

NEWCASTLE - OTTAWA QUALITY ASSESSMENT SCALE (adapted for cross-sectional studies) Selection:

This scale has been adapted from the Newcastle-Ottawa Quality Assessment Scale for cohort studies to provide a quality assessment of cross-sectional studies.

Selection: (Maximum 5 stars)

1. Representativeness of the sample:

- a. Truly representative of the average in the target population. * (all subjects or random sampling)
- b. Somewhat representative of the average in the target group. * (non-random sampling)
- c. Selected group of users/convenience sample.
- d. No description of the derivation of the included subjects.

2. Sample size:

- a. Justified and satisfactory (≥ 100 patients included). *
- b. Not justified (< 100 patients included).

3. Non-respondents:

- a. The response rate is satisfactory ($\geq 90\%$ of patients have anti-Ro levels available). *
- b. The response rate is unsatisfactory ($< 90\%$ of patients have anti-Ro levels available).

4. Ascertainment of the exposure (risk factor):

- a. Validated measurement tool used and anti-Ro52 has been distinctly measured. **
- b. Validated measurement tool used but no distinction is made between anti-SSA/Ro and anti-Ro52.
*
- c. measurement methods not described.

Comparability: (Maximum 2 stars)**1. Comparability of subjects in different outcome groups based on design or analysis.**

- a. One star was given if gender was comparable between the groups. *
- b. One additional star was given if any other variables such as age, other antibodies, disease type, disease duration, etc. were comparable. *
- c. Information was not provided or groups were not comparable.

Outcome: (Maximum 3 stars)**1a. Assessment of the outcome (ILD)**

- a. HRCT or lung biopsy. **
- b. Restrictive pattern pulmonary function tests and CXR. *
- c. Information not provided.

1b. Assessment of the outcome (RPILD)

- a. RPILD defined as either of the following criteria in one month: 1) Progressive worsening of dyspnea; 2) Decrease in FVC by more than 10% or decrease in DLCO by more than 15%; 3) Increase in the severity of interstitial pneumonia on HRCT; 4) Arterial blood gases showing respiratory failure or decrease in partial pressure of oxygen more significant than 10 mmHg. **
- b. RPILD defined in time frames higher than one month. *
- c. Information not provided.

2. Statistical test:

- a. Statistical test used to analyze the data clearly described, appropriate, and measures of association presented including confidence intervals and probability level (P value). *
- b. Statistical test not appropriate, not described, or incomplete.

Cross-sectional Studies: Very Good Studies: 9-10 points Good Studies: 7-8 points Satisfactory Studies: 5-6 points Unsatisfactory Studies: 0 to 4 points