

all Scottish health boards. Eligible patients included any adult leflunomide treated ARD patients with a confirmed (clinically or PCR) diagnosis of COVID-19.

#### Results

Of the 69 cases included in the registry, n=4 were treated with leflunomide (75% female; mean age 61, SD 4.2). N=2 were treated with combination baricitinib or hydroxychloroquine respectively, whilst n=1 received recent corticosteroid therapy (intramuscular Kenalog). Comorbidities observed in this sub-cohort include diabetes mellitus n=3, hypertension n=2, cardiovascular disease n=1, lung disease n=1 and latent TB n=1. At presentation, all patients (n=4) experienced the established COVID-19 related symptom triad of dyspnoea, cough and fever and promptly developed acute respiratory syndrome. Diarrhoea was also recorded in n=2 and constitutional upset n=3. All patients suffered a serious COVID-19 disease outcome (defined as a requirement of invasive or non-invasive ventilation (n=4) and/ or death (n=2)).

#### Conclusion

Preliminary data from this Scotland-wide registry has identified only a small number of leflunomide treated ARD patients infected with COVID-19. However, it is concerning that all cases experienced a serious outcome. Given the relatively infrequent prescription of this drug, combining similar national registry data is necessary to ensure this observation is not spurious. If confirmed, leflunomide washout procedures should be encouraged among such patients when they first present with COVID-19.

#### Disclosure

**M. Karabayas:** None. **J. Brock:** None. **G. Fordyce:** None. **N. Basu:** None.

### P052 LEFLUNOMIDE AND SEVERE COVID-19 OUTCOME: A CAUTIONARY OBSERVATION FROM THE COVID-19 SCOTTISH REGISTRY OF AUTOIMMUNE RHEUMATIC DISEASES (SCAR-19)

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#### Background/Aims

Leflunomide, a conventional disease modifying drug (csDMARD), is used in a variety of autoimmune rheumatic diseases (ARD) due to its immunomodulating, immunosuppressive and antiproliferative properties. This agent does however confer a greater infection risk and, due to its long half-life, drug washout procedures are often advised in the context of serious infections. Interestingly, Leflunomide is currently being tested as a potential therapy for COVID-19 in the general population. It is unknown whether leflunomide therapy is associated with a poor or favourable outcome among ARD patients infected with COVID-19.

#### Methods

A Scottish-wide registry was rapidly developed in March 2020. Clinical characteristics and outcomes of infected cases were collated across

P052 TABLE 1: Patient demographics, clinical characteristics and outcomes

	Patient 1	Patient 2	Patient 3	Patient 4
<b>Age</b>	58	63	57	66
<b>Sex</b>	Female	Female	Male	Female
<b>Rheumatic diagnosis</b>	Rheumatoid arthritis	Psoriatic arthritis	Psoriatic arthritis	Rheumatoid Arthritis
<b>Comorbidities</b>	Diabetes	Hypertension Diabetes COPD	Nil	Ischaemic heart disease Hypertension Diabetes Latent TB
<b>Clinical presentation</b>	Dyspnoea Cough Fever Confusion Constitutional upset	Dyspnoea Cough Fever Diarrhoea Constitutional upset	Dyspnoea Cough Fever Constitutional upset	Dyspnoea Cough Fever Diarrhoea Constitutional upset
<b>Additional csDMARD*</b>	Nil	Nil	Nil	Hydroxychloroquine
<b>bDMARD** / tsDMARD***</b>	Baricitinib	Nil	Nil	Nil
<b>Steroid therapy</b>	Nil	Nil	Nil	IM Kenalog
<b>Invasive or non-invasive ventilation</b>	Yes	Yes	Yes	Yes
<b>Death</b>	No	No	Yes	Yes

\* conventional disease modifying drug,

\*\* biologic disease modifying drug,

\*\*\* targeted synthetic disease modifying drug.