

# Letter to the Editor (matters arising from published papers)

doi:10.1093/rheumatology/kex298

## Comment on: Patterns of interstitial lung disease and mortality in rheumatoid arthritis

SIR, We are writing with reference to the excellent recent paper by Zamora-Legoff *et al.* from the Mayo Clinic on 'Patterns of interstitial lung disease and mortality in rheumatoid arthritis' [1]. The overall 5-year survival of 181 patients was 59.7% and they identified age, disease duration and baseline gas transfer as important predictors of premature mortality, although a number of other factors including the pattern of lung disease did not significantly affect outcome in their study. The population demographics are very similar to those in a UK-based BRILL cohort of 290 patients [2] but the survival figures are quite different. One reason for this may be the variation in therapeutic exposure between the two patient groups. The Mayo group reported biologic usage among most of their patients, with 47% receiving anti-TNF therapy, 18% rituximab and 7% abatacept. There were also high rates of reported usage of oral steroids (51%) and azathioprine (43%) that may have impacted on outcome.

We would like to request further data on the influence of the biologic agents on 5-year survival in the Mayo cohort. Is it possible to compare the mortality of those 84 patients on anti-TNF therapy with the 32 who received rituximab as first line biologic therapy? Furthermore, if the cause of death is available, is it possible to compare respiratory mortality between the two groups? If so, it would be fascinating to assess whether these agents had divergent effects on outcome in the Mayo patient population, especially with regard to respiratory mortality. Data from BRILL incorporating patients from 18 UK centres [3] suggest that RA-ILD patients who received rituximab as first line biologic therapy may survive longer than those who were initially commenced on anti-TNF therapy. The total number of biologic-treated RA-ILD patients now exceeds 600 individuals and offers a growing body of evidence to suggest that rituximab should be considered the first

choice biologic agent in the treatment of active RA in those patients with ILD. Further details of the possible influence of therapy on outcome data from the Mayo paper could therefore be most illuminating, and may allow clinicians to extrapolate further on the potential influence of therapy on outcome of this challenging disorder.

**Funding:** No specific funding was received from any bodies in the public, commercial or not-for-profit sectors to carry out the work described in this manuscript.

**Disclosure statement:** The authors have declared no conflicts of interest.

**Clive Kelly<sup>1</sup> and Kundan Iqbal<sup>1</sup>**

<sup>1</sup>*Department of Rheumatology, Queen Elizabeth Hospital, Gateshead, UK*

Accepted 21 June 2017

Correspondence to: Clive Kelly, Department of Rheumatology, Queen Elizabeth Hospital, Sheriff Hill, Gateshead, Tyne and Wear NE96SSX, UK.

Email: clive.kelly@ghnt.nhs.uk

## References

- 1 Zamora-Legoff JA, Krause ML, Crowson CS, Ryu JH, Matteson EL. Patterns of interstitial lung disease and mortality in rheumatoid arthritis. *Rheumatology* 2017;56:344–50.
- 2 Kelly CA, Saravanan V, Nisar M *et al.* Rheumatoid arthritis-related interstitial lung disease: associations, prognostic factors and physiological and radiological characteristics—a large multicentre UK study. *Rheumatology* 2014;53:1676–82.
- 3 Iqbal K, Carty S, Kelly C *et al.* Survival in rheumatoid lung disease is longer in patients treated with rituximab than in those receiving anti-tumour necrosis factor therapy. *Rheumatology* 2016;55 (suppl 1): i86–i87.