Objectives: To investigate risk factors for TB and TB characteristics in bio-naïve RA patients.

Methods: A population-based case-control study. A national bio-naïve RA cohort was identified from the National Patient Register and the Swedish Rheumatology Quality Register. RA cases with TB were identified by linkage to the Swedish Tuberculosis Register (with mandatory TB registration) 2001-2014 (n=42). For each case, four matched RA controls without TB were identified. Clinical data were obtained from medical records. Univariate and multivariable logistic regression analyses were used to estimate risk for TB expressed as adjusted (adj) odds ratio (OR) with 95% confidence intervals (CI).

Results: After review of the medical records and validation of diagnoses, 31 cases with RA and TB and 122 controls remained in the study. The TB cases had a median of 3 (1-6) reported TB risk factors, and almost 90% were born before 1950. Only one case was screened for TB (with negative result of tuberculin skin test). Active TB occurred at a mean of 15 years after RA diagnosis, with a mean age of 63.0 (SD 11.5 years), a mean ACPA titre of 327.6 (SD 72.6), and a mean disease duration of 30.6 (SD 23.0) years. Treatment success was 94%, comparable to TB patients in general.

Conclusion: Several RA-associated risk factors may contribute to increased TB risk in bio-naïve RA patients (treatment with leflunomide, azathioprine, or prednisolone and concomitant obstructive lung disease). We could not confirm previous findings of an association with the use of moderate to high doses of prednisolone (≥15mg). TB risk seems difficult to predict with precision in the individual bio-naïve patient based on RA-associated risk factors. To further decrease the TB risk in RA patients, TB screening should also be considered in the group of bio-naïve patients.

References:

Disclosure of Interests: Johanna Sundbaum: None declared, Elizabeth Arkema: None declared, Judith Bruchfeld: None declared, Jerker Jonsson: None declared, Johan Askling Grant/research support from: JA acts or has acted as PI for agreements between Karolinska Institutet and the following entities, mainly in the context of the ARTIS national safety monitoring programme of immunomodulators in rheumatology: Abbvie, BMS, Eli Lilly, Merck, MSD, Pfizer, Roche, Samsung Bioepis, Sanofi, and UCB Pharma, Eva Baecklund: None declared DOI: 10.1136/annrheumdis-2020-eular.5339

Figure 1. LUS B-line illustrative.