup>4</sup>	2017	industry	rheumatoid arthritis	yes	no	efficacy	no	yes	yes	yes
Alves 2022 <sup>5</sup>	2020	NR	rheumatoid arthritis	no	no	safety	yes	no	no	no
Alves 2022 <sup>6</sup>	2022	NR	rheumatoid arthritis	no	no	safety	yes	no	no	no
Armstrong 2020 <sup>7</sup>	2020	industry	psoriasis	yes	no	efficacy	no	yes	yes	no
Armstrong 2021 <sup>8</sup>	2021	industry	psoriasis	yes	no	efficacy	no	yes	yes	yes
Armstrong 2022a <sup>9</sup>	2022	industry	psoriasis	yes	no	efficacy	no	yes	yes	yes
Armstrong 2022b <sup>10</sup>	2022	industry	psoriasis	yes	no	both	no	yes	yes	yes
Bae 2018a <sup>11</sup>	2018	public/academic	rheumatoid arthritis	no	no	both	no	no	no	no
Bae 2018b <sup>12</sup>	2018	public/academic	rheumatoid arthritis	no	yes	both	no	no	no	no
Bae 2019a <sup>13</sup>	2019	public/academic	rheumatoid arthritis	no	yes	both	no	no	no	no
Bai 2019b <sup>14</sup>	2019	NR	psoriasis	no	no	both	no	no	no	NR
Baji 2014a <sup>15</sup>	2014	industry	rheumatoid arthritis	no	no	both	no	yes	no	no
Baji 2014b <sup>16</sup>	2014	industry	ankylosing spondylitis	no	yes	both	no	yes	no	no
Baker2012 <sup>17</sup>	2012	industry	psoriasis	no	no	efficacy	no	yes	yes	NR
Bakouny 2019 <sup>18</sup>	2019	NR	IBD	no	yes	efficacy	no	no	no	no
Bansback 2009 <sup>19</sup>	2009	industry	psoriasis	no	no	efficacy	no	yes	yes	NR
Barberio 2021 <sup>20</sup>	2021	none	IBD	no	yes	both	no	yes	no	no
Barberio 2022 <sup>21</sup>	2023	none	IBD	no	no	both	no	no	no	no
Barra 2014 <sup>22</sup>	2014	NR	rheumatoid arthritis	no	yes	efficacy	no	no	no	no
Bechman 2019 <sup>23</sup>	2019	none	rheumatoid arthritis	no	yes	safety	yes	yes	no	no
Bergman 2010 <sup>24</sup>	2010	industry	rheumatoid arthritis	yes	no	efficacy	no	yes	yes	yes
Bergrath 2017 <sup>25</sup>	2017	industry	rheumatoid arthritis	yes	no	both	no	yes	yes	yes
Blauvelt 2022 <sup>26</sup>	2022	industry	psoriasis	yes	no	efficacy	yes	yes	yes	no
Bonovas 2016 <sup>27</sup>	2016	none	IBD	no	yes	safety	yes	yes	no	no
Bonovas 2018 <sup>28</sup>	2018	none	IBD	no	no	both	no	yes	no	no
Buckley 2015 <sup>29</sup>	2015	industry	rheumatoid arthritis	yes	no	efficacy	no	yes	yes	yes
Burr 2019 <sup>30</sup>	2019	none	IBD	no	yes	both	no	yes	no	no
Burr 2021 <sup>31</sup>	2022	none	IBD	no	no	both	no	no	no	no
Camean-Castillo 2019 <sup>32</sup>	2019	NR	rheumatoid arthritis	no	yes	efficacy	no	NR	no	no
Cameron 2018 <sup>33</sup>	2018	industry	psoriasis	yes	yes	both	yes	yes	yes	yes
Cao 2022 <sup>34</sup>	2022	public/academic	ankylosing spondylitis	no	no	both	no	no	no	no
Castagné 2019 <sup>35</sup>	2019	public/academic	rheumatoid arthritis	no	yes	safety	yes	no	no	no
Chen 2016 <sup>36</sup>	2016	NR	ankylosing spondylitis	no	yes	efficacy	no	no	no	no
Chiu 2022 <sup>37</sup>	2022	public/academic	psoriatic arthritis	no	yes	safety	yes	yes	no	no
Choi 2017 <sup>38</sup>	2017	public/academic	rheumatoid arthritis	no	no	efficacy	no	no	no	no
Cholapranee 2017 <sup>39</sup>	2017	none	IBD	no	yes	efficacy	no	yes	no	no

Choy 2019a <sup>40</sup>	2019	industry	rheumatoid arthritis	yes	no	both	no	yes	yes	no
Choy 2019b <sup>41</sup>	2019	industry	rheumatoid arthritis	no	no	both	no	yes	yes	no
Danese 2014 <sup>42</sup>	2014	public/academic	IBD	no	yes	both	yes	yes	no	no
Deodhar 2020 <sup>43</sup>	2020	industry	ankylosing spondylitis	yes	no	efficacy	no	yes	yes	yes
Desai 2012 <sup>44</sup>	2012	public/academic	rheumatoid arthritis	no	no	safety	no	yes	no	no
Devine 2011 <sup>45</sup>	2011	NR	rheumatoid arthritis	no	yes	efficacy	no	NR	no	no
Diaz Acedo 2020 <sup>46</sup>	2020	NR	psoriasis	no	no	efficacy	no	NR	no	NR
Dignass 2019 <sup>47</sup>	2019	industry	IBD	yes	no	both	no	yes	yes	yes
Donahue 2019 <sup>48</sup>	2019	public/academic	rheumatoid arthritis	yes	no	both	yes	no	no	no
DuJardin 2019 <sup>49</sup>	2019	industry	psoriasis	no	no	both	no	yes	no	NR
Fahrbach 2021 <sup>50</sup>	2021	industry	psoriasis	yes	no	efficacy	no	yes	yes	yes
Fan 2015 <sup>51</sup>	2015	industry	psoriasis	no	no	efficacy	no	yes	yes	NR
Fautrel 2020 <sup>52</sup>	2020	industry	rheumatoid arthritis	no	no	efficacy	no	yes	yes	no
FéniX-Caballero 2013 <sup>53</sup>	2013	NR	psoriatic arthritis	no	yes	both	no	NR	no	no
Fleischmann 2017 <sup>54</sup>	2017	industry	rheumatoid arthritis	yes	yes	both	no	yes	yes	yes
Gallego-Galisteo 2012 <sup>55</sup>	2012	NR	rheumatoid arthritis	no	yes	efficacy	no	NR	no	no
Galvan Banqueri 2013 <sup>56</sup>	2013	NR	IBD	no	no	efficacy	no	NR	no	no
Galvan-Banqueri 2015 <sup>57</sup>	2015	NR	psoriasis	no	yes	efficacy	no	NR	no	NR
Gartlehner 2006 <sup>58</sup>	2006	public/academic	rheumatoid arthritis	no	no	both	no	NR	no	no
Geng 2018 <sup>59</sup>	2018	NR	psoriasis	no	no	efficacy	no	NR	no	NR
Gladman 2020 <sup>60</sup>	2020	industry	psoriatic arthritis	yes	no	both	no	yes	yes	yes
Gomez Garcia 2017 <sup>61</sup>	2017	public/academic	psoriasis	no	no	both	yes	yes	no	NR
Gonzalez-Vacarezza 2014 <sup>62</sup>	2014	public/academic	rheumatoid arthritis	no	yes	both	no	no	no	no
Gottlieb 2022 <sup>63</sup>	2022	industry	psoriasis	no	no	efficacy	no	yes	yes	no
Graudal 2014 <sup>64</sup>	2014	public/academic	rheumatoid arthritis	no	yes	efficacy	no	yes	no	no
Graudal 2019 <sup>65</sup>	2019	public/academic	rheumatoid arthritis	no	yes	efficacy	no	no	no	no
Gupta 2014 <sup>66</sup>	2014	NR	psoriasis	yes	yes	efficacy	no	yes	yes	yes
Guyot 2011 <sup>67</sup>	2011	industry	rheumatoid arthritis	yes	no	efficacy	no	yes	yes	yes
Guyot 2012 <sup>68</sup>	2012	industry	rheumatoid arthritis	yes	no	efficacy	no	yes	yes	yes
Hazlewood 2015 <sup>69</sup>	2015	public/academic	IBD	no	yes	both	no	yes	no	no
Hazlewood 2016 <sup>70</sup>	2016	none	rheumatoid arthritis	no	no	both	yes	yes	no	no
He 2022 <sup>71</sup>	2022	NR	rheumatoid arthritis	no	no	safety	yes	no	no	no
Hibi 2021 <sup>72</sup>	2021	industry	IBD	yes	no	efficacy	no	yes	yes	no
Hochberg 2003 <sup>73</sup>	2003	NR	rheumatoid arthritis	no	no	efficacy	no	NR	no	no
Hochberg 2013 <sup>74</sup>	2013	industry	rheumatoid arthritis	yes	no	both	no	yes	yes	yes
HoLee 2020 <sup>75</sup>	2020	none	rheumatoid arthritis	no	yes	both	no	no	no	no
Huang 2021 <sup>76</sup>	2021	none	psoriasis	no	yes	efficacy	yes	no	no	no
Iheozor-Ejiofor 2019 <sup>77</sup>	2019	NR	IBD	no	no	both	yes	yes	no	no
Jabbar Lopez 2017 <sup>78</sup>	2017	public/academic	psoriasis	no	no	both	yes	yes	no	NR
Jairath 2021 <sup>79</sup>	2021	industry	IBD	yes	no	both	no	yes	yes	yes
Janke 2020 <sup>80</sup>	2020	public/academic	rheumatoid arthritis	no	no	both	yes	no	no	no
Jansen 2014 <sup>81</sup>	2014	industry	rheumatoid arthritis	yes	no	efficacy	no	yes	yes	yes

Ji 2022 <sup>82</sup>	2022	NR	rheumatoid arthritis	no	yes	safety	no	no	no	no
Jianzhen 2020 <sup>83</sup>	2020	public/academic	psoriasis	no	no	both	no	no	no	NR
Kawalec 2016a <sup>84</sup>	2016	none	IBD	no	no	both	no	no	no	no
Kawalec 2016b <sup>85</sup>	2016	NR	IBD	no	yes	both	no	no	no	no
Kawalec 2018a <sup>86</sup>	2018	none	psoriatic arthritis	no	no	both	yes	no	no	no
Kawalec 2018b <sup>87</sup>	2018	none	IBD	no	no	both	no	no	no	no
Komaki 2017 <sup>88</sup>	2017	public/academic	IBD	no	no	both	no	no	no	no
Lasa 2022 <sup>89</sup>	2022	none	IBD	no	yes	both	yes	yes	no	no
Launois 2011 <sup>90</sup>	2011	industry	rheumatoid arthritis	yes	yes	efficacy	no	yes	yes	yes
Lee 2015 <sup>91</sup>	2015	public/academic	rheumatoid arthritis	no	yes	both	no	no	no	no
Lee 2016 <sup>92</sup>	2016	public/academic	rheumatoid arthritis	no	yes	both	no	no	no	no
Lee 2018 <sup>93</sup>	2018	public/academic	rheumatoid arthritis	no	yes	both	no	no	no	no
Lee 2020a <sup>94</sup>	2020	none	rheumatoid arthritis	no	yes	both	no	no	no	no
Lee 2020b <sup>95</sup>	2020	none	rheumatoid arthritis	no	yes	both	no	no	no	no
Lee 2020c <sup>96</sup>	2020	none	rheumatoid arthritis	no	yes	both	no	no	no	no
Lee 2021a <sup>97</sup>	2021	NR	psoriatic arthritis	no	yes	both	no	no	no	no
Lee 2021b <sup>98</sup>	2021	none	rheumatoid arthritis	no	yes	both	no	no	no	no
Lee 2021c <sup>99</sup>	2021	none	ankylosing spondylitis	no	no	both	no	no	no	no
Lee 2008 <sup>100</sup>	2008	NR	rheumatoid arthritis	no	no	both	no	NR	no	no
Lee 2017 <sup>101</sup>	2017	public/academic	rheumatoid arthritis	no	yes	both	no	no	no	no
Lee 2022a <sup>102</sup>	2022	none	ankylosing spondylitis	no	no	both	no	no	no	no
Leonardi 2022 <sup>103</sup>	2022	industry	psoriasis	yes	no	efficacy	no	yes	yes	no
Li 2022 <sup>104</sup>	2022	public/academic	IBD	no	no	both	yes	no	no	no
Lin 2012 <sup>105</sup>	2012	public/academic	psoriasis	no	yes	efficacy	no	no	no	NR
Liu 2016 <sup>106</sup>	2016	public/academic	ankylosing spondylitis	no	no	both	no	no	no	no
Loos 2018 <sup>107</sup>	2018	public/academic	psoriasis	yes	yes	both	no	yes	no	yes
Lu 2019 <sup>108</sup>	2019	public/academic	psoriatic arthritis	no	no	both	yes	no	no	no
Lv 2018 <sup>109</sup>	2018	public/academic	psoriasis	no	no	both	no	no	no	NR
Mahil 2020 <sup>110</sup>	2020	public/academic	psoriasis	no	yes	both	yes	yes	no	NR
Maneiro 2017 <sup>111</sup>	2017	none	rheumatoid arthritis	no	yes	safety	no	yes	no	no
Mao 2017 <sup>112</sup>	2017	none	IBD	no	no	efficacy	no	yes	no	no
Maxwell 2015 <sup>113</sup>	2015	public/academic	ankylosing spondylitis	no	no	both	yes	yes	no	no
McInnes 2018 <sup>114</sup>	2018	industry	psoriatic arthritis	yes	no	efficacy	no	yes	yes	yes
McInnes 2022 <sup>115</sup>	2022	industry	psoriatic arthritis	yes	no	both	no	yes	no	yes
Mease 2021 <sup>116</sup>	2021	industry	psoriatic arthritis	yes	yes	both	yes	yes	yes	yes
Mease 2022 <sup>117</sup>	2022	industry	psoriatic arthritis	yes	yes	both	yes	yes	yes	yes
Mei 2015 <sup>118</sup>	2015	NR	IBD	no	no	both	no	no	no	no
Messori 2015 <sup>119</sup>	2015	NR	psoriasis	no	no	safety	no	no	no	NR
Migliore 2012a <sup>120</sup>	2012	public/academic	psoriatic arthritis	no	yes	efficacy	no	no	no	no
Migliore 2012b <sup>121</sup>	2012	public/academic	ankylosing spondylitis	no	yes	efficacy	no	yes	no	no
Migliore 2015 <sup>122</sup>	2015	public/academic	ankylosing spondylitis	no	yes	efficacy	no	yes	no	no
Migliore 2016 <sup>123</sup>	2016	public/academic	rheumatoid arthritis	yes	no	efficacy	no	yes	no	yes
Miligkos 2016 <sup>124</sup>	2016	NR	IBD	no	yes	both	no	yes	no	no

Mocko 2016a <sup>125</sup>	2016	none	IBD	no	no	safety	yes	no	no	no
Mocko 2016b <sup>126</sup>	2016	none	IBD	no	no	safety	yes	no	no	no
Mocko 2017 <sup>127</sup>	2016	none	IBD	no	no	safety	yes	no	no	no
Motaghi 2019 <sup>128</sup>	2019	NR	IBD	no	no	both	no	no	no	no
Murray 2018 <sup>129</sup>	2018	industry	rheumatoid arthritis	yes	yes	efficacy	no	yes	yes	yes
Nixon 2007 <sup>130</sup>	2007	none	rheumatoid arthritis	no	no	efficacy	no	yes	no	no
Orme 2012 <sup>131</sup>	2011	industry	rheumatoid arthritis	yes	no	efficacy	no	yes	yes	yes
Pagnini 2018 <sup>132</sup>	2018	NR	IBD	no	no	efficacy	no	no	no	no
Pan 2021 <sup>133</sup>	2021	industry	psoriasis	no	no	efficacy	no	yes	yes	no
Park 2017 <sup>134</sup>	2017	none	rheumatoid arthritis	no	yes	safety	no	no	no	no
Paschos 2018 <sup>135</sup>	2018	none	IBD	no	yes	efficacy	no	no	no	no
Paul 2020 <sup>136</sup>	2020	industry	rheumatoid arthritis	yes	no	both	no	yes	yes	yes
Pope 2020 <sup>137</sup>	2020	industry	rheumatoid arthritis	yes	no	efficacy	no	yes	yes	yes
Qiu 2020 <sup>138</sup>	2020	public/academic	psoriatic arthritis	no	no	efficacy	yes	no	no	no
Reich 2008 <sup>139</sup>	2008	industry	psoriasis	yes	no	efficacy	no	yes	yes	yes
Reich 2012 <sup>140</sup>	2012	industry	psoriasis	yes	no	efficacy	no	yes	no	yes
Reich 2022 <sup>141</sup>	2022	industry	psoriasis	yes	yes	efficacy	no	yes	yes	no
Rokkas 2021 <sup>142</sup>	2021	NR	IBD	no	yes	both	no	no	no	no
Rui 2021 <sup>143</sup>	2021	none	IBD	no	yes	both	no	no	no	no
Ruyssen-Witrand 2020 <sup>144</sup>	2020	industry	psoriatic arthritis	yes	no	both	no	yes	yes	yes
Saad 2008 <sup>145</sup>	2008	NR	psoriatic arthritis	no	yes	both	no	NR	no	no
Salliot 2011 <sup>146</sup>	2011	NR	rheumatoid arthritis	no	yes	efficacy	no	no	no	no
Sawyer 2018 <sup>147</sup>	2018	industry	psoriasis	yes	no	efficacy	no	yes	yes	yes
Sawyer 2019a <sup>148</sup>	2019	industry	psoriasis	yes	no	efficacy	no	yes	yes	yes
Sawyer 2019b <sup>149</sup>	2019	industry	psoriasis	yes	no	efficacy	no	yes	yes	yes
Sbidian 2017 <sup>150</sup>	2017	public/academic	psoriasis	no	yes	both	yes	yes	no	NR
Sbidian 2020 <sup>151</sup>	2020	public/academic	psoriasis	no	yes	both	yes	yes	no	NR
Sbidian 2021 <sup>152</sup>	2021	public/academic	psoriasis	no	yes	both	yes	yes	no	no
Sbidian 2022 <sup>153</sup>	2022	public/academic	psoriasis	no	yes	both	yes	yes	no	no
Schmitt 2014 <sup>154</sup>	2014	none	psoriasis	no	yes	efficacy	no	yes	no	no
Schmitz 2012 <sup>155</sup>	2012	NR	rheumatoid arthritis	no	no	efficacy	no	yes	no	no
Schoels 2012 <sup>156</sup>	2012	industry	rheumatoid arthritis	no	no	both	no	yes	no	no
Shear NH 2021 <sup>157</sup>	2021	industry	psoriasis	yes	no	safety	no	yes	yes	yes
Shu 2013 <sup>158</sup>	2013	NR	ankylosing spondylitis	no	yes	efficacy	no	no	no	no
Signorovitch 2015 <sup>159</sup>	2015	industry	psoriasis	yes	no	efficacy	no	yes	yes	yes
Simpson 2019 <sup>160</sup>	2019	public/academic	rheumatoid arthritis	no	no	efficacy	no	no	no	no
Singh JA 2016a <sup>161</sup>	2016	public/academic	rheumatoid arthritis	no	no	both	yes	yes	no	no
Singh JA 2016b <sup>162</sup>	2016	public/academic	rheumatoid arthritis	no	no	both	yes	yes	no	no
Singh JA 2017a <sup>163</sup>	2017	public/academic	rheumatoid arthritis	no	no	both	yes	yes	no	no
Singh JA 2017b <sup>164</sup>	2017	public/academic	rheumatoid arthritis	no	no	both	yes	yes	no	no
Singh 2009 <sup>165</sup>	2009	none	rheumatoid arthritis	no	yes	both	no	yes	no	no
Singh 2014 <sup>166</sup>	2014	public/academic	IBD	no	yes	both	no	yes	no	no
Singh 2015a <sup>167</sup>	2015	public/academic	IBD	no	no	both	no	yes	no	no

Singh 2015b <sup>168</sup>	2015	public/academic	rheumatoid arthritis	no	yes	safety	no	yes	no	no
Singh 2018a <sup>169</sup>	2018	none	IBD	no	yes	both	no	yes	no	no
Singh 2018b <sup>170</sup>	2018	public/academic	IBD	no	no	both	no	yes	no	no
Singh 2020 <sup>171</sup>	2020	public/academic	IBD	no	no	both	no	yes	no	no
Singh 2021 <sup>172</sup>	2021	none	IBD	no	yes	both	no	yes	no	no
Song 2018 <sup>173</sup>	2021	none	psoriasis	no	yes	both	no	no	no	NR
Song 2019a <sup>174</sup>	2018	none	psoriatic arthritis	no	yes	both	no	no	no	no
Song 2021 <sup>175</sup>	2019	none	psoriatic arthritis	no	no	both	no	no	no	no
Song 2019b <sup>176</sup>	2019	none	rheumatoid arthritis	no	yes	both	no	no	no	no
Song 2020 <sup>177</sup>	2020	NR	rheumatoid arthritis	no	yes	both	no	no	no	no
Stidham 2014a <sup>178</sup>	2014	NR	IBD	no	no	efficacy	no	no	no	no
Stidham 2014b <sup>179</sup>	2014	public/academic	IBD	no	no	efficacy	no	no	no	no
Sung 2021a <sup>180</sup>	2021	public/academic	rheumatoid arthritis	no	yes	both	no	no	no	no
Sung 2021b <sup>181</sup>	2021	public/academic	rheumatoid arthritis	no	yes	both	no	no	no	no
Szebényi 2020 <sup>182</sup>	2020	public/academic	psoriasis	no	no	efficacy	yes	NR	no	no
Tada 2020 <sup>183</sup>	2020	industry	psoriasis	yes	no	efficacy	yes	yes	yes	no
Tarp 2017a <sup>184</sup>	2017	public/academic	rheumatoid arthritis	no	no	safety	yes	yes	no	no
Tarp 2017b <sup>185</sup>	2017	industry	rheumatoid arthritis	no	yes	both	yes	yes	no	no
Thorlund 2012 <sup>186</sup>	2012	industry	psoriatic arthritis	no	no	efficacy	no	yes	no	no
Thorlund 2014 <sup>187</sup>	2014	industry	IBD	no	no	both	no	yes	no	no
Thorlund 2015 <sup>188</sup>	2015	industry	IBD	yes	no	efficacy	no	yes	no	yes
Torres 2021 <sup>189</sup>	2021	industry	psoriatic arthritis	yes	no	efficacy	no	yes	yes	no
Trigo Vicente 2018 <sup>190</sup>	2018	none	IBD	no	no	both	no	no	no	no
Tvete 2015 <sup>191</sup>	2015	public/academic	rheumatoid arthritis	no	yes	efficacy	no	no	no	no
Ungrasert 2016a <sup>192</sup>	2016	none	psoriatic arthritis	no	yes	efficacy	no	yes	no	no
Ungrasert 2016b <sup>193</sup>	2016	none	psoriatic arthritis	no	yes	efficacy	no	yes	no	no
Ungrasert 2017 <sup>194</sup>	2017	public/academic	ankylosing spondylitis	no	yes	efficacy	no	no	no	no
Varu 2019 <sup>195</sup>	2019	industry	IBD	yes	no	efficacy	no	yes	yes	yes
Vererito 2019 <sup>196</sup>	2019	none	rheumatoid arthritis	no	yes	efficacy	no	no	no	no
Vickers 2016 <sup>197</sup>	2016	industry	IBD	yes	no	both	no	yes	yes	yes
Vieira 2016 <sup>198</sup>	2013	industry	rheumatoid arthritis	yes	no	both	no	yes	yes	yes
Vuyuru 2021 <sup>199</sup>	2021	public/academic	IBD	no	no	both	no	no	no	no
Wang 2016 <sup>200</sup>	2016	NR	ankylosing spondylitis	no	no	both	no	no	no	no
Wang 2021 <sup>201</sup>	2021	NR	rheumatoid arthritis	no	no	both	no	no	no	no
Wang 2022 <sup>202</sup>	2022	none	psoriatic arthritis	no	no	both	yes	yes	no	no
Warren 2020a <sup>203</sup>	2020	industry	psoriasis	yes	no	efficacy	no	yes	yes	no
Warren 2020b <sup>204</sup>	2020	industry	psoriasis	no	no	efficacy	no	yes	yes	NR
Welty 2020 <sup>205</sup>	2020	industry	IBD	yes	no	efficacy	yes	yes	yes	yes
Wheat 2017 <sup>206</sup>	2017	none	IBD	no	yes	safety	yes	no	no	no
Wu 2018 <sup>207</sup>	2018	none	psoriatic arthritis	no	no	both	yes	no	no	no
Wu 2021 <sup>208</sup>	2021	public/academic	IBD	no	no	both	yes	no	no	no
Wu 2021 <sup>209</sup>	2021	public/academic	rheumatoid arthritis	no	yes	efficacy	no	no	no	no
Xu 2019a <sup>210</sup>	2019	none	psoriasis	no	no	both	no	no	no	NR

Xu 2019b <sup>211</sup>	2019	public/academic	psoriasis	no	no	both	no	no	no	NR
Xu 2021 <sup>212</sup>	2021	public/academic	psoriasis	no	no	both	no	no	no	NR
Xue 2020 <sup>213</sup>	2020	industry	psoriasis	yes	no	efficacy	no	yes	yes	yes
Yasmeen 2022 <sup>214</sup>	2022	industry	psoriasis	yes	no	efficacy	no	yes	yes	yes
Zhang 2022 <sup>215</sup>	2022	public/academic	psoriasis	no	yes	both	no	no	no	no
Zhou 2021 <sup>216</sup>	2021	public/academic	IBD	no	no	both	no	no	no	no

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Supplementary table 8. Included studies with funding status and primary outcome results

Study ID	Year of publication	Funding	Coherence of the conclusion	Number of treatments cited as best
Adas 2021	2021	None	Coherent	NA
Akkoç 2023	2023	Industry	Unsupported	One
Albert 2015	2015	None	Coherent	Several
Alfonso-Cristancho 2017	2017	Industry	Coherent	NA
Alves 2022	2020	Not reported	Coherent	Several
Alves 2022	2022	Not reported	Coherent	Several
Armstrong 2020	2020	Industry	Coherent	Several
Armstrong 2021	2021	Industry	Coherent	Several
Armstrong 2022a	2022	Industry	Coherent	One
Armstrong 2022b	2022	Industry	Unsupported	One
Bae 2018a	2018	Public/Academic	Unsupported	NA
Bae 2018b	2018	Public/Academic	Unsupported	One
Bae 2019a	2019	Public/Academic	Unsupported	Several
Bai 2019b	2019	Not reported	Unsupported	Several
Baji 2014a	2014	Industry	Coherent	Several
Baji 2014b	2014	Industry	Coherent	Several
Baker2012	2012	Industry	Unsupported	Several
Bakouny 2019	2019	Not reported	Coherent	Several
Bansback 2009	2009	Industry	Coherent	Several
Barberio 2021	2021	None	Coherent	Several
Barberio 2022	2023	None	Unsupported	One
Barra 2014	2014	Not reported	Coherent	Several
Bechman 2019	2019	None	Coherent	Several
Bergman 2010	2010	Industry	Unsupported	One
Bergrath 2017	2017	Industry	Coherent	Several
Blauvelt 2022	2022	Industry	Unsupported	Several
Bonovas 2016	2016	None	Coherent	NA
Bonovas 2018	2018	None	Coherent	Several
Buckley 2015	2015	Industry	Unsupported	One
Burr 2019	2019	None	Coherent	Several
Burr 2021	2022	None	Unsupported	One
Camean-Castillo 2019	2019	Not reported	Unsupported	One
Cameron 2018	2018	Industry	Unsupported	One
Cao 2022	2022	Public/Academic	Unsupported	One
Castagné 2019	2019	Public/Academic	Coherent	Several
Chen 2016	2016	Not reported	Unsupported	One
Chiu 2022	2022	Public/Academic	Coherent	Several

Choi 2017	2017	Public/Academic	Unsupported	Several
Cholapranee 2017	2017	None	Coherent	Several
Choy 2019a	2019	Industry	Coherent	Several
Choy 2019b	2019	Industry	Coherent	Several
Danese 2014	2014	Public/Academic	Coherent	NA
Deodhar 2020	2020	Industry	Unsupported	Several
Desai 2012	2012	Public/Academic	Coherent	Several
Devine 2011	2011	Not reported	Coherent	Several
Diaz Acedo 2020	2020	Not reported	Coherent	Several
Dignass 2019	2019	Industry	Unsupported	One
Donahue 2019	2019	Public/Academic	Unsupported	Several
DuJardin 2019	2019	Industry	Coherent	Several
Fénix-Caballero 2013	2013	Not reported	Coherent	Several
Fahrbach 2021	2021	Industry	Coherent	Several
Fan 2015	2015	Industry	Unsupported	One
Fautrel 2020	2020	Industry	Coherent	One
Fleischmann 2017	2017	Industry	Coherent	Several
Gallego-Galisteo 2012	2012	Not reported	Coherent	Several
Galvan-Banqueri 2015	2015	Not reported	Unsupported	Several
Galvan Banqueri 2013	2013	Not reported	Coherent	Several
Gartlehner 2006	2006	Public/Academic	Coherent	Several
Geng 2018	2018	Not reported	Unsupported	One
Gladman 2020	2020	Industry	Unsupported	NA
Gomez Garcia 2017	2017	Public/Academic	Coherent	NA
Gonzalez-Vacarezza 2014	2014	Public/Academic	Coherent	NA
Gottlieb 2022	2022	Industry	Unsupported	One
Graudal 2014	2014	Public/Academic	Coherent	Several
Graudal 2019	2019	Public/Academic	Coherent	Several
Gupta 2014	2014	Not reported	Coherent	One
Guyot 2011	2011	Industry	Unsupported	Several
Guyot 2012	2012	Industry	Unsupported	Several
Hazlewood 2015	2015	Public/Academic	Unsupported	Several
Hazlewood 2016	2016	None	Coherent	Several
He 2022	2022	Not reported	Unsupported	One
Hibi 2021	2021	Industry	Unsupported	Several
Hochberg 2003	2003	Not reported	Coherent	Several
Hochberg 2013	2013	Industry	Unsupported	One
HoLee 2020	2020	None	Unsupported	NA
Huang 2021	2021	None	Unsupported	Several

Iheozor-Ejiofor 2019	2019	Not reported	Coherent	Several
Jabbar Lopez 2017	2017	Public/Academic	Coherent	NA
Jairath 2021	2021	Industry	Unsupported	One
Janke 2020	2020	Public/Academic	Coherent	Several
Jansen 2014	2014	Industry	Unsupported	One
Ji 2022	2022	Not reported	Coherent	NA
Jianzhen 2020	2020	Public/Academic	Unsupported	One
Kawalec 2016a	2016	None	Coherent	Several
Kawalec 2016b	2016	Not reported	Unsupported	Several
Kawalec 2018a	2018	None	Coherent	NA
Kawalec 2018b	2018	None	Coherent	Several
Komaki 2017	2017	Public/Academic	Unsupported	NA
Lasa 2022	2022	None	Unsupported	One
Launois 2011	2011	Industry	Coherent	Several
Lee 2015	2015	Public/Academic	Unsupported	NA
Lee 2016	2016	Public/Academic	Unsupported	One
Lee 2018	2018	Public/Academic	Unsupported	NA
Lee 2020a	2020	None	Unsupported	Several
Lee 2020b	2020	None	Unsupported	Several
Lee 2020c	2020	None	Unsupported	Several
Lee 2021a	2021	Not reported	Unsupported	Several
Lee 2021b	2021	None	Unsupported	NA
Lee 2021c	2021	None	Coherent	Several
Lee 2008	2008	Not reported	Coherent	NA
Lee 2017	2017	Public/Academic	Coherent	One
Lee 2022a	2022	None	Unsupported	One
Leonardi 2022	2022	Industry	Coherent	Several
Li 2022	2022	Public/Academic	Unsupported	Several
Lin 2012	2012	Public/Academic	Coherent	Several
Liu 2016	2016	Public/Academic	Unsupported	NA
Loos 2018	2018	Public/Academic	Coherent	Several
Lu 2019	2019	Public/Academic	Unsupported	Several
Lv 2018	2018	Public/Academic	Unsupported	NA
Mahil 2020	2020	Public/Academic	Coherent	Several
Maneiro 2017	2017	None	Coherent	Several
Mao 2017	2017	None	Coherent	NA
Maxwell 2015	2015	Public/Academic	Coherent	Several
McInnes 2018	2018	Industry	Unsupported	NA
McInnes 2022	2022	Industry	Unsupported	Several
Mease 2021	2021	Industry	Unsupported	Several
Mease 2022	2023	Industry	Unsupported	One
Mei 2015	2015	Not reported	Unsupported	One
Messori 2015	2015	Not reported	Coherent	NA

Migliore 2012a	2012	Public/Academic	Coherent	NA
Migliore 2012b	2012	Public/Academic	Unsupported	One
Migliore 2015	2015	Public/Academic	Coherent	Several
Migliore 2016	2016	Public/Academic	Unsupported	One
Miligkos 2016	2016	Not reported	Unsupported	Several
Mocko 2016a	2016	None	Coherent	Several
Mocko 2016b	2016	None	Coherent	Several
Mocko 2017	2016	None	Coherent	Several
Motaghi 2019	2019	Not reported	Coherent	NA
Murray 2018	2018	Industry	Coherent	NA
Nixon 2007	2007	None	Unsupported	Several
Orme 2012	2011	Industry	Coherent	NA
Pagnini 2018	2018	Not reported	Coherent	Several
Pan 2021	2021	Industry	Unsupported	One
Park 2017	2017	None	Coherent	NA
Paschos 2018	2018	None	Coherent	NA
Paul 2020	2020	Industry	Coherent	Several
Pope 2020	2020	Industry	Unsupported	One
Qiu 2020	2020	Public/Academic	Unsupported	Several
Reich 2008	2008	Industry	Unsupported	One
Reich 2012	2012	Industry	Unsupported	NA
Reich 2022	2022	Industry	Unsupported	One
Rokkas 2021	2021	Not reported	Unsupported	Several
Rui 2021	2021	None	Unsupported	Several
Ruyssen-Witrand 2020	2020	Industry	Unsupported	NA
Saad 2008	2008	Not reported	Coherent	Several
Salliot 2011	2011	Not reported	Coherent	Several
Sawyer 2018	2018	Industry	Coherent	Several
Sawyer 2019a	2019	Industry	Coherent	Several
Sawyer 2019b	2019	Industry	Unsupported	One
Sbidian 2017	2017	Public/Academic	Coherent	Several
Sbidian 2020	2020	Public/Academic	Coherent	Several
Sbidian 2021	2021	Public/Academic	Coherent	Several
Sbidian 2022	2022	Public/Academic	Coherent	Several
Schmitt 2014	2014	None	Coherent	Several
Schmitz 2012	2012	Not reported	Unsupported	NA
Schoels 2012	2012	Industry	Coherent	NA
Shear NH 2021	2021	Industry	Unsupported	One
Shu 2013	2013	Not reported	Unsupported	One
Signorovitch 2015	2015	Industry	Coherent	NA
Simpson 2019	2019	Public/Academic	Coherent	Several
Singh JA 2016a	2016	Public/Academic	Coherent	NA
Singh JA 2017a	2017	Public/Academic	Coherent	Several



Singh JA 2017b	2017	Public/Academic	Coherent	Several
Singh 2009	2009	None	Coherent	Several
Singh 2014	2014	Public/Academic	Unsupported	One
Singh 2015a	2015	Public/Academic	Unsupported	Several
Singh 2015b	2015	Public/Academic	Coherent	Several
Singh 2018a	2018	None	Unsupported	Several
Singh 2018b	2018	Public/Academic	Unsupported	Several
Singh 2020	2020	Public/Academic	Unsupported	Several
Singh 2021	2021	None	Unsupported	Several
Singh JA 2016b	2016	Public/Academic	Coherent	Several
Song 2018	2018	None	Coherent	Several
Song 2019a	2019	None	Unsupported	Several
Song 2021	2021	None	Unsupported	One
Song 2019b	2019	None	Unsupported	Several
Song 2020	2020	Not reported	Unsupported	One
Stidham 2014a	2014	Not reported	Coherent	One
Stidham 2014b	2014	Public/Academic	Coherent	Several
Sung 2021a	2021	Public/Academic	Coherent	Several
Sung 2021b	2021	Public/Academic	Unsupported	NA
Szebényi 2020	2020	Public/Academic	Unsupported	NA
Tada 2020	2020	Industry	Unsupported	Several
Tarp 2017a	2017	Public/Academic	Coherent	NA
Tarp 2017b	2017	Industry	Unsupported	Several
Thorlund 2012	2012	Industry	Unsupported	NA
Thorlund 2014	2014	Industry	Coherent	Several
Thorlund 2015	2015	Industry	Coherent	Several
Torres 2021	2021	Industry	Unsupported	Several
Trigo Vicente 2018	2018	None	Unsupported	One
Tvete 2015	2015	Public/Academic	Unsupported	One
Unprasert 2016a	2016	None	Coherent	Several
Unprasert 2016b	2016	None	Coherent	Several
Unprasert 2017	2017	Public/Academic	Coherent	NA
Varu 2019	2019	Industry	Unsupported	One
Vererito 2019	2019	None	Unsupported	One
Vickers 2016	2016	Industry	Unsupported	One
Vieira 2016	2013	Industry	Coherent	Several
Vuyyuru 2021	2021	Public/Academic	Coherent	One
Wang 2016	2016	Not reported	Coherent	Several
Wang 2021	2021	Not reported	Unsupported	Several
Wang 2022	2022	None	Unsupported	Several
Warren 2020a	2020	Industry	Coherent	Several
Warren 2020b	2020	Industry	Unsupported	One
Welty 2020	2020	Industry	Unsupported	One
Wheat 2017	2017	None	Coherent	Several

Wu 2018	2018	None	Unsupported	One
Wu 2021	2021	Public/Academic	Unsupported	One
Wu 2021	2021	Public/Academic	Unsupported	One
Xu 2019a	2019	None	Unsupported	NA
Xu 2019b	2019	Public/Academic	Unsupported	NA
Xu 2021	2021	Public/Academic	Unsupported	One
Xue 2020	2020	Industry	Unsupported	One
Yasmeen 2022	2022	Industry	Coherent	Several
Zhang 2022	2022	Public/Academic	Unsupported	NA
Zhou 2021	2021	Public/Academic	Unsupported	Several

Supplementary table 9. Number of NMAs published each year for each IMID

<b>Year</b>	<b>Psoriasis</b>	<b>Psoriatic arthritis</b>	<b>IBD</b>	<b>Ankylosing spondylitis</b>	<b>Rheumatoid arthritis</b>
<b>2003</b>	0	0	0	0	1
<b>2004</b>	0	0	0	0	0
<b>2005</b>	0	0	0	0	0
<b>2006</b>	0	0	0	0	1
<b>2007</b>	0	0	0	0	1
<b>2008</b>	1	1	0	0	1
<b>2009</b>	1	0	0	0	1
<b>2010</b>	0	0	0	0	1
<b>2011</b>	0	0	0	0	5
<b>2012</b>	3	2	0	1	5
<b>2013</b>	1	1	0	1	2
<b>2014</b>	2	0	5	1	5
<b>2015</b>	3	0	5	2	5
<b>2016</b>	0	2	8	3	5
<b>2017</b>	3	0	4	1	11
<b>2018</b>	5	4	7	0	4
<b>2019</b>	6	2	6	0	11
<b>2020</b>	10	3	2	1	10
<b>2021</b>	8	3	9	1	6
<b>2022</b>	9	4	3	2	3
<b>2023</b>	0	0	1	1	0

Supplementary table 10. Main characteristics of the included network meta-analyses categorized by funding status

		Non-industry funded NMAs n (%) (Total = 149)			
	Industry- funded NMAs n (%) (Total = 67)	Public or academic funding n (%) (Total = 65)	Absence of funding n (%) (Total = 48)	Absence of reporting regarding funding n (%) (Total = 36)	Overall n (%) (Total = 216)
Protocol					
Studied population					
Psoriasis	27 (40)	15 (23)	4 (8)	6 (17)	52 (24)
Psoriatic arthritis	8 (12)	4 (6)	7 (15)	3 (8)	22 (10)
IBD	8 (12)	12 (18)	20 (42)	10 (27)	50 (23)
Ankylosing spondylitis	3 (4)	6 (9)	2 (4)	3 (8)	14 (6)
Rheumatoid arthritis	21 (21)	28 (43)	15 (31)	14 (39)	78 (36)
Assistance of a CRO	52 (78)	3 (5)	0	1 (3)	56 (26)
COI among authors					
Yes	67 (100)	27 (42)	19 (40)	4 (11)	117 (54)
No	0	36 (55)	29 (60)	21 (58)	86 (40)
Not reported	0	2 (3)	0	11 (31)	13 (6)
Author from CRO	43 (64)	2 (3)	0	1 (3)	46 (22)
Author from pharmaceutical companies	57 (85)	0	0	0	57 (27)
Protocol registration	7 (10)	23 (35)	13 (27)	4 (11)	47 (22)
Outcome of interest					
Efficacy alone	43 (64)	15 (23)	10 (21)	17 (47)	85 (39)
Safety alone	1 (1)	5 (8)	9 (19)	5 (14)	20 (9)
Both efficacy and safety	23 (34)	45 (69)	29 (60)	14 (39)	111 (52)
Definition of a primary outcome	9 (12)	31 (48)	28 (58)	18 (50)	86 (40)
Inclusion of all available targeted therapies	21 (31)	20 (31)	11 (23)	12 (33)	64 (30)
Median number of citation (IQR)	7 (3-13)	7 (3-19)	9 (4-15)	5.5 (2-8)	7 (3-16)
Median AAS (IQR)	4 (2-13)	4 (2-25)	5 (2-19)	3 (1-7)	4 (2-13)
Median JIF (IQR)	3.3 (2.3-4.5)	3.6 (2.2-6.6)	3.1 (2.2-7.3)	2.5 (1.8-5.1)	3.3 (2.1-6.1)
Median number of included studies, median (IQR)	20 (10-39)	18 (12-39)	13 (7-28)	14 (6-26)	17 (8-33)
Median number of included targeted therapies, median (IQR)	8 (5-10)	5 (4-8)	5 (3-7)	4 (3-6)	5 (4-8)
Median number of efficacy outcome, median (IQR)	3 (3-5)	3 (2-4)	2 (2-3)	3 (1-4)	3 (2-4)
Median number of safety outcome, median (IQR)	2 (2-3)	2 (1-3)	2 (1-3)	2 (2-3)	2 (1-3)

Supplementary table 11. Main NMAs characteristics for each pathology

	Psoriasis n (%) (Total = 52)	Psoriatic arthritis n (%) (Total = 22)	IBD n (%) (Total = 50)	Ankylosing spondylitis n (%) Total (14)	Rheumatoid Arthritis n (%) Total (n = 78)
Type of funding					
Public/academic	15 (29)	4 (18)	12 (24)	6 (43)	28 (36)
Industry	27 (52)	8 (36)	8 (16)	3 (21)	21 (27)
None	4 (8)	7 (32)	20 (40)	2 (14)	15 (19)
NR	6 (12)	3 (14)	10 (20)	3 (21)	14 (18)
Assistance of a CRO	22 (42)	7 (32)	25 (50)	2 (14)	18 (23)
COI among authors					
Yes	36 (69)	12 (55)	25 (50)	6 (43)	35 (45)
No	11 (21)	8 (36)	24 (48)	8 (57)	35 (45)
Not reported	5 (10)	2 (9)	1 (2)	0	8 (10)
Author from CRO	16 (31)	6 (27)	6 (12)	2 (14)	16 (21)
Author from pharmaceutical companies	26 (50)	6 (27)	6 (12)	2 (14)	18 (23)
Protocol registration	12 (23)	8 (36)	15 (30)	1 (7)	11 (14)
Outcome of interest					
Efficacy alone	31 (60)	7 (32)	12 (24)	1 (7)	28 (36)
Safety alone	19 (37)	1 (5)	5 (10)	0	12 (15)
Both efficacy and safety	2 (4)	14 (64)	33 (66)	7 (50)	38 (49)
Definition of a primary outcome	15 (29)	10 (45)	17 (34)	6 (43)	38 (49)
Inclusion of all available targeted therapies					
Yes	21 (40)	8 (36)	21 (42)	10 (71)	4 (5)
No					
Number of interventions cited as best					
One	17 (33)	2 (9)	14 (28)	6 (43)	16 (21)
Several	25 (48)	14 (64)	20 (40)	5 (36)	44 (56)
NA	10 (19)	6 (27)	16 (32)	3 (21)	18 (23)
Median year of publication (IQR)	2020 (2017-2021)	2019 (2016-2021)	2018 (2016-2021)	2016 (2015-2021)	2017 (2014-2019)
Median number of citation (IQR)	8 (4-18)	6 (3-14)	9 (3-27)	3 (0-7)	7 (3-14)
Median AAS (IQR)	6 (3-12)	9 (3-131)	5 (3-26)	3 (1-4)	2 (0-7)
Median JIF (IQR)	3.7 (3.0-6.6)	2.4 (1.6-5.1)	4.6 (2.6-7.7)	3.0 (1.9-3.9)	2.7 (1.8-4.6)
Median number of included	28 (15-54)	12 (6-26)	13 (7-21)	14 (6-18)	18 (9-37)

studies, median (IQR)					
Median number of included targeted therapies, median (IQR)	8 (4-11)	8 (3-12)	4 (3-6)	4 (4-6)	6 (4-8)
Median number of efficacy outcome, median (IQR)	3 (3-4)	3 (2-6)	3(2-3)	2 (1-4)	3 (1-4)
Median number of safety outcome, median (IQR)	2 (2-3)	2 (1-3)	2 (2-4)	1 (1-2)	2 (1-3)

Supplementary table 12. Reasons for abstracts being unsupported by the reported results.

	<b>Number of NMAs, n (%)</b>
	<b>Total = 108</b>
<b>Omission of a treatment as effective or more</b>	93 (86)
<b>Statement not true for all outcomes</b>	11 (10)
<b>Statement not true for all analyses</b>	2 (2)
<b>Statement not true for all time points</b>	1 (1)
<b>High uncertainty of the results not taken into account</b>	1 (1)

Supplementary table 13. Sensitivity analyses evaluating the association between funding and the study main outcomes

	Exclusion of NMAs that do not report their funding	Exclusion of NMAs without funding or who do not report their funding	Exclusion of NMAs with less than 3 authors	Exclusion of NMAs with less than 4 authors
Coherence	OR = 0.66 [0.35-1.21] ORa = 0.71 [0.34-1.49]	OR = 0.70 [0.35-1.38] ORa = 0.94 [0.40-2.24]	<b>OR = 0.51 [0.28-0.92]</b> ORa = 0.61 [0.30-1.23]	OR = 0.56 [0.30-1.04] ORa = 0.68 [0.32-1.43]
One treatment best	<b>OR = 2.38 [1.17-4.93]</b> ORa = 1.95 [0.83-4.63]	OR = 2.04 [0.91-4.76] ORa = 1.51 [0.57-4.06]	<b>OR = 2.37 [1.19-4.77]</b> ORa = 1.81 [0.82-4.05]	<b>OR = 2.20 [1.08-4.53]</b> ORa = 1.74 [0.75-4.10]

*Variables considered for adjustment: underlying IMIDs, protocol registration, outcomes of the NMA [efficacy alone, safety alone, or both], exhaustivity of included targeted therapies, and year of publication*



Supplementary table 14. Sensitivity analyses evaluating the association between the presence of COI among the NMA's authors and the study primary and secondary outcomes

Association between the presence of COI among authors and the coherence of the conclusions	<ul style="list-style-type: none"> <li>• OR = 1.75 [1.00-3.11], p = 0.05</li> <li>• ORa = 1.61 [0.83-3.13], p = 0.16</li> </ul>
Association between the presence of COI among authors and the number of treatments cited as best	<ul style="list-style-type: none"> <li>• OR = 0.79 [0.40-1.54], p = 0.48</li> <li>• ORa = 0.68 [0.32-1.46], p = 0.33</li> </ul>
Association between the presence of COI among authors and protocol registration	<ul style="list-style-type: none"> <li>• OR = 1.33 [0.68-2.67], p = 0.40</li> </ul>
Association between the presence of COI among authors and definition of a primary outcome	<ul style="list-style-type: none"> <li>• OR = 0.55 [0.31-0.98], p = 0.04</li> </ul>
Association between the presence of COI and the inclusion of all available targeted therapies in the network	<ul style="list-style-type: none"> <li>• (OR = 2.25 [1.18-4.43], p = 0.01</li> </ul>
Association between the presence of COI among authors and evaluation of efficacy outcomes only	<ul style="list-style-type: none"> <li>• OR = 2.75 [1.49-5.06], p = 0.001</li> </ul>
Association between the presence of COI among authors and evaluation of both efficacy and safety outcomes	<ul style="list-style-type: none"> <li>• OR = 0.49 [0.28-0.87], p = 0.01</li> </ul>

*NMA's with conflict of interest among authors, n = 117/216; NMA's without conflict of interest among authors, n = 99/216*

*The analyses using multivariable logistic regressions were only conducted for the primary outcomes*

*Abbreviation: COI : conflict of interest*

Supplementary table 15. List of the included CPGs.

First author, publication year and guideline title	Organizations
<b>Inflammatory bowel disease</b>	
Lichtenstein 2018. <sup>1</sup> ACG Clinical Guideline: Management of Crohn's Disease in Adults.	ACG
Feuerstein 2020. AGA Clinical Practice Guidelines on the Management of Moderate to Severe Ulcerative Colitis <sup>2</sup> AGA Technical Review on the Management of Moderate to Severe Ulcerative Colitis <sup>3</sup>	AGA
Feuerstein 2021 AGA Clinical Practice Guidelines on the Medical Management of Moderate to Severe Luminal and Perianal Fistulizing Crohn's Disease <sup>4</sup> AGA Technical Review on the Medical Management of Moderate to Severe Luminal and Perianal Fistulizing Crohn's Disease. <sup>5</sup>	AGA
Ran 2021. <sup>6</sup> Practice recommendations for medical management and monitoring of inflammatory bowel disease in Asia.	Asian Organization for Crohn's and Colitis and Asia Pacific Association of Gastroenterology
Ooi 2019. <sup>7</sup> Best practices on immunomodulators and biologic agents for ulcerative colitis and Crohn's disease in Asia.	Asia-Pacific Working Group of Gastroenterology
Miehsler 2018. <sup>8</sup> Second Austrian consensus on the safe use of anti-TNF $\alpha$ antibodies in patients with inflammatory bowel diseases.	Austrian Society for Gastroenterology and Hepatology
Teixeira 2019. <sup>9</sup> Ulcerative colitis - treatment with biologicals.	Brazilian Medical Association
Lamb 2019. <sup>10</sup> British Society of Gastroenterology consensus guidelines on the management of inflammatory bowel disease in adults.	British Society of Gastroenterology
Steinhart 2018. <sup>11</sup> Clinical Practice Guideline for the Medical Management of Perianal Fistulizing Crohn's Disease: The Toronto consensus.	Canadian Association of Gastroenterology
Panaccione 2019. <sup>12</sup> Canadian Association of Gastroenterology Clinical Practice Guideline for the Management of Luminal Crohn's Disease.	Canadian Association of Gastroenterology
Moayyedi 2020. <sup>13</sup> Joint Canadian Association of Gastroenterology and Crohn's Colitis Canada Position Statement on Biosimilars for the Treatment of Inflammatory Bowel Disease.	Canadian Association of Gastroenterology and Crohn's Colitis Canada
Qian 2021. <sup>14</sup> Chinese consensus on diagnosis and treatment in inflammatory bowel disease	Chinese Society of Gastroenterology
Torres 2020. <sup>15</sup> ECCO Guidelines on Therapeutics in Crohn's Disease: Medical Treatment.	ECCO
Gordon 2022. <sup>16</sup> ECCO Guidelines on Inflammatory Bowel Disease and Malignancies.	ECCO
Raine 2022. <sup>17</sup> ECCO Guidelines on Therapeutics in Ulcerative Colitis: Medical Treatment.	ECCO

Bouchard 2019. How to manage anal ulcerations and anorectal stenosis in Crohn's disease: algorithm-based decision making: French National Working Group consensus 2018. <sup>18</sup> Management of anoperineal lesions in Crohn's disease: a French National Society of Coloproctology national consensus. <sup>19</sup>	French National Society of Coloproctology
Fuxman 2023. <sup>20</sup> GADECCU 2022 Guideline for the treatment of Ulcerative Colitis. Adaptation and updating of the GETECCU 2020 Guideline.	GADECCU
Sicilia 2020. <sup>21</sup> GETECCU 2020 guidelines for the treatment of ulcerative colitis. Developed using the GRADE approach.	GETECCU
Updated S3-Guideline Ulcerative Colitis. German Society for Digestive and Metabolic Diseases (DGVS). <sup>22</sup>	German Society for Digestive and Metabolic Diseases
Yamamoto-Furusho 2018. <sup>23</sup> The Mexican consensus on the diagnosis and treatment of ulcerative colitis.	Grupo del Consenso Mexicano de Colitis Ulcerosa Crónica Idiopática
Yamamoto-Furusho 2021. <sup>24</sup> Second Mexican consensus on biologic therapy and small-molecule inhibitors in inflammatory bowel disease.	Mexican Association of Gastroenterology
Koh 2023. <sup>25</sup> Korean clinical practice guidelines on biologics for moderate to severe Crohn's disease.	Korean Association for the Study of Intestinal Diseases
Na 2023. <sup>25</sup> Korean clinical practice guidelines on biologics and small molecules for moderate-to-severe ulcerative colitis.	Korean Association for the Study of Intestinal Diseases
Macaluso 2022. Use of biologics and small molecule drugs for the management of moderate to severe ulcerative colitis: IG-IBD clinical guidelines based on the GRADE methodology. <sup>27</sup> Use of biologics and small molecule drugs for the management of moderate to severe ulcerative colitis: IG-IBD technical review based on the GRADE methodology. <sup>28</sup>	IG-IBD
Macaluso 2023. Use of biologics for the management of Crohn's disease: IG-IBD clinical guidelines based on the GRADE methodology <sup>29</sup> Use of biologics for the management of Crohn's disease: IG-IBD technical review based on the GRADE methodology <sup>30</sup>	IG-IBD
Nakase 2021. <sup>31</sup> Evidence-based clinical practice guidelines for inflammatory bowel disease 2020. Matsuoka 2018. Evidence-based clinical practice guidelines for inflammatory bowel disease.	Japanese Society of Gastroenterology
Juliao-Baños 2022 <sup>32</sup> Update of the PANCCO clinical practice guidelines for the treatment of ulcerative colitis in the adult population.	PANCCO
Lodyga 2021. <sup>33</sup> Guidelines for the management of patients with Crohn's disease	Polish Society of Gastroenterology
Nakase 2023. <sup>34</sup> Treatment escalation and de-escalation decisions in Crohn's disease: Delphi consensus recommendations from Japan	TRADE consensus group
Weizman 2019. <sup>35</sup> Appropriateness of Biologics in the Management of Crohn's Disease Using RAND/UCLA Appropriateness Methodology.	Canadian IBD Network for Research and Growth in Quality Improvement

Amiot 2021 <sup>36</sup> Clinical guidelines for the management of inflammatory bowel disease: Update of a French national consensus.	French National Consensus Clinical guidelines for the management of IBD
National Institute for Health and Care Excellence (NICE) 2019. Crohn's disease: management Evidence review for post-surgical maintenance of remission NICE guideline NG129 <sup>37</sup>  Martins R. Management of Crohn's disease: summary of updated NICE guidance <sup>38</sup>	NICE
<b>Psoriatic arthritis</b>	
Singh 2019. <sup>39</sup> American College of Rheumatology/National Psoriasis Foundation Guideline for the Treatment of Psoriatic Arthritis.	American College of Rheumatology/National Psoriasis Foundation
Carneiro 2021 <sup>40</sup> Brazilian Society of Rheumatology 2020 guidelines for psoriatic arthritis.	Brazilian Society of Rheumatology
Tucker 2022. <sup>41</sup> British Society for Rheumatology guideline for the treatment of psoriatic arthritis with biologic and targeted synthetic DMARDs.	British Society for Rheumatology
Gossec 2020. <sup>42</sup> EULAR recommendations for the management of psoriatic arthritis with pharmacological therapies: 2019 update. Kerschbaumer 2020. <sup>43</sup> Pharmacological treatment of psoriatic arthritis: a systematic literature research for the 2019 update of the EULAR recommendations for the management of psoriatic arthritis.	EULAR
Leung 2022. <sup>44</sup> Management of Peripheral Arthritis in Patients With Psoriatic Arthritis: An Updated Literature Review Informing the 2021 GRAPPA Treatment Recommendations. Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA): updated treatment recommendations for psoriatic arthritis	GRAPPA
Elmamoun 2020. <sup>45</sup> International league of associations for rheumatology recommendations for the management of psoriatic arthritis in resource-poor settings	International league of associations for rheumatology
Casasola-Vargas 2021. <sup>46</sup> Recommendations of the Mexican College of Rheumatology for the management of psoriatic arthritis.	Mexican College of Rheumatology
TorreAlonso 2018. <sup>47</sup> Recommendations of the Spanish Society of Rheumatology on treatment and use of systemic biological and non-biological therapies in psoriatic arthritis.	Spanish Society of Rheumatology
Tsai 2021. <sup>48</sup> Recommendations for psoriatic arthritis management: A joint position paper of the Taiwan Rheumatology Association and the Taiwanese Association for Psoriasis and Skin Immunology	Taiwan Rheumatology Association and the Taiwanese Association for Psoriasis and Skin Immunology
Nas 2018. <sup>49</sup> Management of Psoriatic Arthritis: Turkish League Against Rheumatism (TLAR) Expert Opinions.	Turkish League Against Rheumatism
Garcia-Vicuña 2021. <sup>50</sup> Management of particular clinical situations in psoriatic arthritis: an expert's recommendation document based on systematic literature review and extended Delphi process.	
<b>Psoriasis</b>	

Elmets 2019. <sup>51</sup> Joint AAD- NPF guidelines of care for the management and treatment of psoriasis with awareness and attention to comorbidities	AAD- NPF
Menter 2019. <sup>52</sup> Joint AAD- NPF guidelines of care for the management and treatment of psoriasis with biologics.	AAD- NPF
Menter 2020 <sup>53</sup> Joint AAD-NPF guidelines of care for the management of psoriasis with systemic nonbiologic therapies.	AAD- NPF
2021. Clinical Practice Guideline: Management of moderate to severe psoriasis with conventional and systemic biologic systemic conventional and systemic biologic treatments in the Mexican Health System setting. <sup>54</sup>	Academia Mexicana de Dermatologia
Smith 2020. <sup>55</sup> British Association of Dermatologists guidelines for biologic therapy for psoriasis 2020: a rapid update	BAD
Lambert 2020. Practical recommendations for systemic treatment in psoriasis according to age, pregnancy, metabolic syndrome, mental health, psoriasis subtype and treatment history (BETA- PSO: Belgian Evidence- based Treatment Advice in Psoriasis; part 1). <sup>56</sup> Practical recommendations for systemic treatment in psoriasis in case of coexisting inflammatory, neurologic, infectious or malignant disorders (BETA- PSO: Belgian Evidence- based Treatment Advice in Psoriasis; part 2) <sup>57</sup>	BETA-PSO
Arnone 2019. <sup>58</sup> Diagnostic and therapeutic guidelines for plaque psoriasis	Brazilian Society of Dermatology
Fernández-Ávila 2023. <sup>59</sup> Clinical practice guidelines for the treatment of psoriasis in Colombia	Colombian Association of Dermatology
Nast 2020. EuroGuiDerm Guideline on the systemic treatment of psoriasis vulgaris – Part 1: treatment and monitoring recommendations. <sup>60</sup> Nast 2021. EuroGuiDerm guideline on the systemic treatment of psoriasis vulgaris – Part 2: specific clinical and comorbid situations <sup>61</sup>	EuroGuiDerm
2022. Working group set up by the Finnish Medical Association Duodecim, Finnish Dermatologists' Association and Finnish Rheumatology Association. <sup>62</sup>	Finnish Medical Association Duodecim, Finnish Dermatologists' Association and Finnish Rheumatology Association
Amatore 2019. French guidelines on the use of systemic treatments for moderate- to- severe psoriasis in adults <sup>63</sup>	French Society of Dermatology
Nast 2021 German S3-Guideline on the treatment of Psoriasis vulgaris, adapted from EuroGuiDerm - Part 1: Treatment goals and treatment recommendations. <sup>64</sup> German S3-Guideline on the treatment of Psoriasis vulgaris, adapted from EuroGuiDerm - Part 2: Treatment monitoring and specific clinical or comorbid situations <sup>64</sup> Nast 2018. S3 Guideline for the treatment of psoriasis vulgaris, update – short version part 1 – systemic treatment S3 Guideline for the treatment of psoriasis vulgaris, update – short version part 2 – special patient populations and treatment situations	German Dermatological Society

Fujita 2018. <sup>66</sup> Japanese guidelines for the management and treatment of generalized pustular psoriasis: the new pathogenesis and treatment of GPP	Japanese Dermatological Association
Saeki 2023 <sup>67</sup> Japanese guidance for use of biologics for psoriasis Saeki 2020 Japanese guidance for use of biologics for psoriasis	Japanese Dermatological Association for Psoriasis
Prussick 2018. <sup>68</sup> Psoriasis in solid organ transplant patients: best practice recommendations from The Medical Board of the National Psoriasis Foundation. .	National Psoriasis Foundation
Kogan 2019. <sup>69</sup> Latin American Clinical Practice Guidelines on the systemic treatment of psoriasis	Sociedad Latinoamericana de Psoriasis (Latin American Psoriasis Society)
Carrascosa 2022. Practical update of the Recommendations Published by the Psoriasis Group of the Spanish Academy of Dermatology and Venereology (GPS) on the Treatment of Psoriasis with Biologic Therapy. Part 1. Concepts and General Management of Psoriasis with Biologic Therapy, <sup>70</sup> Practical Update of the Guidelines Published by the Psoriasis Group of the Spanish Academy of Dermatology and Venereology (GPs) on the Treatment of Psoriasis With Biologic Agents: Part 2-Management of Special Populations, Patients With Comorbid Conditions, and Risk. <sup>71</sup>	Spanish Academy of Dermatology and Venereology
2019. Guideline National klinisk retningslinje for psoriasis. <sup>72</sup>	Sundhedsstyrelsen (Danish Health Authority)
Valenzuela 2020. <sup>73</sup> Update of Chilean clinical guidelines for the management of psoriasis	
<b>Rheumatoid arthritis</b>	
Fraenkel 2021. <sup>74</sup> American College of Rheumatology Guideline for the Treatment of Rheumatoid Arthritis.	American College of Rheumatology
Lau 2019. <sup>75</sup> 2018 update of the APLAR recommendations for treatment of rheumatoid arthritis.	APLAR
Da Mota 2018. <sup>76</sup> 2017 recommendations of the Brazilian Society of Rheumatology for the pharmacological treatment of rheumatoid arthritis.	Brazilian Society of Rheumatology
Bonfiglioli 2021. <sup>77</sup> Recommendations of the Brazilian Society of Rheumatology for the use of JAK inhibitors in the management of rheumatoid arthritis.	Brazilian Society of Rheumatology
Holroyd 2019. <sup>78</sup> The British Society for Rheumatology biologic DMARD safety guidelines in inflammatory arthritis.	British Society for Rheumatology
Hazlewood 2022. <sup>79</sup> Canadian Rheumatology Association living guidelines for the pharmacological management of rheumatoid arthritis with disease modifying anti rheumatic drugs	Canadian Rheumatology Association
Tian 2021. <sup>80</sup> 2018 Chinese Guidelines for the Diagnosis and Treatment of Rheumatoid Arthritis.	Chinese Rheumatology Association
Smolen 2023. <sup>81</sup> EULAR recommendations for the management of rheumatoid arthritis with synthetic and biological disease-modifying antirheumatic drugs: 2022 update Kerschbaumer 2023. <sup>82</sup> Efficacy of synthetic and biological DMARDs: a systematic literature review	EULAR

informing the 2022 update of the EULAR recommendations for the management of rheumatoid arthritis.	
Nagy 2022. <sup>83</sup> EULAR points to consider for the management of difficult-to-treat rheumatoid arthritis. Roodenrijs 2021. <sup>84</sup> Pharmacological and non-pharmacological therapeutic strategies in difficult-to-treat rheumatoid arthritis: a systematic literature review informing the EULAR recommendations for the management of difficult-to-treat rheumatoid arthritis	EULAR
Daïen 2019. <sup>85</sup> Update of French society for rheumatology recommendations for managing rheumatoid arthritis.	French society for rheumatology
Ho 2019. <sup>86</sup> Updated consensus recommendations from the Hong Kong Society of Rheumatology.	Hong Kong Society of Rheumatology.
Parisi 2019. <sup>87</sup> The Italian Society for Rheumatology clinical practice guidelines for rheumatoid arthritis.	Italian Society for Rheumatology
Park 2020. <sup>88</sup> The use of biological disease-modifying antirheumatic drugs for inflammatory arthritis in Korea: results of a Korean Expert consensus.	Korean College of Rheumatology
Alhajeri 2019. <sup>89</sup> Kuwait association of rheumatology 2018 treatment recommendations for patients with rheumatoid arthritis	Kuwait association of rheumatology
Cardiel 2021. <sup>90</sup> Update of the Mexican College of Rheumatology Guidelines for the Pharmacological Treatment of Rheumatoid Arthritis	Mexican College of Rheumatology Guidelines
Fernandes 2022. <sup>91</sup> Portuguese recommendations for the use of biological and targeted synthetic disease-modifying antirheumatic drugs in patients with rheumatoid arthritis - 2020 update	Portuguese Society of Rheumatology (SPR)
Omaïr 2022. <sup>92</sup> Recommendations for the treatment of rheumatoid arthritis in Saudi Arabia: adoption of the 2021 American College of Rheumatology guidelines.	Saudi Society for Rheumatology
Ataman 2018. <sup>93</sup> Turkish League Against Rheumatism (TLAR) Recommendations for the Pharmacological Management of Rheumatoid Arthritis: 2018 Update Under Guidance of Current Recommendations.	Turkish League Against Rheumatism
Fiehn 2018. <sup>94</sup> S2e guideline: treatment of rheumatoid arthritis with disease-modifying drugs.	Deutsche Gesellschaft für Rheumatologie
Arayssi 2018. <sup>95</sup> Recommendations for the management of rheumatoid arthritis in the Eastern Mediterranean region: an adoption of the 2015 American College of Rheumatology guidelines	
Molina 2020. <sup>96</sup> Expert Recommendations on the Interleukin 6 Blockade in Patients with Rheumatoid Arthritis.	
Xie 2023. <sup>97</sup> Guideline for the diagnosis and treatment of rheumatoid arthritis with integrated traditional Chinese medicine and Western medicine to increase efficiency and reduce toxicity	
<b>Ankylosing Spondylitis</b>	

Ward 2019. <sup>98</sup> Update of the American College of Rheumatology/Spondylitis Association of America/Spondyloarthritis Research and Treatment Network Recommendations for the Treatment of Ankylosing Spondylitis and Nonradiographic Axial Spondyloarthritis	American College of Rheumatology/Spondylitis Association of America/Spondyloarthritis Research and Treatment Network
Tam 2019. <sup>99</sup> 2018 APLAR axial spondyloarthritis treatment recommendations.	APLAR
Resende 2020. <sup>100</sup> The Brazilian Society of Rheumatology guidelines for axial spondyloarthritis – 2019	Brazilian Society of Dermatology.
Saldarriaga-Rivera 2022. <sup>101</sup> 2021 clinical practice guidelines for the diagnosis, treatment, and follow-up of patients with peripheral spondyloarthritis	Colombian Association of Rheumatology
Bautista-Molano 2022. <sup>102</sup> 2021 clinical practice guideline for the early detection, diagnosis, treatment, and monitoring of patients with axial spondyloarthritis. Colombian Association of Rheumatology.	Colombian Association of Rheumatology
Ramiro 2023. <sup>103</sup> ASAS-EULAR recommendations for the management of axial spondyloarthritis: 2022 update. Ortolan 2023. <sup>104</sup> Efficacy and safety of non-pharmacological and non-biological interventions: a systematic literature review informing the 2022 update of the ASAS/EULAR recommendations for the management of axial spondyloarthritis Webers 2022. <sup>105</sup> Efficacy and safety of biological DMARDs: a systematic literature review informing the 2022 update of the ASAS-EULAR recommendations for the management of axial spondyloarthritis	EULAR
Wendling 2022. <sup>106</sup> French Society for Rheumatology (SFR) recommendations on the everyday management of patients with spondyloarthritis, including psoriatic arthritis. Wendling 2018. Update of French Society for Rheumatology (SFR) recommendations about the everyday management of patients with spondyloarthritis	French Society for Rheumatology
Kiltz 2019. <sup>107</sup> Long version on the S3 guidelines for axial spondyloarthritis including Bechterew's disease and early forms, Update 2019: Evidence-based guidelines of the German Society for Rheumatology (DGRh) and participating medical scientific specialist societies	German Society for Rheumatology
Manara 2021. <sup>108</sup> The Italian Society for Rheumatology recommendations for the management of axial spondyloarthritis.	Italian Society for Rheumatology
Ali 2020. <sup>109</sup> Recommendation for the Management of Spondyloarthritis Patients in Kuwait.	Kuwait Association of Rheumatology (KAR)
Reyes-Cordero 2021. <sup>110</sup> Recommendations of the Mexican College of Rheumatology for the Management of Spondyloarthritis.	Mexican College of Rheumatology
Gratacós 2018. <sup>111</sup> Recommendations by the Spanish Society of Rheumatology on the Use of Biological Therapies in Axial Spondyloarthritis.	Spanish Society of Rheumatology
Wei 2020. <sup>112</sup> Taiwan Rheumatology Association consensus recommendations for the management of axial spondyloarthritis.	Taiwan Rheumatology Association



Bodur 2018. <sup>113</sup> Turkish League Against Rheumatism consensus Report: Recommendations For Management of Axial Spondyloarthritis.	Turkish League Against Rheumatism
Truong 2022. <sup>114</sup> Australian consensus Statements for the Assessment and Management of Non-radiographic Axial Spondyloarthritis.	

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Supplementary table 16. Characteristics of the included CPGs

ID	Organizations	IMID	Reach	COI	Industry funding	sponsorship	NMA	Industry funded	Non industry funded	Year
1	French National Consensus Clinical guidelines for the management of IBD	IBD	national	Yes	Yes	supported by Abbvie, Janssen, Pfizer, Takeda, Tillotts Pharma, HAC Pharma, Mylan, Biogen and Sandoz with institutional grants.	Yes	No	Yes	2021
2	AGA	IBD	national	Yes	No		Yes	No	Yes	2020
3	AGA	IBD	national	Yes	No		Yes	No	Yes	2021
4	GADECCU	IBD	national	Yes	Yes	Agradecemos a Abbvie, Biotoscana, Ferring, Janssen, Pfizer y Takeda por su colaboración.	Yes	No	Yes	2023
5	Grupo del Consenso Mexicano de Colitis Ulcerosa Crónica Idiopática	IBD	national	Yes	Yes	Ferring Pharmaceuticals laboratory provided financial support in terms of logistics and travel expenses for all participants of the Mexican Consensus Group	No	No	No	2018
6	Canadian Association of Gastroenterology	IBD	national	Yes	Yes	AbbVie Corp., Janssen Inc., Pfizer Canada Inc., and Takeda Canada Inc. for their generous support of the guideline process	No	No	No	2018
7	TRADE consensus group	IBD	national	Yes	Yes	work was supported by AbbVie	No	No	No	2023
8	French National Society of Coloproctology	IBD	national	Yes	No		No	No	No	2019
9	German Society for Digestive and Metabolic Diseases	IBD	national	No	No		No	No	No	2019
10	Canadian IBD Network for Research and Growth in Quality Improvement	IBD	national	Yes	No		No	No	No	2019
11	GETECCU	IBD	national	Yes	No		No	No	No	2020
12	Canadian Association of Gastroenterology and Crohn's Colitis Canada	IBD	national	Yes	No		No	No	No	2020
13	Chinese Society of Gastroenterology	IBD	national	No	No		No	No	No	2021
14	Korean Association for the Study of Intestinal Diseases	IBD	national	Yes	No		Yes	No	Yes	2023
15	British Society of Gastroenterology	IBD	national	Yes	No		Yes	Yes	Yes	2019

16	ACG	IBD	national	Yes	No		Yes	No	Yes	2018
17	Polish Society of Gastroenterology	IBD	national	NR	No		Yes	No	Yes	2021
18	IG-IBD	IBD	national	Yes	No		Yes	No	Yes	2022
19	IG-IBD	IBD	national	Yes	No		Yes	No	Yes	2023
20	Austrian Society for Gastroenterology and Hepatology	IBD	national	Yes	No		Yes	No	Yes	2018
21	Korean Association for the Study of Intestinal Diseases	IBD	national	No	No		Yes	No	Yes	2023
22	Japanese Society of Gastroenterology	IBD	national	Yes	No		Yes	No	Yes	2021
23	Canadian Association of Gastroenterology	IBD	national	Yes	Yes	Canadian Association of Gastroenterology thanks AbbVie Corp, Janssen Inc, Pfizer Canada Inc, and Takeda Canada Inc for their generous support of the guideline process.	Yes	No	Yes	2019
24	Brazilian Medical Association	IBD	national	NR	No		Yes	Yes	Yes	2019
25	Mexican Association of Gastroenterology	IBD	national	Yes	Yes	Takeda laboratory of Mexico provided financial support	Yes	Yes	No	2021
26	ECCO	IBD	Regional	Yes	No		Yes	No	Yes	2022
27	Asian Organization for Crohn's and Colitis and Asia Pacific Association of Gastroenterology	IBD	Regional	No	No		No	No	No	2021
28	PANCCO	IBD	Regional	Yes	No		Yes	No	Yes	2022
29	ECCO	IBD	Regional	Yes	No		Yes	No	Yes	2022
30	ECCO	IBD	Regional	Yes	No		Yes	No	Yes	2020
31	NICE	IBD	International	No	No		Yes			2019
32	Asia-Pacific Working Group of Gastroenterology	IBD	Regional	No	Yes	Unrestricted educational grants were obtained from Medtronic, Takeda, LF Asia	No	No	No	2019
33	Academia Mexicana de Dermatologia	Pso	national	NR	No		Yes	No	Yes	2021
34	Finnish Medical Association Duodecim, Finnish Dermatologists' Association and Finnish Rheumatology Association	Pso	national	No	No		Yes	Yes	No	2022
35	Spanish Academy of Dermatology and Venereology	Pso	national	No	No		Yes	Yes	No	2022
36	Colombian Association of Dermatology	Pso	national	No	Yes	developed by Asocolderma with support from, in alphabetical order,	Yes	Yes	No	2022

						Abbvie, Janssen, Lilly, Novartis, and Pfizer				
37	Japanese Dermatological Association	Pso	national	No	No		Yes	Yes	No	2018
38	BETA-PSO	Pso	national	No	Yes	Funding for this project was provided to the Royal Belgian Society of Dermatology and Venerology by six pharmaceutical companies: Celgene, Eli Lilly, Janssen, LEO Pharma, Novartis and UCB	No	No	No	2020
39	National Psoriasis Foundation	Pso	national	No	No		No	No	No	2018
40	Brazilian Society of Dermatology	Pso	national	Yes	No		No	No	No	2019
41	French Society of Dermatology	Pso	national	Yes	No		No	No	No	2019
42	AAD- NPF	Pso	national	Yes	No		No	No	No	2019
43	AAD- NPF	Pso	national	No	No		No	No	No	2019
44	Japanese Dermatological Association for Psoriasis	Pso	national	Yes	No		No	No	No	2020
45	Sundhedsstyrelsen (Danish Health Authority)	Pso	national	No	No		No	No	No	2022
46	AAD- NPF	Pso	national	No	No		Yes	No	Yes	2020
47	German Dermatological Society	Pso	national	Yes	No		Yes	Yes	Yes	2021
48	BAD	Pso	national	Yes	No		Yes	No	Yes	2020
49		Pso	national	No	No		Yes	No	Yes	2020
50	Sociedad Latinoamericana de Psoriasis (Latin American Psoriasis Society)	Pso	Regional	No	No		Yes	No	Yes	2019
51	EuroGuiDerm	Pso	Regional	Yes	No		Yes	Yes	Yes	2020
52	International league of associations for rheumatology	Pso Arth	International	Yes	No		No	No	No	2020
53	GRAPPA	Pso Arth	International	Yes	No		No	No	No	2022
54	Brazilian Society of Rheumatology	Pso Arth	national	NR	No		Yes	Yes	Yes	2021
55	Mexican College of Rheumatology	Pso Arth	national	Yes	Yes	Novartis Mexico covered the costs of the meetings,	Yes	No	Yes	2021
56		Pso Arth	national	Yes	Yes	This work was supported by Pfizer.	Yes	No	Yes	2021
57	Spanish Society of Rheumatology	Pso Arth	national	Yes	No		No	No	No	2018
58	British Society for Rheumatology	Pso Arth	national	Yes	No		No	No	No	2022

59	Turkish League Against Rheumatism	Pso Arth	national	No	No		Yes	Yes	Yes	2018
60	Taiwan Rheumatology Association and the Taiwanese Association for Psoriasis and Skin Immunology	Pso Arth	national	No	Yes	Novartis Taiwan kindly provided funding for the article submission fees for this position paper,	Yes	No	Yes	2021
61	American College of Rheumatology/National Psoriasis Foundation	Pso Arth	national	Yes	No		Yes	No	Yes	2019
62	EULAR	Pso Arth	Regional	Yes	No		No	No	No	2020
63	Turkish League Against Rheumatism	RA	national	No	No		Yes	Yes	Yes	2018
64	Mexican College of Rheumatology Guidelines	RA	national	Yes	Yes	Lilly, Roche, Sanofi and UCP for their financial support through an unrestricted educational fund.	Yes	Yes	Yes	2021
65	Brazilian Society of Rheumatology	RA	national	Yes	No		Yes	Yes	Yes	2018
66	French society for rheumatology	RA	national	Yes	No		Yes	Yes	Yes	2019
67	Portuguese Society of Rheumatology (SPR)	RA	national	NR	No		Yes	Yes	No	2022
68	Deutsche Gesellschaft für Rheumatologie	RA	national	No	No		Yes	No	Yes	2018
69	Canadian Rheumatology Association	RA	national	Yes	No		Yes	No	Yes	2022
70	Hong Kong Society of Rheumatology.	RA	national	No	No		Yes	Yes	Yes	2019
71	Kuwait association of rheumatology	RA	national	No	Yes	KAR received unrestricted funds for the development of the KAR 2018 treatment recommendations for patients with RA from Eli Lilly, NewBridge Pharmaceuticals, Roche, and Pfizer.	No	No	No	2019
72	Italian Society for Rheumatology	RA	national	Yes	No		No	No	No	2019
73	Brazilian Society of Rheumatology	RA	national	Yes	No		No	No	No	2021
74	American College of Rheumatology	RA	national	Yes	No		No	No	No	2021
75	Saudi Society for Rheumatology	RA	national	Yes	No		No	No	No	2022
76		RA	national	No	No		No	No	No	2023
77	British Society for Rheumatology	RA	national	Yes	No		Yes	No	Yes	2019
78		RA	national	Yes	No		Yes	No	Yes	2020
79	Korean College of Rheumatology	RA	national	No	No		Yes	Yes	Yes	2020
80	Chinese Rheumatology Association	RA	national	No	No		Yes	Yes	Yes	2021

81		RA	Regional	NR	No		No	No	No	2018
82	EULAR	RA	Regional	Yes	No		No	No	No	2022
83	APLAR	RA	Regional	Yes	No		Yes	No	Yes	2019
84	EULAR	RA	Regional	Yes	No		Yes	Yes	No	2022
85	Colombian Association of Rheumatology	SPA	national	Yes	Yes	unrestricted support of the following entities that jointly financed its realization: Abbvie, Amgen, Janssen, Novartis, and Pfizer.	Yes	No	Yes	2022
86	Turkish League Against Rheumatism	SPA	national	No	No		Yes	No	Yes	2018
87	Taiwan Rheumatology Association	SPA	national	Yes	Yes	Expert consensus for these recommendations were finalized during 3 committee meetings which were funded by Novartis Taiwan	No	No	No	2020
88	Mexican College of Rheumatology	SPA	national	No	Yes	Novartis provided funding to the "Executive Committee for the elaboration of recommendations for the management of spondyloarthropathies"	No	No	No	2021
89		SPA	national	Yes	Yes	unrestricted grants from Novartis, UCB Pharma, Janssen, and Pfizer. This funding paid for investigator time and the journal's Rapid Service Fee.	No	No	No	2022
90	Spanish Society of Rheumatology	SPA	national	Yes	No		No	No	No	2018
91	Kuwaiti Association of Rheumatology (KAR)	SPA	national	No	No		No	No	No	2020
92	Italian Society for Rheumatology	SPA	national	Yes	No		No	No	No	2021
93	German Society for Rheumatology	SPA	national	No	No		Yes	Yes	Yes	2018
94	Brazilian Society of Dermatology.	SPA	national	Yes	No		Yes	No	Yes	2020
95	Colombian Association of Rheumatology	SPA	national	Yes	Yes	unrestricted support of the following institutions that jointly funded this effort: Abbvie, Amgen, Janssen, Novartis and Pfizer	Yes	Yes	No	2022
96	American College of Rheumatology/Spon	SPA	national	Yes	No		Yes	No	Yes	2019

	dylitis Association of America/Spondyloarthritis Research and Treatment Network									
97	French Society for Rheumatology	SPA	national	Yes	No		Yes	Yes	Yes	2022
98	EULAR	SPA	Regional	Yes	No		No	No	No	2022
99	APLAR	SPA	Regional	Yes	No		Yes	No	Yes	2019

Supplementary table 17. PRIOR Statement Checklist

Section Topic	#	Item	Location reported
<b>TITLE</b>			
Title	1	Identify the report as an overview of reviews.	Title
<b>ABSTRACT</b>			
Abstract	2	Provide a comprehensive and accurate summary of the purpose, methods, and results of the overview of reviews.	Abstract section
<b>INTRODUCTION</b>			
Rationale	3	Describe the rationale for conducting the overview of reviews in the context of existing knowledge.	Introduction Line #100-121
Objectives	4	Provide an explicit statement of the objective(s) or question(s) addressed by the overview of reviews.	Line #119-121
<b>METHODS</b>			
Eligibility criteria	5a	Specify the inclusion and exclusion criteria for the overview of reviews. If supplemental primary studies were included, this should be stated, with a rationale.	Line #128-144
	5b	Specify the definition of 'systematic review' as used in the inclusion criteria for the overview of reviews.	NA
Information sources	6	Specify all databases, registers, websites, organizations, reference lists, and other sources searched or consulted to identify systematic reviews and supplemental primary studies (if included). Specify the date when each source was last searched or consulted.	Line #150-154
Search strategy	7	Present the full search strategies for all databases, registers and websites, such that they could be reproduced. Describe any search filters and limits applied.	Supplementary table 2 and 3
Selection process	8a	Describe the methods used to decide whether a systematic review or supplemental primary study (if included) met the inclusion criteria of the overview of reviews.	Line #145-161
	8b	Describe how overlap in the populations, interventions, comparators, and/or outcomes of systematic reviews was identified and managed during study selection.	NA
Data collection process	9a	Describe the methods used to collect data from reports.	Line #162-176
	9b	If applicable, describe the methods used to identify and manage primary study overlap at the level of the comparison and outcome during data collection. For each outcome, specify the method used to illustrate and/or quantify the degree of primary study overlap across systematic reviews.	NA
	9c	If applicable, specify the methods used to manage discrepant data across systematic reviews during data collection.	NA
Data items	10	List and define all variables and outcomes for which data were sought. Describe any assumptions made and/or measures taken to identify and clarify missing or unclear information.	Line #162-189 Supplementary figure 1 and 2, Supplementary table 4
Risk of bias assessment	11a	Describe the methods used to <i>assess</i> risk of bias or methodological quality of the included systematic reviews.	NA
	11b	Describe the methods used to <i>collect</i> data on (from the systematic reviews) and/or <i>assess</i> the risk of bias of the primary studies included in the systematic reviews. Provide a justification for instances where flawed, incomplete, or missing assessments are identified but not re-assessed.	NA
	11c	Describe the methods used to <i>assess</i> the risk of bias of supplemental primary studies (if included).	NA
Synthesis methods	12a	Describe the methods used to summarize or synthesize results and provide a rationale for the choice(s).	Line #198-212

	12b	Describe any methods used to explore possible causes of heterogeneity among results.	NA
	12c	Describe any sensitivity analyses conducted to assess the robustness of the synthesized results.	NA
Reporting bias assessment	13	Describe the methods used to <i>collect</i> data on (from the systematic reviews) and/or <i>assess</i> the risk of bias due to missing results in a summary or synthesis (arising from reporting biases at the levels of the systematic reviews, primary studies, and supplemental primary studies, if included).	NA
Certainty assessment	14	Describe the methods used to <i>collect</i> data on (from the systematic reviews) and/or <i>assess</i> certainty (or confidence) in the body of evidence for an outcome.	NA
<b>RESULTS</b>			
Systematic review and supplemental primary study selection	15a	Describe the results of the search and selection process, including the number of records screened, assessed for eligibility, and included in the overview of reviews, ideally with a flow diagram.	Line #222-233
	15b	Provide a list of studies that might appear to meet the inclusion criteria, but were excluded, with the main reason for exclusion.	Supplementary table 5
Characteristics of systematic reviews and supplemental primary studies	16	Cite each included systematic review and supplemental primary study (if included) and present its characteristics.	Supplementary table 6,7,13, 14
Primary study overlap	17	Describe the extent of primary study overlap across the included systematic reviews.	NA
Risk of bias in systematic reviews, primary studies, and supplemental primary studies	18a	Present assessments of risk of bias or methodological quality for each included systematic review.	NA
	18b	Present assessments ( <i>collected</i> from systematic reviews or <i>assessed</i> anew) of the risk of bias of the primary studies included in the systematic reviews.	NA
	18c	Present assessments of the risk of bias of supplemental primary studies (if included).	NA
Summary or synthesis of results	19a	For all outcomes, summarize the evidence from the systematic reviews and supplemental primary studies (if included). If meta-analyses were done, present for each the summary estimate and its precision and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	Line #240-310
	19b	If meta-analyses were done, present results of all investigations of possible causes of heterogeneity.	NA
	19c	If meta-analyses were done, present results of all sensitivity analyses conducted to assess the robustness of synthesized results.	NA
Reporting biases	20	Present assessments ( <i>collected</i> from systematic reviews and/or <i>assessed</i> anew) of the risk of bias due to missing primary studies, analyses, or results in a summary or synthesis (arising from reporting biases at the levels of the systematic reviews, primary studies, and supplemental primary studies, if included) for each summary or synthesis assessed.	NA
Certainty of evidence	21	Present assessments ( <i>collected</i> or <i>assessed</i> anew) of certainty (or confidence) in the body of evidence for each outcome.	NA
<b>DISCUSSION</b>			
Discussion	22a	Summarize the main findings, including any discrepancies in findings across the included systematic reviews and supplemental primary studies (if included).	Line #313-331
	22b	Provide a general interpretation of the results in the context of other	Line #232-339

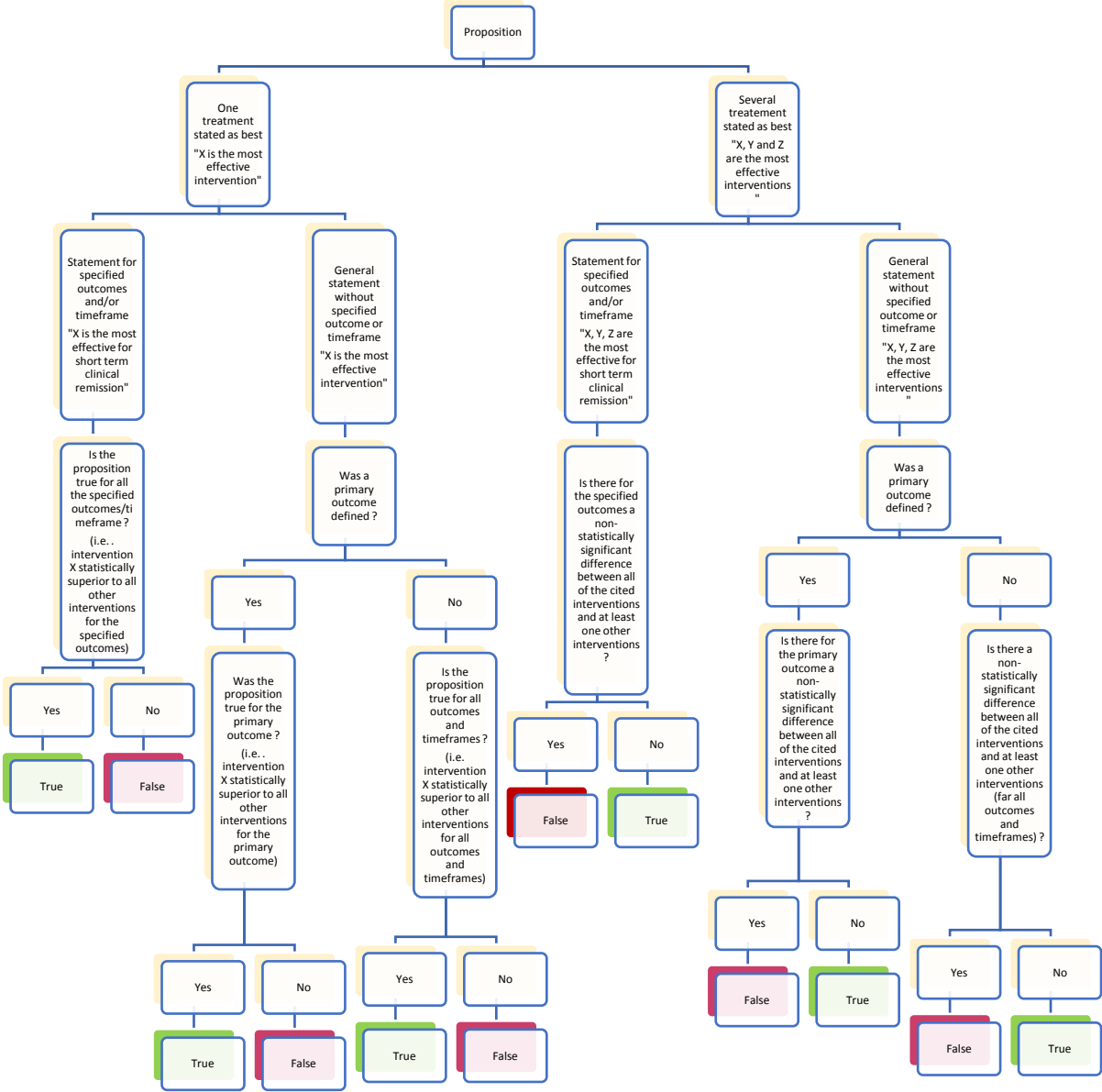


		evidence.	
	22c	Discuss any limitations of the evidence from systematic reviews, their primary studies, and supplemental primary studies (if included) included in the overview of reviews. Discuss any limitations of the overview of reviews methods used.	Line #346-358
	22d	Discuss implications for practice, policy, and future research (both systematic reviews and primary research). Consider the relevance of the findings to the end users of the overview of reviews, e.g., healthcare providers, policymakers, patients, among others.	Line #327-331 #341-345
<b>OTHER INFORMATION</b>			
Registration and protocol	23a	Provide registration information for the overview of reviews, including register name and registration number, or state that the overview of reviews was not registered.	Title page
	23b	Indicate where the overview of reviews protocol can be accessed, or state that a protocol was not prepared.	Title page
	23c	Describe and explain any amendments to information provided at registration or in the protocol. Indicate the stage of the overview of reviews at which amendments were made.	Line #213-219
Support	24	Describe sources of financial or non-financial support for the overview of reviews, and the role of the funders or sponsors in the overview of reviews.	Title page
Competing interests	25	Declare any competing interests of the overview of reviews' authors.	Title page
Author information	26a	Provide contact information for the corresponding author.	Title page
	26b	Describe the contributions of individual authors and identify the guarantor of the overview of reviews.	Line #156-158 and #163 and #178
Availability of data and other materials	27	Report which of the following are available, where they can be found, and under which conditions they may be accessed: template data collection forms; data collected from included systematic reviews and supplemental primary studies; analytic code; any other materials used in the overview of reviews.	Title page

Supplementary table 18. Dissemination metrics given the source of funding

	<b>Industry-funded NMAs</b>	<b>Non-industry funded NMAs</b>	<b>P-value</b>
<b>Citation count, median (IQR)</b>	7 (3-10)	7 (3-13)	0.71
<b>Journal impact factor, median (IQR)</b>	3.3 (2.3-3.9)	2.3 (2.1-5.9)	0.58
<b>Altmetric attention score, median (IQR)</b>	4 (2-19)	4 (1-17)	0.87

Supplementary figure 1. Algorithm for the proposition-level assessment



Supplementary figure 2. Overall algorithm for the assessment of the abstract's coherence

