Predictors of Mortality in Rheumatoid-Arthritis Associated Lung Disease

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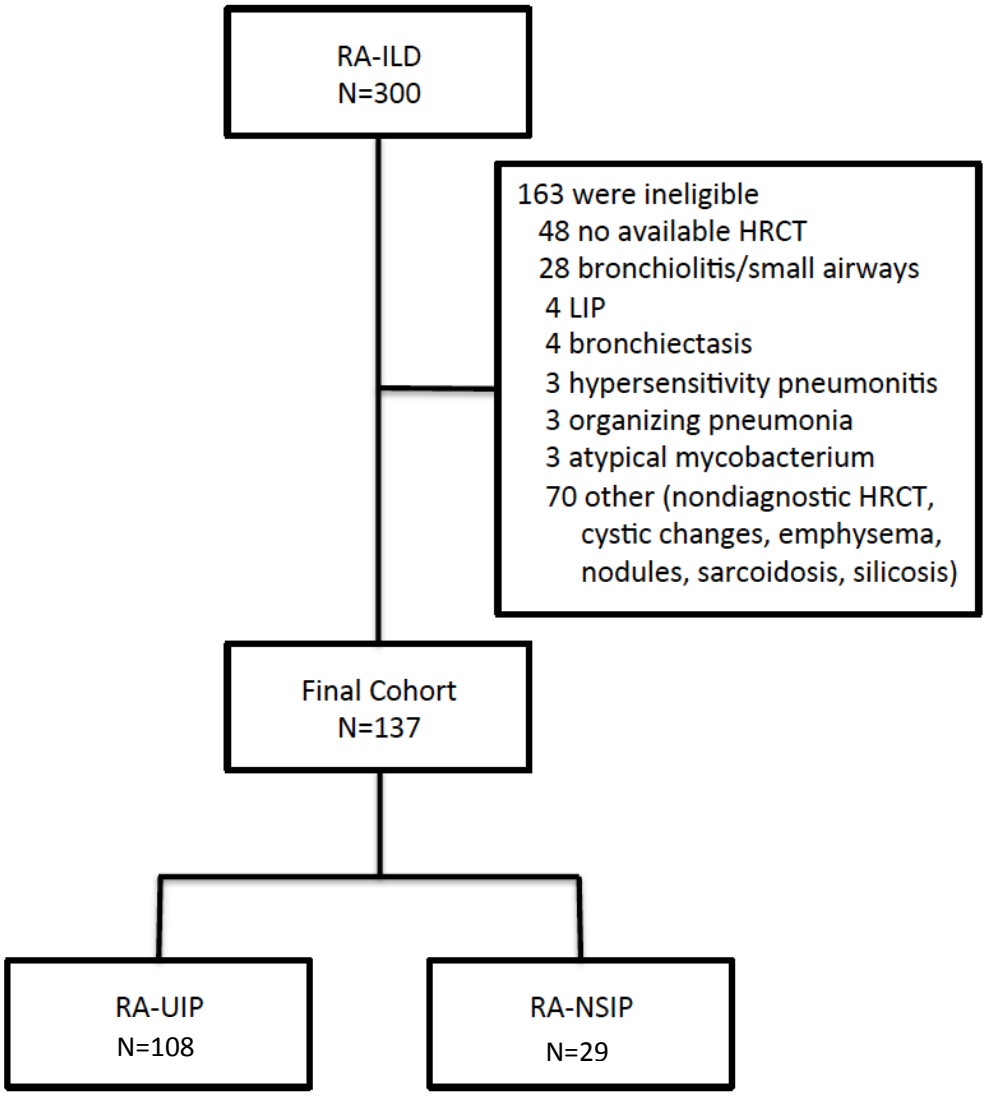
e-Figure. Flowchart for cohort selection



Footnote: RA=rheumatoid arthritis, ILD=interstitial lung disease, HRCT=high resolution computed tomography, LIP=lymphocytic interstitial pneumonia, UIP=usual interstitial pneumonia, NSIP=nonspecific interstitial pneumonia

e-Appendix. Scoring of the high resolution computed tomography (HRCT)

The HRCTs were scored by a board certified chest radiologist. The single best diagnosis based on imaging findings with level of confidence was scored. Any of the known patterns of interstitial lung diseases could be selected including usual interstitial pneumonia (UIP), nonspecific interstitial pneumonia (NSIP), desquamative interstitial pneumonia, respiratory bronchiolitis, organizing pneumonia, acute interstitial pneumonia, idiopathic pleuroparenchymal fibroelastosis, hypersensitivity pneumonitis, asbestosis, silicosis, sarcoidosis, obliterative bronchiolitis, and cellular bronchiolitis. Subjective level of confidence ranged from definite (greater than 90% likelihood), probable (50-89% likelihood) and possible (1-49% likelihood).

Given the importance of the UIP diagnosis, the level of confidence in UIP diagnosis was also scored regardless of the best diagnosis. As described in recently released guidelines[1], the likelihood of UIP diagnosis was scored as inconsistent with UIP, possible UIP, or definite. Definite UIP was defined as peripheral and basilar preponderant pulmonary fibrosis characterized by reticular opacities, subpleural honeycombing, and absence of other features to suggest another specific diagnosis. Possible UIP was defined as peripheral and basilar predominant pulmonary fibrosis with reticular opacities, no significant honeycombing, and absence of features to suggest another specific diagnosis. Inconsistent with UIP was defined as having either upper or mid-lung predominance, peribronchovascular predominance, extensive ground glass abnormality, profuse micronodules, discreet cysts, diffuse mosaic attenuation/air trapping or consolidation in bronchopulmonary segment/lobe. NSIP was invoked when there was substantial ground-glass opacity present. Otherwise, HRCT scans with nonspecific imaging appearance in between NSIP and UIP were scores as possible UIP.

1. Raghu G, Collard HR, Egan JJ, et al. An official ATS/ERS/JRS/ALAT statement: idiopathic pulmonary fibrosis: evidence-based guidelines for diagnosis and management. *Am J Respir Crit Care Med.* 2011;183(6):788-824.