

Supplementary Table-1: Demographic and clinical characteristics of patients with SRDs.

Parameter	Vaccination status		
	Unvaccinated (n=60)	Fully-vaccinated (n=36)	Booster-vaccinated (n=65)
Age (years), mean±SD	48.2 ± 14.9	44.3 ± 14.1	49.3± 16.3
Female gender, n (%)	37 (61.7)	26 (72.2)	49 (75.4)
BMI, mean±SD	27.5 ± 6.5	26.6 ± 6.2	25.3± 5.1
Current smoker, n (%)	13 (21.6)	8 (22.2)	10 (15.4)
SRD			
Inflammatory arthritis, n (%)	29 (48.3)	17(47.2)	36 (55.4)
Connective tissue diseases [#] , n (%)	22 (36.7)	12 (33.3)	24 (36.9)
Systemic vasculitis, n (%)	4 (6.7)	6 (16.6)	1 (1.5)
Autoinflammatory, n (%)	5 (8.3)	1 (2.8)	4 (6.1)
Comorbidities, n (%)			
Diabetes, n (%)	3 (5.0)	0 (0.0)	5 (7.7)
Hypertension, n (%)	8 (13.3)	3(8.3)	14 (21.5)
Cardiovascular disease, n (%)	0 (0.0)	1(2.8)	1 (1.5)
Stroke, n (%)	2 (3.3)	1(2.8)	4 (6.1)
Lung disease, n (%)	10 (16.7)	1(2.8)	13 (20.0)*
Malignancy, n (%)	2 (3.3)	0(0.0)	2 (3.1)
Disease status			
Remission	37 (61.7)	23 (63.9)	47 (70.7)
Low disease activity	20 (33.3)	8 (22.2)	15 (24.6)
Moderate disease activity	3 (5.0)	3 (8.3)	3 (4.6)
High disease activity	0 (0.0)	2 (5.6)	0 (0.0)
Treatment currently received			
Glucocorticoids, n (%)	19 (31.7)	12 (33.3)	27 (41.5)
csDMARDs, n (%)	29 (48.3)	15 (41.7)	37 (55.5)
Apremilast, n (%)	3 (5.0)	0 (0.0)	1 (1.5)
JAK inhibitors, n (%)	2 (3.3)	1 (2.8)	3(4.6)
bDMARDs, n (%)	20 (33.3)	12 (33.3)	22 (33.8)
Rituximab, n (%)	0 (0.0)	1(2.8)	0 (0.0)
Other immunosuppressants [^] , n (%)	8 (13.3)	6 (16.6)	4 (6.1)
Type of vaccines			
BNT162b2 (Pfizer–BioNTech), n (%)	NA	31	62
mRNA-1273 (Moderna), n (%)	NA	1	2
ChAdOx1 nCoV-19 (Astra-Zeneca), n (%)	NA	4	0
Ad26.CoV2.S (Johnson & Johnson), n (%)	NA	0	1

n: number, SD: standard deviation, SRD: systemic rheumatic disease, BMI: body mass index, csDMARDs: conventional synthetic disease modifying antirheumatic drugs, bDMARDs: biologic DMARDs, NA: not applicable, *p=0.04

[#]Connective tissue diseases: SLE, Systemic sclerosis, anti-phospholipid syndrome, mixed connective tissues disease, [^] mycophenolate mofetil, azathioprine, cyclosporine

Supplementary Table 2: Characteristics and outcomes of booster vaccinated individuals with and without SRDs

	Booster-vaccinated individuals without SRD (n=80)	Booster-vaccinated patients with SRD (n=65)
Characteristics		
Age (years), mean±SD	46.7± 14.3	49.3± 16.3
Female gender, n (%)	50 (62.5)	49 (75.4)
BMI, mean±SD	25.4 ± 3.9	25.3± 5.1
Current smoker, n (%)	22 (27.5)	10 (15.4)
Comorbidities		
Diabetes, n (%)	6 (7.5)	5 (7.7)
Hypertension, n (%)	11 (13.8)	14 (21.5)
Cardiovascular disease, n (%)	1 (1.3)	1 (1.5)
Stroke, n (%)	0 (0.0)	4 (6.1)
Lung disease, n (%)	1 (1.25)	13 (20.0)*
Malignancy, n (%)	2 (2.5)	2 (3.1)
Time from third vaccine dose to breakthrough Covid-19 (days), mean±SD	70 ±31	81 ±66
Type of vaccines		
BNT162b2 (Pfizer–BioNTech), n (%)	71	62
mRNA-1273 (Moderna), n (%)	6	2
ChAdOx1 nCoV-19 (Astra- Zeneca), n (%)	3 [^]	0
Ad26.CoV2.S (Johnson & Johnson), n (%)	0	1
Outcomes		
Non-invasive ventilation, n (%)	0 (0.0)	0 (0.0)
Hospitalization, n (%)	1 (1.25)	2 (3.1)
Death, n (%)	0 (0.0)	0 (0.0)

n: number, SD: standard deviation, BMI: body mass index, [^] BNT162b2 as booster, *p= 0.0001