Background: Intestinal lung disease is an important cause of mortality and morbidity for RA. Lung computerized tomography (CT) is a validated method for the detection of intestinal lung disease (ILD) in rheumatoid arthritis (RA) patients. Besides, CT may have a role in the detection of progression in RA-ILD.

Objectives: To compare the clinical and radiological features of RA-ILD patients with and without radiographic progression according to lung CT.

Methods: From the hospital database, all patients recorded as having RA according to ACR criteria and with lung CT examination were included. Seventy-nine patients were included in the study, 71 patients had ILD and 8 patients did not have ILD. The patients were divided into two groups according to the presence of radiographic progression: group 1 had radiographic progression and group 2 did not have radiographic progression.

Results: In this study, 101 patients with 215 lung CT were included to analysis. 67 (66.3%) patients had 3 CTs, 30 (29.9%) patients 4 CTs and 17 (16.6%) patients had 5 CTs. Mean duration between first and last CT was 47.7±38.8 months. Of 101 patients, radiographic progression was seen in 42 (41.6%) patients. Univariate comparison of demographic, clinical and radiographic features of patients with or without radiographic progression were given in Table. In multivariate analysis (adjusted for ILD disease duration) having ground-glass opacity (aOR 8.6; CI: 1.65-44.4; p=0.011), male gender (aOR 2.9; CI: 1.13-7.4; p=0.026) were found as independent risk factors radiographic progression, while taking methotrexate (ever) (aOR 0.21; CI: 0.07-0.6; p=0.04) was found as an independent protector factor for radiographic progression.

Conclusion: The prediction of ILD progression in RA patients was a challenge for clinicians. According to lung CT, baseline ground-glass opacities looks like prominent factor for ILD progression, particularly at male RA patients. Using methotrexate in ILD patients is a dilemma in routine practice, our results demonstrate that methotrexate (not other cs or bDMARDs) is protective drugs for ILD progression, however these results should be confirmed in the further studies.