

EULAR COVAX Registry

for rheumatologists and other clinicians

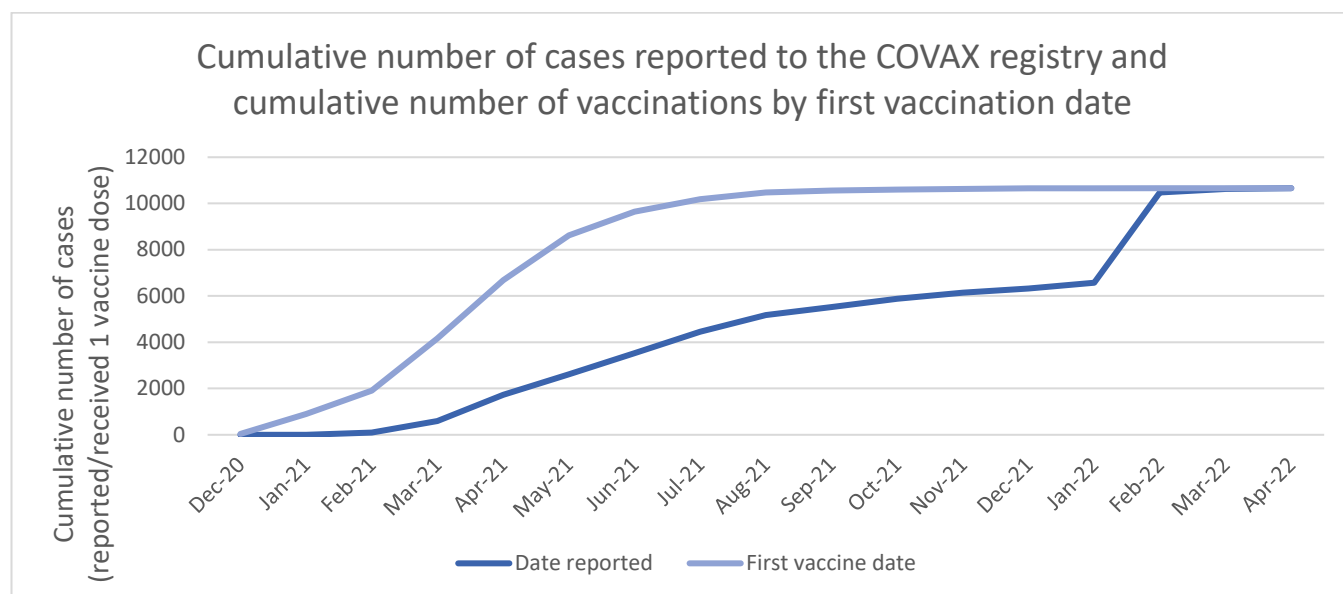
The EULAR COVAX Registry is a European paediatric and adult registry to monitor and report on outcomes of COVID-19 vaccination in patients with rheumatic and musculoskeletal diseases (RMDs).

Data extract: 29 April 2022

Total number of patients to 29 April 2022: 10796

To date there have been 10796 patients reported to the EULAR COVAX registry from 32 countries.

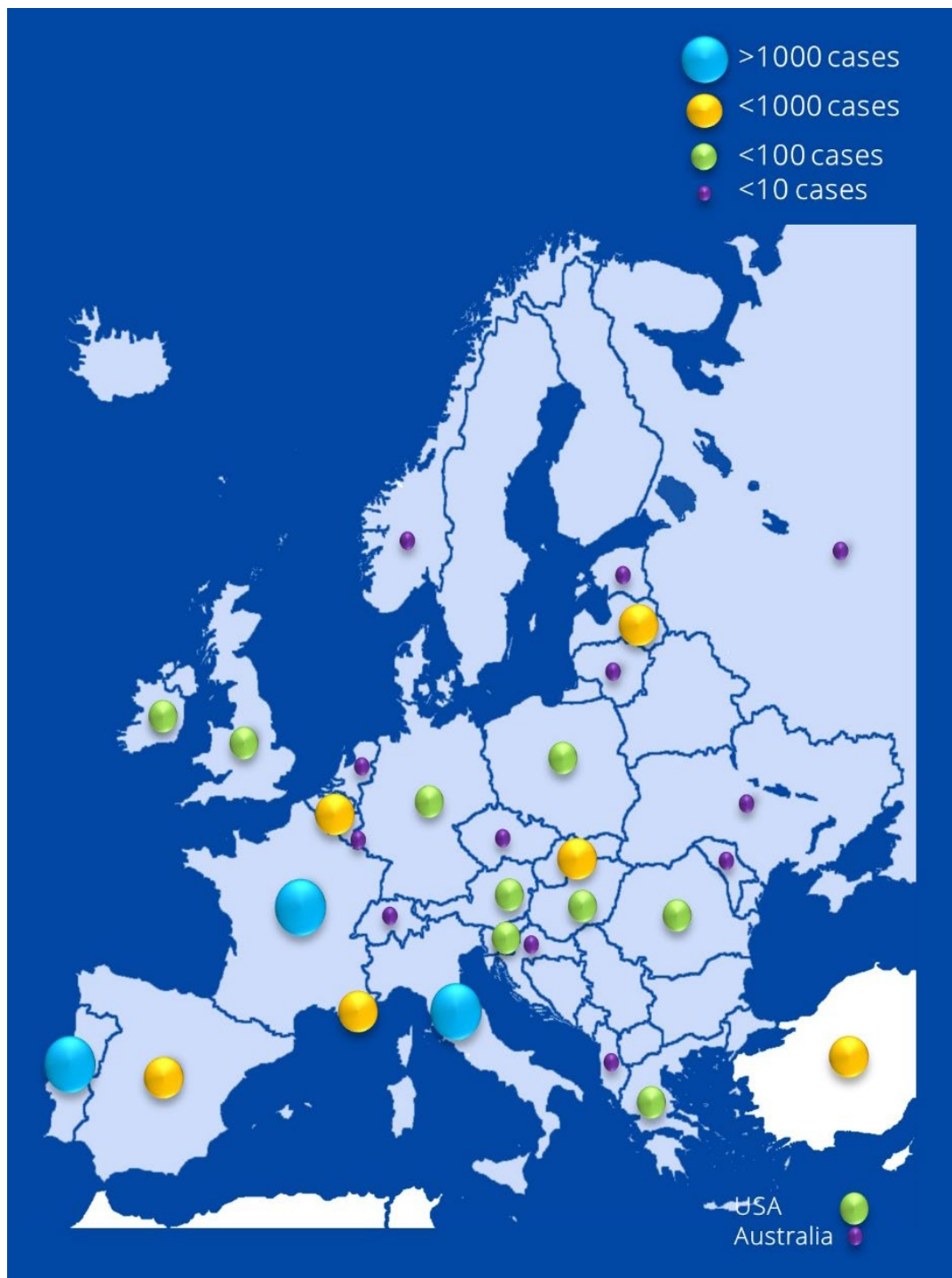
Figure 1: Cumulative number of reports to the database and cumulative cases by date of first vaccination, from December 2020 until 29 April 2022 (current data extract).



EULAR COVAX Registry

for rheumatologists and other clinicians

Figure 2: Number of cases in each country



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Table 1: Patient Demographics

		All patients
Total number		10796
Gender N (%)	Female	7384 (68%)
	Male	3347 (31%)
	Other / Unknown	65 (1%)
Age	Median (IQR)	60 (48, 71)
	Range (min to max)	11 to 102
Age categories (years) N (%) <i>Note: 8 patients are missing age data.</i>	<18	61 (1%)
	18-40	1447 (13%)
	41-60	4076 (38%)
	61-more	5212 (48%)
Country N (%)	Albania	1 (<1%)
	Australia	2 (<1%)
	Austria	16 (<1%)
	Belgium	262 (2%)
	Croatia	9 (<1%)
	Czech Republic	1 (<1%)
	Estonia	1 (<1%)
	France	2732 (25%)
	Germany	36 (<1%)
	Greece	38 (<1%)
	Hungary	22 (<1%)
	Italy	1860 (17%)
	Latvia	451 (4%)
	Lithuania	4 (<1%)
	Luxembourg	3 (<1%)
	Monaco	334 (3%)
	Netherlands	6 (<1%)
	Norway	2 (<1%)
	Poland	50 (<1%)
	Portugal	3742 (35%)
Republic of Ireland	84 (1%)	
Republic of Moldova	1 (<1%)	
Romania	82 (1%)	
Russia	6 (<1%)	

EULAR COVAX Registry

for rheumatologists and other clinicians

Slovak Republic	521 (5%)
Slovenia	14 (<1%)
Spain	224 (2%)
Switzerland	6 (<1%)
Turkey	181 (2%)
Ukraine	2 (<1%)
United Kingdom	90 (1%)
United States of America	13 (<1%)

Table 2: Disease information

		All Patients
Primary Rheumatology Diagnosis N (%)	Rheumatoid Arthritis (RA)	3698 (34%)
	Spondyloarthritis (including Axial spondyloarthritis, other spondyloarthritis)	1948 (18%)
	Psoriatic arthritis	1232 (11%)
	Systemic Lupus Erythematosus	770 (7%)
	Osteoarthritis	366 (3%)
	Sjogrens syndrome	353 (3%)
	Polymyalgia rheumatica	306 (3%)
	Systemic sclerosis	294 (3%)
	Large vessel vasculitis (Giant cell arteritis, Takayasu arteritis)	197 (2%)
	Osteoporosis	195 (2%)
	ANCA-associated vasculitis (e.g., GPA, EGPA)	168 (2%)
	Juvenile idiopathic arthritis (not systemic)	132 (1%)
	Gout	130 (1%)
	Other inflammatory arthritis	130 (1%)
	Inflammatory myopathy (e.g. dermatomyositis, polymyositis)	103 (1%)
	Fibromyalgia	102 (1%)
	Undifferentiated connective tissue disease	87 (1%)
	Behcets	78 (1%)
	Psoriasis	70 (1%)
	Sarcoidosis	69 (1%)
Other mechanical RMD (e.g. tendinopathies, peri- articular disease)	66 (1%)	
Mixed connective tissue disease	53 (<1%)	
Anti-phospholipid antibody syndrome	45 (<1%)	
Other vasculitis	36 (<1%)	
Chronic mechanical back pain	28 (<1%)	
Monogenic autoinflammatory syndrome	23 (<1%)	

EULAR COVAX Registry

for rheumatologists and other clinicians

Juvenile idiopathic arthritis (systemic)	23 (<1%)
Non-monogenic autoinflammatory syndrome	18 (<1%)
IgG4-related disease	18 (<1%)
Medium-vessel vasculitis	18 (<1%)
Radiculopathy or regional pain syndrome	13 (<1%)
Immune complex small-vessel vasculitis	11 (<1%)
Relapsing polychondritis	9 (<1%)
Chronic recurrent multifocal osteomyelitis	5 (<1%)
Ehlers-Danlos Syndromes (EDS)	1 (<1%)

COVID-19 Vaccine Type N (%)	Pfizer/BioNTech	7053 (65%)
	AstraZeneca/Oxford	1461 (14%)
	Moderna	969 (9%)
	Vaccine combination (e.g. Pfizer + Moderna)	705 (7%)
	Janssen/Johnson & Johnson	264 (2%)
	Unknown	251 (2%)
	CoronaVac/Sinovac	80 (1%)
	Sputnik V	8 (<1%)
Other	4 (<1%)	

COVID-19 Vaccine Doses N (%)	One	1779 (16%)
	Two	7311 (68%)
	Three	1690 (16%)
	Four	11 (<1%)
	Unknown	5 (<1%)

Note: 3 patients are missing vaccine dose data.

Patient diagnosed with COVID-19 after vaccination N (%)	Yes	309 (3%)
	No	10111 (94%)
	Unknown	107 (1%)
	Missing	269 (2%)

Rheumatic disease flare following vaccination N (%)	Yes	330 (3%)
	No	9663 (90%)
	Unknown	802 (7%)

Adverse event following vaccination N (%)	Yes	3643 (34%)
	No	7004 (65%)
	Unknown	144 (1%)
	Missing	5 (<1%)

EULAR COVAX Registry

for rheumatologists and other clinicians

Early adverse event N(%)	Pain at the site of injection	1666 (46%)
	Redness at the site of injection	133 (4%)
	Swelling at the site of injection	164 (5%)
	Generalized muscle pain	764 (21%)
	Generalized joint pain	355 (10%)
	Headache	624 (17%)
	Fever	867 (24%)
	Chills	283 (8%)
	Fatigue	1113 (31%)
	Vomiting	135 (4%)
	Diarrhoea	89 (2%)

Adverse events of special interest N (%)	Immunologic – Anaphylaxis	4 (<1%)
	Immunologic – Vasculitides	4 (<1%)
	Immunologic – Arthritis	13 (<1%)
	Cardiac – Coronary artery disease	2 (<1%)
	Cardiac – Arrhythmia	6 (<1%)
	Cardiac – Myocarditis, pericarditis	1 (<1%)
	Haematologic – Thrombocytopenia	2 (<1%)
	Haematologic – Deep vein thrombosis	2 (<1%)
	Haematologic – Pulmonary embolus	1 (<1%)
	Haematologic – Cerebrovascular stroke	1 (<1%)
	Haematologic – Hemorrhagic disease	2 (<1%)
	Gastrointestinal – Liver injury	3 (<1%)
	Neurologic – Anosmia, ageusia	1 (<1%)
	Dermatologic – Single organ cutaneous vasculitis	1 (<1%)
	Dermatologic – Erythema multiforme	5 (<1%)
	Other	216 (6%)

Disclaimer

The EULAR COVAX Database is based on doctors voluntarily reporting cases, meaning that patients included do not necessarily represent the majority of patients with RMDs who have had a COVID-19 vaccination, but those who their doctors reported data to the database. Additionally, this database does not account for non-vaccinated patients. Therefore, results cannot be directly extrapolated to the entire population of patients with RMDs, and should be interpreted cautiously. For research purposes and proper considerations, this data requires adequate analysis, further adjustments and stratifications.