Conclusion: In our multiethnic cohort of patients with SRD we found that age and multiple comorbidities such as diabetes mellitus, hypertension, obesity and coronary artery disease were associated with hospitalisation and morbidity. Disease activity and glucocorticoid use which have been shown to be associated with morbidity [1] was not seen in our cohort. The association between sulfasalazine and poor outcomes have been reported [2] however further studies are still needed to investigate the causal relationship between the two.

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AB1127 ANTIOSTEOPOROTIC TREATMENT AND COVID-19 RISK: IS THERE AN ASSOCIATION?

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Background: Nowadays, the COVID-19 and its complications are considered an important medical issue with aggravated medico-social outcomes, both at the worldwide scale, and in terms of various individual countries. Despite the recent ASBMR, AACE, Endocrine Society, ECTS and NOF recommendations according to osteoporosis management in the era of COVID-19 the influence of antiosteoporotic drugs on disease incidence and severity continue to be studied [1, 2].

Objectives: The purpose of this study was to assess the COVID-19 risk for the patients receiving the parenteral bisphosphonate or Denosumab treatment, and the severity of its course in the systemic osteoporosis patients.

Methods: We performed the phone survey and studied the results of 195 patients (92 % women; mean age – 62.7±10.8 years, height – 161.0±8.0 cm, body weight – 68.9±12.3 kg) with systemic osteoporosis depending on the current use of parenteral antiresorptive drugs (Zoledronic acid, Ibandronic acid, or Denosumab, n=125) and compared the results with patients with osteoporosis who did not use any antiosteoporotic drugs previously (n=70). The mean duration of antiosteoporotic treatment did not vary across the groups, accounting for 15 [9-27] months. Prior to the beginning of the antiosteoporotic therapy, all the patients had a confirmed diagnosis of osteoporosis at the Ukrainian scientific-medical Center of osteoporosis.

Results: We did not reveal any significant differences in the COVID-19 frequency and severity depending on the presence and type of parenteral antiosteoporotic therapy. Additionally, there were no differences depending on patients' age of sex, obesity presence, and other osteoporosis risk factors. The risk of COVID-19 in the patients with systemic osteoporosis did not differ depending on antiresorptive drug use, amounting (Odd Ratio (OR) 95 % CI) to 1.1 (0.6-2.0), or on the use of the definite antiosteoporotic drug (for the Zoledronic acid - 0.9 (0.4-2.0), the Ibandronic acid - 1.1 (0.5-2.3), and for the Denosumab - 1.6 (0.5-5.2).

Conclusion: Our study did not reveal any significant differences in the COVID-19 frequency and severity depending on the presence and type of parenteral antiosteoporotic therapy. We conclude that parenteral antiosteoporotic drugs (Zoledronic acid, Ibandronic acid, or Denosumab) do not have an influence on COVID-19 frequency and severity and can be recommended for the continuation of treatment of patients with osteoporosis.

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AB1128 MAINTENANCE THERAPY FOR PATIENTS WITH RHEUMATIC DISEASES DURING THE COVID-19

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Background: The Covid-19 pandemic has been raging for more than a year in a pandemic mode. Since then, many questions have been raised regarding the management of patients with rheumatic diseases (RD). In this context, the maintenance therapy of conventional, biologic and targeted synthetic disease-modifying antirheumatic drugs (Cs DMARDs, bDMARDs and tsDMARDs respectively) during the Covid-19 infection remains a subject of debate given their immunosuppressive effects as well as their potential generation of lung fibrosis. While the EULAR 2020 guidelines emphasize that discontinuation or maintenance should be discussed on a case-by-case basis, the ACR guidelines advocate discontinuation of all therapies except for the anti-interleukin-6 [1,2].

Objectives: The objective of our work was to report our real-life experience of therapeutic maintenance during the covid-19 pandemic.

Methods: We conducted a cross-sectional study of patients with RD: rheumatoid arthritis (RA) and spondyloarthritis (SpA) recruited from the rheumatology department of the Kassab Institute of Orthopedics. All the patients were asked to complete a questionnaire about their disease management in the era of the Covid-19. The questionnaire included sociodemographic data, treatment modalities, as well as data related to the infection with the Covid-19 (severe forms defined by the need for oxygen therapy or hospitalization), and changes in treatment during the infection.

Results: The study included 102 patients with RA (65.3%) and SpA (34.7%). The mean age was 52.4 ± 13 [19-77] years. There was a female predominance with a sex ratio of 0.4. The mean duration of the disease was 7.8 ± 5 years [1-35]. Fifteen percent of patients were on corticosteroids with a mean dose of 6.7±4.5 mg/L [2-20] of prednisone equivalent. A CsDMARD was prescribed alone in 36.3% of cases and combined with a biologic in 18% of cases. A Covid-19 infection was occurred at least once in 25.5% of cases, of which 19.2% had a severe form (hospitalization (15.4%), oxygen therapy (19.2%)). No deaths were observed. The treatments received during the covid-19 infection were: corticosteroids (n=5), heparin therapy (n=6) and antibiotic therapy (n=10). No patient tapered treatment dosage of DMARDs but discontinuation was reported by 4 patients with a mean time between discontinuation and resumption of 2.1 ± 2 months [0.5-5 months]. The cessation of the treatment was dictated by the treating physician in 2 cases and involved csDMARD in 3 cases (Methotrexate (n=2), Leflunomide (n=1)) and biologics in only one patient. There were no cases of clinical pulmonary worsening upon resumption of the treatments. We found no statistically significant association between severe forms of the infection and the type of RD (p=0.925), as well as the presence of comorbidities (p=0.825). Similarly, the presence of severe forms was not associated with the use of long-term NSAIDs (p=0.29), corticosteroids (p=0.85), or biological treatment (p=0.7). However, maintenance therapy was significantly associated with a lower risk of severe forms (p=0.013).

Conclusion: Our work showed that the maintenance of conventional treatment during Covid-19 infection was associated with a lower risk of severe forms. Our results, along with those of other studies in the literature, support the maintenance of antirheumatic treatments.

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AB1129 SAFETY OF VACCINES AGAINST COVID-19 IN PATIENTS WITH SPONDYLOARTHRITIS (PRELIMINARY DATA).

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Background: Patients with spondyloarthritis (SpA) probably have a high incidence of COVID-19. Vaccination remains one of the most effective methods of preventing infectious diseases. However, data on the safety of vaccines against COVID-19 in patients with SpA are few and relate to foreign vaccines that are not licensed in Russia.

Objectives: To study the safety of COVID-19 vaccines in patients with SpA in real clinical practice.

Methods: The study included 47 SpA patients (25 - ankylosing spondylitis, 13 - psoriatic arthritis, 9 - undifferentiated SpA, 19 women, 28 men, age 42.3±11.6 years, duration of the disease 11.8±9.2 years) - the main group and 97 people without any immuno-inflammatory rheumatic diseases (67 women, 30 men, age 43.7±13.1 years) - the control group. 20 patients received disease-modifying antirheumatic drugs (12 - methotrexate, 8 - sulfasalazine), 10 - biological drugs (8 – TNF-α inhibitors, 2 - IL-17 inhibitors), 6 - glucocorticoids, 1 - tofacitinib, 12 - only nonsteroidal anti-inflammatory drugs, 8 - did not receive therapy. In the main group, 40 patients were vaccinated with Gam-COVID-Vac (Sputnik V), 3 – CoviVac and Sputnik Light, 1 – EpiVacCorona (both components of the vaccine were received by 44 patients). In the control group 69 were vaccinated with Sputnik V, 15 - CoviVac, 5 - Sputnik Light and BNT162b2, 2 - EpiVacCorona, 1 - mRNA-1273. (91 participants received both components of the vaccine). All participants

were interviewed by a research doctor with a unified questionnaire, additional information was obtained from medical documentation.

Results: The data obtained are reflected in the Table 1. Local adverse events (AEs) occurred relatively less frequently in patients with SpA than in the control group. After the introduction of the first component of the vaccine, there was a significant increase in the frequency of pain without restriction of movement and edema/hyperemia in the control group (p<0.001 and p=0.049, respectively), while after the introduction of the second component, a significant difference was registered only for the first indicated symptom (p<0.001). The most frequent systemic AEs were weakness, fever, arthralgia or myalgia, headache, and chills, which were significantly less common (p=0.008) in the main group after immunization with the first component. The proportion of SpA patients without any reactions was significantly higher after the introduction of the first component of the vaccine (59.6% and 29.9%, p<0.001), while after immunity with the second component there were no differences (59.1% and 44.0%, p>0.05). After complete immunization, the percentage of patients without any AEs was significantly higher in the main group than in the control (50.0% and 17.6%, p<0.001). There was no exacerbation of SpA or development of new autoimmune phenomena in the main group after full vaccination.

Table 1. The frequency of AEs in SpA patients and in control

	The first component					The second component				
	SpA, n=47		Control, n=97			SpA, n=44		Control, n=91		
	n	%	n	%	p	n	%	n	%	p
Local AEs										
Pain w/r movement*	2	4.3	38	39.2	<0.001	2	4.5	32	35.2	<0.001
Pain w/r movement**	5	10.6	10	10.3	>0.05	4	9.1	4	4.4	>0.05
Edema or hyperemia	1	2.1	14	14.4	0.049	3	6.8	13	14.3	>0.05
Systemic AEs										
Weakness	13	27.7	36	37.1	>0.05	11	25.0	23	25.3	>0.05
Temperature >37.0ºC	13	27.7	33	34.0	>0.05	9	20.5	21	23.1	>0.05
Myalgia/Arthralgia	6	12.8	22	22.7	>0.05	6	13.6	14	15.4	>0.05
Headache	5	10.6	11	11.3	>0.05	6	13.6	6	6.6	>0.05
Chills	1	2.1	20	20.6	0.008	3	6.8	5	5.5	>0.05
Nausea/vomiting	1	2.1	2	2.1	>0.05	0	0	1	1.1	-
Other	1	2.1	10	10.3	>0.05	0	0	4	4.4	-

Notes: * - pain at the injection site **without** restriction of limb movement, ** - pain at the injection site **with** restriction of limb movement

Conclusion: According to preliminary data, the tolerability of vaccines against COVID-19 in patients with SpA is satisfactory. Further studies with an increased sample are needed to study the safety, immunogenicity and clinical efficacy of immunization against COVID-19 in patients of this cohort.

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AB1130 A REDUCTION IN NEW REFERRALS FOR RHEUMATOID ARTHRITIS, OSTEOARTHRITIS AND CRYSTAL ARTHRITIS COMPARED TO GCA DURING COVID19 PANDEMIC

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Background: The COVID-19 pandemic has had profound effects on the Rheumatology department; we wanted to see if consequently referrals for Rheumatoid arthritis (RA), Crystal Arthritis (CA), Osteoarthritis (OA) and Giant cell arteritis (GCA) were affected. A greater understanding of the impact may enable adequate number of clinics and resources to be made available where needed.

Objectives: To evaluate the impact of COVID-19 pandemic on volume of new referrals to the Rheumatology department for RA, CA, OA and GCA.

Methods: A retrospective analysis of data was conducted from the period of January 2016 to December 2021. The Rheumatology department database was closely analysed and information about new referrals for GCA, RA, OA and CA were evaluated. Statistical analysis was conducted using t-test to compare the mean value pre and during the COVID19 outbreak (2020).

Results: From 2016 to 2021 a total number of 9998 new patients were referred to the Rheumatology department. There were 2768 new referrals for GCA (15%), RA (34%), OA (40%) and CA (11%) made during this period. In 2020, there was a significant decrease in OA, RA and CA referrals (p value 0.000004, 0.00017, 0.0042 respectively) but an insignificant decrease in GCA referrals (p value 0.243).

	Number of referrals		
Diagnoses	**Mean nº 2016-2019**	**2020**	**p value**
GCA	79.75 (14%)	63 (33%)	0.24334236
RA	204 (36%)	55 (28%)	0.000175427
OA	219.7 (39%)	59 (30%)	4.26975E-06
CA	64.5(11%)	18 (9%)	0.004278881
	100%	100%	

Conclusion: During COVID19 pandemic in 2020 there was a significant reduction in the number of new referrals for RA, OA, and CA in contrast to GCA where the referrals have been constant. This may be due to the detrimental consequences of untreated GCA with regards to risk of sight loss. However, with less RA referrals, this may result in a delayed diagnosis with an impact on the disease course.

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AB1131 IDENTIFICATION OF FACTORS ASSOCIATED WITH THE OCCURRENCE OF SEVERE FORMS OF COVID-19 INFECTION IN PATIENTS WITH AUTOIMMUNE/ INFLAMMATORY RHEUMATIC DISEASES

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Background: Patients with autoimmune/inflammatory rheumatic diseases (AIRD) were suspected to be an at-risk population of severe COVID-19. However, whether this higher risk is linked to the disease or to its treatment is difficult to determine.

Objectives: To identify, among AIRD patients, factors associated with occurrence of moderate-to-severe COVID19 infection and to evaluate if having an AIRD was associated with an increased risk of severe form of COVID19 infection (defined by hospitalization in ICU or death), compared to general population.

Methods: Data source: The "Entrepôt des Données de Santé (EDS)" collect data from electronic health records of all patients hospitalized or followed in the AP-HP (39 hospitals in Paris area, France). The French RMD COVID19 cohort is a national multi-center cohort that included patients with confirmed AIRD and diagnosed with COVID-19. All AIRD patients diagnosed with COVID-19 before September 2020 from both cohorts were included.

-We Identified factors associated with severe COVID-19 was made in a combined analysis of the 2 cohorts.

-Then, we compared COVID-19 infection severity in the EDS-COVID database in AIRD patients and controls, by a propensity score (PS)-matched case-control (1:4) study