Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

	Rheumatoid arthritis (n=98)	SLE (n=100)	Sjogren's syndrome (n=92)
Men	17 (17%)	10 (10%)	8 (9%)
Women	81 (83%)	90 (90%)	84 (91%)
Age, years	52·3 (13·4)	40·1 (15·2)	42·6 (12·4)
Anti-nuclear antibody positive	35 (36%)	100 (100%)	92 (100%)
Anti-dsDNA positive	0	63 (63%)	11 (12%)
Anti-Smith antibody positive	0	22 (22%)	2 (2%)
Anti-Sjogren's syndrome antigen positive	3 (3%)	48 (48%)	58 (63%)
Anti-SSB positive	0	8 (8%)	26 (28%)
Anti-U1RNP positive	0	34 (34%)	7 (8%)
Anti-Rib-P positive	0	14 (14%)	4 (4%)
Anti-phospholipid antibodies	0	23 (23%)	3 (3·3%)
Rheumatoid factor	47 (48%)	14 (14%)	21 (23%)
Anti-CCP	51 (52%)	3 (3%)	1 (1%)

Data are n (%) or mean (SD). SLE=systemic lupus erythematosus. dsDNA=double-stranded DNA. SSB= Sjogren's B. U1RNP=U1 ribonucleoprotein. Rib-P=ribosome P protein. CCP=cyclic citrullinated peptide.

***Table*: Clinical characteristics and auto-antibody profile of patients**

with SARS-CoV-2. As such, we wanted to determine whether autoantibodies interfere with detection of SARS-CoV-2 antibodies.

We collected 290 serum samples from patients with autoimmune disease in our serum library, consisting of 98 patients with rheumatoid arthritis, 100 patients with systemic lupus erythematosus, and 92 patients with Sjogren's syndrome. The samples were collected from Jan 1, 2016, to June 30, 2019, which predates the COVID-19 pandemic. Written informed consent was obtained from all patients. The serological test for SARS-CoV-2 IgM and IgG monoclonal antibodies was done with colloidal gold-labelled kits supplied by Innovita Biotechnology Co, Tangshan, China. The nitrocellulose filter of these colloidal gold-labelled assays are coated with two antigens of SARS-CoV-2 (N protein and S protein). The overall testing sensitivity was 89% (352/397) and specificity was 91% (116/128).

Our results showed that both IgG and IgM antibodies against SARS-CoV-2 were not detected in the serum of patients with autoimmune disease, indicating that there was no cross-reactivity between autoantibodies and SARS-CoV-2 antibodies (table). It should be noted, however, that these sera were only analysed using one kit and other kits with different test operating characteristics might produce different results.

In conclusion, the serological test we assessed showed no cross-reactivity with autoantibodies present in patients with autoimmune disease. Asymptomatic carriers could spread SARS-CoV-2,[5] and this type of test could make large scale screening of asymptomatic SARS-CoV-2 carriers possible. We propose that serological testing of IgM and IgG antibodies, along with RT-PCR, in clinical practice should help provide an accurate COVID-19 diagnosis, including in patients with autoimmune disease.

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Hydroxychloroquine: balancing the needs of LMICs during the COVID-19 pandemic

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I want to thank the Editor for bringing attention to the effect of a potential shortage of hydroxychloroquine on existing patients with autoimmune diseases during the ongoing COVID-19 crisis.[1] The drug has shown both promising and not so promising results against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), and more testing needs to be done to fully assess its efficacy in this context; however, hydroxychloroquine is already known to be an effective treatment for patients with autoimmune disorders such as systemic lupus erythematosus.[2]

Patients with autoimmune disorders living in low-income and middle-income countries (LMICs) could be left particularly vulnerable to hydroxychloroquine shortages as high-income countries call for additional supplies of hydroxychloroquine for potential COVID-19 prophylaxis.

Without protection from their own governments and international agencies, these patients are at risk of losing access to their medication. There is a risk that people in LMICs with existing autoimmune conditions will be neglected. These people are dependent on this inexpensive medication. Socioeconomic deprivation is already associated with unfavourable disease outcomes in diseases such as systemic lupus erythematosus.[3]

A surge in demand, price competition, and foreign diplomacy could concentrate hydroxychloroquine in the hands of a few select high-income countries.[4] There is already a shortage of hydroxychloroquine in both high-income countries and LMICs, and prices of raw materials for manufacturing hydroxychloroquine are also increasing.[4] This situation could also lead to a shortage in chloroquine, which is an inexpensive medication for malaria, putting millions of people in malaria endemic regions at risk. However, a chloroquine shortage might be mitigated by the fact that many LMICs are adopting artemisinin-based therapies for treatment of malaria.

If hydroxychloroquine is successful in clinical trials against SARS-CoV-2, it could be used for large-scale prophylaxis for COVID-19.[5] However, this potential use should be balanced with the need to meet the demands of existing patients who depend on hydroxychloroquine in all countries, regardless of income. Supply chains might not be able to meet the shock of increased demands of raw materials needed to produce the drug.

Stocks of this inexpensive medication should be earmarked for patients with autoimmune diseases living in LMICs, and adequate supplies of raw materials for producing hydroxychloroquine should also be provided to pharmaceutical plants. This will require a coordinated response from international organisations such as WHO and other nations. A balanced and staged approach that considers the needs of both high-income countries and LMICs is required towards hydroxychloroquine during the COVID-19 crisis.

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Self-risk assessment for patients with rheumatic disease during the COVID-19 pandemic

The COVID-19 pandemic is the biggest challenge faced by health services worldwide for over a century. As the deadly capability of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) became known, the UK Government and England's National Health Service (NHS) announced the need to identify individuals thought to be at a increased risk of developing severe manifestations of COVID-19, including patients receiving immunosuppressant therapies.[1] The key aim was to advise susceptible individuals of the need to minimise their infection risk by following strict physical distancing or so-called shielding guidance. As a result, clinicians across the UK were challenged to identify and disseminate urgent information almost overnight to a targeted group of patients within the constraints of current NHS systems. Like our colleagues in Wolverhampton,[2] we were acutely aware of the challenge created by the lack of accurate coding of rheumatological diagnosis and current medication within the Leeds Teaching Hospitals NHS Trust, prompting us to develop a multilayered strategy to communicate with our patients asking them to self-assess their COVID-19 risk.

After collating the information cascaded by regulatory authorities, the British Society for Rheumatology, and other medical societies, we created a series of guidance materials related to COVID-19 for rheumatology patients. We developed a patient-friendly self-risk assessment algorithm and presented it in an animated, home-recorded video using PowerPoint (Microsoft, Redmond, WA, USA),[3-5] with all materials then uploaded onto the hospital website. Patients in the rheumatology department's outpatient waiting list were directed to this website via an SMS (text) message, which was sent to 10 612 patients, followed by a dispatch of 948 letters to those who could not access the message via SMS. Consent to be approached via SMS is recorded and renewed during routine outpatient reviews in our NHS trust. The video was uploaded onto YouTube.com[3-5] and shared via Twitter. As of May 7, 2020, 6 weeks into the UK lockdown, the Leeds risk stratification video had been viewed 5442 times, and 1568 patients have identified themselves as high risk by filling in a dedicated e-form on our website. Furthermore, the locally produced algorithm and video have been adopted or modified by rheumatology colleagues in other centres and patient charities in the UK and abroad.

We believe that self-stratification has other benefits for rheumatology patients, particularly when treatment might have changed since their last hospital visit. Our tool emphasises that patients should be aware of the importance of glucocorticoids as an