Correspondence on "Safety of vaccination against SARS-CoV-2 in people with rheumatic and musculoskeletal diseases: results from the EULAR Coronavirus Vaccine (COVAX) physician-reported registry" by Machado *et al*

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Contributors All authors contributed in writing and conception of the manuscript.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not applicable.

Ethics approval This study involves human participants and was approved by DR2015-218. Participants gave informed consent to participate in the study before taking part.

Provenance and peer review Not commissioned; internally peer reviewed.

Data availability statement All data relevant to the study are included in the article.

► Additional supplemental material is published online only. To view, please visit the journal online (http://dx.doi.org/10.1136/annrheumdis-2022-222118).

To cite Bourguiba R, Delplanque M, Savey L, *et al*. *Ann Rheum Dis* 2023;**82**:e228.

Received 10 January 2022
Accepted 12 January 2022
Published Online First 11 July 2022

Ann Rheum Dis 2023;**82**:e228. doi:10.1136/annrheumdis-2022-222118

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We read with great interest the article by Machado *et al* who describe safety of vaccination against SARS-CoV-2 in people with rheumatic and musculoskeletal disease.[1] The authors observed that vaccine against SARS-CoV-2 is well tolerated with rare report of I-RMD flare and very rare reports of serious adverse events.

We observed that the authors included only 27 patients with autoinflammatory diseases. We thus propose to complete their observation with the result of our study about 190 patients with autoinflammatory disease (AID).

A web survey assessing adverse effects after COVID-19 vaccination was sent on 7–30 June 2021 to patients with AID followed in the French national adult AID reference centre, and already included in the Juvenile Inflammatory Rheumatism (JIR) cohort. The patients were asked whether they had received a COVID-19 vaccination, the type of vaccine and number of injections. Severe adverse events were defined by the need for hospitalisation. Local reaction, fever, headache, arthralgia, myalgia, allergic reaction, fatigue, nausea, adenopathy, heart disorder, venous thromboembolism and stroke were monitored after the first and the second injection.

The survey was sent by email to 445 patients with AID: 225 (50%) patients answered it, 168 aged between 18 and 55 years old and 57 aged above 55 years old. Among the 190 patients who received two doses of COVID-19 vaccines (online supplemental table), most patients had familial Mediterranean fever (FMF) (n=128, 67.4%); other AID were undefined systemic AID (n=20), TNF-α receptor-associated periodic syndrome (n=13), cryopyrin-associated periodic syndrome (n=9), adult-onset still disease (n=9), mevalonate kinase deficiency (n=7) and A20 haploinsufficiency (n=4). Eleven patients declared also having AA amyloidosis (5.7%). Colchicine was the most used treatment (n=138, 72.6%); 37 (19.5%) patients were on biotherapy, mostly interleukin-1 inhibitors (n=33) and 15 patients were not taking any treatment. Forty-six patients had already contracted SARS-CoV-2.

Out of the 190 (84.4%) vaccinated patients with AID, BNT162b2 (Pfizer/BioNTech) (n=157, 82.6%) and ChAdOx1 nCoV-19 (AstraZeneca) (n=22, 11.5%) were the most common vaccines; few patients received CX-024414 (Moderna) (n=11, 5.8%). Eighty-eight patients (46%) developed mild adverse events after the first injection and 70 patients (54%) after the second injection. Among the 153 patients who received BNT162b2, tenderness at the injection site was the most reported event (n=39, 25.5%); others were myalgia (n=28, 18.3%), fever (n=20, 13%) and headache (n=16, 10.5%). Concerning ChAdOx1 nCoV-19, reported events were fever (n=13, 59%), myalgia (n=11, 50%) and intense fatigue (n=2, 9%). Concerning CX-024414, four patients reported fever and myalgia (36%). No severe adverse event requiring hospitalisation has been reported. Twelve patients with FMF (9.3%) reported a mild flare after the first injection, which did not require hospitalisation. No vaccinated patient had developed COVID-19 after the second vaccine injection.

Altogether, this study shows that adverse event of COVID-19 vaccination in patients with AID are similar to the expected adverse effects reported in the general population.[2] Especially among patients with FMF on colchicine treatment, the vaccine is very safe and should be highly recommended to patients with risk factors of severe COVID-19, since we previously reported death among such patients with FMF.[3] It also suggests that COVID-19 vaccination does not usually trigger an AID flare; these data were also reported in patients with autoimmune diseases[4] and AID.[5] To our knowledge, this is the largest study describing the effects of COVID-19 vaccination among patients with AID: the vaccine is well tolerated; these data combined with the results from Machado *et al*[1] could reassure patients displaying immune systemic disorders including AID patients who are still hesitant about COVID-19 vaccination, especially in the actual context of the resurgence of the epidemy.

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Supplementary Table . Main features of the 190 vaccinated patients with autoinflammatory disease (AID).

Overall	190
Women	115 (60.5%)
Type of AID	
Familial Mediterranean fever	128 (67.4%)
Undefined systemic AID	20 (10.5%)
TNF- α Receptor-Associated Periodic Syndrome	13 (6.8%)
Cryopyrin associated periodic syndrome	9 (4.7%)
Adult onset of Still disease	9 (4.7%)
Mevalonate kinase deficiency	7 (3.7%)
HA20	4 (2.1%)
Treatment	
Colchicine	138 (72.6%)
Interleukin-1 inhibitor	
Anakinra	20 (10.5%)
Canakinumab	13 (6.8%)
Interleukine-6 inhibitor	
Tocilizumab	2 (1%)
Tumor necrosis factor inhibitor	2 (1%)
None	15 (7.9%)
Type of vaccine	
BNT162b2 (Pfizer/BioNTech)	157 (82.6%)
ChAdOx1 nCoV-19(Astra Zeneca)	22 (11.6%)
CX-024414 (Moderna)	11 (5.8%)