

SARCOIDOSIS VASCULITIS AND DIFFUSE LUNG DISEASES 2025; 42 (4): 17112
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Supplementary materials - The prevalence of interstitial lung disease and bronchiectasis in rheumatoid arthritis: a systematic review and meta-analysis

Risk of bias assessment

Assessment tool: Newcastle-Ottawa Scale adapted for cross-sectional studies

Selection: (Maximum 6 points)

1) Representativeness of the sample:

- a) Truly representative of the rheumatoid arthritis (RA) patient population (inclusion of consecutive RA patients): 2 points
- b) Somewhat representative of the RA patient population (inclusion exclusively from hospital settings): 1 point
- c) Selected group e.g., inclusion based on abnormal chest x-ray or no description (exclusion criteria).

3) Study design:

- a) Cross-sectional or prospective: 1 point
- b) Retrospective: 0 points

3) Non-respondents:

- a) HRCT was performed in 100% of consecutive patients, or in $\geq 90\%$ of consecutive patients with a description of both the participants who underwent HRCT and those who did not: 2 point
- b) $\leq 90\%$ underwent HRCT with a description of both the participants who underwent HRCT and those who did not: 1 points
- c) No description of the proportion of patients who underwent HRCT or their characteristics: 0 points

4) Ascertainment of the exposure (risk factor):

- a) Patients diagnosed with RA according to either ACR, ARA, or ACR/EULAR 2010 diagnostic criteria for RA: 1 point
- b) Specialist diagnosed RA: 0 points

Comparability: (Maximum 2 points)

1) The study reports

- a) Median duration of rheumatoid arthritis and mean CRP: 2 points
- b) Median duration of rheumatoid arthritis or mean CRP: 1 point
- c) Neither median duration of rheumatoid arthritis nor mean CRP: 0 points

Outcome: (Maximum 2 points)

1) Assessment of the outcome:

- a) HRCT assessed by ≥ 2 Independent radiologists or pulmonologists blinded to clinical data: 2 points
- b) HRCT assessed by 1 radiologist or pulmonologist blinded to clinical data: 1 point
- c) HRCT assessed by unblinded radiologist or pulmonologist: 0 points
- d) No description: 0 points

Quality/risk of bias assessment

First author, (year of publication)	Selection	Comparability	Outcome	Total score
Cortet, B et al. (1997)	5	1	0	6
Gabbay, E et al. (1997)	4	1	2	7
Dawson, J et al. (2001)	4	2	2	8
Izumiyama, T et al. (2002)	3	1	0	4
Saracoglu, M (2004)	5	2	0	7
Bilgici, A et al. (2004)	3	2	0	5
Köker, I et al. (2007)	5	2	0	7
Kanat, F et al. (2007)	5	2	0	7
Mori, S et al. (2008)	5	2	2	9
Noor, N et al. (2009)	5	1	0	6
Youssef, A et al. (2011)	5	1	0	6

Skare, T et al. (2011)	4	1	0	5
Habib, H (2011)	4	1	2	7
Mori, S et al. (2012)	5	1	1	7
Chen, J (2013)	5	1	2	8
Reynisdottir, G (2013)	3	1	2	6
Baky, A et al. (2017)	4	1	0	5
Dong, H et al. (2019)	4	2	1	7
Shawky, R et al. (2019)	3	2	0	6
Paulin, F et al. (2021)	5	2	2	9
Andronache, I et al. (2021)	4	1	0	5
Tanaka, A et al. (2022)	4	1	2	7
Selldén, T et al. (2023)	5	2	0	7
Chai, D (2023)	3	1	2	6

Search strings

PubMed

(rheumatoid arthritis[MeSH Terms] OR rheumatoid arthritis[Title/Abstract]) AND ("high-resolution computed tomography"[Title/Abstract] OR HRCT[Title/Abstract]) AND (lung[MeSH Terms] OR pulmonary[Title/Abstract] OR thoracic[Title/Abstract]) AND (abnormalities[Title/Abstract] OR findings[Title/Abstract] OR pathology[Title/Abstract] OR "interstitial lung disease" OR "bronchiectasis")

Embase

The Embase search was conducted using the advanced search function, with the following limits applied: '*Human*' and '*remove of MEDLINE records*'.

((('rheumatoid arthritis' OR 'rheumatoid arthritis-associated') AND (interstitial lung disease OR bronchiectasis OR reticulation OR honeycombing OR 'ground glass opacification' OR 'traction bronchiectasis')) AND (HRCT OR 'high resolution computed tomography' OR 'HR-CT' OR 'high-resolution CT')) NOT ('case report' OR 'meta-analysis' OR letter OR editorial))

Google Scholar

"rheumatoid arthritis" AND "high resolution computed tomography" AND ("lung abnormalities" OR "pulmonary abnormalities") AND prevalence AND (interstitial OR "lung disease") -review -"case report"