PANLAR 2023 - ABSTRACT SUBMISSION

BASIC SCIENCE

PANLAR2023-1092

TREATMENT WITH TOFACITINIB ATTENUATES MUSCLE LOSS THROUGH MYOGENIN ACTIVATION IN COLLAGEN-INDUCED ARTHRITIS

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Objectives: The loss of muscle mass observed in Rheumatoid Arthritis (RA) patients occurs either by activation of catabolic pathways or by inhibition of anabolic pathways. Despite having a list of drugs capable of treating RA inflammation, the effect of these therapeutic interventions on muscle have not been elucidated. Our objective was to evaluate the effect of tofacitinib on muscle mass of collagen-induced arthritis (CIA) in mice.

Methods CIA was induced in male DBA/1 J mice. Animals were randomized into 3 groups: CIA + tofacitinib (CIA-TOF; n = 10); CIA + vehicle (CIA-VEH; n = 10); healthy controls (CO; n = 9). Vehicle (PBS) or tofacitinib 15 mg/kg were administered twice a day, between days 18 and 45 after the disease induction. Clinical score, edema and body weight were evaluated during the experimental period. Tibio-tarsal joints were collected for assessment of disease histopathological score, and tibialis anterior (TA) and gastrocnemius (GA) muscles were weighed to assess muscle mass. Muscle atrophy was evaluated by measurement of TA myofiber cross-sectional area (CSA). Expression of proteins related to muscle regeneration or catabolism (Pax7, MyoD, myogenin and Murf-1) were evaluated by Western blot in GA homogenates. Serum inflammatory markers (TNF and IL-6) were evaluated by ELISA.

Results Tofacitinib treatment decreased arthritis severity by reducing clinical score ($p = 0.03$) and hind paw edema ($p = 0.04$) than CIA-VEH group. CIA-TOF showed weight gain ($p = 0.02$), higher TA ($p = 0.009$) and GA ($p = 0.02$) weights, and increased CSA compared to CIA-VEH group ($p = 0.01$). On day 45, CIA-TOF presented increased muscle strength compared to CIA-VEH group ($p = 0.006$), however, no difference was found in the fatigue parameter among groups ($p > 0.05$). The expression of Pax7 was unchanged ($p = 0.07$), while MyoD expression showed an increase trend, and myogenin expression was significantly increased in CIA-TOF compared to CIA-VEH ($p = 0.04$) and CO groups ($p = 0.02$). The treatment did not significantly modify Murf-1 expression. Compared to CIA-VEH group, CIA-TOF mice showed decreased serum levels of TNF ($p = 0.04$), and no difference in IL-6 serum levels ($p = 0.08$).

Conclusion Tofacitinib attenuated muscle loss in arthritic mice, as increased muscle weight and muscle CSA were detected in treated mice. Additionally, an increased activation of satellite cells regeneration, based on the expression of myogenin, is a potential mechanism involved in tofacitinib-protection against muscle loss.

Disclosure of Interest: R. Espírito Santo: None Declared, T. Rosa: None Declared, B. Bartikoski: None Declared, M. Farinon: None Declared, J. Silva: None Declared, R. Pedó: None Declared, R. Xavier Grant / Research support with: $ 9,660.00

Keywords: Collagen-induced arthritis, Janus Kinase inhibitor, Muscle loss

PANLAR2023-1074

PREVALENCE OF NEOPLASTIC DISEASE IN PATIENTS WITH SYSTEMIC SCLEROSIS IN A SOUTH AMERICAN COHORT

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Objectives: To describe the prevalence of cancer in a cohort of patients with systemic sclerosis (SSc) in a university hospital, as well as the epidemiological, clinical and immunological characteristics of these patients.

Methods: Observational study of an ambispective cohort of patients with SSc (ACR/EULAR 2013 Criteria) treated at a tertiary level university hospital. The main variable was the prevalence of neoplasms, and the type of neoplasm; age, disease duration at the time of diagnosis, and mortality data were also collected. And in relation to SSc, epidemiological variables, comorbidities, clinical and serological subtypes, and conditions typical of SSc, capillaroscopy, and the presence of other autoimmune diseases were collected.

Results: Of the cohort of 98 patients with SSc (table), 15% presented neoplasms (n = 15). 80% were women. The mean age at diagnosis was 57 ± 15 years. In order of frequency, they presented: 40% breast cancer, 13% colon, 7% ovarian and lung. 2 patients died (1 breast, 1 lung). Of the patients with neoplasia, 80% presented the limited subtype and 14% the diffuse subtype. 33% showed an overlap syndrome, the most frequent being Sjögren's syndrome (26%). As main manifestations, they presented: telangiectasias in 67%, pitting scars, joint and digestive involvement in 33% and calcinosis and digital ulcers in 27%. Five patients received disease-modifying synthetic drugs for their joint involvement; none underwent biological treatment. The most frequent antibodies were in order: anti centromere (ACA) in 67% and anti-topoisomerase (ATA) in 20%. No patient presented anti RNA polymerase III (RNA-pol), and 13% did not present any of antibody (triple negative). Patients with neoplasms were on average 10 years older than those who had not developed neoplasms (95% CI: 1-19 years). No association with SSc subtype or with antibodies was found.

Conclusion: Our results show a prevalence of cancer similar in patients with SS to that of the general population, around 15%, which is similar to that of other publications. The only epidemiological factor associated with the presence of neoplasms was age. A larger proportion in patients with neoplasms had the limited form of the disease but this was not statistically significant; finally, in a third of the patients there was less than a 5-year difference between the diagnosis of cancer and that of SS.

Disclosure of Interest: None declared.

Keywords: Cancer, Epidemiology, Rheumatic diseases

PANLAR2023-1302

PLASMA CYTOKINE LEVELS IN A GROUP OF COLOMBIAN PATIENTS WITH MODERATE SYSTEMIC LUPUS ERYTHEMATOSUS AND RHEUMATOID ARTHRITIS

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Objectives: Systemic lupus erythematosus (SLE) and rheumatoid arthritis (RA) are autoimmune diseases whose pathophysiological mechanisms are not fully understood but it is known that the abnormal biological activity of cytokines and their imbalance are implicated in the development of these diseases. We compared the plasma cytokine levels of a group of Colombian patients with moderate SLE and RA with those of healthy controls and we determined the association between cytokine levels and clinical variables measured in RA and SLE patients.

Methods: The plasma levels of GM-CSF, CX3CL1, IFN-α2, IFN-γ, IL-10, MDC, IL-12p70, sCD40L, IL-17A, IL-1β, IL-2, IL-4, IL-6, IL-8, MCP-1, TNF-α and VEGF were measured in 24 SLE, 24 RA and 29 healthy controls recruited in two Rheumatology departments in Bogota, Colombia using the Milliplex® Map human cytokine/chemokine panel. The association between cytokine levels (high and low) and the clinical variables (body mass index, disease duration, family history of autoimmunity, glucocorticoid usage, among others) were evaluated. The study was approved by the ethical committees and was funded by Minciencias.

Results: In SLE patients, plasma levels of GM-CSF, CX3CL1, IFN-α2, IL-10, IL-12p70, IL-17A, IL-1β, MCP-1 and TNF-α were significantly higher compared to controls ($p < 0.05$). In RA patients, plasma levels of GM-CSF, CX3CL1, IFN-α2, IFN-γ, IL-12p70, IL-17A, IL-1β, IL-2, TNF-α and VEGF

were significantly higher compared to controls ($p < 0.05$). There were no differences in the levels of IL-6, IL-8, IL-4, MDC and sCD40L between the study groups. Low levels of IFN-α2 were associated with a disease duration longer than 5 years in the RA patients ($p = 0.03$) whereashigh levels of IL-6 were associated with the use of glucocorticoids in SLE patients ($p = 0.03$).

Conclusion: We observed a differential cytokine profile in patients with moderate SLE and RA, so that IL-2, IFN-γ and VEGF were elevated specifically in RA, but IL-10 and MCP-1 were elevated only in SLE. The upregulation of several cytokines together in both diseases is because the autoimmune diseases share signs, symptoms and mechanisms in what is known as autoimmune tautology. The association between the levels of IFN-α2 and disease duration has been previously reported in RA patients. The SLE patients treated with glucocorticoids present higher levels of IL-6 since it has been observed that glucocorticoids increase the expression of acute phase proteins that are induced by IL-6.

Disclosure of Interest: None declared

Keywords: Cytokines, RA, SLE

PANLAR2023-1315

EXPRESSION OF CYTOKINES RELATED TO INFLAMMAGING AND ARTERIAL STIFFNESS IN PATIENTS WITH RHEUMATOID ARTHRITIS AND OSTEOARTHRITIS: A GENE ONTOLOGY AND PATHWAY ENRICHMENT ANALYSIS

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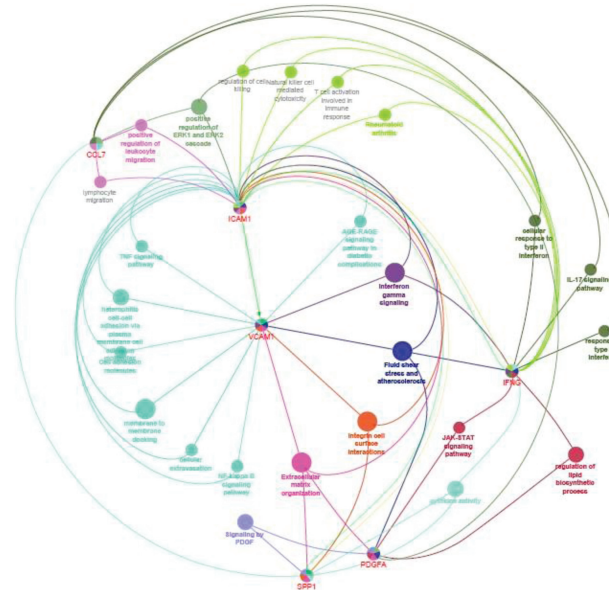
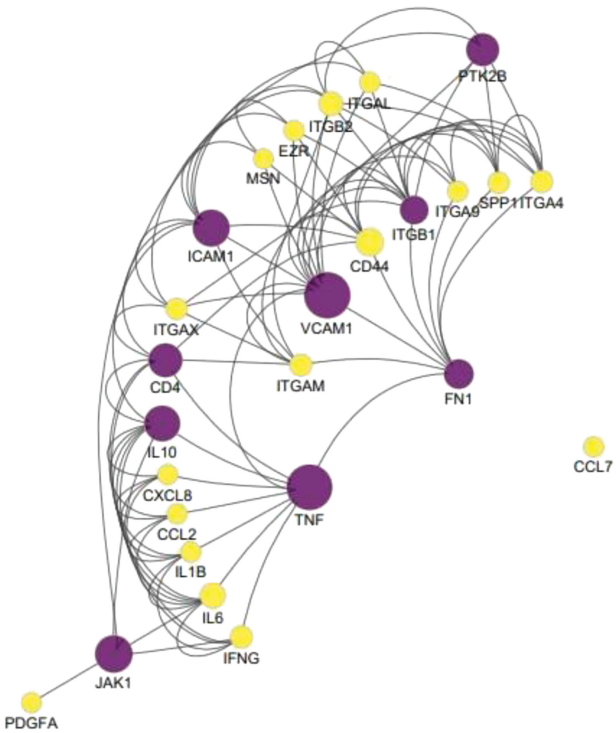
Objectives: To assess the expression of inflammatory cytokines associated to cardiovascular alterations (i.e. arterial stiffness) in rheumatoid arthritis (RA) and osteoarthritis (OA) patients through Gene Ontology and Pathway Enrichment analysis.

Methods: Cross-sectional study. RA and OA patients (40-70 years of age were included. Levels of 18 cytokines: VCAM1, ICAM1, CCL7, MCP1, SPP1, PDGF, CXCL10 and inflammaging related cytokines: INF- γ, IL-10, IL-1RA, IL-1β, IL-6, TNF-α, MMP1, MMP2, MMP9, TIMP-1, TIMP2, were measured using a Luminex Assay (Invitrogen, Carlsbad, CA, United States). Arterial stiffness parameters were performed (TensioMed® Arteriograph). A protein-protein interaction network (PPI) was built using the string App plugin from Cytoscape v3.9.1. Gene Ontology and pathway analysis were carried out using ClueGO (v2.8.9) + Cluepedia (v1.5.9) Cytoscape plugin for the proteins that showed a significant overexpression against GO biological processes, KEGG, and Reactome pathways databases.



Results: Eighty patients were included (71.3% women). Levels of disease activity in RA patients were low. There were no significant differences of cardiovascular measurements between the two groups except for Brachial diastolic blood pressure (higher in RA). Levels of VCAM1, MARC, OPN, IL-1RA and IL-1β were significantly higher RA patients. ICAM1, MARC, and INF-γ levels correlated with Aix in RA group. The merged network between upregulated cytokines (VCAM1, SPP1, PDGF, IFNG, ICAM1 and CCL7), RA query in DISESASE database and "Arterial stiffness" query (PubMed) resulted in a PPI network with 26 nodes and 88 interactions. (Figure 1) The nodes with BC above 0.05 (VCAM1, TNF, JAK1, ICAM1, IL-10, CD4, PTK2B, FN1, ITGB1) represent the key genes. Ten *GO* terms and twelve pathways were significantly enriched (Figure 2). Principal GO terms were: "membrane to membrane docking" (34% genes), "response to type II interferon" (7.9%), and "regulation of lipid biosynthetic process" (5.3%). KEGG and REACTOME included: signaling by PDGF (7.9%), integrin cell surface interaction (2.6%), extracellular matrix organization (2.6%).



Conclusion: Cytokines related to "Inflammaging" shown significant relationship with arterial stiffness parameters in RA patients. The representative nodes/proteins were related with cellular adhesion, MAPK activation pathway and proinflammatory responses showing that those are key processes in arterial stiffness and RA.

Disclosure of Interest: J. Carvajal-Veloza: None Declared, J.-A. Rubio-Rubio: None Declared, G. Salguero: None Declared, L. D. Gutiérrez-Castañeda: None Declared, G. S. Rodríguez-Vargas: None Declared, P. Santos-Moreno Grant / Research support with: Abbvie, Abbott, Biopas-UCB, Bristol, Janssen, Pfizer, Roche, Sanofi;, Speakers Bureau with: Abbvie, Abbott, Biopas-UCB, Bristol, Janssen, Pfizer, Roche, Sanofi;, D. Echeverri: None Declared, P.-K. Bautista-Niño: None Declared, L. D. Sáenz: None Declared, A. Rojas-Villarraga: None Declared

Keywords: Cytokines, Rheumatic diseases

PANLAR2023-1288

ASSOCIATION OF CAROTID PLAQUE ACCORDING TO PSORIASIS AREA SEVERITY INDEX IN PSA PATIENTS

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Objectives: To compare the presence of carotid plaque (CP) according to the Psoriasis Area Severity Index (PASI) score.

Methods: This was a cross-sectional, descriptive study. Psoriatic arthritis (PsA) patients who fulfilled the 2006 CASPAR criteria were recruited. Carotid ultrasound was performed on all study participants, and the presence of CP, defined as carotid intima-media thickness (cIMT) ≥1.2 mm or focal thickness ≥ 0.5 mm, was assessed. Patients were divided into 2 groups according to the PASI scores (0-5 mild, >5 moderate-severe). Comparisons were done with Chi-square, Student´s t and Mann-Whitney's u tests. A p value ≤0.05 was considered significant.

Results: A total of 73 patients were recruited. Demographic characteristics are shown in Table 1. There were no significant associations between PASI scores and erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) levels; likewise there was no association with lipid profile. Finally, no difference was found in the prevalence of CP between both groups.

Conclusion: The limitation of this study is that the group of patients with moderate-severe PASI was small; however, we found no association between PASI score and markers of inflammation such as CRP and ESR; likewise there were no differences in the lipid profile and on the prevalence of atherosclerosis; therefore, PASI should not be considered an indicator of atherosclerosis.

Reference 1: Gialouri CG, Fragoulis GE. Cardiovascular disease in psoriatic arthritis: facts and unmet needs. Rheumatology (Oxford). 2022; 61(4): 1305–6.

Reference 2: Hoffmann JHO, Knoop C, Schäkel K, et al. Evaluation of psoriasis area and severity index as a proxy for biomarkers of systemic disease under treatment with tumour necrosis factor-alpha and interleukin 12/23 antagonists in patients with psoriasis: A retrospective cohort study of 186 treatment cycles. Acta Derm Venereol. 2021;101(5): adv00462

Disclosure of Interest: None declared

Keywords: Cardiovascular, Psoriatic arthritis, Skin lesions

TABLE 1. Demographic, clinical, laboratory and carotid Doppler characteristics.

	Characteristics	PsA patients with PASI < 5 (n = 63)	PsA patients with PASI > 5 (n = 10)	p value
Demographic	Age, years, mean (DE)	55.14 (11.82)	54.0 (8.66)	NS
	Women, n (%)	38 (52.05)	3 (4.1)	NS
	Disease duration, years, median (iQR)	6.0 (3.0-12.0)	4.5 (1.0-15.5)	NS
Laboratory profile	Cholesterol, mg/dL. mean (DE)	175.67 (37.2)	176.2 (30.7)	NS
	Triglycerides, mg/dL. median (iQR)	128.4 (95.5-174.6)	196.1 (103.3-252.00)	NS
	HDL, mg/dL, median (iQR)	47.5 (35.9-54.6)	44.5 (39.02-53.42)	NS
	LDL, mg/dL, mean (DE)	96.78 (31.63)	93.91 (33.49)	NS
	CRP, mg/dL. median (iQR)	0.58 (0.32-1.09)	0.54 (0.35-1.27)	NS
	ESR, mm/H, median (iQR)	15.0 (10.0-30.0)	17.5 (13.5-22.5)	NS
Carotid Doppler	Without CP, n	35	6	NS
	With CP, n	28	4	

CRP C-reactive protein, ESR erythrocyte sedimentation rate, CP carotid plaque

PANLAR2023-1069

CHARACTERIZATION OF RHEUMATIC MANIFESTATIONS IN PATIENTS WITH HIV INFECTION FROM A SOUTH AMERICAN HOSPITAL

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Objectives: To describe the prevalence of rheumatic diseases in a cohort of patients with HIV infection being cared for at a university hospital, along with the demographic and clinical features of patients so affected.

Methods: Cross-sectional study of 1712 patients with HIV infection treated at the outpatient's department of a university hospital.

Results: There was a prevalence of rheumatic diseases of 5.2% (n = 89) in the patients studied, with 76% being male. The mean age of onset was 45 ± 11 years. Fourteen patients had reactive arthritis (15%), 14 had osteoarthritis (15%), 10 had immune thrombocytopenic purpura (11%), and 53 had other conditions (59%). The mean time between HIV diagnosis and rheumatic condition onset was 73 ± 66 months. The most prevalent comorbidities were dyslipidemia in 12 patients (11%), hepatitis B in 19 (17%), lipodystrophy in 12 (11%), herpes zoster in 11 (10%) and hypothyroidism in 10 (9%).

Conclusion: There was a prevalence of rheumatic diseases of 5.2% in the patients studied. Fourteen patients had reactive arthritis (15%), 14 osteoarthritis (15%), 10 immune thrombocytopenic purpura (11%), and 53 other conditions (59%).

Disclosure of Interest: None declared

Keywords: AIDS, Epidemiology, Rheumatic diseases

PANLAR2023-1333

ANTHROPOMETRIC MEASURES OF CENTRAL ADIPOSITY IN THE EVALUATION OF METABOLIC SYNDROME IN PATIENTS WITH IDIOPATHIC INFLAMMATORY MYOPATHIES

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Objectives: This study aimed at verifying the use of anthropometric measures in the assessment of metabolic syndrome (MetS) in patients diagnosed with idiopathic inflammatory myopathies (IIM).

Methods: We conducted a cross-sectional study through analyses of medical records of 33 patients diagnosed with IIM according to the 2017 EULAR/ACR criteria in a tertiary center. Anthropometric measures were described as follows: body weight (BW), height, waist circumference (WC), hip circumference (HC), waist-to-hip ratio (WHR), waist-to-height ratio (WHtR), body adiposity index (BAI), body mass index (BMI). IIM patients without MetS were used as controls. Statistical analyses were performed, and a significant difference was considered when p < .05.

Results: We found a high frequency (45%) of MetS in the patients studied. Mean ± SD values of BW, height, HC, BMI, and BAI were 77 ± 17 kg, 164 ± 7 cm, 102 ± 13 cm, 27.7 ± 7 kg/m2, and 30 ± 7%, respectively, without statistical difference between both groups (p > 0.05). Central adiposity measures (mean ± SD) such as WC (94 ± 15 cm), WHR (0,92 ± 0,08), and WHtR (0,57 ± 0,09) were statistically different between the groups (p = 0,035, p = 0,021 and p = 0,027, respectively).

Conclusion: In our cohort of IIM patients we found a high frequency of MetS and a relation between MetS and central adiposity measures (WC, WHR, and WHtR). Longitudinal studies are required to establish the best anthropometric instrument for the evaluation of such patients; however, the use of central adiposity measures is relevant because of its simplicity and ease of implementation into daily practice.

Disclosure of Interest: None declared

Keywords: Anthropometry, Inflammatory myopathies, Metabolic syndrome

PANLAR2023-1571

ANTI RO 52/60 ANTIBODIES AND THEIR CLINICAL SEROLOGICAL CORRELATION. SINGLE CENTER DESCRIPTIVE STUDY

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Objectives: The interpretation of diverse antibodies linked to systemic autoimmune diseases (SAD) is a clinical challenge. Among the specific antibodies, anti-Ro antibodies are the most frequent. They are associated with a clinical phenotype, related to both diverse clinical manifestations and established SAD. The aim of this study is to describe clinical manifestations associated with Ro52/60.

Methods: descriptive observational cross-sectional study, carried out at the *Hospital Maciel*, Montevideo, Uruguay.

Results: Seventy patients were enrolled, most of them were female. Sixty patients (85%) presented Ro52, 40(57%) Ro60 and 31(44%) both antibodies. From the total number of patients showing Ro positivity, there was clinical evidence of SAD in 59(93%). The most frequent clinical manifestations were: photosensitivity in 26 (42%), Raynaud's in18(30%); xerostomia in 26(42%), xerophthalmia in 25(41%), interstitial lung disease in 10(15%), nephropathy in 20(32%), and hematological involvement in 16(23%). In 59 patients (86%)

an autoimmune disease was diagnosed based on available classification criteria. The most frequent were: Sjögren's syndrome 26(41%), SLE 26(41%), rheumatoid arthritis 14(22%), systemic sclerosis (SSc) 10(16%), autoimmune liver diseases 10(14%). Eleven patients (13%) were not diagnoses with SAD, 6% with oncological diseases. ANA was positive in 67 patients (95%). Proportion of patients with positive Ro60 was significantly higher in the ones with photosensitivity ($p = 0.006$), acute cutaneous lupus ($p = 0.003$), joint involvement ($p = 0.031$), and nephropathy ($p = 0.016$). The positivity of both Ro52/60 was significantly higher in patients with muscular involvement ($p = 0.028$) and nephropathy (p:0.047). Regarding the type of autoimmune disease, there was a significant proportion of patients with Ro60 and SLE ($p = 0.004$), both antibodies and SSc ($p = 0.04$). There was a higher proportion of patients with Ro60 and anti SCL70 ($p = 0.008$) than those who did not, the same happens with Ro60 and RF ($p = 0.018$); and Ro 52/60 with anti La ($p = 0.049$) and anti SCL-70 ($p = 0.027$).

Conclusion: Ro52/60 specific antibodies are frequent, being Ro52 the predominant one. The majority of patients presenting positivity have an underlying autoimmune disease, being observed also in patients with oncological pathology. Ro60 could be a risk factor for the development of skin, articular and renal involvement. Getting to know their associations is of paramount importance, given the fact that they present a diagnostic and prognostic role, helping to predict the clinical phenotype.

Disclosure of Interest: None declared

Keywords: Autoimmune diseases, Ro 52 kDa antibody, RO 60 KDA antibody

COVID-19

PANLAR2023-1058

HUMORAL AND T-CELL RESPONSES TO SARS-COV-2 VACCINATION IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Objectives: Patients with immune-mediated diseases achieve lower seroconversion rates to COVID19 vaccines compared to healthy controls. The aim of this study was to assess the SARS-CoV-2-specific humoral and T-cell responses after a two-dose regimen of SARS-CoV-2 vaccine in patients with rheumatoid arthritis (RA).

Methods: Observational study. Patients with RA, ≥18 years of age, who were vaccinated according to the Argentine National Health Ministry´s vaccination strategy were included. Anti-SARS-CoV-2 IgG antibodies, neutralizing activity and specific T-cell responses were assessed after the first and second doses.

Results: A total of 120 RA patients were included. Mostly, homologous regimens were used, including Gam-COVID-Vac (27.5%), ChAdOx1 (24.2%), BBIBP-CorV (22.5%) and BNT162b2 (0.8%), while the most frequent combination of vaccines was Gam-COVID-Vac/mRNA-1273 (21.7%). After the second dose 81.7% presented anti-SARS-CoV-2 antibodies, 70.0% neutralizing activity and 65.3% specific T-cell response. The use of BBIBP-CorV, treatment with abatacept (ABA) and rituximab (RTX) were associated with undetectable antibodies and no neutralizing activity after two doses of vaccine. BBIBP-CorV was also associated with the absence of T-cell response.

The total incidence of adverse events was 357.1 events/1000 doses: significantly lower with BBIBP-CorV (166.7 events/1000 doses, $p < 0.02$).

Conclusion: In this cohort of patients with RA who received 2 doses of COVID-19 vaccine, according to the Argentine strategic vaccination plan which included homologous and heterologous regimens, two of ten did not develop IgG anti-SARS-CoV-2, 70% presented neutralizing activity and 65% specific T-cell response. The use of BBIBP-CorV was associated with deficient humoral and cellular response, while treatment with ABA and RTX affected the development of IgG anti-SARS-CoV-2 and neutralizing activity.

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Keywords: COVID-19, Rheumatoid arthritis, Vaccination

PANLAR2023-1343

THIRD BOOSTER DOSE VACCINE AGAINST SARS-COV-2 IN PRIMARY SJÖGREN'S SYNDROME: LONGITUDINAL COHORT FROM THE SAFER STUDY

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Objectives: Few studies evaluate the immunogenicity and safety of different COVID-19 vaccine platforms in patients with primary Sjögren's Syndrome (pSS). The present study aims to assess the immunogenicity through anti-spike IgG antibodies after the COVID-19 vaccine dose in heterologous groups compared to homologous regimen in patients with pSS.

Methods: These data are from the SAFER study: "Safety and efficacy of the COVID-19 vaccine in rheumatic disease", a real-life phase IV multicenter longitudinal study, evaluating patients since before the first dose. Pregnant women, those with a history of serious adverse events prior to any vaccine, and those with other causes of immunosuppression were excluded. Patients with pSS > 18 years, classified according to ACR/EULAR 2016 classification criteria were included. Antibodies against the Receptor Binding Domain – RBD portion of the Spike protein of SARS-CoV-2 (IgG-S) were measured by chemiluminescence (Architect SARS-CoV-2 Quanti II, Abbott), before the first dose and 28 days after the 2nd and 3rd dose. Seropositivity was defined as IgG-Spike titers ≥7.1 BAU/mL. Patients received adenoviral vector (ChAdOx1, Astrazeneca), mRNA (Pfizer) or inactivated SARS-COV-2 (Coronavac). Non-parametric methods were used. The alpha level of significance was set at 5%.

Figure 1: Comparison of paired medians

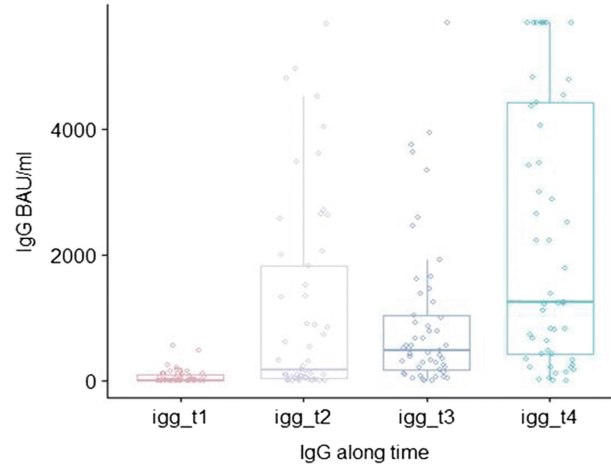
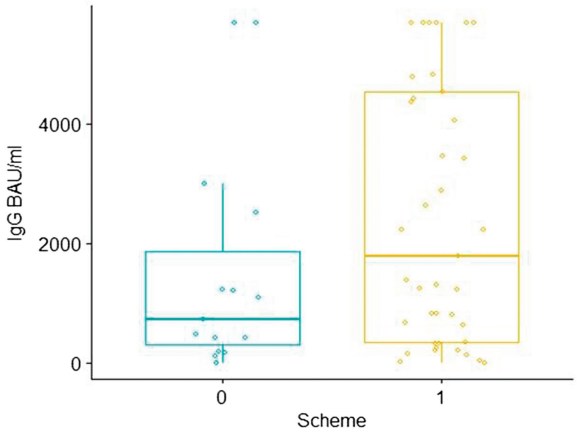


Figure 2: Comparison of homologous and heterologous general medians



Results: 56 participants received 3 doses, 46 ± 11 years old, disease duration 7.62 years, 92.9% female, 41.1% White and 55.4% Mixed. The homologous third-booster dose group (n = 15, all ChAdOx1) and heterologous group (n = 41) were homogeneous for age, sex, ethnicity, comorbidities, medication and baseline IgG-S median [IQR] titers. After primary vaccination (2 doses) IgG-S median and titers [IQR] were similar in homologous and heterologous groups (373.03 [179.58, 843.92] vs. 473.36 [119.05, 1059.60], p = 0.705). Third-booster dose induced higher IgG-S median [IQR] titers compared to only 2 doses (1229.54 [333.55, 4365.47] vs 464.95 [140.42, 1015.25], p < 0.001). Heterologous 3rd-booster induced higher IgG-S median [IQR] titers than homologous scheme with ChAdOx1 (1779.52 [335.83, 4523.89] vs 730.76 [303.37, 1858.98], p = 0.150), Fig 1 and 2, although not statistically significant.
Conclusion: Third booster dose induced higher humoral immune response compared to two doses which may improve protection against COVID-19 in patients with pSS. Although not statistically significant, the response to the heterologous scheme tended to be better than the response to the homologous booster vaccination, which heterologous booster scheme tended to respond better than homologous booster vaccination, which is relevant in this immunosuppressed population. Increasing the sample size will help clarify this issue.

Disclosure of Interest: None declared

Keywords: COVID, Vaccination, Primary Sjögren's syndrome

PANLAR2023-1486

OUTCOMES AND IMPACT OF COVID-19 ON DISEASE ACTIVITY IN PATIENTS WITH SYSTEMIC VASCULITIDES: DATA FROM THE REUMA-COV BRAZIL REGISTER

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Objectives: To assess the impact of COVID-19 on disease activity and severity outcomes in patients with systemic vasculitis.
Methods: The Reuma-CoV Brazil is a longitudinal, multi-stage cohort study, designed to monitor patients with immune-mediated rheumatologic disease (IMRD) during the SARS-CoV-2 pandemic. Systemic vasculitis patients with COVID-19 were compared with those without COVID-19. Vasculitis activity was evaluated by the patient global assessment (PGA) and Birmingham Vasculitis Activity Score 3 (BVAS 3). The prognosis was assessed by the Five-Factor Score (FFS).
Results: Between May 2020 and January 2021, 53 patients with vasculitis were included and followed for six months, 32 (60.3%) with COVID-19 and 21 (39.6%) in the control group. In total, 79.5% were female with a mean age (SD) of 49 (16.5) years. Both groups were homogeneous regarding sex, age, and comorbidities. Thirty-eight (71.8%) patients had at least one comorbidity. Thirty-two patients were classified as small vessels vasculitis (SVV), 10 as large vessels (LVV) and 11 as vasculitis of variable caliber. There was no difference in PGA, BVAS and FFS when comparing before and after SARS-CoV-2 infection (Table 1). In the group of patients with LVV, two had clinical or laboratory worsening post infection. Compared to controls, patients with vasculitis and COVID-19 were at higher risk of intensive care unit (ICU) hospitalization [OR (IC95%) = 7.98 (3.78 – 16.8), p < 0.001], mechanical ventilation [OR (IC95%) = 7.45 (3.16 – 17.5), p = <0,001] and death [OR (IC95%) = 9.69 (3.87 – 24.3), p < 0,001]. Of the 7 patients who died, 40% were using high-dose prednisone (>20 mg/d) and 38.8% were using rituximab.
Conclusion: In this sample of patients with systemic vasculitis, there was no worsening of disease activity after COVID-19, but there was a higher risk of poor outcomes, possibly related to immunosuppression.

Disclosure of Interest: None declared

Keywords: COVID-19, Outcomes, Vasculitis

TABLE 1. Patient global assessment, disease activity and prognosis in patients with small vessels vasculitis and COVID-19.

	BASELINE			SIX MONTHS		
	Cases (n = 16)	*Controls (n = 16)*	*p* value	*Cases (n = 14)*	*Controls (n = 15)*	*p* value
PGA	2 (0-9)	0 (0-9)	0.34	2 (0-9)	0 (0-2)	0.42
BVAS3	4 (0-27)	0 (0-27)	0.27	4 (0-27)	0 (0-2)	0.10
FFS	0 (0-2)	1 (0-2)	0.23	0 (0-2)	1 (0-2)	0.16

BVAS3: Birmingham Vasculitis Activity Score 3; FFS: Five-Factor Score; PGA: patient global assessment (PGA). Median and interquatile range; Mann-Whitney test; CI 95%

PANLAR2023-1455

IMPACT OF GLUCOCORTICOID ON IMMUNOGENICITY AMONG COVID-19 VACCINES IN IMMUNE-MEDIATED DISEASES

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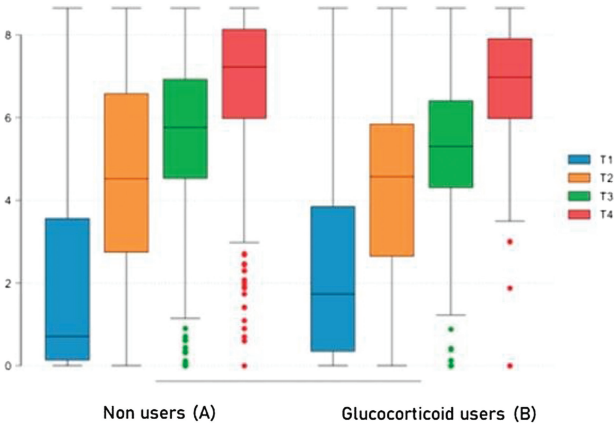
Objectives: The use of glucocorticoids (GC) has been associated with increased risk of hospitalization for coronavirus infection and reduced immunogenicity of SARS-CoV-2 vaccines in immune-mediated diseases (IMD) patients. However, there is still controversy of which dose of GC is correlated with impaired vaccine response on each of the diverse COVID-19 vaccines available, as well as the possible influence of other concurrent immunosuppressants. This study aimed at evaluating the effect of GC on serological response after two doses of BNT162b2 (Pfizer/BioNTech), CoronaVac (inactivated SARS-CoV-2 Vaccine) and ChadOx1 (AstraZeneca) and after the booster dose in patients with IMD.
Methods: The data were extracted from a multicenter longitudinal observational Brazilian cohort (SAFER: Safety and Efficacy on COVID19 Vaccine in Rheumatic Disease). Patients >18 years of age with IMD were evaluated after 2 doses of the same vaccine against COVID-19 and after a booster vaccine, applied according to Brazilian National Immunization Program. All patients underwent clinical examination and collected blood samples for immunogenicity tests. Serological response was evaluated by Anti-RBD titers (IgG) at baseline and 4 weeks after each vaccine dose.



T1: Before vaccination
T2: Between 1st and 2nd dose
T3: 4 weeks after 2nd dose
T4: 4 weeks after 3rd dose (vaccine booster)

T1 (A) vs T1 (B) p= 0,14
T2 (A) vs T2 (B) p= 0,23
T3 (A) vs T2 (B) p= 0,039
T4 (A) vs T4 (B) p= 0,90

Results: Among the 1009 patients evaluated, 301 were using GC (196/401 SLE, 52/199 RA and 27/74 vasculitis). Patients using GC were younger (38.2 vs 40,8 years, p = 0,002), had higher BMI (27,6 vs 26,4 p = 0,008), higher prevalence of kidney disease (3,3% vs 0,5%, p = 0,001) and of thrombosis (11,6% vs 5,9%, p = 0,002) than non-users. Regarding the type of vaccine, most of the GC users received CoronaVac (61.7%), while only 31.9% of non-users received this vaccine (p < 0.001). Although there were similar rates of pre-vaccination infections among them, patients with GC tended to have a higher incidence of confirmed COVID-19 infection after the 2nd dose of the vaccine compared to non-users (4.5% vs 2.0% p = 0.054). The antibody titers after the 1st dose of COVID-19 vaccines were similar between groups, but there was a worse response in the GC group after the 2nd dose (p = 0.039). However, this difference was not statistically significant after the 3rd dose (Figure).

Conclusion: GC use may compromise vaccine-induced immunogenicity after a 2-dose regimen; however, this effect does not remain significant after the booster dose. Multivariate analysis is still pending to assess the potential difference in the impact of GC on the immune response depending on GC dose, type of vaccine and associated drugs.

Disclosure of Interest: None declared

Keywords: Autoimmune diseases, COVID-19, Vaccines

PANLAR2023-1057

CLINICAL CHARACTERISTICS OF SARS-COV-2 INFECTION IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS IN ARGENTINA: DATA FROM THE SAR-COVID NATIONAL REGISTRY

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Objectives: Patients with systemic lupus erythematosus (SLE) present greater severity of SARS-CoV-2 infection compared to the general population, particularly those with glomerulonephritis and who are treated with glucocorticoids. Likewise, high disease activity and some immunosuppressants have been associated with worse outcomes. The aim of this study was to describe the characteristics of SARS-CoV-2 infection in patients with SLE in Argentina from the SAR-COVID registry and to establish factors associated with a worse outcome.

Methods: Observational study. Patients diagnosed with SLE with confirmed SARS-CoV-2 infection (RT-PCR and/or positive serology) from the SAR-COVID registry were included. Data were collected from August 2020 to March 2022. The outcome of the infection was measured using the World Health Organization - ordinal scale (WHO-OS). Severe COVID-19 was defined as an WHO-OS value ≥5. Descriptive analysis, Student's t , Mann Whitney U, ANOVA, Chi2 and Fisher's tests. Multivariable logistic regression.

Results: A total of 399 patients were included, 93% female, with a mean age of 40.9 years (SD 12.2), 39.6% had at least one comorbidity. At the time of infection, 54.9% were receiving glucocorticoids, 30.8% immunosuppressants, and 3.3% biological agents. SARS-CoV-2 infection was mild in most cases, while 4.6% had a severe course and/or died. The latter had comorbidities, used glucocorticoids, and had antiphospholipid syndrome (APS) more frequently and higher disease activity at the time of infection. In the multivariate analysis, high blood pressure (OR 5.1, 95% CI 1.8-15.0), the diagnosis of APS (4.7, 95% CI 1.2-15.8), and the use of glucocorticoids (10 mg/day or more: OR 5.5, 95% CI 1.6-20.5) were associated with severe hospitalization and/or death from COVID-19 (WHO-EO ≥ 5).

Conclusion: In this cohort of SLE patients with confirmed SARS-CoV-2 infection, most had a symptomatic course, 22.1% were hospitalized, and 5% required mechanical ventilation. Mortality was close to 3%. The diagnosis of APS, having high blood pressure, and the use of glucocorticoids were significantly associated with severe COVID-19.

Disclosure of Interest: C. A. Isnardi Grant / Research support with: SAR-COVID is a multi-sponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., K. Roberts: None Declared, Y. Tissera Grant / Research support with: SAR-COVID is a multi-sponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., I. . Petkovic Grant / Research support with: SAR-COVID is a multi-sponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., G. Berbotto: None Declared, C. Gobbi: None Declared, R. Tanten: None Declared, K. . Cogo: None Declared, C. . Asnal: None Declared, A. Baños: None Declared, F. Vivero: None Declared, M. M. Schmid: None Declared, M. A. . Lazaro: None Declared, N. German: None Declared, L. Takashima: None Declared, J. . Scafati: None Declared, M. L. . Werner: None Declared, L. . Casalla: None Declared, C. Matellan: None Declared, D. M. Castrillon: None Declared, F. . Rodriguez: None Declared, S. Moyano: None Declared, M. L. . Martin: None Declared, V. Cosentino: None Declared, N. Herscovich: None Declared, E. R. Tralice: None Declared, T. . Barbich: None Declared, D. L. Vasquez: None Declared, E. Buschiazzo: None Declared, P. Maid: None Declared, A. C. Ledesma: None Declared, V. Yohena: None Declared, G. . Gomez: None Declared, R. . Quintana: None Declared, G. J. Pons-Estel : None Declared

Keywords: COVID-19, Lupus

PANLAR2023-1191

SAFETY AND IMMUNOGENICITY OF CORONAVAC AND CHADOX1 VACCINES AGAINST SARS-COV-2 IN PATIENTS WITH RHEUMATOID ARTHRITIS: BRAZILIAN MULTICENTRIC STUDY

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Objectives: To evaluate the safety and immunogenicity of CoronaVac and ChAdOx1 vaccines against SARS-CoV-2 in patients with Rheumatoid Arthritis (RA).

Methods: These data are from the "SAFER (Safety and Efficacy on COVID-19 Vaccine in Rheumatic Diseases)" study, a Brazilian multicentric longitudinal phase IV study to evaluate COVID-19 vaccine in immunomediated rheumatic diseases (IMRDs). Adverse events (AEs) in patients with RA were assessed after two doses of ChAdOx1 or CoronaVac. Stratification of postvaccination AEs was performed using a diary, filled out daily. The titers of neutralizing antibodies against the receptor-biding domain of SARS-CoV-2 (anti-RBD) were measured by chemiluminescence test after each dose of immunizers. Proportions between groups were compared using the Chi-square and Fisher's exact tests for categorical variables. Clinical Disease Activity Index (CDAI) before and after vaccination was assessed using the McNemar test.

Results: A total of 188 patients with RA were included in the study, most of them were female. CoronaVac was used in 109 patients and ChAdOx1 in 79. Only mild AEs were observed. The more common AEs after the first dose were pain at injection site (46,7%), headache (39,4%), arthralgia (39,4%) and myalgia (30,5%), and ChAdOx1 had a higher frequency of pain at the injection site (66% vs 32 %, $p < 0.001$) arthralgia (62% vs 22%, $p < 0.001$) and myalgia (45% vs 20%, $p < 0.001$) compared to CoronaVac. The more common AEs after the second dose were pain at the injection site (37%), arthralgia (31%), myalgia (23%) and headache (21%). Arthralgia (41,42 % vs 25 %, $p = 0.02$) and pain at injection site (51,43% vs 27%, $p = 0.001$) were more common with ChAdOx1. No patients had a flare after vaccination. The titers of anti-RBD after two doses of ChAdOx1 were higher compared to two doses of CoronaVac (6,03 BAU/mL vs 4,67 BAU/mL, $p < 0,001$).

Conclusion: The frequency of local adverse effects, particularly pain at injection site, was high. AEs were more frequent with ChAdOx1, especially after the first dose. The use of the immunizers dis not change the degree of inflammatory activity of the disease. In patients with RA, ChAdOx1 was more immunogenic than CoronaVac.

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Disclosure of Interest: None declared

Keywords: COVID-19, Rheumatoid arthritis, Vaccine

PANLAR2023-1295

EFFECT OF ABO AND RH BLOOD TYPE ON SARS-COV-2 INFECTION SEVERITY IN PATIENTS WITH RHEUMATIC DISEASES: DATA FROM THE NATIONAL SAR-COVID REGISTRY

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Objectives: To evaluate the association between the ABO and Rh antigens and the clinical characteristics and evolution of the SARS-CoV-2 infection in patients with rheumatic diseases.

Methods: SAR-COVID is a national, longitudinal, and observational registry. Patients ≥18 years of age with a diagnosis of inflammatory or degenerative rheumatic disease, and confirmed SARS-CoV-2 infection (RT-PCR or serology) were included. Data were collected from August 2020 to June 2022. Sociodemographic, clinical data, comorbidities, underlying rheumatic disease, disease activity, and its treatment at the time of infection were recorded, as well as symptoms, complications and treatments received for COVID-19. The WHO ordinal scale (WHO-OS) was used, and severe COVID-19 was defined as WHO-OS ≥5. Patients were categorized as follows: blood group A or non-A, and Rh factor positive or negative.

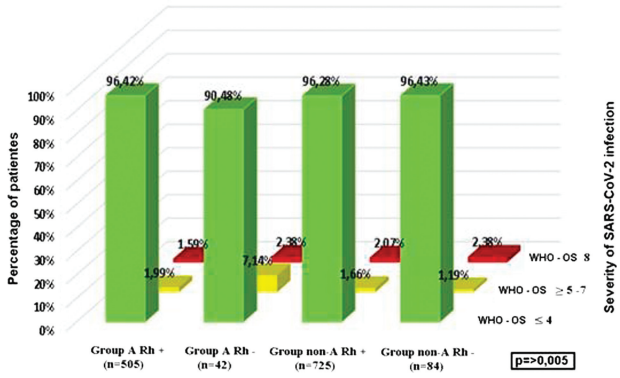
Results: A total of 1356 patients were included, 547 (40,3%) had blood group A and 809 non-A (59,7%). Regarding the Rh factor, 1230 (90,7%) were positive and 126 (9,3%) negative. Age, sex, ethnicity and comorbidities were comparable between both groups. In both cases, the most frequent rheumatic diseases were rheumatoid arthritis (38,9%; $p = 0,052$), systemic lupus erythematosus (17,4%; $p = 0,530$) and osteoarthritis (10,1%; $p = 0,888$). Patients with non-A blood type presented a higher frequency of psoriatic arthritis (group A 5,1% vs non-A 8,7%; $p = 0,015$).

During SARS-CoV-2 infection, more than 90% of patients in both groups were symptomatic (group A 96.0% vs non-A 94,8%; $p = 0,384$). Non-A blood group patients had a significantly higher frequency of arthralgia and dysgeusia. In A blood group 18.5% of the patients required hospitalization, 41,0% of them were admitted in the intensive care unit and 5.9% presented complications, while in the non-A blood group, were 16,7%, 31,1% and 5,5%, respectively ($p > 0,05$ in all the cases). The most frequent complications in both groups were respiratory distress syndrome and sepsis ($p > 0,05$). The outcome of the COVID-19 infection is detailed in Figure 1. In the multivariate analysis, adjusted for poor prognostic factors, patients with A blood type and those with negative Rh factor presented more likely severe COVID-19. (OR 1,75, 95%CI 1,20 - 2,56, $p = 0,003$ and OR 2,63, 95%CI 1,45 - 4,55, $p = 0,001$, respectively).

Conclusion: Blood type A and negative Rh factor were associated with worse COVID-19 outcomes in this national cohort of patients with rheumatic diseases.

Disclosure of Interest: F. Valdez Donelli Grant / Research support with: SAR-COVID is a multi- sponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., V. Carrizo Abarza Grant / Research support with: SAR-COVID is a multi- sponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants.

Figure 1. Severity and mortality of SARS-CoV-2 infection according to ABO and Rh blood type in patients with rheumatic diseases.



None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., C. A. Isnardi Grant / Research support with: SAR-COVID is a multi- sponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., A. B. Gomez Vara Grant / Research support with: SAR-COVID is a multi- sponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or influenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., E. E. Schneeberger Grant / Research support with: SAR-COVID is a multi- sponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., G. Citera Grant / Research support with: SAR-COVID is a multi- sponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., G. Gomez Grant / Research support with: SAR-COVID is a multi- sponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., R. Quintana Grant / Research support with: SAR-COVID is a multi- sponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., K. Roberts Grant / Research support with: SAR-COVID is a multi- sponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., G. J. Pons-Estel Grant / Research support with: SAR-COVID is a multi- sponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database.

Keywords: COVID-19

PANLAR2023-1476

HUMORAL IMMUNE RESPONSE TO SARS-COV-2 THIRD VACCINE IN PATIENTS WITH AUTOIMMUNE RHEUMATIC DISEASES WITHOUT SEROCONVERSION AFTER THE INITIAL 2-DOSE REGIMEN

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Objectives: To evaluate the humoral immune response to the third dose (booster) of vaccine against SARS-CoV-2 in patients with autoimmune rheumatic diseases who were seronegative after a two-dose regimen.

Methods: Observational study. Patients with autoimmune rheumatic diseases who had not achieved seroconversion after a two-dose vaccine schedule against SARS-CoV-2 were included. To assess the humoral immune response, anti-RBD IgG (S protein receptor binding domain) neutralizing antibody titers were determined by ELISA (cutoff titer 200). The determination was made between 30 to 45 days after the third dose.

Results: From 66 patients who received SARS-CoV-2 vaccination, 18 patients (29.5%) were seronegative after a two-dose schedule. 61% had SLE, 77% had comorbidities (61% with hypertension, p = 0.03). Patients were on treatment: 10 with prednisone (8 with doses greater than 10 mg/d, p = 0.01), 10 with hydroxychloroquine, one with methotrexate, one with leflunomide, four with azathioprine, five with mycophenolate mofetil and five with rituximab (they are the total number of non-responders on biological treatment, p = 0.03). Regarding the primary vaccination regimen, 11 received BBIBP-CorV (p = 0.01), 5 AZD1222, 1 Gam-COVID-Vac and 1 mRNA1273/Gam-COVID-Vac heterologous scheme. Of these 18 non-responders, 14 received a third dose; nine patients (62%) presented anti-RBD IgG detectable. Of the five patients who did not respond to the booster vaccination, three had received BBIBP-CorV as the initial schedule and the vaccines applied as a third dose were Ad5-nCoV (1), BNT162b2 (1), AZD 1222 (2) and Gam- COVID-Vac (1). They were being treated with: rituximab (2), azathioprine (2) and mycophenolate mofetil (1). Treatment with higher doses of prednisone was the only factor associated with non-seroconversion to the third dose (8 ± 4.5; p 0.02).

Conclusion: The third dose of SARS-CoV-2 vaccine allowed to improve the serological response to vaccination, achieving a seroconversion of 62% in this group of patients.

Disclosure of Interest: None declared

Keywords: Booster, COVID-19 Vaccines, Systemic rheumatic diseases

PANLAR2023-1141

SAFETY AND EFFICACY OF COVID-19 IMMUNIZATION IN SYSTEMIC VASCULITIDES – A MULTICENTRIC COHORT

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Objectives: Patients with immune-mediated rheumatic diseases (IMRDs) develop more severe outcomes of Coronavirus disease 2019 (COVID-19). Recent studies have contributed to understand the safety and efficacy of COVID-19 vaccines in IMRDs, suggesting that different diseases and therapies may interfere on immunization efficacy. In this study we analyze the immunogenicity of COVID-19 vaccines in patients with Systemic Vasculitides (VASC), the rate of COVID-19 and the frequency of disease relapse following immunization.

Methods: We included patients with VASC (n = 73), a subgroup of the SAFER study (Safety and Efficacy on COVID-19 Vaccine in Rheumatic Disease), a

longitudinal, multicenter, Brazilian cohort. We analyzed the geometric means of IgG antibody against receptor-biding domain of protein spike of SARS-CoV-2 (anti-RBD) after two shots of CoronaVac (Inactivated vaccine), ChadOx-1 (AstraZeneca) or BNT162b2 (Pfizer-BioNTech). IgG anti-RBD was measured by chemiluminescence test. We assessed new-onset COVID-19 episodes, adverse events (AE) and disease activity for each VASC.

Results: The sample included Behçet's disease (BD) (n = 41), Takayasu arteritis (TAK) (n = 15), antineutrophil cytoplasmic antibody (ANCA)-associated vasculitis (AAV) (n = 14), polyarteritis nodosa (n = 7) and other small vessel VASC(n = 6). The majority of patients were female (69%) without comorbidities (49%) and a median age of 37 years. The most common medication was conventional synthetic disease-modifying anti-rheumatic drugs, followed by biologic drugs. No patient received rituximab at baseline. Most patients received CoronaVac (n = 25) or ChadOx-1 (n = 36), while four received BNT162b2. Baseline IgG-RBD means were 1.34 BAU/mL. They increased to 3.89 and 5.29 BAU/mL after the 1st and 2nd vaccine dose, respectively. ChadOx-1 had higher antibody titers than CoronaVac (p = 0.002). There were no differences between different VASC. There were 3 cases of COVID-19 after immunization with CoronaVac. BD patients had a tendency for more cutaneous-articular activity following ChadOx-1. There were no severe relapses and no serious adverse events.

Conclusion: Our results show the safety of different SARS-CoV-2 vaccines in VASC population. A progressive increase of IgG-RBD antibodies was observed after each dose. ChadOx-1 led to higher IgG-RBD geometric means compared to CoronaVac. Finally, even though ChadOx-1 presented a tendency of triggering mild disease activity, there were no significant disease activity following vaccination in VASC patients.

Disclosure of Interest: None declared

Keywords: COVID vaccine, Immunization, Vasculitis

PANLAR2023-1330

EVALUATION OF THE PREVALENCE OF PSYCHOLOGICAL DISTURBANCES IN PATIENTS WITH IMMUNE-MEDIATED RHEUMATIC DISEASES AND COVID-19 INFECTION IN AN AMBULATORY SERVICE

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Objectives: COVID-19 is an acute respiratory infection caused by the new coronavirus that has spread around the world, becoming an international public health emergency. Studies have shown a high prevalence of psychiatric symptoms such as depression, anxiety and post-traumatic stress disorder in patients after the infection, a situation that can be even more pronounced in patients with chronic diseases such as Immune-mediated rheumatic diseases (IRMD). The aim of this study is to evaluate the psychological impact of the COVID-19 infection and pandemic on patients with IRMD as well as to describe the epidemiological profile of the selected population.

Methods: A longitudinal cohort observational study was carried out with a comparison group, based on the analysis of data from patients of Project Reumacov, organized by de Brazilian Society of Rheumatology, in Manaus/Amazonas. Data regarding the psychological impact was obtained through the application of DASS-21 forms, which evaluated levels of depression, anxiety and stress. Possible answers were divided into four categories according to the frequency of the symptoms presented, such as Not applicable; Present for a short time; Present for a significant amount of time or Present most of the time.

Results: In total, 283 patients were included in the study. The mean age was 44 years and the majority of the patients were female. The most frequent diagnosis was systemic lupus erythematosus, followed by rheumatoid arthritis. Of the patients included, 270 answered the DASS-21 questionnaire, being 152 in the Case group (patients with COVID-19) and 118 in the Control group (patients without COVID-19). There was a significant statistic correlation between high levels of depression, anxiety and stress and the presence of COVID-19 related symptoms.

Conclusion: Our study demonstrated that high levels of stress, depression and anxiety were associated to the coronavirus infection. It is, however, difficult to determine whether this scenario is a result of a physiological response to the infection or a consequence of the social context of a pandemic. This knowledge may contribute to a better understanding of COVID-19 infection and its repercussions as well as to highlight the necessity of a multidisciplinary approach aimed at the mental health of patients with rheumatic diseases.

Disclosure of Interest: None declared

Keywords: COVID-19, DASS-21, Immune-mediated rheumatic diseases

PANLAR2023-1182

CLINICAL OUTCOME OF SYSTEMIC LUPUS ERYTHEMATOSUS DURING THE COVID-19 OMICRON VARIANT WAVE COMPARED TO PREVIOUS PERIODS: RESULTS FROM A SINGLE CENTER COHORT OF PUERTO RICO

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Objectives: Variant-related differences of SARS-CoV-2 have been reported such as higher transmissibility but less disease severity in omicron sublineages when compared to other variants. Although some studies have examined the outcomes of COVID-19 in systemic lupus erythematosus (SLE), most were conducted during the initial waves. Thus, we sought to compare the clinical outcomes of SLE patients with COVID-19 during the omicron and pre-delta/delta periods.

Methods: A cohort of adults with SLE from a single center in Puerto Rico was studied. SARS CoV-2 infection was confirmed by polymerase chain reaction or antigen tests. The pre-delta/delta variants period was defined as March 2020 to November 2021 and the omicron period as December 2021 to October 2022. Demographic parameters, cumulative SLE manifestations, disease activity, disease damage, lupus treatments, comorbidities, COVID-19 symptoms, SLE exacerbations, and hospitalizations were compared between the study periods using bivariate and multivariate analyses.

Results: Of the entire SLE cohort (n = 347), 151 patients (43.5%) had COVID-19. In those with COVID-19, the mean (SD) age was 46.7 (12.5) years and 96.0% were women. Overall, clinical outcomes were favorable with low rates of hospitalizations (2.6%), lupus flares (3.3%), and mortality (0.7%). In 14.6% of cases, COVID-19 occurred during the pre-delta/delta period and in 85.4% during the omicron wave. Patients that had COVID-19 during the pre-delta/delta period were younger and had a significantly higher proportion of oral ulcers, psychosis, anti-Smith antibodies, coronary artery disease, and chronic kidney disease compared to those during the omicron wave. Among COVID-19 symptoms, runny nose, cough, and sore throat were more common in the omicron period, whereas anosmia and anorexia were more frequent in the pre-delta/delta period. In the multivariable analyses adjusted by age, all variables retained significance except for psychosis, anti-Smith antibodies, and coronary artery disease. No significant differences were observed for other variables.

Conclusion: In this group of Puerto Ricans with SLE, a higher proportion had COVID-19 during the omicron wave compared to previous periods. No differences were seen for severe outcomes such as hospitalizations, lupus flares, and mortality. Furthermore, COVID-19 did not appear to have a negative impact on the short-term clinical outcomes of these patients, regardless of the variant period examined.

Disclosure of Interest: None declared

Keywords: COVID-19, SLE

PANLAR2023-1072

FACTORS RELATED TO THE PRESENCE OF LOW BACK PAIN DURING REMOTE WORK IN THE COVID-19 PANDEMIC IN BRAZIL

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Objectives: With the new needs that the market and the population presented, there was a need to adopt strategies to make the new work environment as safe and comfortable as possible, preserving the health of workers regardless of the work environment. Given this context, it is extremely important that the workers have knowledge about ergonomics and how environmental factors can affect their work capacity and comfort, factors such as ambient light, noise, air flow, temperature, long period in a static position and inappropriate furniture. The aim of the study was to identify the etiology of low back pain during remote work during the COVID-19 pandemic.

Methods: Two questionnaires were applied, one of them developed by the researchers and the other a disability questionnaire (Roland-Morris Disability Questionnaire - RMDQ) in the form of GoogleForms for adults (n = 54) of both sexes, aged over 18 years who were working remotely during the period of the COVID-19 pandemic in Brazil in the year 2021.

Results: With the application of the questionnaires, it was possible to notice an increase in the emergence and worsening of low back pain in individuals who performed remote work during the COVID-19 pandemic; this increase related to factors such as: inadequate furniture at home, excessive number of hours in the sitting position using the computer, decrease in regular physical activities and weight gain.

Conclusion: From the beginning of remote work, during the COVID-19 pandemic, most individuals studied either developed low back pain or had increased low back pain, resulting in mild disability. These data are preliminary in Brazil; in the future, we seek to expand to a larger number of participants, as well as to create strategies and health-promoting actions for low back pain prevention.

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Reference 2: Torres SF, Macedo ACB, Antunes MD, et al. Effects of electroacupuncture frequencies on chronic low back pain in older adults: triple-blind, 12-months protocol for a randomized controlled trial. Trials. 2019;20(1):762 Doi: https://doi.org/10.1186/s13063-019-3813-6

Disclosure of Interest: None declared

Keywords: COVID-19, Low back pain, Pandemic

PANLAR2023-1067

LONG-TERM HYDROXYCHLOROQUINE AND ITS ASSOCIATION WITH COVID-19 INFECTION, A COHORT STUDY FROM A SOUTH AMERICAN HOSPITAL

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Objectives: We aimed at examining whether patients with rheumatological conditions receiving chronic hydroxychloroquine therapy are at a lower risk of developing SARS-CoV-2 infection than those not receiving hydroxychloroquine.

Methods: This historical cohort study included information of all patients aged 18 years or older with rheumatoid arthritis, systemic lupus erythematosus, or associated rheumatological conditions (based on International Classification of Diseases, 10th edition, diagnostic codes). A propensity score was calculated for each patient, and each patient who was receiving hydroxychloroquine was matched to two patients who were not receiving hydroxychloroquine (controls). The primary endpoint was the proportion of patients with PCR-confirmed SARS-CoV-2 infection among those receiving chronic hydroxychloroquine versus the propensity-matched patients not receiving chronic hydroxychloroquine in 2021.

Results: 322 patients receiving hydroxychloroquine and 645 patients not receiving hydroxychloroquine were included in the primary analysis. The incidence of active SARS-CoV-2 infections during the study period did not differ between patients receiving hydroxychloroquine and patients not receiving hydroxychloroquine ([0·3%] vs 78 [0·4%] of 21406; odds ratio 0·79, 95% CI 0·52–1·20, p = 0·27). There were no significant differences in secondary outcomes between the two groups of patients who developed active SARS-CoV-2 infection. For all patients in the study, overall mortality was lower in the hydroxychloroquine group than in the group of patients who did not receive hydroxychloroquine (odds ratio hydroxychloroquine was not associated with the development of active SARS-CoV-2 infection (odds ratio 0·79, 95% CI 0·51–1·42)

Conclusion: Hydroxychloroquine was not associated with a protective effect against SARS-CoV-2 infection in a large group of patients with rheumatological conditions.

Disclosure of Interest: None declared

Keywords: COVID-19, Rheumatic diseases, Risk

PANLAR2023-1299

LYMPHOCYTE POPULATIONS AND AUTOANTIBODIES, IN A COHORT OF PATIENTS WITH RHEUMATOID ARTHRITIS: A LONG-TERM STUDY OF COVID-19 CASES AND NON-COVID-19 CONTROLS

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Objectives: To assess the immunological [Lymphocyte populations (LP) and Autoantibodies (Ab)] and clinical profile of rheumatoid arthritis (RA) patients who suffered from COVID-19 compared with non-COVID-19 RA patients.

Methods: A nested case-control study of RA patients treated under a strict follow-up model. RA patients and confirmed COVID-19 infection (last 24 months) and RA patients without the infection were included. Subgroups of cases: Long COVID (LC): symptoms after infection for ≥4 weeks; Post COVID syndrome (PCS): symptoms for ≥12 weeks; and patients with symptoms <4 weeks. Sociodemographic, clinical, and paraclinical variables of RA and COVID-19 infection (in cases) were captured. Antinuclear antibodies (ANA), anticardiolipin antibodies, lymphocyte populations (BD FACSDuet™ - BD FACSLyric™multiparameter flow cytometry) T cells, B cells, and NK were evaluated. Univariate and bivariate analyzes (STATA 17) were done.

Results: 300 patients were included (148 cases/152 controls; 87.3% women). Median age 59 years (IQR 11). 71.86% were in low disease activity. There were no significant differences in sociodemographic and clinical characteristics between cases and controls. Cases had a time since infection of 18.5 months (IQR 7). Of the total cases, 69% presented LC and 63% PCS. No significant differences were found between cases and controls in the lymphocyte population nor in the antibodies evaluated. There were no differences in the immune profile when comparing patients with LC and PCS with those with symptoms <4 weeks after COVID-19 infection.

Conclusion: No differences were found in the behavior of the immunological profile (independent of symptoms of LC and PCS) in RA patients under strict follow up, evaluated long-term after infection with those who did not have COVID-19. This suggest that patients returned to their baseline homeostatic state, something that has not yet been reported up to now. These results should be replicated in populations with different RA characteristics.

Disclosure of Interest: None declared

Keywords: COVID-19, Rheumatoid arthritis

TABLE. Profile of autoantibodies and lymphocyte populations

Laboratory tests	Total = 300 (n %)	Controls = 152 (n %)	Cases = 148 (n %)	*p* value
ANA	240(80)	126(82.8)	114(77.0)	0.204
Anticardiolipin IgG	21(7)	12(7.8)	9(6.0)	0.538
Anticardiolipin IgM	150(50)	77(50.6)	73(49.3)	0.817
D3+	72.3(11.9)	71.9(11.8)	72.7(11.4)	0.365
aCD3 + CD8+	24.2(11.9)	23.4(12.2)	24.7(11.6)	0.073
aCD3 + CD4+	45.1(12.5)	45.7(12.4)	43.9(13.2)	0.337
aCD3 + CD4 + CD8+	0.76(0.8)	0.76(0.8)	0.74(0.8)	0.506
aCD16 + CD56+	12.64(9)	12.93(8.1)	12.4(9.3)	0.890
aCD19+	12.4(8.8)	12.4(9.2)	12.3(8.4)	0.239

PANLAR2023-1546

SAFETY OF THE VACCINE AGAINST SARS-COV-2 IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS: DATA FROM THE SAFER STUDY

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Objectives: Systemic lupus erythematosus (SLE) is an autoimmune disease which presents infections as one of the most frequent complications, including more severe outcomes of Coronavirus disease 2019 (COVID-19). Immunization of these patients has been strongly recommended, however, data on safety are still scarce. In this study we evaluate the safety after vaccination against SARS-CoV2 in patients with SLE.

Methods: Safety and Efficacy on COVID-19 Vaccine in Rheumatic Disease – the "SAFER" study, is a longitudinal Brazilian multicenter phase IV study. In this study patients with SLE (according to the 2019 ACR/EULAR criteria), older than 18 years who received vaccination against SARS-CoV-2 CoronaVac (Inactivated SARS-CoV-2 Vaccine), ChadOx-1 (AstraZeneca) and BNT162b2 (Pfizer-BioNTech) were included. The evaluation of adverse events (AEs) was done by telephone contact, symptom diaries and a face-to-face visit on the 28th day after each dose. Patients were followed up also by disease activity, assessed using SLEDAI-2 K score.

Results: A total of 367 individuals with SLE were included, 207 received CoronaVac, 128 received ChadOx-1 and 32 received BNT162b2. Ninety percent of the subjects were female with a mean age of 37 years. About 50% (182) of patients were using oral glucocorticoids and azathioprine was the most frequent immunosuppressive therapy. Regarding disease activity parameters, 38% (140) of patients had zero SLEDAI-2 K at baseline and 41% (147) had zero SLEDAI-2 K 28 days after the 2nd dose. After the first and second dose the most frequent AEs were pain at injection site (58%/44%), headache (48%/33%) and pruritus (42%/37%). Comparing the three vaccines, after the first dose, local symptoms, myalgia, and fever were less frequent in patients who received CoronaVac ($p < 0.001$) as well as headache, tiredness ($p = 0.001$) and arthralgia ($p = 0.003$). After the second dose, only local symptoms such as pain at the application site and thickening of the skin around the application site were less frequent in the CoronaVac group ($p < 0.05$). Headache, tiredness, musculoskeletal symptoms and fever were more common in patients receiving AstraZeneca. No serious adverse events were reported regardless of the vaccination schedule used.

Conclusion: This study suggests that vaccines against SARS-COV-2 are safe in SLE patients. Neither severe AEs were reported nor worsening of disease activity were reported. Comparing the different vaccines, CoronaVac had fewer adverse events.

Disclosure of Interest: None declared

Keywords: COVID-19, Systemic Lupus erythematosus, Vaccination

PANLAR2023-1324

IMMUNIZATION AGAINST COVID-19 IN A POPULATION OF PATIENTS WITH RHEUMATOID ARTHRITIS

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Objectives: Immunization against COVID-19 in Paraguay began in February 2021, and patients with rheumatic diseases were the preferred population to get vaccinated. Up to December 2022 the immunization coverage in Paraguay was 59.4%, with at least one vaccine dose. 52.4% accessed the primary immunization schedule (two doses), while 28.6% had at least one booster dose. Only 7.1% received the complete schedule. The aim of this study wasto describe the frequency of vaccination, the number of doses, and the type of vaccines against COVID-19 in Paraguayan patients with Rheumatoid Arthritis (RA).

Methods: Descriptive, cross sectional, observational study, in a Paraguayan cohort of RA patients meeting the 2010 ACR/EULAR criteria, under follow-up in two Rheumatology reference centers, from October to December 2022. A standardized questionnaire according to the variables included (clinical, vaccination, vaccine type, number of doses) was made. Quantitative variables were presented as means and qualitative as frequencies.

Results: 568 patients with RA were included, 84.1% were female, mean age 55.48 ± 13.94 years. The average number vaccinations doses received was 2.54 ± 1.19. 88.7% of patients acquired at least one dose of COVID-19 vaccine, 85% obtained two doses; and, while 60.9% of patients received the first booster, 21.2% had the second one. The table describes the characteristics of the received vaccines.

Conclusion: In this series of Paraguayan RA patients, vaccination against COVID-19 was higher than the general population, perhaps due to priority of patients with rheumatic diseases receiving immunization, and frequent access to medical care with physician's prompting them to receive the vaccine. While over 80% of patients have a complete primary schedule, and more than 60% received the first booster; only 21% have a complete immunization schedule, which is still much higher than the general population of Paraguay.

Disclosure of Interest: None declared

Keywords: immunization, Rheumatoid arthritis, Vaccination

TABLE:.

Vaccine Type against Covid-19	First Dose n: 504	Second Dose n: 483	First Booster n:344	Second Booster n:122
Sputnik V(Gam–COVID-Vac) n(%)	149 (26.2)	137 (24.1)	10 (1.8)	0
Astrazeneca (ChAdOx1nCoV-19) n(%)	172 (30.3)	171 (30.1)	110 (19.4)	68(55.7)
Pfizer (BNT162b2) n(%)	81 (14.3)	80 (14.1)	198 (34.9)	68 (55.7)
Moderna (mRNA-1273) n(%)	41 (7.2)	38 (6.7)	22 (3.9)	18 (14.8)
Hayat Vax n(%)	29 (5.1)	28 (4.9)	1 (0.2)	0
Sinopharm BBIBP n(%)	2 (0.4%)	1 (0.2)	0	0
Covaxin n(%)	28 (4.9)	26 (4.6)	3 (0.5)	0
Corono Vac n(%)	2 (0.4)	2 (0.4)	0	0

PANLAR2023-1477

REASONS FOR NON-ADHERENCE TO RHEUMATOLOGY CONSULTATION IN A TERTIARY CARE HOSPITAL: COVID-19 PANDEMIC CONSEQUENCE?

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Objectives: To determine the leading causes for non-adherence to rheumatology consults in a tertiary care hospital.

Methods: Patients who did not show up for their programmed consult were identified using the rheumatology service database, from January 2021 to July 2022, and they were contacted by telephone to determine reasons for their absence.

Results: During 2021, we identified 2487 patients who did not show for their rheumatology consult. Sixty percent of patients referred that their absence was related to COVID-19 (38% were sick or in contact with a sick relative, and 22% were afraid of getting sick). Meanwhile, 40% mentioned different reasons: 10% have economic problems, and 30% forgot their consult date. On the other hand, during January-July 2022 period, 1529 patients were identified as no shows for their rheumatology consult. Seventy percent of these patients satted that economic problems were the main cause (impossibility to pay for transportation, consultation, requested studies and/or treatment), while 15% said that they forgot about their appointment date, and the other 15% referred to a reason related to the pandemic (mostly, afraid of getting sick with COVID-19).

Conclusion: The COVID-19 pandemic harmed consult adherence in rheumatology. Initially, this problem was caused by pandemic-related issues, however, reasons for these "no shows" have changed, being more recently economic troubles the leading cause, which was induced by the pandemic.

Disclosure of Interest: None declared

Keywords: Adherence, Pandemic, Rheumatology service

PANLAR2023-1528

EVALUATION OF HOMOLOGOUS AND HETEROLOGOUS VACCINE AGAINST SARS-COV-2 IN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS: DATA FROM SAFER STUDY

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on COVID-19 Vaccine in Rheumatic Disease-SAFER Study. *[1]Reumatologia, Escola Paulista de Medicina /UNIFESP, São Paulo, [2]Reumatologia, Serviço de Reumatologia, Hospital de Clínicas de Porto Alegre, Universidade Federal do Rio Grande do Sul., Porto Alegre, [3]Reumatologia, HUCAM-UFES, Vitória, [4]Reumatologia, Universidade Federal do Amazonas, Manaus, [5]Reumatologia, Universidade Federal de Goiás, Goiânia, [6]Reumatologia, Serviço de Reumatologia HC-EBSERH da Univ. Fed. De Minas Gerais, Belo Horizonte, [7]Reumatologia, Universidade Federal de Juiz de Fora, Juiz de Fora, [8]Reumatologia, Serviço de Reumatologia Hospital de Clínicas de Porto Alegre da Universidade Federal do Rio Grande do Sul , Porto Alegre, [9]Instituto Renè Rachou, Fundação Oswaldo Cruz (FIOCRUZ-Minas), Belo Horizonte, Brazil.*

Objectives: To evaluate the immunogenicity of ChAdOx1, Coronavac and BNT162B2 vaccines in SLE patients, including homologous and heterologous immunizations.

Methods: The "Safety and efficacy on COVID-19 Vaccine in Rheumatic Disease-SAFER study" is a Brazilian multicentric longitudinal phase IV study to evaluate COVID-19 Vaccine in immune-mediated rheumatic diseases (IMRD) in real life, started on May 2021. SLE patients (according to the 2012 SLICC classification criteria), older than 18 years of age were recruited after 2 or 3 doses of vaccine against COVID-19 (ChAdOx1, BNT162b2 and CoronaVac) and were evaluated at baseline and on the 28th day after each dose. Homologous immunization was considered if they received three doses of the same vaccine and heterologous if a different one was applied. IgG antibody against SARS-CoV-2 spike receptor-binding domain were measured by chemiluminescence (SARS-CoV-2-IgG-II Quant assay, Abbott-Laboratories) at baseline and 28 days after the first, 2nd and 3rd doses (Seropositivity IgG-Spike≥7.1BAU/mL). Statistical analysis: ANOVA and pairwise comparisons tests

Results: 316 SLE patients were included (255 heterologous and 61 homologous immunization), 89.2% were female and the mean age was 37.6 ± 11.2 years. The two groups were homogeneous regarding demographical data, disease activity and immunosuppressive treatment. 49.7% used corticosteroids (< 5 mg/day in 52.3%), 83.5% antimalarials, 22.8% azathioprine and 20.3% mycophenolate mofetil. 207 patients received the first two doses with CoronaVac, 128 ChadOx-1 and 32 BNT162b2. Regarding the first two doses of the same vaccine, there was no difference in IgG titers over time between CoronaVac or ChadOx-1 ($p = 0.313$). IgG titers increased in all vaccine groups, with difference only after 2nd dose: 4.96 ± 1.71BAU/mL CoronaVac *vs.* 6.00 ± 1.99BAU/mL ChadOx-1 *vs.* 7.31 ± 1.49BAU/mL BNT162b2 ($p < 0.001$). There was no difference in IgG titers over time between homologous or heterologous vaccine schedule ($p = 0.872$). IgG titers also increased in all groups, with difference only after 2nd dose: 5.49 ± 1.96BAU/mL heterologous *vs.* 6.30 ± 2.10BAU/mL homologous ($p = 0.009$).

Conclusion: Induction of immunogenicity occurred in different vaccine regimens in SLE patients. Future research to explore different heterologous schemes in IMRD must be performed.

Disclosure of Interest: None declared

Keywords: COVID-19, SLE, Vaccine

PANLAR2023-1404

ASSOCIATION BETWEEN COVID-19 AND FATIGUE IN PATIENTS WITH IMMUNE-MEDIATED RHEUMATIC DISEASES IN AN OUTPATIENT SERVICE

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Objectives: Patients with immune-mediated rheumatic diseases (IMRD) constitute an important subgroup of immunosuppressed patients at risk of developing severe infections. Since coronavirus 19 infection (COVID-19) is an international public health emergency, it is necessary to observe the relationship between this viral infection and the development or intensification of the clinical course of IMRD and the persistence of new associated symptoms. The aim of this study is to trace this population's epidemiological profile and evaluate the frequency of chronic fatigue syndrome in patients with IMRD and COVID-19 compared to uninfected patients.

Methods: This is a descriptive cross-sectional observational study with a comparison group. The sociodemographic, clinical, and FACIT-F Fatigue Scale data were from patients with IMRD of Project Reumacov, organized by the Brazilian Society of Rheumatology, locally in Manaus/Amazonas. The statistical analysis was performed through the inferential method to demonstrate the prevalence.

Results: 268 patients were evaluated, those who had contact with COVID-19 had fatigue according with the fatigue assessment scale compared to unexposed patients. There was a statistically significant correlation between fatigue post-COVID-19 infection in the patients studied.

Conclusion: Clinically relevant fatigue was a prevalent and commonly reported symptom in the post-COVID-19 period in the evaluated population. These data should direct attention to the reported manifestations as they affect the functioning of individuals' socioeconomic and health well-being throughout the pandemic period and beyond.

Disclosure of Interest: None declared

Keywords: COVID-19, FACIT-F, Rheumatic diseases

PANLAR2023-1216

PATIENTS WITH AXIAL SPONDYLOARTHRITIS HAVE BETTER SARS-COV-2 OUTCOMES COMPARED WITH PATIENTS WITH RHEUMATOID ARTHRITIS: DATA FROM THE NATIONAL SAR-COVID REGISTRY

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Objectives: To assess the severity of SARS-CoV-2 infection in patients with axSpA from the SAR-COVID registry, comparing them with patients with rheumatoid arthritis (RA), and to determine the factors associated with poor outcomes and death.

Methods: Patients ≥18 years of age from the SAR-COVID national registry with diagnosis of axSpA (2009 ASAS criteria) and RA (2010 ACR/EULAR criteria) who had confirmed SARS-CoV-2 infection (RT-PCR or positive serology), recruited from August 2020 to June 2022 were included. Sociodemographic and clinical data, comorbidities, treatment and outcomes of the infection were collected. Infection severity was assessed using the WHO-ordinal scale (WHO-OS): ambulatory (1), mild hospitalizations (2.3 y 4), severe hospitalizations (5.6 y 7) and death (8).

Results: A total of 1226 patients were included, 59 (4.8%) with axSpA and 1167 (95.2%) with RA. RA patients were significantly older, more frequently female, and had a longer disease duration. 43.9 % presented comorbidities. t the time of SARS-Cov-2 diagnosis, patients with RA used glucocorticoids and conventional DMARDs more frequently than those with axSpA, while 74.6% of the latter were under treatment with biological DMARDs being anti-TNF the most used (61%). 94.9 % of the patients in both groups reported symptoms related to SARS-CoV-2 infection.

During the SARS-CoV-2 infection, 6.8% and 23.5% of the patients with axSpA and RA were hospitalized, respectively. All the patients with axSpA were admitted to the general ward, while 26.6% of those with RA were admitted to the intensive care units. No patient with axSpA had complications or severe COVID-19 (WHO-OS> = 5) or died as a result of the infection while mortality in the RA group was 3.3% (Figure 1).

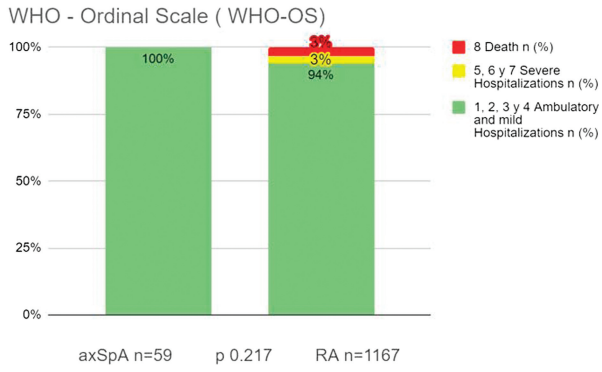
In the multivariate analysis adjusted for poor prognosis factors, no association was found between the diagnosis of axSpA and severity of SARS-CoV-2 infection assessed with the WHO-OS (OR -0.18, IC 95%(-0.38, 0.01, $p = 0.074$).

Conclusion: Patients with axSpA did not present complications from SARS-CoV-2 infections and none of them died due COVID-19.

Reference 1: 1. World Health Organization coronavirus disease (COVID-19) Therapeutic Trial Synopsis Draft 2020. https://cdn.who.int/media/docs/default-source/blue-print/covid-19-therapeutic-trial-synopsis.pdf?sfvrsn=44b83344_1&download=true

Disclosure of Interest: A. Bravo Grant / Research support with: SAR-COVID is a multi-sponsor registry, where Pzifer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or influenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., T. Barbich Grant / Research support with: SAR-COVID is a multi-sponsor registry, where Pzifer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or influenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., C. Isnardi Grant / Research support with: SAR-COVID is a multi-sponsor registry, where Pzifer, Abbvie, and Elea

Figure 1. Outcomes and severity of SARS-CoV-2 infection in patients with axSpA and RA.



Phoenix provided unrestricted grants. None of them participated or influenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., E. Schneeberger Grant / Research support with: SAR-COVID is a multi-sponsor registry, where Pzifer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or influenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., G. Citera Grant / Research support with: SAR-COVID is a multi-sponsor registry, where Pzifer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or influenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., R. Quintana Grant / Research support with: SAR-COVID is a multi-sponsor registry, where Pzifer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or influenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., C. Pisoni Grant / Research support with: SAR-COVID is a multi-sponsor registry, where Pzifer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or influenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., G. Gomez Grant / Research support with: SAR-COVID is a multi-sponsor registry, where Pzifer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or influenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., K. Roberts Grant / Research support with: SAR-COVID is a multi-sponsor registry, where Pzifer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or influenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., G. J. Pons-Estel Grant / Research support with: SAR-COVID is a multi-sponsor registry, where Pzifer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or influenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database.

Keywords: COVID-19

PANLAR2023-1549

CASES OF COVID-19 IN PATIENTS WITH IMMUNE-MEDIATED RHEUMATIC DISEASES AFTER VACCINATION AGAINST SARS-COV-2 IN MANAUS - AMAZON

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Objectives: Immunization against SARS-CoV-2 is an effective strategy to reduce morbidity and mortality in the face of the COVID-19 pandemic. People with Immune-mediated Rheumatic Diseases (IMRD) also benefited from this campaign. However, there is a limited amount of data on the outcome of vaccination in these patients, in terms of those who were infected by the virus. This study had the objective to evaluate the rate of COVID-19 cases in patients with IMRD after vaccination against SARS-CoV-2.

Methods: Observational, longitudinal and ambidirectional study with follow-up of subgroups of patients with IMRD immunized with vaccines made available by the National Immunization Plan (inactivated adsorbed vaccine registered by the Instituto Butantan (IB), recombinant vaccines registered by BioManguinhos/Fiocruz and by Janssen, and Pfizer/BioNTech). Sociodemographic data and questionnaires on flu syndrome, laboratory confirmation of infection and need for hospitalization and outcomes were collected and stored via an online platform. This study is associated to the SAFER Project from the Brazilian Society of Rheumatology and it was approved by the local Research Ethics Committee.

Results: A total of 223 patients aged over 18 years, mean age 42.79 ± 15.18 years, were included. All were within the inclusion/exclusion criteria, with 83% being female. The main IMRD included were systemic lupus erythematosus (39%) and rheumatoid arthritis (33.6%). After the 1st dose, 1.45% of patients had COVID-19, 50% sought health services (emergency care), without the need for hospitalization and after the 2nd dose, 1.5% had the disease, of which none sought health services, required hospitalization or had a negative outcome. After the 3rd dose,: 2.9% were infected with SARS-CoV-2 one month later, 15.6% two to three months later and 5.5% four to six months later, all with laboratory confirmation; only 4% presenting any serious complication; there were no deaths. After the 4th dose, 9.1% of patients had COVID-19, of which 40% were hospitalized, without the need for assisted ventilation; half of these patients had a serious complication, but there no deaths.

Conclusion: In this study, we observed the effectiveness of the vaccine in preventing severe cases of COVID-19 and complications of SARS-CoV-2 infection.

Disclosure of Interest: None declared

Keywords: COVID-19, COVID-19 Vaccines, Rheumatic diseases

PANLAR2023-1485

COVID 19 IN PATIENTS WITH RHEUMATIC DISEASES

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Objectives: BIOBADAGUAY is the Paraguayan/Uruguayan registry of adverse events in patients with inflammatory rheumatic conditions under biologic therapy (BT). Three years have elapsed from the first case of coronavirus and data about South American patients with COVID are still scarce. In this study we analyzed the frequency and clinical outcomes of COVID-19 in a cohort of patients with rheumatic diseases from Paraguay.

Methods: A cross sectional study of Paraguayan patients with rheumatic diseases from BIOBADAGUAY and controls without BT. Clinical, epidemiological, and COVID-19 data were analyzed. Only cases confirmed by SARS-CoV-2 positive PCR test were included. Descriptive analysis were performed for this study.

Results: 832 patients were included (696 under BT and 136 controls). 116 (13.9%) had COVID-19. 22 had a second infection and 9 a third reinfection. Table 1 shows characteristic of COVID-19 patients. The most frequent diagnosis was rheumatoid arthritis (n = 93, 80.2%) followed by ankylosing spondylitis (n = 6, 5.2%), undifferentiated spondylarthritis (n = 5, 4.3%), psoriatic arthritis (n = 4, 3.4%), juvenile onset arthritis (n = 2, 1.7%), vasculitis (n = 2, 1.7%). Only 1 case (0.8%) were registered for Still's disease, enteropathic spondylarthritis, systemic sclerosis and seronegative polyarthritis, respectively.

When comorbidities were analyzed, 46 (39.6%) patients had at least one (Table 1). Of the total treatments received: 65 (56.0%) had methotrexate, 53 (45.7%) leflunomide, 3 (2.5%) sulfasalazine, 15 (12.9%) hydroxychloroquine, 25 (21.5%) glucocorticoid, 52 (44.8%) anti-TNF and 20 (17.2%) non-anti-TNF. COVID-19 severity outcomes were: 101(87%) non severe, 31 (26.7%) severe and 1 fatal(0.8%). 189 (90.9%) patients received vaccination and the mean number of doses were 2.5 doses. 55 (26.4%) had COVID prior to vaccination

Conclusion: In this study we examined the frequency of COVID-19 in Paraguayan patients with rheumatic diseases. In this cohort of rheumatologic patients, COVID 19 severity was similar to the one in the general population.

Disclosure of Interest: P. De Abreu Trigueros Grant / Research support with: Casa Boller-Roche, E. Leiva Grant / Research support with: Casa Boller-Roche, S. Cabrera Villalba Grant / Research support with: Casa Boller-Roche, P. Pusineri Grant / Research support with: Casa Boller-Roche, A. Amarilla Grant / Research support with: Casa Boller-Roche, M. Zarza Grant / Research support with: Casa Boller-Roche, P. Melgarejo Grant / Research support with: Casa Boller-Roche, L. Roman Grant / Research support with: Casa Boller-Roche, Z. Morel Ayala Grant / Research support with: Casa Boller-Roche, G. Ávila Pedretti Grant / Research support with: Casa Boller-Roche

Keywords: COVID-19., Rheumatic diseases, Vaccination

TABLE 1. Baseline characteristics at the time of COVID-19 onset.

Demographic (n = 116)	
Mean age, mean (SD)	52.5(14.5)
Female, n (%)	91 (78.4)
Comorbilities, n(%)	46 (39.6)
Hypertension, n(%)	27 (23.3)
Diabetes, n(%)	6 (5.2)
Lung disease, n (%)	1 (0.8)
Dyslipidemia, n (%)	3 (2.5)
Cancer, n (%)	2 (1.7)
Obesity, n (%)	23 (19.8)
Smoking, n (%)	5 (4.3)

PANLAR2023-1545

EVALUATION OF DISEASE ACTIVITY IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS IN FOLLOW-UP AT A UNIVERSITY HOSPITAL IN MANAUS AFTER VACCINATION AGAINST COVID-19

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Objectives: Patients with Systemic Lupus Erythematosus (SLE) are predisposed to serious infections due to immunocompromise, comorbidities, immunomodulatory and/or immunosuppressive therapy, as well as the lack of these medications faced by patients dependent on the *Sistema Único de Saúde* (SUS) during the COVID-19 pandemic. Studies revealed a low risk of worsening disease activity after vaccination against SARS-CoV-2 and safety in the continuity of immunomodulatory therapy during the vaccination stages. Thus, immunization against COVID-19 is an important pillar in reducing morbidity and mortality related to infectious conditions and SLE. This study had the objective to understand the disease activity in SLE patients after vaccination against COVID-19.

Methods: This is an observational, longitudinal, ambidirectional study with follow-up of subgroups of patients with immune-mediated rheumatic diseases immunized with vaccines made available by the *Programa Nacional de Imunização* (Butantan Institute, Pfizer/BioNTech, BioManguinhos/Fiocruz and Janssen). Data from the SLE disease activity index 2000 (SLEDAI-2 K) and sociodemographic data were collected and stored via an online platform, with a comparison of the index before and after each dose. This study was approved by the local Research Ethics Committee, and it is associated to the SAFER Project from Brazilian Society of Rheumatology.

Results: A total of 223 patients were included, of which 83% were female and 39% had SLE, 36.7 ± 11.76 years old. Regarding the disease activity, at inclusion the mean PGA score(SD) was 2,61 ± 2,77. After the 1st dose it was 1.38 ± 2.17, after the 2nd dose it was 2,35 ± 2,99, after the 3rd dose it was 2,19 ± 2,58 and after the 4th dose 1.18 ± 1.88. The mean SLEDAI-2 K score at inclusion was 7,27 ± 9,70, after the 1st dose it was 2,75 ± 5,29, after the 2nd dose it was 4,73 ± 6,40, after the 3rd dose 3,33 ± 5,51 and after the 4th dose 2.12 ± 4.27. 6% of the patients referred worsening disease activity after the 1st dose, 14,3% after the 2nd dose, and no patient reported worsening of disease activity after the 3rd and 4th doses.

Conclusion: Vaccination did not contribute to worsening disease activity of the SLE patientss studied, according to the indices used to assess disease activity.

Disclosure of Interest: None declared

Keywords: COVID-19 Vaccines, Systemic Lupus Erythematosus, SLEDAI 2 K

PANLAR2023-1088

RESULTS OF EDUCATION CAMPAIGN ¿RHEUMA WHO ARE YOU? OVER SEVEN CONSECUTIVE YEARS IN SUCRE CITY

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Objectives: To determine the knowledge of the population of Sucre about rheumatic diseases through the Education Campaign ¿Rheuma Who are you? using a survey.

Methods: The survey had been implemented as a tool of the educational process for the general population in the city of Sucre (Bolivia). 7161 surveys were applied in the seven years of the educational campaign ¿Rheuma, who are you? and the answers obtained were weighted considering variables such as sex, age, level of education and the answers to six questions about the nature of the rheumatic disease, childhood occurrence, possibility of deformity, extra-articular involvement and attitude towards rheumatic disease

Results: Most of the population was between 18 and 50 years of age and belonged to the female sex. Most of them have had university studies and higher education. In the first question, 42.9% of them answered to know the existence of several rheumatic diseases. In the second question, 75% answered that rheumatic diseases affect children and young people. In the third question 42% of population answered that rheumatic diseases affect other organs. In the fourth question most people answered to know the possibility of deformity and disability caused by the rheumatic diseases (86.3%). Regarding the fifth question about the attitude they take when affected by bone, muscle and joint pain, 64.1% said they go to the doctor, 17.9% go to the pharmacy, 10.6% endure it and 8.1% take natural medicines. Finally, in the sixth question about the type of professional they would go to when suffering from a rheumatic disease, 42.8% chose to go to the internist, 35% to the rheumatologist, 13.1% to the orthopedic surgeon 3.6% to the naturist and 5.4% to another type of professional. There were few differences in the answers of men and women and when comparing the answers according to the levels of education it was found that the groups with university studies and higher education were the ones that answered correctly, more frequently

Conclusion: Although most people know the nature of rheumatic diseases, their severity and the disability they can cause, there is still a significant proportion of the population that is unaware of them. And there is also a significant proportion of the population that instead of going to the doctor take other strategies to address their problems.. We believe in the relevance of these campaigns and the intervention of the health professionals in raising public awareness, looking for changing the options people take to the ones that are healthier.

Disclosure of Interest: None declared

Keywords: Education, rheumatism, survey

PANLAR2023-1467

DIFFERENCES IN JAKI INDICATIONS IN PATIENTS WITH RHEUMATOID ARTHRITIS TREATED IN BRAZIL VS THE REST OF LATIN AMERICAN: PRELIMINARY RESULTS OF AN INTERNATIONAL, REAL-WORLD LIFE PANLAR´S REGISTER

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Objectives: To evaluate differences in Janus kinase inhibitors (JAKi) prescriptions in patients with rheumatoid arthritis treated in Brazil vs the rest of Latin American (LA).

Methods: Clinical, demographic and treatment data from the real-world life PANLAR´s register of consecutive patients diagnosed with RA (2010 ACR-EULAR) from Dec 2021 to Dec 2022 were examined. Patients treated with JAKi were stratified by place of prescription. We performed descriptive statistic to summarize patients characteristics. Different comparisons were made using parametric and non-parametric tests for continuous variables and X^2test for categorical variables. A p value ≤0.05 was considered significant.

Results: 319 patients were included (53.9% Brazil). Patients' characteristics are summarized in the table. Brazilian patients treated with JAKi had longer disease duration ($p < 0.00001$), concomitant glucocorticoid use ($p = 0.015$) and previous bDMARD failure ($p < 0.00001$) than patients in the rest of LA. Differences in special interest comorbidities, antibodies or disease activity were not found.

Conclusion: In Brazil JAKi were more commonly prescribed in patients with longer disease duration and mainly after bDMARDs failure.

Disclosure of Interest: N. M. Marin Zucaro: None Declared, M. L. Brance: None Declared, F. Gilda: None Declared, D. G. Fernández Avila Consultant with: Abbvie, Bristol Myers-Squibb, Elli-Lilly, Fresenius kabi, Janssen, Novartis, Pfizer., E. R. Soriano Grant / Research support with: Abbvie, Amgen, Bristol Myers-Squibb, Janssen, Elli-Lilly, Novartis, Pfizer, Roche, Sandoz, UCB., Consultant with: Abbvie, Amgen, Bristol Myers-Squibb, Janssen, Elli-Lilly, Novartis, Pfizer, Roche, Sandoz, UCB., Speakers Bureau with: Abbvie, Amgen, Bristol Myers-Squibb, Janssen, Elli-Lilly, Novartis, Pfizer, Roche, Sandoz, UCB.

Keywords: Janus kinase inhibitors, Real world data, Registry

TABLE:. Characteristics of patients treated with JAKi by region

	Brazil (n = 172)	Rest of LA (n = 147)	*p* value
Female,n, % (95%CI)	162,94.2% (89.5-96.8)	133,90.5% (84.5-94.3)	NS
Age at initial treatment, years, median (IQR)	56.2 (46.8-61.7)	56 (43.6-64.9)	NS
Time since arthritis diagnosis, years, median(IQR)	11.3 (6.1-18.9)	4.9 (1.9-10.5)	0.0001
Age > 65 years, n, % (95%CI)	30,17.4% (12.4-23.9)	35,24.6% (18.2-32.4)	NS
Concomitant GC, n, % (95%CI)	130,76% (67.6-80.7)	86,58.5% (50.3-66.2)	0.015
Concomitant cDMARD, n, % (95%CI)	127,74.3% (69.5-82.3)	112,76.2% (68.5-82.4)	NS
At least 1 cDMARD failure, n, % (95%CI)	166,96.5 (92.4-98.4)	141,97.9 (93.7-99.3)	NS
N° of cDMARDs failure, median (IQR)	2(2-3)	2(1.5-3)	NS
At least 1 bDMARD failure, n, % (95%CI)	132,76.7% (69.8-82,5)	66,44.9% (36.9-53)	<0.0001
TNFi, n, % (95%CI)	122,70.1% (63.6-77.2)	51,34.7% (27.4-42.7)	<0.0001
CD80-86i, n, % (95%CI)	52,30.2% (23.8-37.5)	4,2.7% (1-7)	<0.0001
N° of bDMARDs failure, median (IQR)	2(1-3)	1(1-2)	NS
JAKi failure, n, % (95%CI)	22,12.8% (0.8-18.7)	5,3.4% (1.4-7.9)	NS
Extraarticular disease, n, % (95%CI)	22,13.3% (8.9-19.4)	33,23.4% (17.1-31.2)	NS
Bone erosion, n, %(95%CI)	89,53.3% (45.6-60.8)	78,55.3% (46.9-63.3)	NS
HAQ, mean (SD)	1.3(0.8)	1.1(0.63)	NS

LA: Latin America; IQR: Interquartile range: SD: Standard deviation: CI: Confidence interval: NS: non-significant.

PANLAR2023-1210

PRELIMINARY DATA OF THE REAL WORLD PANLAR'S LATIN AMERICAN REGISTER OF TREATMENTS IN RHEUMATOID ARTHRITIS, PSORIATIC ARTHRITIS, AND AXIAL SPONDYLARTHRITIS

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Objectives: To evaluate the characteristics of treatments used by Latin American patients with inflammatory rheumatic diseases according to disease type.

Methods: Data were obtained from the real-world PANRED register of consecutive patients diagnosed with RA, PsA and axSpA from Dec 2021 to Dec 2022. Categorical variables are expressed as % and contingency tables were analyzed with χ^2 or Fisher tests. A p value ≤0.05 was considered significant.

Results: 708 patients were included. RA was the most frequent disease. Treatments are listed in the table. Treatments in other diseases (0.8%) are not shown. Generic copies or biosimilars were rarely used: generic tofacitinib: 3,15%, TNFi biosimilars 8,5 %. Methotrexate was the most frequent cDMARD prescribed (77% RA, 100% PsA), followed by leflunomide, sulfasalazine and hydroxychloroquine. Concomitant glucocorticoids (GC)were prescribed in 63.4%, 67.7%, 31.3% 18.9% and 66.7% of the entire population, RA, PsA, and axSpA, respectively. Adverse events were reported in 9.2% of the total population. Of these 3.28% were in patients receiving JAKki treatment, 11.39% bDMARDs, and 7.6% cDMARDs. No differences were found in the % of adverse events among treatments (JAKi vs bDMARD, $p = 0.06$).

Conclusion: Generic copies and biosimilars are rarely used while GC and cDMARD are frequently concomitant drugs used in rheumatic patients in Latin America. Among other therapies JAKi and TNFi are the most frequent prescriptions.

Disclosure of Interest: N. M. Marin Zucaro: None Declared, M. L. Brance: None Declared, F. Gilda: None Declared, D. G. Fernández Avila Consultant with: Abbvie, Bristol Myers-Squibb, Elli-Lilly, Fresenius kabi, Janssen, Novartis, Pfizer., E. R. Soriano Grant / Research support with: Abbvie, Amgen, Bristol Myers-Squibb, Janssen, Elli-Lilly, Novartis, Pfizer, Roche, Sandoz, UCB., Consultant with: Abbvie, Amgen, Bristol Myers-Squibb, Janssen, Elli-Lilly, Novartis, Pfizer, Roche, Sandoz, UCB., Speakers Bureau with: Abbvie, Amgen, Bristol Myers-Squibb, Janssen, Elli-Lilly, Novartis, Pfizer, Roche, Sandoz, UCB.

Keywords: Real world data, Registry, Treatment

TABLE:. Treatment Characteristics in Latin American

	Total, n = 708	RA, n = 632 (89.3%)	PsA, n = 32 (4.5%)	axSpA, n = 38 (5.4%)
Female (%)	83.9%	87.8%	50%	47.4%
Age at diagnosis, (years). Median (IQR)	44.6 (35.3-55.67)	44.9 (35.3-56.2)	43.8 (37.4-48.9)	42.5 (35.4-48.7)
Age at initial treatment, (years).Median (IQR)	53.6 (43.4-62.9)	55.3 (44.3-63.99)	46.9 (43.8-54.8)	37.1 (30.1-47.1)
JAKi (%)	47.5%	50.3%	28.1%	13.2%
-Upadacitinib	35.8%	37.5%	11.1%	0
-Tofacitinib	35.5%	33.4%	66.7%	100%
-Baricitinib	28.7%	29%	22.2%	0
bDMARDs (%)	33.9%	30.1%	69.6%	96.9%
-TNFi	59,16%	53.68%	81.5%	80.6%
cDMARDs (%)	18.5%	19.5%	30.4%	2.63%
First treatment	23.5%	21.6%	37.5%	45.9%
2° treatment	24.1%	22.5%	43.8%	29.7%
3° treatment	16.7%	17.6%	9.4%	10.8%
4° treatment	12.1%	13.1%	0	8.1%
> 4	23.5%	25.2%	9.4%	5.4%
Previous cDMARD failure	76.5%	78.4%	62.5%	18.6%
Prevoius bDMARD failure	43.2%	45%	28.1%	27%
Previous Jaki failure	7.1%	8%	0	0
Concomitant cDMARD	67.5%	67.7%	56.3%	18.9%

EPIDEMIOLOGY

PANLAR2023-1475

VACCINATION IN PATIENTS WITH INFLAMMATORY RHEUMATIC DISEASES: PRELIMINARY RESULTS OF AN INTERNATIONAL, REAL-WORLD LIFE PANLAR´S REGISTER

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Objectives: To evaluate vaccination among patients with inflammatory rheumatic diseases initiating disease-modifying antirheumatic drugs (DMARD)

Methods: Data from the real-world life PANLAR´s register of consecutive patients diagnosed with RA, PsA, and axSpa (2010 ACR-EULAR /2006 CASPAR -2009 ASAS) from Dec 2021 to Dec 2022 were analyzed. Prevalence of recommended vaccinations were compared between different inflammatory rheumatic diseases. Categorical variables were expressed as %. Tables were analyzed with χ^2 or Fisher tests, continuous variables (median, IQR) with the Kruskal-Wallis test, according with the variables type. A p value ≤0.05 was considered significant.

Results: 608 patients were included. Among patients with rheumatoid arthritis (RA), psoriatic arthritis (PsA), and axial Spondyloarthritis (axSpA) are presented in the table. RA and axSpA seemed to have lower vaccination rate of pneumococcal vaccines than PsA. (p = 0.045 for conjugate anti pneumococcal vaccine in RA vs PsA). A large percentage of the population was vaccinated against COVID-19. There was a high rate of influenza vaccination in all three diseases.

Conclusion: In Latin America, anti-pneumococcal vaccination is low, especially in patients with RA and axSpA. For other vaccines there was an acceptable level of vaccination without differences between diseases.

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Keywords: Real world data, Registry, Vaccines

TABLE:. Vaccination rate in RA, PsA and axSpa Latin American patients

	RA n = 540	PsA n = 32	axSpA n = 36
Vaccination, n (%)			
Pneumococcal conjugate vaccine	243(45.4)	22(68.8)	16(44.4)
Pneumococcal non conjugate vaccine	254(47.2)	21(65.6)	14(38.9)
Influenza vaccine	400(73.8)	22(68.8)	25(69.4)
Hepatitis B vaccine	360(66.8)	23(71.8)	29(80.5)
Tetanus vaccine	397(74.3)	23(71.8)	30(85.7)
COVID-19 vaccine	523(95.1)	29(90.6)	31(86.1)
Herpes zoster vaccine	4(0.73)	0	0

PANLAR2023-1408

PULMONARY MANIFESTATIONS IN SJOGREN'S SYNDROME AND ASSOCIATED FACTORS

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Objectives: Sjogren's syndrome (SS) is a chronic autoimmune disease characterized by inflammation of the exocrine glands; airway disease and lung involvement may be present in these patients and has been reported in up to half of the patients with SS. In Colombia we do not know prevalence of SS. The aim of this study is to describe the prevalence of pulmonary manifestations in a cohort of patients with Sjogren's syndrome and to analyze the associated factors.

Methods: An observational cross-sectional study was carried out that included 288 patients (medical reports) with SS according to 2016 ACR/EULAR criteria who were treated at an institution specialized in rheumatology between 2010 and 2022 in Colombia. Pulmonary manifestations were defined as respiratory symptoms plus abnormalities on pulmonary function tests or chest CT scans. Univariate analyses were performed to describe the sociodemographic, immunological, clinical, and therapeutic characteristics of the population. Bivariate analysis was performed using the Chi-square test for nominal variables. Multivariate analysis was performed using binary logistic regression with variables with a value of p < 0.2 in the bivariate analysis entering the model.

Results: 288 patients were analyzed. Female sex (95.9%); median disease duration of 2.0 years (IQR = 4.2), 5.2% with secondary SS. 10 patients (3.5%) with pulmonary manifestation, four of them with pulmonary fibrosis. The factors associated with the presence of manifestations are described in Table 1. A multivariate analysis was performed where the presence of positive ANAs (OR: 7.9 (95% CI: 1.6-38.8) p:0.011) and female sex (0.1 (95% CI: 0.1-0.4) p:0.002)) were independently associated with pulmonary manifestations.

Conclusion: The presence of pulmonary manifestations was low in our cohort, compared to other populations, possibly due to the diagnostic criteria used. We found female gender to be a protective factor for the presence of pulmonary manifestations in patients with SS, similar to what has been documented in the literature. Additionally, there was evidence that the presence of high ANA titers was associated with pulmonary compromise but given the type of study, this requires confirmation.

Disclosure of Interest: None declared

Keywords: Clinical manifestations, Lung, Sjogren's syndrome

TABLE 1. Factors associated with the presence of pulmonary manifestations in patients with Sjogren's syndrome

Pulmonary manifestations	Absent (n:278)		Present (n:10)		
Variable	n	%	n	%	*p* value
Female sex	270	97.1	7	70.0	<0,001
Anti-Ro	166	61.0	10	100.0	0,008
ANA >1280	33	17.0	5	62.5	0,007

ANA: Antinuclear antibodies

PANLAR2023-1410

CUTANEOUS MANIFESTATIONS IN SJOGREN'S SYNDROME AND ASSOCIATED FACTORS

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Objectives: Sjogren's syndrome (SS) is a chronic autoimmune disease that affects the exocrine glands. Patients also develop extraglandular manifestations of the disease; cutaneous manifestations are part of these extraglandular manifestations. The aim of this study was to describe the prevalence of skin manifestations in a cohort of patients with SS in Colombia and associated factors.

Methods: Observational cross-sectional study was carried out, included 288 patients with SS according to the 2016 ACR/EULAR criteria treated at a Colombian institution specialized in rheumatology between 2010 and 2022.. The skin manifestations were documented based on the diagnosis made by a specialist in rheumatology or dermatology with or without biopsy. Univariate analyses were performed to describe the characteristics of the population. Bivariate analysis was performed using the Chi-square test or Fisher's exact test for nominal variables. The multivariate analysis was performed using binary logistic regression with variables with a value of p < 0.2 in the bivariate analysis. The characteristics of these patients were obtained from medical reports.

Results: 288 patients were examined, of whom 95.85% were women; with a median disease duration of 2.0 years (IQR = 4.2), 94.8% with primary SS and 9 patients (3.1%) patients with cutaneous manifestation; The main manifestations were limited cutaneous vasculitis (55.6%), xeroderma (22.2%), purpura pigmentosa (11.1%), and lichen simplex (11.1%). The factors associated with the presence of manifestations are described in Table 1. When performing the multivariate analysis, the presence of positive rheumatoid factor (OR: 5.2

(95% CI: 1.1-26.5) p:0.047) and arthritis (OR 8.3 (95% CI: 1.7 to 41.3) p:0.01) were documented as independently associated variables.

Conclusion: The presence of skin manifestations is low in our cohort compared to other populations. This study shows that the presence of rheumatoid factor and arthritis are associated with skin involvement as an extraglandular manifestation, which supports an immune-mediated inflammatory origin.

Disclosure of Interest: None declared

Keywords: Clinical manifestations, Cutaneous lesions, Sjogren's syndrome

TABLE 1.. Associated factors of cutaneous manifestations in Sjogren syndrome

Cutaneous manifestations	Absent (n:278)		Present (n:10)		
	n	%	n	%	*p* value
Female sex	268	96.1	9	100.0	0,701
Rheumatoid factor, positive	75	32.5	6	66.7	0,042
Low complement C4	11	4.6	4	44.4	0,001+
Corticosteroids therapy	97	34.5	6	66.7	0,047
Non-biological immunomodulator	131	46.6	9	100.0	0,001
PNS manifestations	7	2.5	2	22.2	0,028+
Present of arthritis	49	17.4	5	55.6	0,013

PNS: Peripheral nervous system
+Analyzed with Fisher's exact test

PANLAR2023-1110

PREVALENCE OF KINESIOPHOBIA IN ELDERLY BRAZILIANS WITH CHRONIC LOW BACK PAIN: PRELIMINARY STUDY

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Objectives: To verify the prevalence of kinesiophobia in elderly Brazilians with chronic low back pain.

Methods: This is a cross-sectional study of 82 elderly residents in Brazil with chronic low back pain. The Tampa Scale of kinesiophobia was used, which presents a final score of 17 to 68 points, with scores greater than 37 indicating a high degree of kinesiophobia. Data were analyzed using descriptive statistics.

Results: The mean age was 67.79 ± 5.98 years and the majority of the subjects (78%) were female. An average of 42 ± 7.95 points was observed on the Tampa Scale of Kinesiophobia, with 79% of participants being classified as kinesiophobic.

Conclusion: Most participants had kinesiophobia, which could lead to inactivity and reduced mobility. It is suggested that health promotion strategies be carried out to reduce the levels of kinesiophobia, and consequently improve pain and functional disability.

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Disclosure of Interest: None declared

Keywords: Aged, Fear, Low back pain

PANLAR2023-1459

CLINICAL CHARACTERISTICS ACCORDING TO EPIDEMIOLOGICAL, SOCIAL AND COMORBIDITIES DISPARITIES AMONG PATIENTS WITH INFLAMMATORY RHEUMATIC DISEASES: PRELIMINARY RESULTS OF AN INTERNATIONAL, REAL-WORLD LIFE PANLAR´S REGISTER

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Objectives: To evaluate the epidemiological, social and comorbidities disparities among patients with inflammatory rheumatic diseases

Methods: Demographic, social and comorbidities data from the real-world life PANLAR´s register of consecutive patients diagnosed with RA, PsA, and axSpA (2010 ACR-EULAR 2010/2006 CASPAR-2009 ASAS) from Dec 2021 to Dec 2022 were compared between diseases. Categorical variables were expressed as %. Tables were analyzed with χ^2or Fisher tests, continuous variables (median, IQR) with Kruskal-Wallis test according to the distribution of the variables. A p value ≤0.05 was considered significant.

Results: 702 patients were included. Results forthe entire population is presented in the table. Patients with RA were significantly less frequently in active work status and had a lower prevalence of private insurance. Patients with axSpA seemed to have lower prevalence of comorbidities, although this difference was not statistically significant.

Conclusion: White ethnicity represents less than half of the Latin American population. There are some social differences among patients with different inflammatory diseases in Latin America.

Disclosure of Interest: M. L. Brance: None Declared, N. M. Marin Zucaro: None Declared, F. Gilda: None Declared, D. G. Fernández Avila Consultant with: Abbvie, Bristol Myers-Squibb, Elli-Lilly, Fresenius kabi, Janssen, Novartis, Pfizer., E. R. Soriano Grant / Research support with: Abbvie, Amgen, Bristol Myers-Squibb, Janssen, Elli-Lilly, Novartis, Pfizer, Roche, Sandoz, UCB., Consultant with: Abbvie, Amgen, Bristol Myers-Squibb, Janssen, Elli-Lilly, Novartis, Pfizer, Roche, Sandoz, UCB., Speakers Bureau with: Abbvie, Amgen, Bristol Myers-Squibb, Janssen, Elli-Lilly, Novartis, Pfizer, Roche, Sandoz, UCB.

Keywords: Comorbidities, Real world data, Registry

TABLE:. Basal characteristic in Latin American patients

	RA n = 632,89.3%	PsA n = 32,4.5%	axSpA n = 38,5.4%
Female,n(%)	554(87.8)	16,50%	18(47.4)
Ethnicity,n = 691,n(%)			
Mestizo	274(44.6)	15(46.9)	13(34.2)
White	275(44.7)	14(43.8)	20(52.6)
Black	58(9.4)	2(6.3)	4(10.5)
Amerindian	8(1.3)	1(3.1)	1(2.6)
Active work status, n = 628 n (%)	260(47.1)	25(78.1)	28(73.7)
Private medical insurance, n = 697 n (%)	362(57.2)	27(84.4)	25 (65.8)
Age at initial treatment, years, median (IQR)	55.3(44.3-64)	46.9(43.8-54.8)	42.5 (35.4-48.7)
Comorbidities n(%)			
Hypertension	252(40.6)	11(34.4)	10(27)
Stroke	7(1.1)	0	0
Myocardial infarction	16(2.6)	0	0
Dyslipidemia	226(36.5)	11(34.4)	7(18.9)
Smoking	147(23.7) CS:39% Ex: 61%	11(34.4) CS: 63.6% Ex: 36.4%	5(15.3) CS: 60% Ex: 40%
Type II diabetes	85(13.9)	5(15.6)	2(5.4)
Non-cutaneous cancers plus melanomas	15(2.4)	1(3.1)	1(2.7)
DVT or PT	16(2.6) DVT: 68.75% DVT + PT:31.25%	0	0
Herpes Zoster	24(3.9) MC: 100%	1(3.1) MC: 100%	1(2.7) MC: 100%
Interstitial lung disease	37(5.98) UIP: 48.6% NSIP: 35.1%	1(3.1)	0
Tuberculosis	82(13.3) Latent:78% AP:17.1% A-ExP:4.9%	4(12.5) Latent:75% AP: 25% A-ExP: 0%	6(16.2) Latent: 100% AP: 0% A-ExP: 0%

CS: Current smoking; PT pulmonary thromboembolism; DVT deep venous thrombosis; MC: monometameric cutaneous; AP active pulmonary; Active Extrapulmonary A-ExP.

PANLAR2023-1411

ASSESSMENT OF DENTAL CARE IN PATIENTS WITH RHEUMATOLOGIC DISEASES USING A BRIEF INSTITUTIONAL QUESTIONNAIRE

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Cassandra Michele Skinner-Taylor[1], and Dionicio Á. Galarza-Delgado[1]. [1]*Rheumatology, Hospital Universitario "Dr. José Eleuterio González", Monterrey, México.*

Objectives: Oral abnormalities are frequent in patients with rheumatic diseases and may indicate the presence of an immune disorder or be secondary to them, manifested as decreased salivary flow, dysbiosis and mucosal abnormalities. Information on the prevalence of oral abnormalities in other rheumatologic diseases and their impact on disease activity is still lacking.

To describe the oral-dental health habits of patients with rheumatologic diseases through the application of a short institutional questionnaire.

Methods: A cross-sectional and descriptive study was carried out. Patients with at least one rheumatologic diagnosis who were cared for at the rheumatology service of *Hospital Universitario "Dr. José Eleuterio González"* were included. A brief questionnaire was administered regarding the dental control performed by the patients. The questionnaire consists of 10 questions, where data on dental hygiene habits, use of alcohol and tobacco, if they know the implication of dental problems in their rheumatologic disease and if their rheumatologist has recommended a visit to the dentist are collected.

Results: A total of 350 patients were included, 326 (93.1%) were women. Diagnoses were rheumatoid arthritis in 196 (56%), Sjogren's syndrome in 59 (16.9%), systemic lupus erythematosus in 44 (12.6%), osteoarthritis in 16 (4.6%), scleroderma in 8 (2.3%), ankylosing spondylitis in 6 (1.7%) and others in 21 (6.1%) including anti-synthetase syndrome, dermatomyositis, vasculitis, psoriatic arthritis and antiphospholipid syndrome. Smoking was positive in 16 (4.6%) patients and alcoholism in 26 (7.4%). A total of 254 patients (72.5%) had a dental care service (13.4% in a public institution and 59.1% in private facilities), while 96 (27.4%) refused dental care. The mean time fromthe last dental appointment was 19.71 (±42.05) months, the patients were seen 1.36 (±3.19) times/year for dental consultation and brushed their teeth 2.3 (±0.7) times/day. Moreover, 197 patients (56.3%) denied knowing that dental disease can affect their rheumatologic disease outcomes and 159 (45.4%) denied being referred to dentistry by their rheumatologist. However, 307 (87.7%) agreed to receive a dental check-up reference to the dental service.

Conclusion: More than one third of patients visits the dentist less than once a year and more than half are unaware of the implications of oro-dental disorders in their rheumatologic disease. Patient education on oral health could change their perspective and have a positive impact on preventing the development of oral and systemic complications.

Disclosure of Interest: None declared

Keywords: Dental habits, Oral health, Rheumatic diseases

PANLAR2023-1415

FACTORS ASSOCIATED WITH MANIFESTATIONS OF THE PERIPHERAL NERVOUS SYSTEM IN PATIENTS WITH SJOGREN'S SYNDROME

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Objectives: Sjogren syndrome (SS) is a chronic autoimmune disease primarily characterized by chronic inflammation of exocrine glands. SS can be accompanied by peripheral nervous system manifestations (PNS). In Colombia there are few descriptive studies on the extraglandular manifestations of SS

Methods: An observational cross-sectional study was conducted that included 290 SS patients treated at a rheumatology specialized institution between 2010 and 2022. The diagnosis of SS was based on the 2016 ACR/EULAR classification criteria. A univariate analysis was performed to describe the sociodemographic, immunological, clinical, and therapeutic characteristics of the population. Bivariate analysis was performed using Chi-square and Fisher's exact testq for nominal variables, Mann Whitney U test for quantitative variables to compare the presence or absence of PNS manifestations. A multivariate analysis was performed using binary logistic regression with variables with a value of $p < 0.2$ in the bivariate analysis. The epidemiological characteristics were obtained from the review of the medical records.

Results: 288 patients were included, of whom 95.8% were women; with a median age at diagnosis of 55.3 years (IQR = 15.5), 94.8% with primary SS. 9 (3.1%) patients with PNS manifestations; 5 sensorimotor polyneuropathy, 2 distal axonal sensory polyneuropathy, and 2 chronic inflammatory demyelinating polyneuropathies. The factors associated with the presence of PNS manifestations are described in Table 1. When performing the multivariate analysis, it was documented that the C4 complement was low (adjusted OR 29.9; 95% confidence interval [CI], 5.8 to 154.1 p:< 0.001) is associated with manifestations of the SNP

Conclusion: The prevalence of PNS manifestations is similar to that reported in other populations; we found that low C4 complement was associated with the presence of PNS manifestations, which supports the inflammatory origin of the these manifestations as reported in the literature.

Disclosure of Interest: None declared

Keywords: Clinical activity, Peripheral nervous system, Sjogren's syndrome

TABLE 1. Factors associated with the presence of PNS manifestations of patients with Sjogren's syndrome.

PNS Manifestations	Absent (n:279)		Present (n:9)		
	n; Median	%, IQR	n; Median	%, IQR	*p* value
Female sex	270	96.4	7	87.5	0,194
Skin manifestations	7	2.5	2	22.2	0,001+
Low complement C3	9	3.8	2	22.2	0,054+
Low complement C4	11	4.6	4	44.4	0,001
Corticosteroid therapy	96	34.2	7	77.8	0,011
Non-biological immunomodulator	132	47.0	8	88.9	0,016
Lymphocyte count	1860	822	1190	760	0,014
PNS: peripheral nervous system +Analyzed by Fisher's Exact Test					

PANLAR2023-1087

FREQUENCY AND PREVALENCE OF RHEUMATIC DISEASES IN A SPECIALIZED RHEUMATOLOGY CARE CLINIC

Diana Páez*[1], Nilmo Chávez[1], Estuardo Anzueto[1], Silvia Rivera[1], Gilbert Martínez[1], Valeria Rodríguez[1], William Recinos[1], Alejandra Felipe[1], and Luis Gómez[1]. [1]*Rheumatology, Instituto Guatemalteco de Seguridad Social, Guatemala, Guatemala.*

Objectives: Describe the frequency and prevalence of rheumatic diseases in a single referral center.

Methods: Cross-sectional, historical study, of patients evaluated in the rheumatology outpatient clinic in the Guatemalan Social Security Institute during the period from January 1, 2010, to July 31, 2022.

Results: A total of 56,800 consultations were performed, of which 2% were first visits, 48% follow-up visits, and 1.36% were consultations. The diagnosis with the highest percentage and prevalence was rheumatoid arthritis (31.99%), followed by systemic lupus erythematosus (27.20%), osteoarthritis (8.41%) and inflammatory myopathies (5.19%) (Table 1). The percentage of diagnosis of rheumatic diseases increased over the years from 4% to 12% (Figure 1).

Conclusion: The data found suggest that the frequency and prevalence of rheumatological diseases behave in a similar way to data collected in other latitudes of the world; however, the frequency of rheumatoid arthritis was lower compared to that of other countries worldwide. This may be explained because our unit is specialized in treatment with Biological DMARDS. It is highlighted that the identification of rheumatic diseases is increasing over time.

Disclosure of Interest: None declared

Keywords: Diseases, Prevalence, Rheumatic

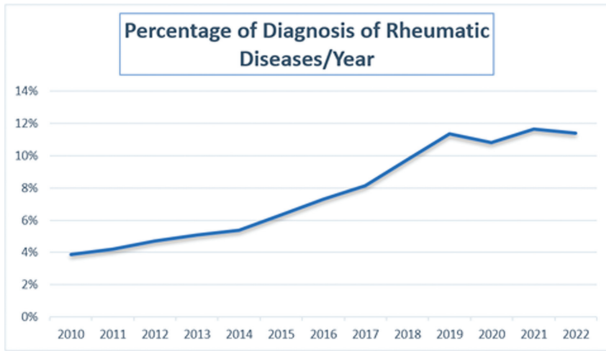
TABLE:.

Diagnosis	Total	Percentage	Prevalence/100 patients
Rheumatoid arthritis	2943	31.99%	5.18
Systemic lupus erythematosus	2502	27.20%	4.40
Osteoarthritis	774	8.41%	1.36
Inflammatory myopathy	477	5.19%	0.84
Spondylarthritis	418	4.54%	0.74
Primary vasculitis	409	4.45%	0.72
Osteoporosis	343	3.73%	0.60
Systemic sclerosis	258	2.80%	0.45

Continued next page

TABLE:. *(Continued)*

Antiphospholipid syndrome	166	1.80%	0.29
Sjogren's syndrome	151	1.64%	0.27
Psoriatic arthritis	146	1.59%	0.26
Gout	101	1.10%	0.18
Primary pulmonary hypertension	54	0.59%	0.10
Interstitial lung disease	48	0.52%	0.08
Juvenile idiopathic arthritis	20	0.22%	0.04
Adult-onset Still's disease	17	0.18%	0.03
Paget's disease	13	0.14%	0.02
Reactive arthritis	8	0.09%	0.01
Infectious arthritis	3	0.03%	0.01
Relapsing polychondritis	4	0.04%	0.01
Others	344	3.74%	0.61
Total	**9199**	**100.00%**	



PANLAR2023-1379

CLUSTER ANALYSIS TO IDENTIFY PATIENT GROUPS AND ASSESS THE PRESENCE OF ADVERSE EVENTS. REAL WORLD EVIDENCE FROM THE BIOBADASAR 3.0 REGISTRY

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Objectives: Through cluster analysis, this study aimed at identifying different clinical phenotypes related to adverse events in patients treated with biological drugs.

Methods: Historical, multicenter study of patients with rheumatic diseases treated with original biological drugs, biosimilars, or original and generic targeted therapies in Argentina, follow-up from August 2010 to July 2021. Demographic and clinical data, time of treatment initiation and completion, data on disease activity, and on AEs were collected.

Patients were unbiasedly matched based on their clinical and phenotypic profiles using a k-means pooling method. The initiation of biological disease-modifying antirheumatic drugs (b-DMARD) was evaluated in the different groups to investigate each group's clinical course and differential characteristics.

Results: A total of 5676 patients were analyzed. Three different clusters were obtained. Image 1: Cluster Graph by K-Means

Cluster 1: 1041 patients. Disease duration was 30.5 years (Q1 25.8; Q3 35.6) longer than for the other clusters; there was also a longer delay in starting treatment: 18.3 years (Q114.4; Q3 24) $p < 0.0001$.

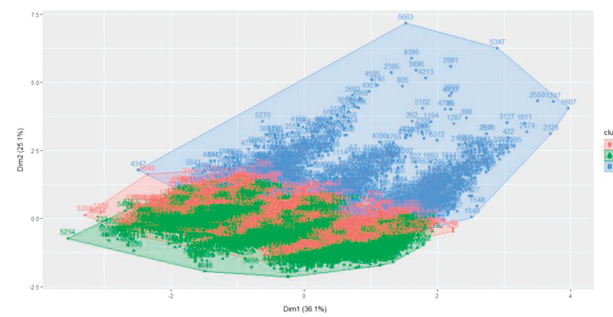
Cluster 2: 2136 patients. We observed a higher frequency of patients with systemic lupus erythematosus: 156 (7.3%) $p < 0.0001$ and a lower frequency of AEs 190 (8.9%) $p < 0.0001$

Cluster 3: 2499 patients. We observed an older mean age than in the other two clusters, 57.3 (SD 8.3) $p < 0.001$.

The use of systemic corticosteroids was evenly distributed among the 3 clusters.

Conclusion: The unsupervised grouping of patients from the BIOBADASAR registry demonstrated the existence of clusters based on clinical and demographic characteristics. Identifying high-risk patients through a combination of these parameters may be helpful for the early identification of risk factors and their association with adverse events.

Disclosure of Interest: A. Brigante Grant / Research support with: BIOBADASAR has received an unrestricted Grant from Pfizer. Pfizer has not participated in or influenced the project's development, data collection, analysis, interpretation, or report writing. They do not have access to the information collected in the database., K. Roberts Grant / Research support with: BIOBADASAR has received an unrestricted Grant from Pfizer. Pfizer has not participated in or influenced the project's development, data collection, analysis, interpretation, or report writing. They do not have access to the information collected in the database., C. Isnardi Grant / Research support with: BIOBADASAR has received an unrestricted Grant from Pfizer. Pfizer has not participated in or influenced the project's development, data collection, analysis, interpretation, or report writing. They do not have access to the information collected in the database., M. G. Gomez Grant / Research support with: BIOBADASAR has received an unrestricted Grant from Pfizer. Pfizer has not participated in or influenced the project's development, data collection, analysis, interpretation, or report writing. They do not have access to the information collected in the database., M. J. Haye Salinas Grant / Research support with: BIOBADASAR has received an unrestricted Grant from Pfizer. Pfizer has not participated in or influenced the project's development, data collection, analysis, interpretation, or report writing. They do not have access to the information collected in the database., M. A. Garcia Grant / Research support with: BIOBADASAR has received an unrestricted Grant from Pfizer. Pfizer has not participated in or influenced the project's development, data collection, analysis, interpretation, or report writing. They do not have access to the information collected in the database., C. Gobbi Grant / Research support with: BIOBADASAR has received an unrestricted Grant from Pfizer. Pfizer has not participated in or influenced the project's development, data collection, analysis, interpretation, or report writing. They do not have access to the information collected in the database., G. C. Casado Grant / Research support with: BIOBADASAR has received an unrestricted Grant from Pfizer. Pfizer has not participated in or influenced the project's



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Keywords: Cluster analysis, Real-world evidence, Registries

PANLAR2023-1434

REPORTED SATISFACTION WITH METHOTREXATE IN PATIENTS WITH INFLAMMATORY RHEUMATIC DISEASES

Griselda Serna-Peña[1], Diana Paola Flores-Gutierrez*[1], Oscar Eduardo Alvarez-Gonzalez[1], Ana Gabriela Rodriguez-Flores[1], Jesus Alberto Cardenas-De la Garza[1], and Dionicio Galarza-Delgado[1]. [1]*Rheumatology, Hospital Universitario Dr. José Eleuterio González, Monterrey, México.*

Objectives: The Treatment Satisfaction Questionnaire for Medication (TSQM) aims to evaluate a patient's satisfaction with the treatment of a chronic disease and it includes four domains: effectiveness, side effects, convenience, and global satisfaction. Methotrexate is the first disease-modifying drug (DMARD)

in the therapeutic algorithm of many rheumatic diseases. The aim of this study was to assess the patients' satisfaction with methotrexate treatment.

Methods: We performed a cross-sectional study in an outpatient rheumatology clinic. Patients older than 18 years with a rheumatologic disease taking methotrexate and with a disease duration >1 year were included in this study. Sociodemographic characteristics were collected from patients' files. The TSQM (Version 1.4) questionnaire was applied to assess patient satisfaction. Group comparisons were made through the Mann-Whitney U test and Chi-square.

Results: We evaluated 47 patients (91.5% women), mean age 51.4 years +/- 14.8; the most frequent diagnosis was rheumatoid arthritis (RA) in 76.6% (36) of them. All patients were prescribed more than 1 medication, and 46.8% % (22) of all patients had more than 1 diagnosis. Only 36.2% (17) of the patients were on corticosteroids, 31.9% were receiving antimalarials and 8.5% (4) were receiving a biologic DMARD. Mean TSQM scores were 68.3% ±16.3 for convenience, 64.8% ± 18.0 for effectiveness, and 69.7% ± 16.1 for global satisfaction. More than half the patients (53.19%) reported side effects, with a mean satisfaction of 66.6% ± 21.6 regarding this domain. However, no statistical significance was found in the global satisfaction domain compared to those who did not have AE(p = .568).

Conclusion: We found patients reported a global satisfaction of 69.7% with methotrexate, and no statistical differences were observed between patients who experienced or not side effects.

Reference 1: Atkinson MJ, Sinha A, Hass SL, et al. Validation of a general measure of treatment satisfaction, the Treatment Satisfaction Questionnaire for Medication (TSQM), using a national panel study of chronic disease. Health Qual Life Outcomes. 2004;2:12.

Disclosure of Interest: None declared

Keywords: inflammatory diseases, Methotrexate

PANLAR2023-1129

FATIGUE ASSESSMENT IN SYSTEMIC SCLEROSIS, SANTO DOMINGO, DOMINICAN REPUBLIC

Jennifer Santana Peralta*[1], Rodamin A. Alvarez Santana[1], Diana Garcia[1], Teresandris Polanco[1], Lory Concepcion Sanchez[1], Ismely Paulino[1], Ingrit Mercedes[1], Edral Rodriguez[1], Tirso Valdez Lorie[1], Roberto Muñoz Louis[1], and Alba Feriz. *[1]Rheumatology, Hospital Docente Padre Billini, Santo Domingo, Dominican Republic.*

Objectives: To evaluate the frequency and degree of fatigue in systemic sclerosis (SSc) patients.

Methods: Longitudinal, observational study of a cohort of patients being cared for at the Rheumatology service of the *Hospital Docente Padre Billini*. Patients were interviewed in November 2021. Inclusion criteria: ≥18 years, diagnosis of SSc according to the 2013 ACR/EULAR classification criteria. Exclusion criteria: previous diagnosis of fibromyalgia, depression and/or anxiety, treatment with antidepressants, antihistamines, beta-blockers. Measurement of FACIT-F, HAQ-DI, modified Rodnan skin score (mRSS) scales. Statistical analysis was performed with the Pearson correlation (r) with p= > 0.05. The data were analyzed with SPSS V23.

Results: 54 patients met the inclusion criteria. 100% were female, mean age 53.3 + 15.1 years, mean disease duration 11.3 years, diffuse SSc 75.9% (41), limited SSc 24.1% (13), interstitial pneumonia 33.3% (18), gastrointestinal reflux disease 27.8% (15), pulmonary hypertension 20.37% (11). Frequency of fatigue 100% (54): moderate FACIT-F: 29.6% (16), severe FACIT-F 38.8% (21), extreme 31.5% (17). Correlation FACIT-F with mRSS and HAQ-DI: Moderate FACIT-F: mRSS mild 43.8% (7), moderate 12.5% (2), severe 18.8% (3), terminal 25% (4), HAQ-DI mild 25% (4), moderate 37.5% (6), severe 18.8% (3). Severe FACIT-F: mRSS normal 4.8% (1), mild 19% (4), moderate 91% (4), severe 33.3 % (7), terminal 23.8% (5), HAQ-DI mild 4.8% (1), moderate 19% (4), severe 47.6% (10). FACIT-F extreme: mRSS mild 7.61% (3), moderate 29.4% (5), severe 35.3% (6), terminal 17.6% (3), HAQ-DI moderate 11.8% (2), severe 52.9% (9). r = 0.246 p > 0.05

Conclusion: The study demonstrated a high frequency of fatigue. The most frequent degree of fatigue was severe. A statistically significant linear association was observed between skin involvement and the patients' degree of functional limitation.

Disclosure of Interest: None declared

Keywords: Fatigue, Quality of life, Systemic sclerosis

PANLAR2023-1507

CARDIOVASCULAR OUTCOMES OF ANTI-TNF ALFA AND JAK INHIBITORS IN PATIENTS WITH RHEUMATOID AND PSORIATIC ARTHRITIS. REAL WORLD EVIDENCE AND INSIGHTS FROM THEBIOBADASAR 3.0 REGISTRY

Alejandro Brigante*[1], Karen Roberts[1], Carolina Isnardi[1], Maria Gimena Gomez[1], Maria J Haye Salinas[1], Mercedes A Garcia[2], and on behalf of BIOBADASAR 3.0; Carla Gobbi[2]; on behalf of BIOBADASAR 3.0; Gustavo C. Casado[2]; on behalf of BIOBADASAR 3.0; Carola Soliz Cordero[2]on behalf of BIOBADASAR 3.0; Joan Manuel Da Peña[2]; on behalf of BIOBADASAR 3.0; Gladys Bovea C[2]; on behalf of BIOBADASAR 3.0; Amelia Granel[2]; on behalf of BIOBADASAR 3.0; Anastasia Secco[2]; on behalf of BIOBADASAR 3.0; Osvaldo Kerzberg[2]; on behalf of BIOBADASAR 3.0; Silvia Papasidero[2]; on behalf of BIOBADASAR 3.0; Guillermo Berbotto[2]; on behalf of BIOBADASAR 3.0; Malena Viola[2]; on behalf of BIOBADASAR 3.0; Veronica Saurit[2]; on behalf of BIOBADASAR 3.0; Ingrid Petkovic[2]; on behalf of BIOBADASAR 3.0; Ana Bertoli[2]; on behalf of BIOBADASAR 3.0; Monica Diaz[2]; on behalf of BIOBADASAR 3.0; Erika Catay[2]; on behalf of BIOBADASAR 3.0; Bernardo Pons Estel[2]; on behalf of BIOBADASAR 3.0; Ida Elena Exeni[2]; on behalf of BIOBADASAR 3.0; Mercedes E De La Sota[2]; on behalf of BIOBADASAR 3.0; Maria Silvia Larroude[2]; on behalf of BIOBADASAR 3.0; Dora Pereira[2]; on behalf of BIOBADASAR 3.0; Gustavo Medina[2]; on behalf of BIOBADASAR 3.0; Cecilia Pisoni[2]; on behalf of BIOBADASAR 3.0; Monica Sacnun[2]; on behalf of BIOBADASAR 3.0; Edson Velozo[2]; on behalf of BIOBADASAR 3.0; Nora Aste[2]; on behalf of BIOBADASAR 3.0; Cecilia Castro[2]; on behalf of BIOBADASAR 3.0; Veronica Savio[2]; on behalf of BIOBADASAR 3.0; Laura Lucia Holguin[2]; on behalf of BIOBADASAR 3.0; Maria Julieta Gamba[2]; on behalf of BIOBADASAR 3.0; Gustavo Citera[2]; on behalf of BIOBADASAR 3.0; Cesar Graf[2]; on behalf of BIOBADASAR 3.0; Enrique Soriano[2]; on behalf of BIOBADASAR 3.0; Rosana Quintana[1]; on behalf of BIOBADASAR 3.0; Guillermo Pons Estel[1]; on behalf of BIOBADASAR 3.0; Maria De La Vega[3]; on behalf of BIOBADASAR 3.0. *[1]Research Unit of the Argentine Society of Rheumatology - UNISAR, [2]Argentine Society of Rheumatology, Ciudad Autónoma de Buenos Aires, Argentina, [3]President, Argentine Society of Rheumatology, Ciudad Autónoma de Buenos Aires, Argentina.*

Objectives: This study aims at providing real-world evidence on the influence of JAK inhibitors, Anti-TNFα, and cs-DMARDs therapy on cardiovascular events in rheumatoid arthritis (RA) and psoriatic arthritis (PsA). Patients.

Methods: Data from the BIOBADASAR 3.0 registry of patients diagnosed with RA and PsA (2010 ACR-EULAR/ 2006 CASPAR) from June 2010 to May 2022. Data was collected from patients treated with cs-DMARDs (control group), Anti-TNF alpha, and JAK inhibitors. The history of specific comorbidities and the appearance of adverse events (AE) were recorded. Kaplan Meier curves evaluated event-free survival time, and the comparison between the different treatments was performed by Log Rank analysis. Additionally, to account for alternative explanations, a propensity score (PS) was estimated, which assigned a value to each observation according to the probability of incorporating all the information available to estimate this probability and making the groups more comparable.

Results: Of 6,209 patients, 4,817 (77.6%) with RA and 510 (8.2%) with PsA were studied. The overall frequency of major adverse cardiovascular events (MACE) was 48 (2.2%) in the Anti-TNF alpha group, 5 (2.37%) in the Anti-JAK group, and 38 (1.84%) in the control group (p = 0.6). MACE-free survival was a median in years of 3.02 for the Anti-TNF alpha group (HR 1.3 95%CI 0.8-384), 5.1 for the control group (HR 1.5 95%CI 0.32-651), and 1.8 for the group with JAK inhibitors (HR 3.02 95% CI 0.2-0.8). (Image 1).

The results of the regression model adjusted by PS to present MACE were for the Anti-TNF aalpha group HR 1.28 IC95% 0.77-2.13 p 0.34, for the non-exposed group HR 1.48 IC95% 0.82-2.67 and the JAK inhibitor group 3.12 IC95% 1.48-6.6 p < 0.001.

Conclusion: In conclusion, we found no statistically significant difference between the RA and PsA groups' appearance of adverse events of interest. In this study, we observed a higher MACE-free survival time in the not exposed group than in the Anti-TNFa group and considerably low in the Anti-JAK group with a statistically significant difference. These differences persist in the multivariate model adjusted for the propensity score.

Disclosure of Interest: A. Brigante: None Declared, K. Roberts Grant / Research support with: BIOBADASAR has received an unrestricted Grant from Pfizer. Pfizer has not participated in or influenced the project's development, data collection, analysis, interpretation, or report writing. They do not have access to the information collected in the database., C. Isnardi Grant / Research support with: BIOBADASAR has received an unrestricted Grant from Pfizer. Pfizer has not participated in or influenced the project's development, data collection, analysis, interpretation, or report writing. They do not have access to the information collected in the database., M. G. Gomez Grant / Research support with: BIOBADASAR has received an unrestricted Grant from Pfizer. Pfizer has not participated in or influenced the project's development, data collection, analysis, interpretation, or report writing. They do not have access to the information collected in the database., M. J. 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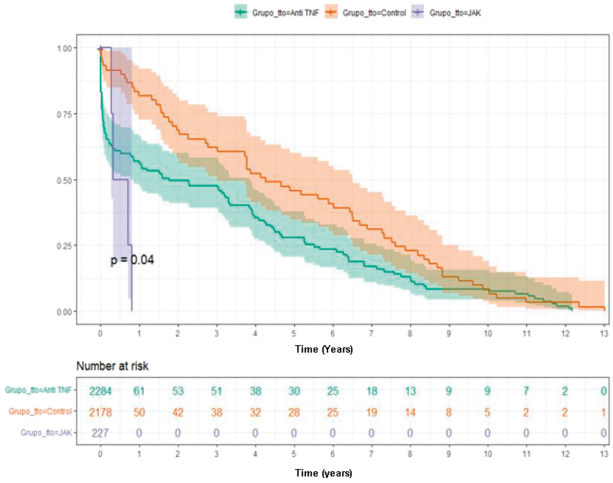

Image 1. Free-major cardiovascular events survival curve according to treatment group.

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Keywords: Cardiovascular risk, Real-world evidence, Rheumatoid Arthritis

PANLAR2023-1196

BODY COMPOSITION AND ITS MAIN CHANGES IN PATIENTS WITH RHEUMATOLOGIC DISEASES

Diana Carolina Rubio-Torres*[1], Oscar E. Alvarez-González[1], Janett C. Riega-Torres[1], Jesús Alberto Cárdenas-de la Garza[1], Leonardo René Aguilar-Rivera[1], and Dionicio Galarza-Delgado[1]. *[1]Rheumatology, Hospital Universitario "Dr. José Eleuterio González", Monterrey, México.*

Objectives: Rheumatologic diseases are frequently associated with a wide spectrum of nutritional disorders. Obesity by itself is a proinflammatory state that promotes autoimmune diseases. These changes are associated with increased clinical manifestations, disease activity and risk of cardio-metabolic comorbidities. To describe the body composition and the prevalence of its main changes in patients with rheumatologic diseases.

Methods: Cross-sectional and descriptive study carried out in the Rheumatology Service of the *Hospital Universitario Dr. José Eleuterio González*. A bioelectrical impedance analysis was performed with the InnerScan™ TANITA model BC-533 (Yesod, Japan) with which the following parameters were obtained: weight, % fat, % water, visceral fat level, muscle mass, bone mass and metabolic age.

Results: A total of 1693 assessments of 1,226 individual patients were included. The majority (n = 1529, 90.3%) were female. The mean age was 50 years (±13.5). The most frequent diagnoses were rheumatoid arthritis in 776 (45.8%), systemic lupus erythematosus in 211 (12.4%), osteoarthritis in 152 (8.9%), fibromyalgia in 73 (4.3%) and mixed connective tissue disease in 100 (5.9%). One hundred and twelve (6.6%) were first-time patients with no established diagnosis. Other diagnoses were recorded in 269 (15.8%). We found an abnormal body mass index (BMI) in 1267 (74.7%) patients; 626 (36.9%) of them were obese (22.4% grade 1; 10.1% grade 2; 4.4% grade 3), 593 (35%) were overweight and 48 (2.8%) were underweight. We found high total fat in 1012 (59.8%), high visceral fat in 252 (14.9%) and low muscle mass in 1428 (84.3%). The percentages of total fat and visceral fat were 28.05 vs 36.73 and 10.46 vs 8.41 in men and women, respectively. Body composition and anthropometric measures are shown in Table 1.

Conclusion: The prevalence of overweight and obesity, high total fat and low muscle mass was very high in patients with rheumatic diseases in Mexico, particularly among women. Comprehensive multidisciplinary management is necessary to reduce the potential associated morbimortality.

Disclosure of Interest: None Declared

Keywords: Body composition, Obesity, Rheumatic diseases

TABLE 1. Anthropometric and sociodemographic parameters in rheumatologic patients.

N = 1693	Mean (SD) or N (%)
Female	1529 (90.3%)
Male	164 (9.6%)
Age , years	50 (± 13.5)
Anthropometric measures	
Weight, kg	71.98 (17.38)
Height, m	1.56 (0.07)
Body fat, percentage	36.24 (9.75)
Body fat mass, kg	27.24 (12.29)
Body wáter, percentage	44.62 (6.79)
Visceral fat mass, kg	8.96 (4.27)
Lean mass, kg	42.45 (7.41)
Bone mass, kg	2.28 (0.41)
Kcal	2172 (374.93)
Metabolic age	43.33 (11.98)
BMI, kg/m^2	29.22 (6.89)
Waist, cm	92.93 (17.21)
Hip, cm	108.40 (45.81)
Waist-hip ratio	0.87 (0.12)

PANLAR2023-1252

SOCIO-DEMOGRAPHIC PROFILE AND FUNCTIONAL DISABILITY IN ELDERLY BRAZILIAN POPULATION WITH CHRONIC LOW BACK PAIN: PRELIMINARY STUDY

Priscila Januário*[1], Ariela Cruz[1], Amanda Rodrigues[2], Maynara Silva[2], Vinícius Faria[2], Mara Pinheiro[1], Mateus Antunes[1], Ingred Merllin Souza[1], and Amélia Marques[1]. *[1]Department of Physiotherapy, Speech Therapy and Occupational Therapy, University of São Paulo, São Paulo, [2]Department of Physiotherapy, Centro Universitário de Barra Mansa, Barra Mansa, Brazil.*

Objectives: To examine the socio-demographic characteristics and level of functional disability in an elderly Brazilian population with chronic low back pain.

Methods: Observational cross-sectional study of 206 elderly patients with chronic low back pain, of both genders and living in the southeastern region of Brazil. A socio-demographic questionnaire was applied, including data such as gender, age, marital status, self-reported race, socio-economic factors (number of years of education and individual income), occupational activity based on the Brazilian Classification of Occupations and the Roland Morris Questionnaire for assessment of the level of functional disability where scores above 14 points indicate severe functional disability. Data analysis was made by absolute and relative frequencies (%), means and standard deviations.

Results: The mean age of these patients was 71 ± 6.6 years and most of them were female (64.1%). The most frequently self-reported race was White (43.7%), most patients were married (54.9%), had a low income (66.5%) and few years of education(77.2%) (1 to 4 years). 80.6% were not currently working, however, most of their lives they had worked as service workers or as

salespersons in stores and markets (60.2%). As for the Roland Morris Questionnaire, the most frequently reported difficulties due to low back pain were: changing positions to make the back more comfortable (79.9%), walking slower than usual (65.7%), using a handrail to climb stairs (51.5%), lying down to rest frequently (51.5%), using some support to get up from a normal chair (56.7%), dressing slowly (54.5%), avoiding squatting and kneeling (73.9%), having back pain almost all the time (50.7%), turning over in bed (55.2%), trouble putting their socks on (53%), walking short distances (53%), avoiding heavy work (76.9%), climbing stairs slowly (77.6%). 44.1% of the elderly scored between 7 to 13 points. The overall score (11.1 ± 5.8) indicated moderate functional disability.

Conclusion: This study shows that most of the elderly were women, aged above 70 years, they were white, married, and of low income and education. The results indicate moderate functional disability, considering that there may be an association between demographic and social factors. Therefore, information related to functional disability may favor the implementation of preventive measures and guided rehabilitation interventions.

Reference 1: de David CN, Deligne LMC, da Silva RS, et al. The burden of low back pain in Brazil: estimates from the Global Burden of Disease 2017 Study.Popul Health Metr. 2020; 18(Suppl 1):12.

Reference 2: Nusbaum L, Natour J, Ferraz MB, Goldenberg J. Traslation, adaptation and validation of the Roland- Morris questionnaire-Brazil Roland-Morris. Bras. J Med Biol Res. 2001; 34(2):203-10.

Disclosure of Interest: None declared

Keywords: Aged, Epidemiology, Low back pain

PANLAR2023-1239

ARTHRITIS AS AN EXTRAGLANDULAR MANIFESTATION IN SJOGREN'S SYNDROME AND ASSOCIATED FACTORS

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Objectives: Sjogren's syndrome (SS) is a chronic autoimmune disease characterized by inflammation of the exocrine glands; one third of SS patients also develop extraglandular manifestations, resulting in a variable clinical presentation. Arthritis as an extraglandular manifestation is rare, generally not erosive or deforming.

Describe the prevalence of arthritis in a cohort of patients with SS in Colombia and to examine the factors associated with it.

Methods: An observational cross-sectional study was carried out, which included 288 patients with SS, according to the 2016 ACR/EULAR classification criteria, treated at a Colombian institution specialized in rheumatology between 2010 and 2022. Univariate analyses were performed to describe the sociodemographic, immunological, clinical, and therapeutic profile of the population. Bivariate analysis were performed using the Chi-square or Fisher's exact tests for nominal variables. The multivariate analysis was performed using binary logistic regression with variables with a value of $p < 0.2$ in the bivariate analysis. Entering the model. The different characteristics investigated were obtained from the review of the patients medical records.

Results: 288 patients were included, 95.9% were female ; their median age at diagnosis was 55.4 years (IQR = 15.5), 5.2% had secondary SS. 99 (34.3%) patients had extraglandular manifestations; of them 54 (53.5%) had arthritis, that is, 18.8% of all patients with SS; polyarticular involvement occurred in 52 patients or 96.3%; of the 2 additional cases, one had oligoarticular and the other monoarticular arthritis. The factors associated with the presence of articular manifestations are described in Table 1. When performing the multivariate analysis, non-biological immunomodulatory therapy was independently associated with joint involvement (OR 0.2 (95% CI: 0.1 to 0 .5) p:<0.001).

Conclusion: In our cohort, the frequency of arthritis as an extraglandular SS manifestation is high compared to other populations. Of the different variables examined, no independent associations were found with the exception of the use of non-biological immunomodulatory therapy, which may have been indicated for this extraglandular manifestation. This study has the methodological limitations of a cross-sectional study.

Disclosure of Interest: None declared

Keywords: Arthritis, Clinical manifestations, Sjogren's syndrome

TABLE 1. Factors associated with the presence of arthritis in patients with Sjogren's syndrome

Arthritis	Absent (n:234)		Present (n:54)		
Variable	n	%	n	%	*p* value*
Skin manifestations	4	1.7	5	9.3	0,013
Anti-Ro, positive	134	58.8	42	77.8	0,010
Corticosteroids therapy	75	31.8	28	51.9	0,005
Non-biological immunomodulator	100	42.4	40	74.1	<0,001

*Analyzed with the Chi Square test

PANLAR2023-1497

ANALYSIS OF ADVERSE EFFECTS IN IMMUNE-MEDIATED INFLAMMATORY DISEASES TREATED WITH JAK INHIBITORS IN A SINGLE CENTER

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Objectives: To evaluate adverse events in patients treated with Janus kinase inhibitors in various immune-mediated inflammatory diseases (RA, PsA and SpA).

Methods: We reviewed 203 patients from the Rheumatology department at Navarra University Hospital who underwent treatment with JAKi (Baricitinib, Filgotinib, Tofacitinib and Upadacitinib) and are reporting the adverse events occurring with their use.

Results: Of our sample of 203 patients, 81,2% were diagnosed with RA, 8,8% with PsA, 7,5% with SpA and the remaining 2,5% were diagnosed as having indeterminate arthritis. We found that out of the patients diagnosed with RA, 10,83 % had a significant adverse event (22 events in total). A 0,5% had a myocardial infarction, 1,5% stroke, 2,1% arterial thrombosis, 2,1% venous thrombosis, 1,5% developed some type of malignancy and 3,6% had an herpes zoster reactivation,. One arterial thrombosis happened in the indeterminate arthritis group.

Conclusion: In our series, out of 203 patients treated with JAKi, 11,33% had a significant adverse event. The most common adverse event was herpes zoster reactivation (3,44%), followed by arterial and venous thrombosis (2,46 and 1,97%, respectively). A longer follow-up and a larger number of patients are necessary to confirm these data.

Disclosure of Interest: None declared

Keywords: Adverse events, Jak inhibitors, Rheumatic diseases

PANLAR2023-1566

MULTIDIMENSIONAL POVERTY: A REALITY IN PREGNANT WOMEN WITH RHEUMATIC DISEASES?

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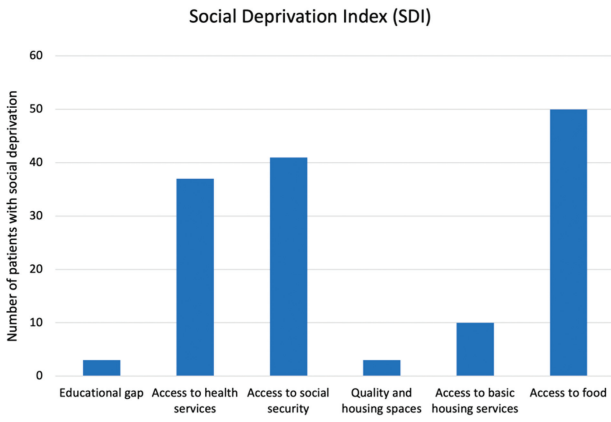
Objectives: Having an official poverty index helps us know the social context of the Mexican population and the type of attention patients require. The CONEVAL's Social Deprivation Index (SDI) is the measurement used in Mexico to assess whether a person is living in poverty. Persons living in poverty must have at least one social deprivation (SD) and an insufficient income to acquire the goods and services required to meet their food and non-food needs. A person is in extreme poverty when they have three or more deficiencies within the SDI and is also below the minimum well-being line. On the other hand, people can be vulnerable due to social deprivations (>1 SD) but whose income is higher than the well-being line. This study aims at

Figure 1. Social Deprivation Index: Index built for each person from the sum of the six indicators associated with social deprivation; is the number of deficiencies that a person has (educational gap, access to health services, access to social security, quality and housing spaces, access to basic housing services, and access to food).



identifying the SD from the SDI in pregnant women with autoimmune rheumatic diseases (ARDs).

Methods: A descriptive, cross-sectional, historical study was carried out at the Pregnancy and Reproductive Health Clinic for Rheumatic Diseases (CEER) from the University Hospital "*Dr. José Eleuterio González*", in Mexico. The data of pregnant patients were collected from the clinical records. We classified them according to the SDI and poverty definitions from the CONEVAL (1). The sociodemographic and clinical characteristics are presented as frequencies, percentages, or interquartile ranges (IQR).

Results: A total of 59 pregnant women with ARDs were included, with a median age of 28 years (IQR 23 – 34). The most frequent diagnoses were rheumatoid arthritis with 25 (42.4%) patients, systemic lupus erythematosus with 17 (28.8%) and antiphospholipid syndrome with 7 (11.9%) women. The median monthly income was 441.58 USD (IQR 315.41 – 735.96). The median number of persons living in a house was 4 (IQR 3-5). The median food expenditure was 152.45 USD (IQR 86.74 – 210.28). There were 18 (30.5%) patients below the minimum well-being line. The women's SDs are in **Figure 1**. We found that 42 (71.2%) patients reported extreme poverty, 10 (16.9%) were vulnerable due to SD and 7 (11.9%) were in poverty.

Conclusion: Patients' SDs (access to food, health services and social security) impact directly their ARDs prognosis, pregnancy outcomes and newborn's health. Closing the gap between these SD it's imperative to improve their quality of life.

Reference 1: 1. Consejo Nacional de Evaluación de la Política de Desarrollo Social (CONEVAL). Medición multidimensional de la pobreza 2016 - 2020 [Internet]. 2020 [cited 2023 Jan 7]. Available from: https://www.coneval.org.mx/Medicion/MP/Paginas/Pobreza_2020.aspx

Disclosure of Interest: None declared

Keywords: Poverty, Pregnancy, Quality of life

EPIDEMIOLOGY (INCLUDES SOCIO-ENCONOMIC, SOCIO-CULTURAL AND GENDER-EQUITY STUDIES)

PANLAR2023-1259

PERINATAL LOSSES: CAN A RHEUMATIC DISEASE AFFECT THE GRIEVING PROCESS?

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Objectives: Having autoimmune rheumatic diseases (ARDs) and perinatal losses (PL) have been considered traumatic events. Women with ARDs have greater risk of PL that leads to the process of grieving. Perinatal grief (GF) symptoms affect women around the world; the capacity to overcome them it's called resilience. The aim of this study is to identify the frequency of complicated grief in women with ARDs and their resilience capacity.

Methods: Descriptive, cross-sectional, study at the *Hospital Universitario "Dr. José Eleuterio González*" in México. Women with and without ARDs (>18 yrs.) were invited to fill a virtual survey with demographic, PL data, the PG Scale (PGS score: >50 suggests a complicated grief comorbidity) and the Resilience Scale (RS score from 5 to 175: the greater the score, the greater the resilience capacity).

Results: A total of 50 women were included: 25 with ARD and 25 without ARD. In the ARD group the most frequent diagnoses were systemic lupus erythematosus (7/28%), rheumatoid arthritis (6/24%) and antiphospholipid syndrome (4/16%). From the total (N = 50) of women, the ones with >1 PL have greater scores in the RS (p = 0.042).

As for the PGS scores twenty (40%) of the 50 women got a score > 50; 11 (55%) were women without ARD and 9(45%) have ARD. No statistically differences were found in the scales total scores and subscales between groups. The sociodemographic, PL data and the PGS and RS scores for both groups are included in **table 1.**

Conclusion: Our results suggest that having an ARD does not impact the development of a complicated grief process. The RS scores were like the ones reported in other chronic diseases. Suffering >1 PL can enhance the resilience capacity of women with PL also. We will Increase the sample to determine protective factors for complicated grief and resilience capacity.

Disclosure of Interest: None declared

Keywords: Pregnancy, Resilience

TABLE 1. Clinical characterization

	Patients with ARD N = 25	Patients without ARD N = 25	$p = 0.05$
Age, years, median (IQR)	42(38.5-51)	34(26-42.5)	
Years of education			0.114
>9 years	21 (84%)	15 (60%)	
<9 years	4 (16%)	10 (40%)	
Marital Status			0.225
Single	2 (8%)	2 (8%)	
Married/Common law	20 (80%)	15 (60%)	
Divorced	3 (12%)	8 (32%)	
Perinatal Losses			0.387
1	13(52%)	17(68%)	
>1	12(48%)	8(32%)	
Living children			0.725
Yes	21 (84%)	19 (76%)	
No	4 (16%)	6 (24%)	
Num. of pregnancies, median (IQR)	4 (2.5-5)	3 (2-3.5)	0.38
Num. of living children, median (IQR)	2 (1-3)	1 (0.5-2)	0.123
Resilience Scale score, mean (SD)	132.72 (31.03)	137.56 (22.14)	0.587
PGS score, median (IQR)	43(37.5-60.0)	46 (39.5-62.5)	0.529

PANLAR2023-1071

HEALTH PERCEPTION IN PATIENTS WITH FIBROMYALGIA

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Objectives: Fibromyalgia is a rheumatologic syndrome characterized by chronic pain and symptoms such as fatigue, morning stiffness, sleep disturbances and depression. Health perception is a global assessment of health based on an analysis of the objective and also subjective aspects of each person. Health self-assessment is increasingly researched and shows the health status of the population, considering the individual's personal perspective and that this information can be useful to propose health promotion strategies.

The objective of the study was to identify the perception of health in patients with fibromyalgia.

Methods: This is a cross-sectional study that was carried out in Brazil in 2021. Individuals with fibromyalgia were invited to participate in the study through the Brazilian Association of Fibromyalgia Patients (ABRAFIBRO) in August 2021. The invitation was sent via email to all individuals registered with this association. Self-perception of health was assessed through the following response options: bad, fair, good or very good. Data were analyzed using descriptive statistics.

Results: The study consisted of 243 individuals with fibromyalgia living in different Brazilian states. Most subjects were female (97.5%), married or living with a partner (63.7%), of White ethnicity (58%), receiving 1 to 2 minimum wages (60.4%), with complete higher education (46.5%) and who were taken more than 2 medications per day (65.8%). Regarding the perception of health, the majority reported that their health was regular (42.4%), followed by bad (38.3%), good (16%) and very good (3.3%).

Conclusion: The most prevalent health perception in people with fibromyalgia in Brazil was: "regular", followed by "bad", "good" and "very good". In view of the findings of this study, measures to control and prevent health risks in subjects with fibromyalgia become necessary. To implement policies to promote a healthy life for this population, it is necessary to know the determinants of these indicators of self-reported health morbidity in Brazil. The results of this investigation should be monitored by periodic population-based surveys, in order to verify the observed associations, being able, in the future, to detect an association with other variables. In addition, these data can guide and evaluate education and health promotion strategies in fibromyalgia.

Reference 1: Antunes MD, Couto LA, Bertolini SMMG, et al. Effectiveness of interdisciplinary health education programs for individuals with fibromyalgia: A systematic review. Journal of Education and Health Promotion. 2021;10:64. Doi: https://dx.doi.org/10.4103%2Fjehp.jehp_592_20

Reference 2: Jensen KB, Petzke F, Carville S, et al. Anxiety and depressive symptoms in fibromyalgia are related to poor perception of health but not to pain sensitivity or cerebral processing of pain. Arthritis Rheuma. 2010;62 (11):3488-3495. Doi: https://doi.org/10.1002/art.27649

Disclosure of Interest: None declared

Keywords: Fibromyalgia, Health promotion, Self-perception of health

PANLAR2023-1440

CROSS-CULTURAL ADAPTATION AND VALIDATION OF THE "SJOGREN'S SYNDROME DISEASE DAMAGE INDEX (SSDDI)" FOR ARGENTINA

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Objectives: Primary Sjögren's Syndrome (pSS) is an immune-mediated connective tissue disease. The clinical course usually reveals a persistent disease activity that can lead to irreversible damage to the organs or tissues involved. Measuring cumulative damage in patients with pSS allows to evaluate outcomes and disease prognosis as well as to decide treatment changes. The objective of the study was to cross-culturally adapt and validate the SSDDI in patients with pSS to be used in the Argentine population.

Methods: Observational, analytical, cross-sectional study. The researchers were trained through a pilot test with online clinical cases to achieve a correct use of the SSDDI and the visual analog scale (VAS), obtaining a strong concordance (rho >0.80 in all cases) among the evaluators. To assess the construct validity of the index, experts used the VAS in each domain and in the total score (0 millimeters: no damage; 100 millimeters: maximum damage). To assess reproducibility, a subgroup of patients was randomly evaluated without changes in treatment or clinical condition 15 days after the baseline assessment. Continuous variables were described as mean and standard deviation (SD) or median and interquartile range (IQR), according to distribution. Categorical variables were expressed as percentages. Spearman's correlation (rho) was used to assess construct validity. The intraclass correlation coefficient (ICC) was used to assess reproducibility.

Results: Sixty female patients diagnosed with pSS according to the 2002 American-European Consensus Group (AECG) criteria and/or the 2016 ACR/EULAR criteria were included (mean age: 53 (SD ± 12); median time of disease duration: 24 months (IQR 12-108)). 89% presented positive ANA-antibodies, 74% had positive anti-Ro and 37% positive anti-La antibodies. The median overall VAS was 3 (IQR 2-5), and the median SSDDI total score was 3 (IQR 2-4). The correlation between global VAS and total SSDDI score was 0.70 ($p < 0.01$). The correlation coefficient between VAS and scales for each domain were: oral/salivary: 0.79 ($p < 0.01$); ocular: 0.87 ($p < 0.01$); neurological: 0.87 ($p < 0.01$); pleuro-pulmonary: 1.00 ($p < 0.01$); renal dysfunction: 1.00 ($p < 0.01$) and lymphoproliferative disorders: 1.00 ($p < 0.01$). Reproducibility was excellent (ICC of 1).

Conclusion: The results show that the SSDDI is a reliable, valid, and reproducible tool for the Argentine population with pSS.

Reference 1: Vitali, G. Palombi G, Baldini C, et al. Sjögren's Syndrome Disease Damage Index and disease activity index: scoring systems for the assessment of disease damage and disease activity in Sjögren's syndrome, derived from an analysis of a cohort of Italian patients. Arthritis Rheum 2007; 56:2223-31

Reference 2: Sociedad Argentina de Reumatología. *Consenso argentino de diagnóstico y tratamiento de síndrome de Sjögren primario.* Rev Argentina de Reumatología 2017; Suppl.: 1-108

Disclosure of Interest: None declared

Keywords: Damage measure, Sjogren's syndrome, Validation

PANLAR2023-1265

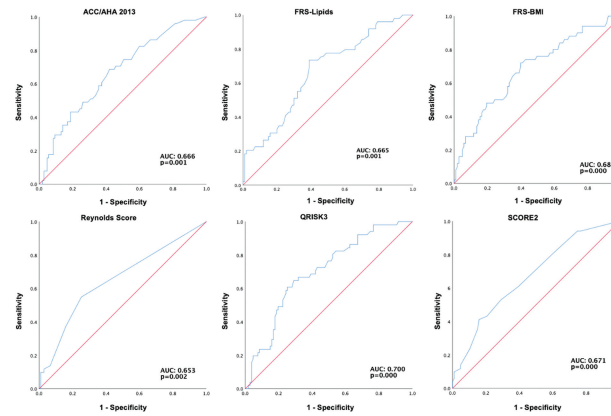
THE MOST ACCURATE CARDIOVASCULAR RISK ALGORITHM FOR PREDICTING CAROTID PLAQUE PRESENCE IN FEMALE RHEUMATOID ARTHRITIS PATIENTS

Iris J. Colunga-Pedraza[1], Jose R. Azpiri-Lopez[2], Dionicio A. Galarza-Delgado[1], Valeria Gonzalez-Gonzalez*[1], Victor M. Beltran-Aguilar[1], Angel G. Arias-Peralta[2], Natalia De Avila-Gonzalez[1], Jesus A. Cardenas-de la Garza[1], and Gisela Garcia-Arellano[1]. *[1]Rheumatology, [2]Cardiology, Hospital Universitario "Dr. José Eleuterio González", Monterrey, México.*

Objectives: To compare six cardiovascular risk (CVR) algorithms with carotid ultrasound findings in women with RA and to identify the algorithm with the cutoff point with the best sensitivity for carotid plaque (CP) detection.

Methods: Cross-sectional and descriptive study. Patients aged 40 to 75 years who met the 2010 ACR/EULAR classification criteria for the diagnosis of RA. Patients with a history of cardiovascular disease were excluded. CVR was calculated using 6 algorithms: ACC/AHA 2013, FRS-Lipids, FRS-BMI, RRS, QRISK3 and SCORE2. Carotid ultrasound was performed on all study participants, and the presence of CP, defined as diffuse carotid intima-media thickness (cIMT) ≥1.2 mm or focal thickness ≥ 0.5 mm, was assessed. Subclinical atherosclerosis was defined as the presence of CP or a cIMT ≥0.8 mm. An ROC curve analysis was performed and the cutoff points for each algorithm were determined

Figure 1. ROC curves of the cardiovascular risk algorithms.



using the Youden index. Area under the curve (AUC) sensitivity, specificity, and likelihood ratios (LR) were calculated. A value of $p < 0.05$ was considered statistically significant.

Results: A total of 158 women with a diagnosis of RA were included. The prevalence of CP was 32.3%. Results are shown in Figure 1.

Conclusion: The FRS-Lipids algorithm was one of the best algorithms for the detection of CP in women, with the best sensitivity compared to the other algorithms, however, in the low-risk group none of the algorithms proved to be sufficiently effective in predicting CVR. Therefore, we suggest considering carotid ultrasound as part of the evaluation in women with RA.

Disclosure of Interest: None declared

Keywords: Cardiovascular risk, Gender, Rheumatoid arthritis

PANLAR2023-1431

THE GENDER GAP IN PARTICIPATION IN THE MEXICAN CONGRESS OF RHEUMATOLOGY

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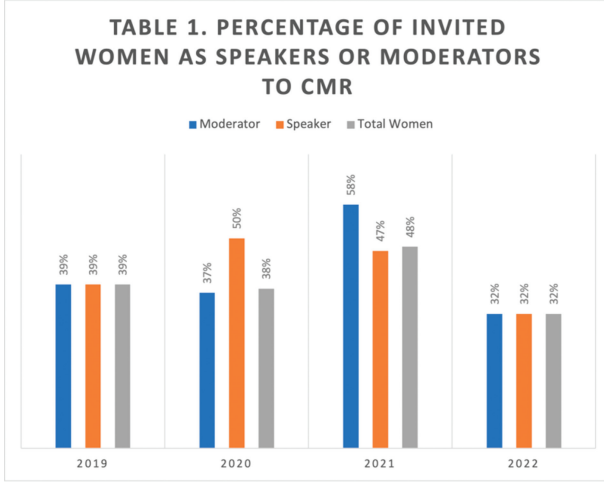
Objectives: The number of women in rheumatology has increased in recent years, and the American College of Rheumatology (ACR) predicts that by 2025 they will represent the majority of its members (1). However, women continue to be underrepresented in academic rheumatology and leadership positions, and there are still unmet needs for them to succeed on equal terms with men. (2) The aim of this study was to determine the percentage of participation of women as speakers or moderators at the Mexican Congress of Rheumatology (CMR).

Methods: This study evaluated the proportion of women as speakers or moderators at the CMR, by reviewing the programs from 2019 to 2022; the gender of each participant was determined by name; presentations of the pharmaceutical industry were excluded.

Results: A total of 385 participants from 2019 to 2022 were included in the CMR programs. The proportion of women speakers (moderators and speakers) at the CMR was 41% (156/385). Participation as moderators fluctuated from 39% (21 of 54) in 2019, reaching its peak in 2021 with 58% (19 of 33) and decrease to 32% in 2022 (18 of 56); and as speakers from 39% in 2019 (27 of 69), with its highest proportion in 2020 with 50% (7 of 14) and decrease to 32% in 2022 (7 of 22) (Table 1).

Conclusion: Women invited as speakers at the CMR are less than half for the period between 2019 and 2022 with 41%; this figure is similar to what is reported in European congresses such as EULAR (3). Despite the fact that the gender gap in rheumatology has decreased in recent years, the underrepresentation of women in Academic Rheumatology remains a problem to confront.



Reference 1: Battafarano, D, Ditmyer M, Bolster MD, et al. 2015 American College of Rheumatology Workforce Study: Supply and Demand Projections of Adult Rheumatology Workforce, 2015-2030. Arthritis Care Res (Hoboken) 2018; 70(4): 617–626.

Reference 2: Andreoli L, Ovseiko PV, Hassan N, et al. Gender equity in clinical practice, research and training: Where do we stand in rheumatology?. Joint Bone Spine 2019; 86(6): 669–672. https://doi.org/10.1016/j.jbspin.2019.05.005

Disclosure of Interest: None declared

Keywords: Epidemiology, Gender

PANLAR2023-1068

CHARACTERIZATION OF THE METABOLIC SYNDROME AND ITS ASSOCIATION WITH CARDIOVASCULAR RISK IN PATIENTS WITH PSORIASIS AT A SOUTH AMERICAN HOSPITAL

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Objectives: To determine the frequency of metabolic syndrome in patients with psoriasis who were seen in consultation at the Dermatology Department of a South American hospital from November 2017 to May 2018.

Methods: Descriptive cross-sectional study. In patients with diagnosis of psoriasis who were seen in consultation at the dermatologydepartment , the PASI, ATP-III, Framingham and GLOBORISK indices were applied.

Results: 55 patients, 55% men and 45% women were included; there was a statistical correlation between older age and the PASI index (p = 0.023). The main modifiable cardiovascular risk factors were smoking, sedentary lifestyle and obesity; a significant correlation was found for sedentary lifestyle (p = 0.047). The main non-modifiable cardiovascular risk factors were hypertension and diabetes showing both statistical significance (p = 0.004 and p = 0.0001, respectively). The ATP-III criteria showed statistical significance for hypertension, glycemia, total cholesterol and low HDL (p = 0.003, p = 0.008, p = 0.027 and p = 0.017, respectively). The frequency of metabolic syndrome was present in 47.27% of the sample. The most affected gender was male (61.54%). A statistical significant correlation was found between older age and the presence of the metabolic syndrome (p = 0.0001). The group with the higher frequency of metabolic syndrome was the one who had 6 to 10 years of disease duration (p = 0.001). When applying the Framingham and GLOBORISK scales there were higher scores in the patients as the PASI increased.

Conclusion: There is a high frequency of Metabolic Syndrome in patients with Psoriasis, so it is recommended to establish measures aimed at reducing the burden of cardiovascular disease in these patients.

Disclosure of Interest: None declared

Keywords: Cardiovascular disease, Epidemiology, Risk

PANLAR2023-1266

EFFECT OF GENDER BASED RHEUMATOID ARTHRITIS DIAGNOSIS DELAY ON 10 YEAR CARDIOVASCULAR RISK

Iris J. Colunga-Pedraza[1], Dionicio A. Galarza-Delgado[1], Jose R. Azpiri-Lopez[2], Valeria Gonzalez-Gonzalez*[1], Victor M. Beltran-Aguilar[1], Angel G. Arias-Peralta[2], Natalia De Avila-Gonzalez[1], Jesus A. Cardenas-de la Garza[1], and Gisela Garcia-Arellano[1]. *[1]Rheumatology, [2]Cardiology, Hospital Universitario "Dr. José Eleuterio González", Monterrey, México.*

Objectives: To compare the delay in diagnosis in patients with RA according to gender and to evaluate cardiovascular risk (CVR) stratification and disease severity in these patients.

Methods: Cross-sectional analytical study. Patients aged 40 to 75 years who met the 2010 ACR/EULAR classification criteria for the rheumatoid arthritis. A delay in diagnosis was defined as a difference of at least 6 months between the date of symptoms onset and the diagnosis date. Disease activity was assessed with the

DAS-28 CRP. Activity classification was performed using common cut-off values: remission (<2.6), low (≥2.6 to <3.2), moderate (≥3.2 to <5.1) and high (>5.1). Patients with a history of cardiovascular disease were excluded. The distribution between groups was assessed with the Kolmogorov-Smirnov test. Comparisons with Chi-square or Fisher's exact tests and Student's t-test, accordingly. A value of $p < 0.05$ was considered statistically significant.

Results: A total of 64 patients were included. Demographic and clinical characteristics are shown in Table 1. No difference in diagnosis delay was found between women and men with RA (23.96 months, p = 0.549). When comparing the algorithms for CVR assessment it was found that no calculator shows a difference in predicting high CVR in patients with delayed RA diagnosis regardless of gender (Table 1).

Conclusion: In patients with a delayed RA diagnosis, regardless of gender, no significant difference was found for high CVR prediction by CVR algorithms. Thus, we suggest integrating carotid ultrasound as part of the initial evaluation in patients with RA for reclassification of low-risk patients and prevent the occurrence of future cardiovascular events.

Disclosure of Interest: None declared

Keywords: Cardiovascular risk, Gender, Rheumatoid arthritis

TABLE 1. Cardiovascular risk algorithms.

Characteristics	Women with RA (n = 45)	Men with RA (n = 87)	*p* value
High CVR by algorithms			
ACC/AHA 2013, n (%)	1 (2.6)	3 (23.1)	NS
FRS-Lipids, n (%)	3 (7.5)	6 (46.2)	NS
FRS-BMI, n (%)	7 (17.5)	6 (46.2)	NS
RRS, n (%)	0 (0.0)	0 (0.0)	NS
QRISK3, n (%)	0 (0.0)	0 (0.0)	NS
SCORE2, n (%)	5 (12.2)	3 (21.4)	NS

RA, rheumatoid arthritis; SD, standard deviation; DAS28-CRP, 28-joint Disease Activity Score based on C-reactive protein; CVR, cardiovascular risk; FRS, Framingham score; BMI, body mass index; RRS, Reynolds risk score.

PANLAR2023-1263

MEXICAN MESTIZO COHORT OF RHEUMATOID ARTHRITIS PATIENTS: COMORBIDITIES AND CARDIOVASCULAR RISK FACTORS

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Objectives: To determine the prevalence of comorbidities and associated cardiovascular risk factors in Mexican patients with rheumatoid arthritis.

Methods: Observational, longitudinal, cross-sectional, and analytic study. Patients aged 40 to 75 years who met the ACR/EULAR 2010 Classification Criteria for Rheumatoid Arthritis in a period from August 2014 to December 2022 were included. Patients with a history of cardiovascular disease (myocardial infarction, cerebrovascular event, or peripheral arterial disease) were excluded. The distribution was evaluated with the Kolmogorov-Smirnov test. Normally distributed variables were described with means and standard deviations (SD) and the 25th and 75th percentiles (p25-p75) were used to report variables without a normal distribution.

Results: A total of 487 patients were included. The mean age was 55.3 ± 8.9 years, women 92.2%. The median for disease duration was 7.0 (2.8-14.5) years. In this cohort, 163 (33.3%) of patients were in remission, 67 (13.8%) had low, 198 (40.7%) moderate and 60 (12.3%) high disease activity according to DAS28-CRP. Of these patients, 401 (82.3%) were on methotrexate, 296 (60.8%) were on prednisone (median dose of 5.0 mg per day), and 260 (53.4%) were on both. The cardiovascular risk factors with the highest prevalence were overweight in 208 (42.9%) and obesity in 153 (31.4%). The most prevalent comorbidity was dyslipidemia in 150 (30.9%), the others are shown in Table 1.

Conclusion: Although patients with rheumatoid arthritis have a lower prevalence of traditional cardiovascular risk factors and of comorbidities compared to the general Mexican population, they continue to have a high cardiovascular risk and increased mortality at 3 – 10 years, which raises the question: should RA be included as a cardiovascular risk factor?

Disclosure of Interest: None declared

Keywords: Comorbidities, Epidemiology, Rheumatoid arthritis

TABLE 1. Patients' characteristics.

Characteristic	RA patients (*n* = 487)
Cardiovascular risk factors	
High blood pressure[a], n (%)	74.0 (15.2)
Family health history of premature CAD[b], n (%)	46 (9.4)
Overweight[c], n (%)	208 (42.9)
Obesity, n (%)	153 (31.5)
Active smoking, n (%)	48 (9.9)
Comorbidities	
Hypertension, n (%)	148 (30.4)
Dyslipidemia, n (%)	150 (30.9)
Diabetes, n (%)	76 (15.6)
Kidney disease, n (%)	0 (0.0)

RA, rheumatoid arthritis; CAD, cardiovascular disease; [a]Systolic blood pressure ³140 and/or diastolic blood pressure ³90; [b]BMI ³25 and < 30; [c]BMI ³30.

PANLAR2023-1187

PREVALENCE OF NECK PAIN IN ADULTS IN THE CITY OF ARACAJU-SE, BRAZIL

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Objectives: Neck pain is any pain located in the anatomical region of the neck with or without irradiation to the head, trunk and upper limbs. It presents with variations in intensity, crisis duration, symptomatology and intervals between pain episodes throughout life. The average neck pain prevalence rate for the general population is 23.1%; mean punctual prevalence, 14.4% and 1-year prevalence , 25.8%. The objective of the study was to estimate the prevalence of neck pain in adults in the city of Aracaju, Sergipe, Brazil and to identify possible associated factors.

Methods: Cross-sectional, non-probabilistic study with the participation of adults aged between 18 and 59 years living in the urban area of Aracaju, Sergipe. Sociodemographic data, prevalence of neck pain at one time and at 12 months andpain intensity were assessed using the Numerical Pain Scale and functional limitation using the Neck Disability Index.

Results: 242 adults participated, where 27.7% felt punctual pain during the interview (most of them were females (57.4%) aged between 28 and 38 years (32.6%)), while 72.3% did not felt any pain at the time; however, 66.1% of participants had felt pain over the preceding 12 months. Of the subjects who felt pain at the time of the interview, the mean intensity was 6.0 ± 4.76 and 85.1% had some level of disability (mild, moderate and severe).

Conclusion: The prevalence of punctual neck pain and pain over the preceding 12 months was high among adults; the pain intensity was moderate and associated with functional disability. Our results demonstrate that the prevalence of neck pain is high and can influence several aspects of the individual's life, therefore, it is important to create strategies and health promotion programs to prevent or reduce neck pain in Aracaju, Sergipe.

Reference 1: Hoy DG, Protani M, De R, Buchbinder R. The epidemiology of neck pain. Best Pract Res Clin Rheumatol. 2010; 24(6):783-92.

Reference 2: Hoy D, March L, Woolf A, et al. The global burden of neck pain: estimates from the Global Burden of Disease 2010 study. Ann Rheum Dis. 2014;73(1):1309-15.

Disclosure of Interest: None declared

Keywords: Health promotion, Neck pain, Prevalence

IMAGING

PANLAR2023-1099

USEFULNESS OF HIGH-RESOLUTION COMPUTED TOMOGRAPHY SIGNS TO DIFFERENTIATE BETWEEN NON-SPECIFIC INTERSTITIAL PNEUMONIA FROM USUAL INTERSTITIAL PNEUMONIA IN INTERSTITIAL LUNG DISEASE ASSOCIATED WITH SYSTEMIC SCLEROSIS

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Objectives: Straight edge sign (SES), four corners sign (FCS), anterior upper lobe sign (AULS) and exuberant honeycombing sign (EHS) have been described on high-resolution computed tomography (HRCT). These signs have been used to distinguish between usual interstitial pneumonia (UIP) of interstitial lung disease associated with systemic sclerosis (SSc-ILD) from UIP of idiopathic pulmonary fibrosis. This study aimed to evaluate the usefulness of HRCT signs to differentiate between non-specific interstitial pneumonia (NSIP) from UIP in SSc-ILD.

Methods: A cross-sectional study, which included patients >18 years of age with a diagnosis of SSc according to the 2013 EULAR/ACR criteria and diagnosis of ILD by forced vital capacity (FVC) < 70% and > 5% of affected lung area. Four HRCT signs were examined. SES consisted of isolation of honeycombing, reticulation or ground-glass attenuations to the lung bases and FCS was defined by previous findings in the anterolateral regions of mid-upper lobes and the posterosuperior regions of lower lobes. AULS was described by cyst and fibrosis in anterior regions of the upper lobes and EHS was delineated by these findings in more than 50% of the lungs (**Figure 1**). Cases were blindly evaluated by a radiologist and a clinician. The agreement between them were assessed by inter-rater reliability (Cohen k). Sensitivity, specificity and diagnostic accuracy (DA) were calculated.

Results: Of 74 patients with SSc, 39 (52.7%) had ILD; of them 59% had NSIP and 51.3% showed extensive disease. The agreement between readers for UIP (k = 0.796) and NSIP (k = 0.677) was good. SES was more useful to distinguish between NSIP from UIP. FCS had high specificity but modest sensitivity for UIP. On the contrary, EHS had the best DA for UIP (Table 1).

Conclusion: This study suggests that in SSc-ILD, SES can be useful to differentiate between NSIP from UIP. For UIP, FCS has the highest specificity, but EHS show better DA.

Reference 1: Walkoff L, White DB, Chung JH, et al. The Four Corners Sign: A Specific Imaging Feature in Differentiating Systemic Sclerosis-related Interstitial Lung Disease From Idiopathic Pulmonary Fibrosis.J Thorac Imaging. 2018;33(3):197-203.

Reference 2: Zhan X, Koelsch T, Montner SM, et al. Differentiating Usual Interstitial Pneumonia From Nonspecific Interstitial Pneumonia Using High-resolution Computed Tomography: The "Straight-edge Sign". J Thorac Imaging. 2018;33(4):266-270.

Disclosure of Interest: None declared

Keywords: High-resolution computed tomography, Interstitial lung disease, Systemic sclerosis

TABLE 1. Performance of High-Resolution Computed Tomography Signs in Differentiation between patterns from Interstitial Lung Disease associated with Systemic Sclerosis.

High-resolution Computed tomography Signs	Sensitivity (%)	Specificity (%)	Diagnostic accuracy (%)
In Non-Specific Interstitial Pneumonia	73.9	94.1	87.83
Straight edge	0	84.3	58.10
Four corners	17.4	76.5	58.10
Anterior upper lobe	26.1	70.6	56.75
Exuberant honeycombing	18.8	70.7	59.45
In Usual Interstitial Pneumonia	50	100	89.18
Straight edge	75	93.1	89.18
Four corners			90.54
Anterior upper lobe	93.8	89.7	
Exuberant honeycombing			

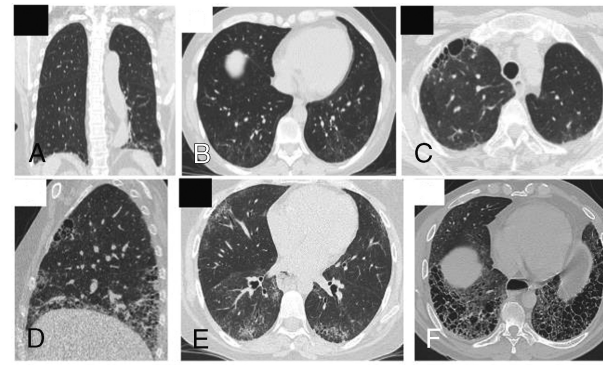

Figure 1. Selected images of high-resolution computed tomography (HRCT) signs. Coronal **(A)** and axial **(B)** HRCT images demonstrate straight edge sign. Axial **(C)** HRCT image represents anterior upper lobe sign. Sagittal **(D)** and axial **(E)** HRCT images depict four corners sign. Axial **(F)** HRCT image shows exuberant honeycombing sign.

PANLAR2023-1498

LUNG QUANTIFICATION CORRELATES WITH PULMONARY FUNCTION TESTS AND PREDICTS MORTALITY IN SYSTEMIC SCLEROSIS

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Objectives: Computed Aided Lung Informatics for Pathology Evaluation and Rating (CALIPER) is a new method for the quantification of parenchymal abnormalities and vascular features on high-resolution computed tomography (HRCT). We aimed at investigating whether changes in parenchymal abnormalities measured by CALIPER are associated with mortality and correlate with pulmonary function tests (PFTs) in patients with systemic sclerosis (SSc).

Methods: Patients diagnosed with SSc (2013 ACR/EULAR criteria) evaluated from January 2011 to October 2022 at the Scleroderma outpatient's clinic at Federal University of São Paulo were consecutively selected. To be included, patients should have volumetric HRCTs and PFTs performed at baseline and at 24 months of follow-up. All causes of death and clinical variables were collected from clinical records. HRCTs were analyzed using CALIPER. The following parameters were evaluated: ground glass opacities (GGO), reticular pattern (RET) and honeycombing (HC). The extent of interstitial lung disease (ILD-extent), given by the sum of GGO, RET and HC and the fibrosis score given by the sum of the RET and HC were also evaluated. The best thresholds for CALIPER measurements were calculated using ROC analysis. Factors associated with death were evaluated by Kaplan-Meier survival curves.

Results: Of the 71 SSc patients included, eleven patients (15.49%) died during follow-up, and all had ILD (Table 1). All CALIPER parameters (except HC) had a significant correlation with forced vital capacity (FVC) at baseline ($p < 0.001$). As shown by the Kaplan-Meier survival curves, survival was worse among patients with an FVC at baseline ≥70% than <70%, an ILD-extent% ≥ 6.32, a fibrosis score% ≥ 1.42, and a reticular pattern % ≥ 1.41 at baseline (Figure 1).

Conclusion: CALIPER is a useful tool for assessing lung extent involvement and damage and predicting mortality in patients with SSc. Future studies are needed to confirm these data.

Disclosure of Interest: None declared

Keywords: Interstitial lung disease, Systemic sclerosis

TABLE 1. Clinical Characteristics

Age, mean (SD)	54.2 (11.6)
Female sex n (%)	64 (90.1%)

Continued next page

TABLE 1. *(Continued)*

Disease duration Median, (IQR)	11.4 [7.00-14.00]
Diffuse/Limited n (%)	26 (36.6%)/45 (63.4%)
ILD n (%)	60 (84.5%)
Antitopoisomerase I antibodies / Anticentromere antibodies n (%)	20 (31.3%) / 13 (22.4%)
Pulmonary function test (Mean-SD)	
FVC, % pred Mean (SD)	73.6 (19.1)
DLCO, % pred Mean (SD) (n = 8)	54.3 (13.7)
CALIPER Median [quartile range]	
GGO %	6.06 [1.87 – 15.8]
RET %	1.58 [0.671 – 2.85]
HC%	0.015 [0.007-0.05]
Fibrosis Score%	1.65 [0.68 – 3.25]
ILD-Extent%	7.82 [3.27 – 19.1]

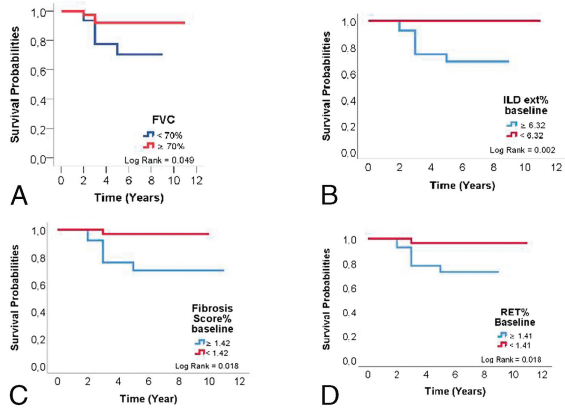

Figure 1. Survival compared between SSc patient with: (A) CVF=70% and < 70%, (B) ILD-extent levels above and below a threshold value of 6.32, (C) Fibrosis Score = or < than 1.42, and (D) Reticular pattern (RET) = or < 1.41 at baseline.

PANLAR2023-1273

DIAGNOSTIC PERFORMANCE OF HIP ULTRASOUND IN CALCIUM PYROPHOSPHATE DEPOSITION DISEASE

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Objectives: Calcium pyrophosphate deposition disease (CPPD) is a chronic and potentially incapacitating disease. The reference standard for its diagnosis is the identification of calcium pyrophosphate (CPP) crystals in synovial fluid. Ultrasound (US) has been proven to be a highly sensitive and specific tool for the diagnosing of CPPD. Still, its diagnostic performance for hip joint involvement has yet to be determined.

To evaluate the diagnostic performance of US compared with synovial fluid analysis and histopathology (hyaline cartilage, fibrocartilage, synovial membrane) for identifying hip CPP deposits.

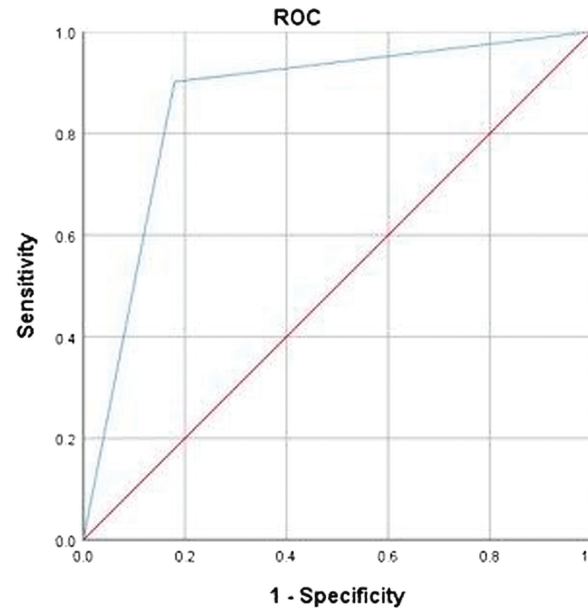
Methods: We included patients older than 50 years with osteoarthritis who had been scheduled for hip replacement surgery at a tertiary referral hospital. Patients with an inflammatory or autoimmune rheumatologic disease were excluded. A pre-surgical US of the affected hip was performed with a LOGIQ^{TM}e device and a convex transducer (2-5 MHz); the anatomical structures evaluated were the acetabular fibrocartilage (FC) and the hyaline cartilage of the femoral head (HC), video tracking was recorded and a dichotomic score was assigned to determine the presence or absence of CPP deposits (in line with OMERACT definitions). During surgery, a sample of hip synovial fluid was obtained and examined using polarized light microscopy. After surgery, an experimented pathologist examined the FC and HC for CPP crystals.

Results: One hundred patients were included. 54% were women with a mean age of 64.8 ± 8.5 years. All patients had advanced osteoarthritis (Kellgren-Lawrence 3 = 33 and Kellgren-Lawrence 4 = 67). A frequency of 62% CPP deposits was found through US examination, of which 19.4% were found on FC, 46.8% on HC, and 33.8% in both. Regarding pathology evaluation, a prevalence of 61% of CPP crystals was found; 13.1% were found on FC, 9.8% were found on HC, and 77.1% were found in both. 33% of patients had synovial effusion and 9% had synovial hypertrophy. Synovial fluid was obtained in 62% of patients, with a median volume of 0.8 mL (IQR 0.5-1.5 mL), and CPP crystals were found in 19.4% (12/62) of samples. Chondrocalcinosis in Xray films was found in 10%. A sensitivity of 90% and a specificity of 82% were obtained, the positive predictive value was 89%, and the negative predictive value was 84%. The area under the curve for the US was 0.86 (CI 95% 0.78-0.94). (Figure 1).

Conclusion: US is a valid imaging method with good diagnostic performance for diagnosing CPPD in the hip joint.

Reference: Filippou G, Scanu A, Adinolfi A, et al. Criterion validity of ultrasound in the identification of calcium pyrophosphate crystal deposits at the knee: an OMERACT ultrasound study. Ann Rheum Dis 2021;80 (2):261–7.

Figure 1. ROC curve of US



Disclosure of Interest: None declared
Keywords: Coxofemoral joint, CPPD, Ultrasound

IMAGING

PANLAR2023-1287

PSA PATIENTS ON BIOLOGIC THERAPY HAVE LOWER PREVALENCE OF BILATERAL CAROTID PLAQUE

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Objectives: To evaluate the presence of carotid disease in patients with PsA using biologics or non-biologics

Methods: This was a cross-sectional, descriptive study. PsA patients aged 40-75 years, who fulfilled the 2006 CASPAR criteria were recruited. Carotid ultrasound was performed on all study participants, and the presence of carotid plaque (CP), defined as carotid intima-media thickness (cIMT) ≥1.2 mm or focal thickness ≥ 0.5 mm, was assessed. Patients were divided into 2 groups according to whether they use bDMARDs or not. Comparisons were done with Chi-square test, Student´s T test and Mann-Whitney's U-test. A p value ≤0.05 was considered significant.

Results: A total of 67 patients were recruited. Demographic characteristics are shown in Table 1. Twenty-seven were under bDMARD treatment, twenty-five of these were using an anti-TNF. We found a difference in C-reactive protein (CRP) levels (p = 0.004), lower in patients with bDMARDs and in the presence of bilateral CP (p = 0.041), less prevalent in patients with bDMARDs. The rest of the variables studied did not show significant differences.

Conclusion: We found that PsA patients under bDMARDs therapy had lower levels of CRP and less prevalence of bilateral CP in PsA, therefore strengthens the theory that the less inflammation the less bilateral carotid plaque is present.

Reference 1: Fragoulis GE, Soulaidopoulos S, Sfikakis PP, Dimitroulas T, Kitas GD. Effect of Biologics on Cardiovascular Inflammation: Mechanistic Insights and Risk Reduction. J Inflamm Res. 2021 May;Volume 14:1915–31.

Disclosure of Interest: None Declared

Keywords: Biological Therapies, Cardiovascular Disease, Psoriatic Arthritis

TABLE 1. Demographic, laboratory and carotid Doppler characteristics.

	Characteristics	PsA patients with bDMARDs (n = 27)	PsA patients without bDMARDs (n = 40)	p value
Demographic	Age, years, mean (DE)	52.00 (7.24)	57.98 (8.93)	0.004
	Women, n (%)	13 (19.4)	18 (26.86)	NS
	Disease duration, years, median (iQR)	8.0 (4.0-14.0)	6.0 (3.0-10.7)	NS
	BMI, median (iQR)	29.4 (25.86-34.57)	28.46 (26.59- 31.75)	NS
	SBP, mean (DE)	128.59 (14.76)	129 (21.48)	NS
	DBP, mean (DE)	85.15 (10.54)	78.53 (11.78)	0.019
Laboratory profile	Cholesterol, mg/dL. mean (DE)	187.7 (39.51)	171.7 (36.59)	NS
	Triglycerids, mg/dL. median (iQR)	141.7 (100.3-199.7)	128.4 (94.8-173.9)	NS
	HDL, mg/dL, mean (DE)	48.1 (10.83)	47.5 (15.00)	NS
	LDL, mg/dL, mean (DE)	106.3 (30.73)	94.2 (34.31)	NS
	CRP, mg/dL. median (iQR)	0.34 (0.28-0.94)	0.62 (0.36-1.09)	0.05
	ESR, mm/H, median (iQR)	14.0 (8.0-18.0)	18.0 (11.0-31.5)	NS
Carotid Doppler	Unilateral CP, n	9	6	NS
	Bilateral CP, n	2	11	0.041

BMI body mass index, SBP systolic blood preassure, DBP diastolic blood preassure, CRP C-reactive protein, ESR erythrocyte sedimentation rate, CP carotid plaque

PANLAR2023-1311

CAN WE DIFFERENTIATE PATIENTS WITH DYSFERLINOPATHIES AND INFLAMMATORY MYOPATHIES BY MUSCLE ULTRASOUND? A DISCRIMINANT ANALYSIS STUDY

Sinthia Yadira Solorzano Flores[1], Rosa Carina Soto Fajardo*[1], Abish Angeles Acuña[1], Fabian Carranza Enriquez[1], Rosa Elena Escobar Cedillo[2], Saúl Renán León[1], and Carlos Pineda Villaseñor[1]. *[1]Rheumatology, [2]Electromyography and muscular dystrophy, Instituto Nacional de Rehabilitación Luis Guillermo Ibarra Ibarra, Ciudad de México, Mexico.*

Objectives: Immune-mediated myopathies (IMM) are characterized by inflammation and muscle weakness; among their differential diagnoses are the dysferlinopathies

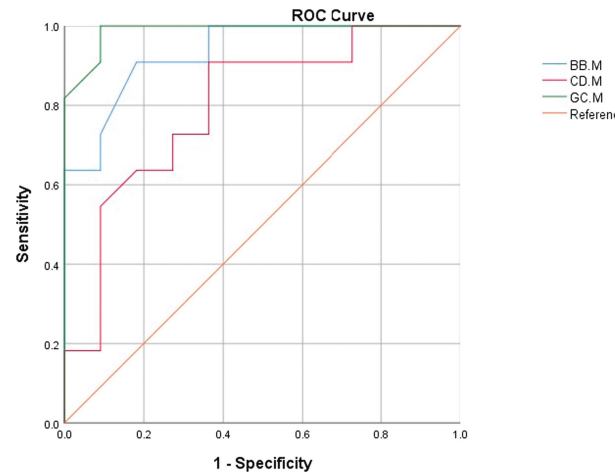
The objective was determine the sonographic differences between dysferlinopathies and immune-mediated myopathies and whether these allow their classification.

Methods: Observational, cross-sectional, and analytical study in which we evaluated 20 muscles from 11 patients with dysferlinopathies and 11 with IMM. They were matched for age, sex, and time of disease evolution. Clinical and laboratory variables were analyzed. GE LOGIQ™e equipment with a 4-12 MHz linear transducer was used, and the thickness of each muscle was measured. A semiquantitative scale evaluated elementary lesions: atrophy, edema, power Doppler, and the Heckmatt scale (0-4) was calculated. Descriptive statistics were performed. Finally, discriminant analysis was performed to determine which ultrasound variables best predicted the diagnoses.

Results: 40 muscles were evaluated, finding a greater degree of atrophy and a higher Heckmatt scale in patients with dysferlinopathies compared to IMM.

TABLE:.

General characteristics	Dysferlinopathies n = 11	IMM n = 11	
Women	9 (81.8%)	9 (81.8%)	
Manual Muscle Testing Scores [MMT8 (mean)]	100 (79-112)	145 (136-147)	*.007*
Laboratories			
CK (mcg/L)	2785.50 (1052.75-4378.75)	162.00 (72.00-311.00)	*.000*
Muscle size			
BB (cm)	1.67 ± 0.63	2.78 ± 0.49	*<0.0001*
CD (cm)	2.70 ± 0.84	3.45 ± 0.87	*.046*
GC (cm)	1.88 ± 0.42	3.16 ± 0.42	*<0.001*
Discriminant analysis	Function	Function	**CP
BB	7.434	13.928	<2.44
CD	-1.117	-4.250	<2.72
GC	13.489	25.399	<2.29
Constant	-18.051	-52.935	
	-18.051 + 7.434(B/B)-1.117 (CD) + 13.489(GC)	-52.953 + 13.928(B/B)-4.250(CD) + 25.399(GC)	



Discriminant analysis showed that the set of 3 muscles, Right biceps/brachialis (BB), Right quadriceps (CD), and Gastrocnemius/right soleus (GC), had a diagnostic accuracy of 100% (sensitivity 100%, specificity 100%, canonical coefficient 0.733 p = .000). We present a set of 2 formulas that allow classifying with the highest score according to the measurement of the muscles in group 1 (dysferlinopathy) or group 2 (MII). Finally, a COR analysis was performed to determine the cut-off points of each muscle to classify as dysferlinopathies (table 1).

Conclusion: The study of 3 muscle groups (BB, CD, GC) presents high diagnostic accuracy to differentiate dysferlinopathies from IMM, especially when there is no genetic study or antibodies available, and there is diagnostic doubt.

Disclosure of Interest: None Declared

Keywords: None

PANLAR2023-1262

VALUE OF LUNG ULTRASOUND FOR THE DETECTION OF INTERSTITIAL LUNG DISEASE IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Objectives: To establish the diagnostic value of lung ultrasound (LUS) in interstitial lung disease(ILD) in patients with rheumatoid arthritis (RA), using chest High-resolution computed tomography (HRCT) as the gold standard.

Methods: A cross-sectional study was performed at the Hospital Italiano de Buenos Aires, Argentina. Consecutive patients with RA (ACR/EULAR-2010 criteria), who had a chest HRCT performed at least 12 months previous to inclusion.Demographic, clinical, laboratory and therapeutic data were recorded. Each patient underwent a LUS with a simplified examination (14 bilateral lung intercostal spaces -LIS-), with assessment of B-lines (BL) and pleural irregularities (PI). Additionally, a 6MWT was performed on each patient. For the diagnosis of ILD, HRCT was the gold-standard, taking as a threshold an extension of interstitial involvement ≥10%, scored by an expert lung specialist. ROC curves were made to test the ability of LUS findings (BL and PI), and 6 MWT, to discriminate patients with ILD.

Results: A total of 104 RA patients were included, 21,8 % with ILD, 82.7% (95% CI 74.0-89.4) were women, with a median age at diagnosis of RA of 57.5 years (IQR 47.3 -67.2) and a median disease duration of 8.7 years (IQR 3.3-15.8). 96.2% of patients (95% CI 90.5-98.9) were seropositive for rheumatoid factor (RF) and/or anti-citrullinated protein antibodies (ACPA), and median DAS28-ESR was 3.19 (IQR 2.6-4.6). Patients with ILD were older at the time of RA diagnosis (64 vs 54 years, p = 0.002) and had higher erythrocyte sedimentation rate (ERS) and C-reactive protein (CRP) (48 vs 29 mm/h and 5.9 vs 3 g/L p = 0.002) than patients without ILD. In LUS, patients with ILD had more BL (median 26 vs. 1, p < 0.001), (Figure 1) and PI (median 12 vs. 4, p < 0.001) than patients without ILD.The diagnostic accuracy in ROC curves was: AUC 0.88 - 95% CI 0.78-0.93 for BL and AUC 0.82 - 95% CI 0.74-0.89 for PI. The best cut-off point for ILD detection was 8 BL and 7 PI.The performance of LUS was more sensitive than 6 MWT (Table 1).

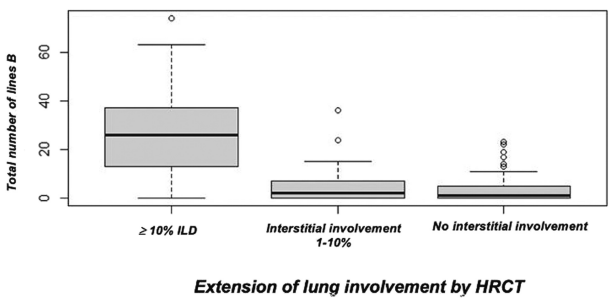
Conclusion: The presence of 8 BL and/or 7 PI in the LUS showed an adequate diagnostic performance for ILD, with a good negative prognostic value.

Disclosure of Interest: None Declared

Keywords: interstitial lung disease - rheumatoid arthritis - Lung Ultrasound - high-resolution computed tomography

TABLE 1. *Diagnostic performance of LUS and 6MWT for the detection of ILD*

Test	Sensitivity	Specificity	LLR positive	LLR negative	Positive Prognostic Value	Negative Prognostic Value
B-lines (≥8)	80,95%	79,52%	3,95	0,24	50	94,30
Pleural irregularities (≥7 spaces)	80,95%	75,90%	3,36	0,25	45,95	94,03
6MWT	36,84%	92,31%	4,70	0,68	53,85	85,71



PANLAR2023-1338

APPLICATION OF MAGNETIC RESONANCE IMAGING IN A RHEUMATOLOGY CENTER

Javier Federico Flores Trejo*[1], Joan Manuel Dapeña[1], Juan Manuel Bande[1], María Alejandra Medina[1], José Angel Caracciolo[1], and Silvia Beatriz Papasidero[1]. [1]*Hospital Tornú, Buenos Aires, Argentina.*

Objectives: Magnetic Resonance Imaging (MRI) has become a versatile tool for the rheumatologist, allowing us to see structural damage and inflammatory activity. Apart from the guidelines/recommendations on inflammatory rheumatic diseases, little is known about the extent of its use in other rheumatic pathology groups. The aim of this study was to determine the MRI request frequency in a cohort of patients with musculoskeletal diseases and to describe features related to order, realization, and results of this study. Also, to evaluate the elapsed time between the symptom onset and the request and between the order to the MRI completion.

Methods: Observational, descriptive, retrospective and analytical study. Patients ≥18 years followed up in our center between March 2014 and March 2020 were included. Patients with less than 1 year of follow-up and those with diagnosis of any inflammatory rheumatic disease were excluded. Sociodemographic data and comorbidities were collected. Regarding MRI, request reason, region studied, quantity of MRI requested/performed, time from symptoms onset to request and between request and execution were recorded. In those who had MRI, pathological findings were reported. Other complementary studies were registered.

Results: A total of 841 patients were included: 76% female, mean age 57 years old (SD 14). Forty-four percent worked, and 48% had healthcare coverage. The most common comorbidities were high blood pressure (36%), dyslipidemia (27%) and hypothyroidism (14%). Fourteen percent had osteoarthritis and 9% osteoporosis. Patients were followed-up for pain in low back (51%), shoulder (17%), knee (12%) and neck (10%). MRI was requested in 12% (N = 104) and performed in 79% (n = 82). The most requested regions were lumbar spine (49%), shoulder (17%), knee (13%) and cervical spine (11%). Other complementary studies were requested in 96% (n = 100). The mean time from the initial symptoms to the MRI request was 25 months (SD 37) and, from the request to the MRI realization was 38 days (SD 53). Among MRI findings 49% presented joint involvement, 45% spinal disc, 22% tendinous, 10% meniscal, 7% ligamentous, 4% muscular and 2% neurological damages. MRI findings were not pathological in 11% of the cases.

Conclusion: MRI was requested in 12% of the patients, being performed only in 78% of the cases. The time from onset symptoms to its request was around 2 years and, once indicated, one month delay was observed until its performance. Almost 90% of the MRI performed were pathological.

Disclosure of Interest: None Declared

Keywords: Magnetic Resonance Imaging

PANLAR2023-1031

SHEAR-WAVE ELASTOGRAPHIC ULTRASOUND OF METACARPOPHALANGEAL SECOND IN SYNOVIUM OF RHEUMATOID ARTHRITIS

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Objectives: Background: Musculoskeletal ultrasonography has an established role in diagnosing, monitoring disease activity and assessing joint damage in rheumatoid arthritis. The standard modalities are grey scale ultrasound (GSUS) which assesses tissue morphology, and power Doppler ultrasound (PDUS) which measures blood flow.

Shear-wave elastographic ultrasound (SW-EUS) is a third modality that is currently used in liver, thyroid and breast imaging but has litlle studied in synovial tissue.

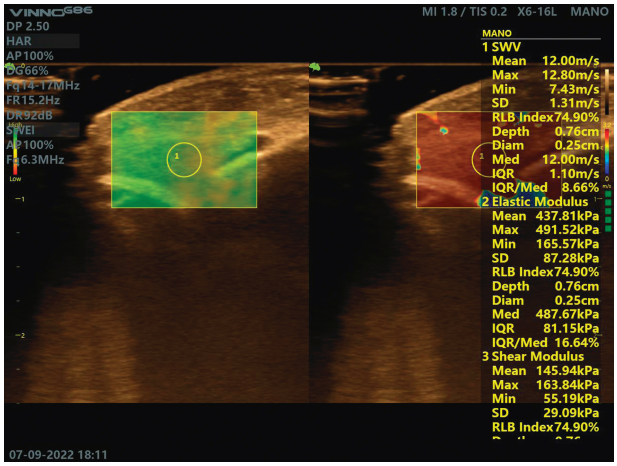
Shear-wave elastographic ultrasound (SW-EUS) assesses the stiffness of human tissues. It is used in liver, thyroid and breast imaging but has litle studied in synovium. Soft tissues have a slower shear-wave velocity (SWV) than stiff tissues. There is a hypothesis that rheumatoid arthritis (RA) patients would have softer synovium than controls and this could be quantified with a slower SWV. We also assessed whether SWV varied with disease activity.

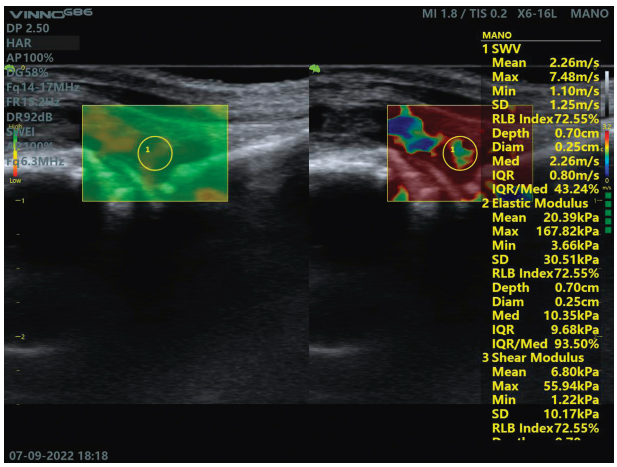
Objetives: Perform a quantitative analysis of SW-EUS in 2MCP synovium of patients with RA and controls

Determine whether there is a correlation between SW-EUS and disease activity

Methods: Fifteen patients with RA were consecutively recruited and matched with ten controls. Participants underwent clinical assessment, blood sampling, grey scale ultrasound (GSUS), power Doppler ultrasound and SW-EUS of MCP joints 2, on the dominant hand.

Results: Average age was 40. Mean RA disease activity (DAS28-ESR) was moderate at 3.65. Patients with RA had lower maximum synovial SWV than controls (7.41 m/s vs. 12.00 m/s P < 0.001). Negative Pearson's correlation coefficients (PCC) were observed between maximum SWV and disease activity markers including GSUS graded synovial thickness (PCC = -0.57, P = 0.03) and ESR (PCC = -0.46, P = 0.095).





Conclusion: This is the first pilot study in Latin America of SW-EUS in synovium. Mean SWV was significantly lower in RA than controls. There was a negative correlation between mean and maximum SWV and GSUS synovial thickening. Further study is warranted to confirm the role of SW-EUS in diagnosing and assessing disease activity in RA

Reference 1: Mihra S. Taljanovic, MD, PhD, Lana H. Gimber, MD, MPH, Giles W. Becker, MD, L. Daniel Latt, MD, PhD, Andrea S. Klauser, MD et al. Shear-Wave Elastography: Basic Physics and Musculoskeletal Applications. RadioGraphics 2017; 37:855–870

Disclosure of Interest: None Declared
Keywords: Ultrasound

PANLAR2023-1229

CAPILLAROSCOPIC FINDINGS IN PATIENTS WITH SJÖGREN'S SYNDROME IN A HIGH-COMPLEXITY CENTER IN MEDELLÍN, COLOMBIA. 2016-2022

Simón Hoyos-Patiño*[1], and on behalf of UNIR Resrarch Group, Alejandro Arango-Martínez[2] on behalf of UNIR Research Group, Libia María Rodríguez-Padilla[2] on behalf of UNIR Research Group, Andrés Chavarriaga-Restrepo[3,4] on behalf of UNIR Research Group, Carlos J. Velasquez-Franco[3,5] on behalf of UNIR Research Group. *[1]Internal Medicine, [2]School of Health Sciences, Universidad Pontificia Bolivariana, [3]Rheumatology, Clinica Universitaria Bolivariana, [4]Rheumatology, Clinica CES, [5]Rheumatology, Universidad Pontificia Bolivariana, Medellin, Colombia.*

Objectives: To describe the capillaroscopic findings in patients with Sjögren's syndrome at a national reference center for capillaroscopy in Medellín, Colombia, between 2016 and 2022.

Methods: A retrospective descriptive observational study was carried out. Subjects over 18 years who met ACR/EULAR 2016 criteria, confirmed by a rheumatologist, were included. Capillaroscopic variables were analyzed (number of capillaries per millimeter, dilated capillaries, megacapillaries, abnormal capillaries, microhemorrhages, avascular zones, arborescent capillaries, capillary disorganization, and capillaroscopic pattern). Qualitative variables were expressed by absolute and relative frequencies and quantitatives through median and interquartile range (IQR) due to the heterogeneous distribution of data. Statistical analysis was performed using the IBM SPSS version 27 program.

Results: In total there were 65 individuals, of which 63 (96.9%) were female: The median age was 55 years (IQR: 42-66). The most frequent capillaroscopic finding was the presence of dilated capillaries in 36 subjects (55.4%). The rest of capillaroscopic findings are described in Table 1.

The most frequent capillaroscopic pattern was non-scleroderma – normal in 32 patients (49.2%). The rest of the patterns are depicted in Table 2.

TABLE 1. Capillaroscopic findings in 65 patients with Sjögren's syndrome from a capillaroscopy reference center in Medellin, Colombia.

	n (%)
Decreased capillary density	8 (12.3)
Dilated capillaries	36 (55.4)
Megacapillaries	10 (15.4)
Abnormal capillaries	22 (33.8)
Microhemorrhages	16 (24.6)
Avascular zones	12 (18.5)
Arborescent capillaries (n = 28)	3 (10.7)
Capillary disorganization	22 (33.8)

TABLE 2. Capillaroscopic patterns in 65 patients with Sjögren's syndrome from a capillaroscopy reference center in Medellin, Colombia.

Capillaroscopic pattern	n (%)
Non-scleroderma normal	32 (49.2)
Non-specific abnormalities	21 (32.3)
Early Scleroderma	3 (4.6)
Active Scleroderma	8 (12.3)
Late Scleroderma	1 (1.5)

Conclusion: Unlike the systematic review by Melsens et al. (Clin Exp Rheumatol. 2020;38 Suppl 126(4):150-157), where lower capillary density was the only statistically significant finding, in our study dilated capillaries and capillary disorganization were frequent. We also describe a significant frequency of non-scleroderma pattern, non-specific abnormalities, and scleroderma pattern (n = 12; 18.5%), only reported by Melsens et al. in one study.

Disclosure of Interest: None Declared
Keywords: Capillaries, Microscopic angioscopy, Sjogren's Syndrome

PANLAR2023-1012

NAILFOLD VIDEO-CAPILLAROSCOPY IN MDA5 POSITIVE PATIENTS WITH AND WITHOUT CUTANEOUS ULCERS

Ronald Butendieck*[1]. [1]*Rheumatology, Mayo Clinic, Jacksonville, United States.*

Objectives: The MDA5 is classified as a myositis-specific antibody and has been associated with rapidly progressive interstitial lung disease (ILD), amyopathic dermatomyositis (aDM), mechanic's hands, ulcerations, inflammatory arthritis and increased mortality. Nailfold videocapillaroscopy (NVC) represents the best method to assess the microvascular abnormalities. A defined pattern on NVC has been reported in patients with dermatomyositis. This goal of this study is to compare the NVC characteristics of MDA5-positive patients who develop skin ulcers versus patients who do not develop skin ulcers to see if NVC findings will correlate with the severity of skin lesions.

Methods: NVC was performed in all 7 MDA5-positive patients (3 male and 4 female). Patient mean age was 59.6 years old. The capillary parameters were scored as standardized by current guidelines. The 3 MDA5-positive patients with skin ulcers were compared to the 4 MDA5-positive patients without skin ulcers. Baseline clinical characteristics and serology were recorded in all patients.

Results: A scleroderma like pattern was noted in 5 out of 7 patients but no significant NVC differences were noted between the 2 groups. In our sample of MDA5-positive patients, 2 had Raynaud's, 5 out of 7 had periungual erythema and 2 had mechanics hands. One patient with cutaneous ulcerations died soon after diagnosis and his NVC was normal.

Conclusion: MDA5-positive patients with or without cultaneous ulcers were found to have scleroderma like pattern on NVC without discernable differences. However, the comparison was performed on patients who were at different stages of the disease and at different time during therapy which may have influenced the findings. Further investigation with NVC on a larger cohort of MDA5-positive patients early in the disease could identify differences between the 2 groups.

Disclosure of Interest: None Declared

Keywords: capillaroscopy, dermatomyositis, skin ulcer

PANLAR2023-1562

DIAGNOSTIC ACCURACY OF LUNG ULTRASOUND FOR DETECTING INTERSTITIAL LUNG DISEASE AMONG PATIENTS WITH SYSTEMIC SCLEROSIS: A COMPARATIVE STUDY OF TWO SCANNING PROTOCOLS

Sinthia Yadira Solorzano Flores[1], Fabián Carranza Enríquez*[1], Carina Soto Fajardo[1], Abish Ángeles Acuña[1], Carlos Pineda Villaseñor[1], Tatiana Sofía Rodríguez Reyna[2], Amyrari Vázquez Ortega[2], Iván Jesús Vázquez Romero[2], and Mayra Edith Mejía Ávila[2]. [1]*Rheumatology, Instituto Nacional de Rehabilitación "Luis Guillermo Ibarra Ibarra",* [2]*Immunology and Rheumatology, instituto Nacional de Ciencias Médicas y Nutrición "Salvador Zubirán", Mexico City, Mexico.*

Objectives: To evaluate diagnostic accuracy of LUS for ILD by comparing the systematic evaluation of 14 intercostal spaces (ICS) against 12 postero-basal ICS.

Methods: Patients with SSc (according to established classification criteria) were recruited from the Rheumatology clinic of the National Institute of Medical Sciences and Nutrition, reference hospital in Mexico City. Demographic, clinical, serological, and imaging variables were collected, followed by LUS assessment with the simultaneous scanning of 14 predetermined ICS and 12 postero-basal ICS. "B" lines (BL) and pleural abnormalities (PA) were documented for each ICS. HRCT was performed with a maximum 3 month-interval from the time of recruitment (before or after).

Descriptive statistics for categorical and continuous variables was used. A bivariate analysis was undertaken to discriminate factors associated with the presence of ILD. Diagnostic accuracy was assessed through elaboration of ROC curves.

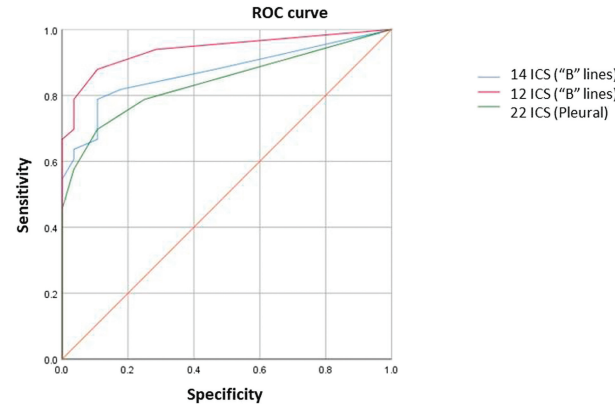
Results: We included 73 patients, with a median age of 54.5 ± 15.1 years and 96.1% were women. Prevalence of ILD was 43.6%. Relevant baseline characteristics are shown in Table 1. Acknowledged risk factors for ILD were pulmonary hypertension (OR 6.27, CI 95% 1.75-22.4, p = 0.005) and diffuse SSc (OR 6.17, CI 95% 1.92-19.76, p = 0.002).

The AUC were 0.87 (95% CI, 0.78-0.96), 0.94 (95% CI, 0.88-1.00) and 0.84 (95% CI, 0.74-0.94) for the evaluation of the number of BL in 14 ICS, in 12 ICS and the number of ICS with PA (22 EIC), respectively. ROC curves are represented in Image 1.

TABLE 1. General characteristics

Variable	w/o ILD (*n* = 40)	ILD (*n* = 31)	*p* value
Age	50.3 ± 13.05	56 ± 12.2	0.66
Gender (female)	40 (56.3)	28 (39.4)	0.079
Systemic Sclerosis variant (n = 71):			
Limited	33 (46.5)	14 (19.7)	**0.003**
Diffuse	7 (9.9)	17 (23.9)	
Anti-Scl-70 (n = 64)	22 (34.3)	23 (35.9)	0.179
Anti-centromere (n = 68)	30 (44.1)	23 (33.8)	1.000
Pulmonary Hypertension (n = 71)	5 (7.0)	14 (19.7)	**0.003**
Medsger global score (n = 69)	2 (1-2)	2 (1-3)	**0.048**
Warrick score	13.5 (9-20.8)	4 (0-9.5)	**<0.001**
Mycophenolate mophetil	7 (9.8)	13 (18.3)	**0.033**

Continuous variables: Mean ± DE, Median (25-75), Categorical variables: Frequency (%)
ILD: Interstitial Lung Disease



Conclusion: Our study confirms the robustness of LUS as a tool for the detection of ILD by using any of two different scanning protocols (14 and 12 ICS). The added value of PA identification for the diagnosis of ILD with LUS is still unknown.

Disclosure of Interest: None Declared

Keywords: interstitial lung disease, lung ultrasound, systemic sclerosis

PANLAR2023-1588

ULTRASOUND LEARNING CURVE IN INTERSTITIAL LUNG DISEASE OF AUTOIMMUNE RHEUMATIC DISORDERS: A DISEASE ORIENTED TRAINING PROGRAM

Marwin Gutierrez*[1], Daniel Mejia-Arredondo[1], Juan Carlos Arana-Ruiz[1], and Chiara Bertolazzi[1,2]. [1]*Center of Excellence in Musculoskeletal and Rheumatic Disorders,* [2]*Instituto Nacional de Rehabilitacion LGII, Mexico City, Mexico.*

Objectives: To describe the learning curve of rheumatologists with limited experience using ultrasound (US) attending an intensive disease-oriented training program focusing on the skills required to obtain and interpret US signs of ILD in patients with autoimmune rheumatic diseases

Methods: **Five** investigators participated in a seven-day training program involving 15 patients with autoimmune rheumatic diseases. The expert sonographer was a Rheumatologist with >15 years of US experience, whose assessments were used as the gold standard to evaluate the US findings obtained by the remaining 4 investigators. Two beginner sonographers were fellows in rheumatology with 5 months of global US experience, whereas the other 2 beginner sonographers were fellows in rehabilitation and rheumatology with a very basic knowledge of musculoskeletal US (<3 months) and no direct US experience in ILD. The training program lasted for 7 days (at least 5 hours per day) following specific aims and activities for each day during the training program. The agreement between the expert and beginners was calculated in 4 sessions involving 15 patients (13 females and 2 males; 4 rheumatoid arthritis, 6 systemic sclerosis, 3 Sjogren syndrome, 2 dermatomyositis). The US assessment was performed according the previously proposed 14-intercostal spaces (IS) scanning protocol using the following semiquantitative scale [0 = normal (≤5 B-lines); 1 = slight (≥6 and

≤ 15 B-lines); 2 = moderate, (≤16 and ≥ 30 B-lines); 3 = severe (≥30 B-lines)] (1). Additionally the pleural irregularity in each IS was dichotomously recorded.
Results: A total of 210 lung IS were studied. Kappa values and overall agreement percentages of qualitative and dichotomist assessments of US ILD findings (B-lines and pleural irregularity) at the end of the exercise showed moderate to excellent agreement (between 0.769 and 0.895), while in the first session they showed poor/fair agreement (between 0.325 and 0.435). The comparison between the expert (gold standard) and beginners' examinations at the fourth and final session, including the kappa values, sensitivity, specificity, and negative and positive predictive value were also improved.
Conclusion: After 1 week of the disease-oriented training program, physicians with limited experience in US were satisfactorily able to detect and interpret the main US signs indicative of ILD in patients with autoimmune rheumatic diseases.

Reference 1: Gutierrez M, Salaffi F, Carotti M, et al. Utility of a simplified ultrasound assessment to assess interstitial pulmonary fibrosis in connective tissue disorders–preliminary results. Arthritis Res Ther. 2011.18;13:R134.

Disclosure of Interest: None Declared
Keywords: interstitial lung disease, lung ultrasound, Ultrasound

PANLAR2023-1592

INTERNATIONAL EXPERT CONSENSUS FOR THE FORMAT AND CONTENT OF THE REPORT OF ULTRASOUND IN RHEUMATOLOGY

Marwin Gutierrez*[1], and Ivan Nolasco[1]. *[1]Center of Excellence in Musculoskeletal and Rheumatic Disorders, Mexico City, Mexico.*

Objectives: This project aims to draw up a consensus document for the format and content of the report for ultrasound (US) in rheumatology.
Methods: Firstly, a content analysis of the literature was undertaken by senior experts in US in rheumatology members of international panels, to identify existing proposals of the report, definitions, and methods of quantification of US abnormalities to structure the report statements and the labels currently used to denote them. Successively, a written Delphi questionnaire on US report was developed from a literature review and expert consensus. The Delphi questionnaire was sent to an international panel including preliminary 12 rheumatologists experts in US in rheumatology, 3 radiologists, and 3 rheumatology patients asking them to rate their level of agreement or disagreement with each statement. The exercise is currently in the first online round. It will include ahead two additional online rounds and a face-to-face (live meeting).
Results: Eight works describing proposals of the report, definitions, and methods of quantification of US abnormalities were included in the analysis of the literature. Forty-eight items were discussed in the first round with a response rate of 100% for the first round. It is ongoing the items that will be discussed in the second, third, and face-to-face meeting.
Conclusion: This is the first international consensus-based format and content of the report in rheumatology US. Uniform use of the description of US findings can help in the correct interpretation of their findings in daily practice. This is only the first effort in the standardization of the technique of execution and interpretations on US findings.

Reference 1: Iagnocco A, Porta F, Gutierrez M, et al. Musculoskeletal Ultrasound Study Group of the Italian Society of Rheumatology. The Italian MSUS Study Group recommendations for the format and content of the report and documentation in musculoskeletal ultrasonography in rheumatology. Rheumatology. 2014;53:367-73.

Disclosure of Interest: None Declared
Keywords: report, Rheumatic diseases, Ultrasound

LUPUS

PANLAR2023-1256

ASSOCIATION BETWEEN ENDOTHELIAL PROGENITOR CELLS, ACTIVITY AND DAMAGE IN SYSTEMIC LUPUS ERYTHEMATOSUS. A CASE-CONTROL STUDY

Gonzalo Silveira*[1,2], Sabrina Ranero[3], Adriana Carlomagno[1,2], Andreína Brugnini[4], Natalia Trías[4], Daniela Lens[4], Martín Rebella[2,5], Sofía Grille[3,4], and Alvaro Danza[2,6]. *[1]Clínica Médica 1, Facultad de Medicina - Universidad de la República, [2]Unidad de Enfermedades Autoinmunes Sistémicas, Médica Uruguaya - Corporación de Asistencia Médica, [3]Cátedra de Hematología, [4]Departamento Básico de Medicina, [5]Clínica Médica C, [6]Clínica Médica 2, Facultad de Medicina - Universidad de la República, Montevideo, Uruguay.*

Objectives: To analyze EPC and circulating endothelial cells (CEC), as well as CD34+ and CD34+ CD133+ cells in patients with SLE.
Methods: A case-control study was conducted. Patients with SLE who met the SLICC-2012 classification criteria were included. Clinical, analytical, activity, and damage variables were recorded using SLEDAI 2 K and SDI. Matched controls were collected. Cell populations were counted by 8-color flow cytometry. CPEs were defined as: CD45low/-, CD34+, CD133+, CD31+, CD146+, KDR+, CD3-, CD19-; CEC as: CD45low/-, CD34+, CD133-, CD31+, CD146+, KDR+, CD3-, CD19-. CD34+; and CD34+, CD133+ were also enumerated. The qualitative variables were expressed in proportions, the quantitative ones in measures of central tendency and dispersion according to their distribution, a statistical significance level of 0.05 was established.
Results: 32 patients and 28 controls were included. Table 1 summarizes its characteristics. Patients had significantly lower levels of CD34+ cells (1.12 cells/μL, IQR 0.49–2.14 vs 2.44 cells/μL, IQR 1.38–3.63, p = 0.001), CD34 + CD133+ (0.21 cells/μL, IQR 0.06-0.97 vs 0.43 , IQR 0.26–1.08; p = 0.016), CPE (0.12cell/μL RIC 0.026-0.94 vs 0.39cell/μL RIC 024-0.90, p = 0.018) and CEC (0.47 cell/μL RIC 0.068-0.89 vs 1.04cell/ μL IQR 0.72-2.34, p<0.000) compared to controls. Statistically significant correlations were found between activity biomarkers and cell population levels (Figure 1). Significantly higher levels of populations were found among patients with some accumulated damage compared to those without damage

TABLE.

	SLE (n = 32)	Control (n = 28)	*p* value
Gender(F/M)	27/5	24/4	0.89
Age(y)(median - IQR)	33(28-39)	32(28- 41)	1
HTA(n-%)	5(18.5)	2(8.3)	0.53
DM(n-%)	0(0)	0(0)	
Smoking(n-%)	4(14.8)	5(20.8)	0.28
Dyslipidemia (n-%)	1(3.7)	2(8.3)	0.30
Obesity(n-%)	1(3.7)	0(0)	0.43
C3(mg/dL)(median - IQR)	85.5 (71-103.5)		
C4(mg/dL)(median - IQR)	14 (10-20-5)		
Positive Anti DNA(n-%)	12(37.5)		
SLEDAI(median - IQR)	4(2-8)		
SDI ≥ 1(n-%)	7(21.9)		

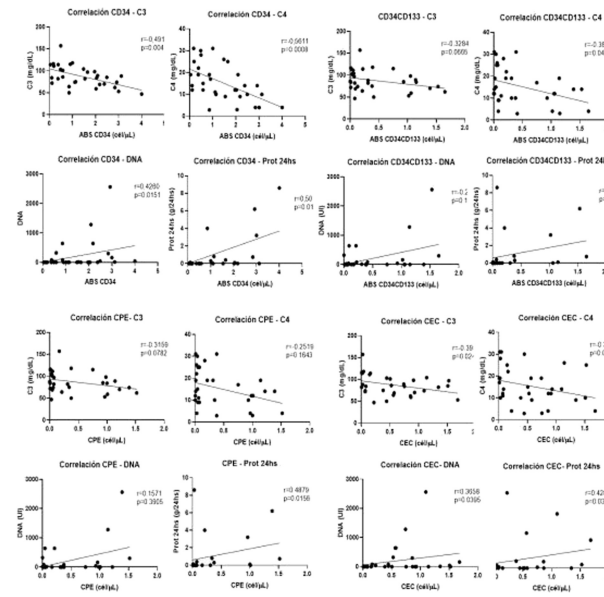


Figure 1. Correlation between cell populations and biomarkers of activity, Spearman's test.

(CD34+: 2.38cell/μL, IQR 1.96-3.00 vs 0.90cell/μL, IQR 0.38–1.65; p = 0.0073. CD34 + CD133+: 1.05cell/μL, IQR 0.21-1.39 vs 0.13cell/μL, IQR 0.04-0.39, p = 0.018 CPE: 0.98cell/μL, IQR 0.21-1.22 vs 0.060cell/μL, IQR 0.023–0.37, p = 0.0175. CEC: 0.91 cells/μL, IQR 0.56-1.10 vs 0.38 cells/μL, IQR 0.042-0.74, p = 0.0201).

Conclusion: The variation according to activity and damage suggests an association between the inflammatory stimulus and the endothelial repair process in which these cell populations are found.

Disclosure of Interest: None Declared

Keywords: activity biomarkers, Endothelial progenitor cells, Systemic lupus erythematosus

PANLAR2023-1119

MALE SEX AND DISEASE ACTIVITY AT DIAGNOSIS ARE PREDICTORS OF SEVERE HEMOLYTIC ANEMIA IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS: DATA FROM A MULTIETHNIC LATIN AMERICAN COHORT

Luis A. Gonzalez*[1], Graciela S. Alarcón[2,3], Guillermina B. Harvey[4], Rosana Quintana[5], Guillermo J. Pons-Estel[5], Manuel F. Ugarte-Gil[6,7], Gloria Vásquez[1], Luis J. Catoggio[8], Mercedes A. García[9], Eduardo F. Borba[10], and GLADEL (Grupo Latino Americano De Estudio de Lupus). *[1]División de Reumatología, Departamento de Medicina Interna, Universidad de Antioquia, Medellín, Colombia, [2]Division of Clinical Immunology and Rheumatology, Department of Medicine, Marnix E. Heersink School of Medicine, The University of Alabama at Birmingham, Birmingham, United States, [3]Department of Medicine, School of Medicine, Universidad Peruana Cayetano Heredia, Lima, Peru, [4]Escuela de Estadística, Facultad de Ciencias Económicas y Estadística, Universidad Nacional de Rosario, [5]Grupo Oroño - Centro Regional de Enfermedades Autoinmunes y Reumáticas (GO-CREAR), Rosario, Argentina, [6]Rheumatology Department, Hospital Nacional Guillermo Almenara Irigoyen, EsSalud, [7]Grupo Peruano de Estudio de Enfermedades Autoinmunes Sistémicas, Universidad Científica del Sur, Lima, Peru, [8]Rheumatology Section, Hospital Italiano de Buenos Aires, Buenos Aires, [9]Servicio de Reumatología, HIGA San Martin de La Plata, La Plata, Argentina, [10]Rheumatology Division, Hospital das Clinicas HCFMUSP, Faculdade de Medicina, Universidade de Sao Paulo, Sao Paulo, Brazil.*

Objectives: The severity of autoimmune hemolytic anemia (AIHA) has rarely been studied in SLE patients (1,2); we thus have examined the predictors of severe AIHA using the extensive database of a large Latin American inception cohort.

Methods: In patients with a recent diagnosis of SLE (≤ 2 years), factors associated with the occurrence of severe AIHA (hemoglobin level < 7 g/dl) were examined by Cox proportional univariable and multivariable hazards regression analyses.

Results: Of 1,349 patients, 103 (7.6%) developed AIHA over 5.4 (3.8) years. Of them, 49 (47.6%) patients were classified as having severe AIHA (Mestizos 44.9%, Caucasians 40.8%, and African-Latin American 14.3%). The median time from the first clinical SLE manifestation to the occurrence of severe AIHA was 3.7 months (IQR 1.4-15). In the univariable analyses, male sex and disease activity at diagnosis were associated with a shorter time to severe AIHA occurrence while malar rash and photosensitivity were associated with a longer time. By multivariable analysis and after adjusting for age at SLE diagnosis, gender, and ethnicity, male sex, and higher disease activity at diagnosis remained associated with a shorter time to the occurrence of severe AIHA. The results are shown in the Table below.

Conclusion: Severe AIHA occurred in 3.6% of our cohort and it is an early manifestation of lupus. In Latin American patients with SLE, male sex represents more than a two-fold higher risk of experiencing severe AIHA at a faster pace. A higher level of disease activity at SLE diagnosis is also an independent predictor of the occurrence of severe AIHA in a shorter time.

TABLE.

	Univariable Analyses			Multivariable Analyses		
Variable	HR	95% CI	*p* value	HR	95% CI	*p* value
Age at SLE diagnosis	1.00	0.98-1.02	0.895	1.01	0.99-1.03	0.465
Male sex	2.11	1.02-4.34	0.044	2.26	1.02-4.75	0.044
Ethnicity						
Caucasian	Reference group			Reference group		
Mestizo	1.05	0.57-1.93	0.869	1.18	0.62-2.25	0.613
ALA	1.21	0.51-2.87	0.659	0.83	0.30-2.28	0.722
Disease manifestations						
Malar rash	0.23	0.07-0.74	0.014			
Photosensitivity	0.29	0.11-0.82	0.019			
Arthritis	0.55	0.29-1.02	0.058			
Serositis	1.45	0.35-5.99	0.604			
Renal involvement	2.21	0.79-6.14	0.129			
Neurologic involvement	0.52	0.07-3.78	0.520			
Leukopenia	0.76	0.10-5.35	0.764			
Thrombocytopenia	1.74	0.54-5.58	0.354			
SLEDAI at diagnosis	1.04	1.01-1.08	0.033	1.04	1.01-1.08	0.025
Oral glucocorticoids [a]	0.72	0.17-2.95	0.644			

HR, hazard ratio; 95% CI = 95% confidence interval; ALA: African Latin American; SLEDAI: Systemic Lupus Erythematosus Disease Activity Index; [a] prednisone or equivalent.

Reference 1: Durán S, Apte M, Alarcón GS, et al. Features associated with, and the impact of, hemolytic anemia in patients with systemic lupus erythematosus: LX, results from a multiethnic cohort. Arthritis Rheum 2008; 59:1332–1340.

Reference 2: Sultan SM, Begum S, Isenberg DA. Prevalence, patterns of disease, and outcome in patients with systemic lupus erythematosus who develop severe hematological problems. Rheumatology (Oxford) 2003; 42:230–234.

Disclosure of Interest: None Declared

Keywords: Autoimmune hemolytic anemia, Predictors, Systemic lupus erythematosus

PANLAR2023-1457

ANTI-INFLAMMATORY AND IMMUNOMODULATORY POTENTIAL OF ZETOMIPZOMIB (KZR-616) FOR ACTIVE SYSTEMIC LUPUS ERYTHEMATOSUS WITH OR WITHOUT LUPUS NEPHRITIS: RESULTS FROM THE OPEN-LABEL MISSION STUDY

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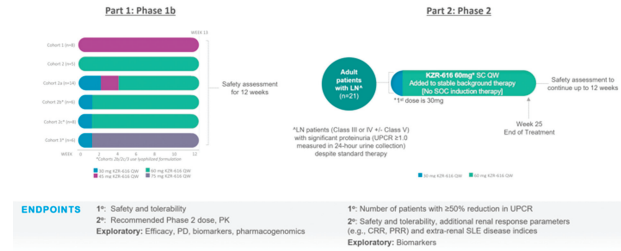
Objectives: Zetomipzomib, a first-in-class, small molecule selective inhibitor of the immunoproteasome, demonstrated anti-inflammatory and immunomodulatory properties without indications of immunosuppression in preclinical and clinical studies. The MISSION study is a Phase 1b/2, open-label study to evaluate safety, tolerability, and exploratory efficacy of zetomipzomib in patients with active systemic lupus erythematosus (SLE) ± lupus nephritis (LN). The objective of this abstract is to report MISSION study results including subgroup analysis in the Hispanic/Latino population.

Methods: Phase 1b included multiple dose escalation cohorts to evaluate the safety/tolerability of zetomipzomib in patients with SLE ± LN. The Phase 2 included patients with active LN (Class III/IV ± V) to assess the efficacy and safety of zetomipzomib. Study schematics and endpoints are detailed in *Figure 1*.

Results: In the Phase 1b (47 patients enrolled, 35 patients completed study), zetomipzomib demonstrated a favorable safety/tolerability profile and resulted in improvement across multiple exploratory disease activity measures and biomarkers. In the Phase 2 (21 patients enrolled, 17 patients completed study), 24 weeks of zetomipzomib treatment demonstrated clinically meaningful renal responses (UPCR reduction ≥50% in 11/17 evaluable patients and complete renal response with UPCR ≤0.5 in 6/17 of patients) with 14/17 patients achieving corticosteroid ≤10 mg/d. Subgroup analysis in the Hispanic/Latino population (n = 8) also demonstrated consistent renal responses and steroid sparing effect. Of the 8 Hispanic/Latino patients, 6 patients achieved UPCR reduction ≥50% and 4 patients achieved a complete renal response. All 8 patients achieved corticosteroid ≤10 mg/d at Week 25. In the Phase 2, zetomipzomib treatment also improved key SLE disease activity scores and serologic (anti-dsDNA, C3/C4) and urinary (uCD163) biomarkers. The most common adverse event (AE) was injection site reaction of mild to moderate severity (Grade ≤ 2). No serious/opportunistic infections or immune cell depletion were reported.

Figure 1. MISSION Phase 1b/2 open-label study schematics and endpoints



Conclusion: In the MISSION study, zetomipzomib demonstrated favorable safety/tolerability profile and was efficacious in reducing proteinuria and daily corticosteroid use, which were also seen in the Hispanic/Latino population (n = 8). Zetomipzomib treatment has the potential to be a steroid-sparing immunomodulatory therapy for patients with SLE/LN.

Disclosure of Interest: A. Saxena Consultant with: AstraZeneca, BMS, Eli Lilly, GSK, Kezar Life Sciences, S. Parikh Grant / Research support with: Aurinia, EMD-Serono, NIH-NIDDK, Consultant with: Alexion, Aurinia, BMS, GSK, Kezar Life Sciences , P. Ruiz Shareholder with: Kezar Life Sciences, Consultant with: Kezar Life Sciences, R. Leff Shareholder with: Kezar Life Sciences, Consultant with: Kezar Life Sciences, E. Li Consultant with: Kezar Life Sciences, E. Park Shareholder with: Kezar Life Sciences, Employee with: Kezar Life Sciences, N. Henig Shareholder with: Kezar Life Sciences, Employee with: Kezar Life Sciences

Keywords: Lupus nephritis, Systemic lupus erythematosus, Zetomipzomib

PANLAR2023-1077

CARDIOVASCULAR STRATIFICATION IN PATIENTS WITH RHEUMATIC DISEASE, 1-YEAR FOLLOW-UP IN A SOUTH AMERICAN HOSPITAL

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Objectives: Autoimmune diseases have been considered responsible for a high burden of cardiovascular disease. Some, such as systemic lupus erythematosus, rheumatoid arthritis, systemic sclerosis, polymyositis, vasculitis, and others, are associated with early mortality from cardiovascular disease, and the literature available in this regard is very scarce.

Methods: Assess cardiovascular risk comparatively through SCORE and Framingham equations. Analytical cross-sectional study, in a rheumatology service of a university hospital where 254 patients who attended spontaneously were recruited during the year 2015. Variable crossover tables and their subsequent calculation with Chi Square and Pearson's coefficient were used.

Results: The diseases with the highest cardiovascular risk were RA, vasculitis. Vasculitis led the elevated CVR with 22.5%. The SCORE model showed that 3.1% of the diseases had a very high CVR. When comparing both cardiovascular risk scales, 60.4% of the patients presented low CVR. According to Pearson's R correlation coefficient, there is a level of association of more than 50%, therefore, it was shown that there is a very good correspondence between these scores.

Conclusion: A positive correlation was found between the two scales, and the diseases with the highest cardiovascular risk were RA and vasculitis, which makes it necessary to carry out an adequate stratification in this particular group of patients.

Disclosure of Interest: None Declared

Keywords: Cardiovascular Disease, Epidemiology, Rheumatic diseases

PANLAR2023-1172

LATIN-AMERICAN SYSTEMIC LUPUS ERYTHEMATOSUS CLUSTERS

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Objectives: To describe different SLE clusters according to sociodemographic, clinical and serological characteristics.

Methods: GLADEL 2.0 is an ongoing Latin-American observational cohort initiated in 2019. Variables chosen at cohort entry to stratify patients and construct clusters were selected from sociodemographic and cumulative clinical and serological variables. Hierarchical cluster analyses were performed by the Ward method on a distance matrix using the Gower's method.

Results: A total of 560 SLE patients were included in this analysis. Three clusters were identified. Cluster1 (n = 269) was characterized by more cutaneous, articular, renal and serosal involvement; serological manifestation was positive anti-dsDNA. Cluster2 (n = 194) was represented by patients who rarely had renal involvement and the most frequent clinical manifestations were cutaneous and hematological; the most frequent serological manifestations were the presence of antiphospholipid antibodies (aPLs). Cluster3 (n = 97) was characterized by a lower frequency of clinical and serological involvements, with the exception of neurological domain. Clusters 1 and 2 share hematologic manifestations and hypocomplementemia (Table 1).

TABLE 1. Clustering of GLADEL 2.0 SLE patients based on sociodemographic, serological and clinical characteristics.

Variable	Cluster 1 (n = 269)	Cluster 2 (n = 194)	Cluster 3 (n = 97)	*p* value
Persistent proteinuria, n%	240 (89.2)	24 (12.4)	28 (28.9)	<0.001
Pericarditis, n%	63 (23.4)	29 (14.9)	13 (13.4)	0.03
Arthritis, n%	230 (85.5)	151 (77.8)	73 (75.3)	0.03
Alopecia, n%	185 (68.8)	114 (58.8)	59 (60.8)	0.02
Seizures, n%	14 (5.2)	7 (3.6)	4 (4.1)	0.04
Leukopenia, n%	123 (45.7)	106 (54.6)	32 (33)	0.01
Anti-dsDNA, n%	255 (94.8)	142 (73.2)	53 (54.6)	<0.001
aPLs, n%	62 (23)	75 (38.7)	24 (24.7)	0.001
Hypocomplementemia*, n%	268 (99.6)	194 (100)	11 (11.3)	<0.001

IR (Interquartile range); NL (Lupus nephritis); aPLs (Antiphospholipid antibodies); *(decreased C3 or C4)
Only variables that had statistically significant difference (p < 0.05) were included in this table

Conclusion: In this cohort, three clusters were identified. Cluster 1 patients were characterized by renal, articular, cutaneous, serositis involvement, anti-dsDNA antibodies and hypocomplementemia, Cluster 2 patients were characterized by hematologic, cutaneous involvement, aPLs and hypocomplementemia. Cluster

3 patients presented fewer serological findings but a higher frequency of neurological involvement. Follow up of these patients will allow for elucidation of relationship of these clusters with SLE outcomes.

Disclosure of Interest: R. Quintana: None Declared, R. Nieto: None Declared, G. Pons-Estel: None Declared, J. Gómez-Puerta: None Declared, G. Harvey: None Declared, M. Scolnik: None Declared, N. Meras: None Declared, C. Otaduy: None Declared, E. Novatti: None Declared, V. Arturi: None Declared, M. E. Sattler: None Declared, L. Gonzalez Lucero: None Declared, W. Patiño Grageda: None Declared, N. Pérez: None Declared, C. Pisoni: None Declared, A. C. de Oliveira e Silva Montandon: None Declared, O. Monticielo: None Declared, A. Duarte: None Declared, F. Machado Ribeiro: None Declared, E. Figueiredo Neves Yuki: None Declared, E. Torres dos Reis Neto: None Declared, I. Guerra Herrera: None Declared, M. Mimica: None Declared, G. Aroca Martínez: None Declared, G. J. Tobón: None Declared, G. Quintana Lopez: None Declared, A. Cadena Bonfanti: None Declared, M. J. Moreno Alvarez: None Declared, M. A. Saavedra Salinas: None Declared, M. Portela: None Declared, H. Fragoso Loyo: None Declared, L. H. Silveira Torre: None Declared, J. I. Garcia Valladares: None Declared, C. Abud-Mendoza: None Declared, J. A. Esquivel Valerio: None Declared, M. Martínez: None Declared, M. Duarte: None Declared, C. S. Mora Trujillo: None Declared, M. F. Ugarte-Gil: None Declared, E. Zavala: None Declared, R. Muñoz Louis: None Declared, R. Robaina: None Declared, V. Juarez: None Declared, G. Silveira: None Declared, E. Borba: None Declared, L. Catoggio: None Declared, G. S. Alarcon: None Declared, F. Zazzetti Employee with: Janssen Pharmaceutical Companies of Johnson & Johnson, Horsham, PA, USA, A. Orillion Employee with: Janssen Pharmaceutical Companies of Johnson & Johnson, Spring House, PA, USA, U. Sbarigia Employee with: Janssen Pharmaceutica NV, Beerse, BE, B. Pons-Estel: None Declared

Keywords: Autoantibodies, Registries, Systemic lupus erythematosus

PANLAR2023-1417

FACTORS ASSOCIATED WITH MANIFESTATIONS OF THE CENTRAL NERVOUS SYSTEM IN A POPULATION WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Objectives: Systemic Lupus Erythematosus (SLE) affects a wide range of organs. Neuropsychiatric lupus (NPSLE) encompasses syndromes of the peripheral and of the central nervous system (CNS), associated with a high disease burden. Describe and evaluate manifestations of the CNS

Methods: observational cross-sectional study, 395 patients with diagnosis of SLE (198 with neuropsychiatric SLE (NPSLE) vs 197 without it); Patients treated at a specialized rheumatology institution between 2010 and 2022, in Colombia. Univariate analyzes were performed to describe characteristics of the population. Bivariate analysis was performed using chi-square to compare the presence or absence CNS manifestations. Multivariate analysis is performed using binary logistic regression with variables with a value of $p < 0.2$ in the bivariate analysis

Results: 395 patient, 163 (41.3%) with CNS manifestations. 85.0% were women. A total of 221 events (n:163 patients) were documented; the main CNS manifestations were headache (25.8%), mood disorder (17.7%), convulsive disease (17.2%) and cerebrovascular disease (15.8%), psychosis (8.1%) and myelopathy (5.4%); and the remaining corresponded to aseptic meningitis, demyelinating syndrome, movement disorders and cognitive dysfunction. The factors associated with the CNS manifestations can be seen in table 1. In the multivariate analysis, it is documented that lupus nephritis (OR 2.2 (95%CI: 1.2 to 3.8) p:0.008), corticosteroid therapy (OR 4.1 (95%CI: 2.0 to 8.3) p: <0.001) and nonbiologic immunomodulator (OR 8.9 (95%CI: 2.4 to 32.6) p:0.001) were independently associated with CNS manifestations

Conclusion: The present study documents an association between lupus nephritis, corticosteroid therapy, and non-biological immunomodulator therapy with the presence of CNS manifestations in patients with SLE; this can be explained by greater disease activity; however, clinical suspicion and early diagnosis favor the implementation of timely therapies that lead to control of the disease

Disclosure of Interest: None Declared

Keywords: clinical manifestations, Lupus Erythematosus, Systemic, neuropsychiatric

TABLE 1. Factors associated with the presence of manifestations in the central nervous system (CNS) in SLE

	Absent (n:232)		Present (n:163)		
	n	%	n	%	P
Female sex	189	81.5	147	90.2	0,017
Antiphospholipid syndrome	138	59.7	31	19.0	<0,001
Chronic cutaneous lupus	76	32.8	34	21.0	0,01
Arthritis	161	69.4	131	80.4	0,014
Serositis	40	17.2	48	29.4	0,004
Lupus nephritis	46	19.8	63	38.7	<0,001
AntiDNA positive	167	72.3	102	62.6	0,041
Low complement	120	51.9	99	61.1	0,072
Corticosteroid therapy	166	71.6	137	84.0	0,004
Non-biological Immunomodulator	192	83.1	158	98.1	<0,001

PANLAR2023-1179

BASELINE CHARACTERISTICS OF A LONGITUDINAL, MULTINATIONAL, MULTIETHNIC STUDY OF LUPUS PATIENTS, WITH OR WITHOUT LUPUS NEPHRITIS

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Objectives: To describe sociodemographic, clinical, serological and treatment characteristics of a multicenter and multiethnic Latin American SLE cohort of patients with or without lupus nephritis (LN)

Methods: GLADEL 2.0 is an ongoing observational cohort. Patients were categorized according to renal involvement: Group I (LN never); II (prevalent renal involvement currently inactive); III (prevalent renal involvement, currently active) and IV (incident renal involvement). Demographic, clinical manifestations, treatments, disease activity were examined at baseline. A descriptive cross-sectional analysis was performed

Results: A total of 991 SLE patients were included, 884 (89.2%) female and 68.3% Mestizos (Amerindian and European ancestry). Median (IQR) age at cohort entry was 35 (28-45) years and disease duration were 67 months (18-139). Patients with incident LN had a higher proportion of males, shorter disease duration, were younger and more frequently Mestizos. Pericarditis and anti-dsDNA were less frequent in group I and MMF in groups I and IV (Table 1). A predominance of class IV (49%) was evidenced in 510 patients in which a kidney biopsy was performed

TABLE 1. Sociodemographic and clinical characteristics and treatment at cohort entry

Variable	Group I (n = 393)	Group II (n = 213)	Group III (n = 224)	Group IV (n = 161)	*p* value
Female n%	361(91.9)	193(90.6)	200(89.3)	130(80.7)	0.002[a]
Age (years)[d]	39 (30-48)	38(30-48)	30(25-37)	33(25-40)	<0.001[c]
Disease duration (months)[d]	77.1(32-146)	106(52-187)	64.4(25-130)	3.0(0.7-26)	<0.001
Education (years)[d]	12.5 (11-16)	14(11-16)	13(11-16)	12(11-16)	<0.001[c]
Ethnic group n%					<0.001[b]
Caucasian	106 (28.5)	54 (26.0)	37 (16.7)	28 (17.6)	
Mestizo	236 (63.4)	138 (66.3)	167 (75.2)	115 (72.3)	
Afro-LAtin American	26 (7.0)	14(6.7)	18(8.1)	14 (8.8)	
Discoid rash n%	40 (10.6)	11(5.2)	20 (8.9)	6 (4.0)	0.025
Pleuritis n%	73 (19.6)	49 (23.6)	67 (29.9)	50 (32.7)	0.003
Anti-dsDNA n%	231(64.0)	167(81.9)	194 (89.8)	134 (89.3)	<0.001
Low C3 n%	228 (62.1)	158 (77.1)	193 (88.5)	137 (91.3)	<0.001
Mycophenolate n%	75 (25.8)	151(73.3)	183(83.9)	35 (39.3)	<0.001
SLEDAI[c]	2 (0-6)	2 (0-4)	10 (6-16)	16 (11-21.2)	<0.001

[a] Chi-squared test was used. [b] Fisher exact test was used. [c] Kruskal-Wallis test was used. [d] Median and IQR

Conclusion: Baseline characteristics of GLADEL 2.0 well characterized lupus patients' cohort with or without LN are described with distinct demographic, clinical and laboratory patterns that will allow both centralized laboratory evaluation of urinary biomarkers and exploratory biomarker analyses including transcriptome and their impact on the outcome of these patients

Disclosure of Interest: None Declared

Keywords: Registries, Systemic lupus erythematosus

PANLAR2023-1164

PREGNANCY OUTCOMES IN SYSTEMIC LUPUS ERYTHEMATOSUS: DATA FROM A MULTIETHNIC, MULTINATIONAL LATIN AMERICAN COHORT

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Objectives: To study Systemic Lupus Erythematosus (SLE) pregnancy outcomes in Latin America.

Methods: SLE women from the GLADEL 2.0 cohort[1] with at least one pregnancy were included. Past and ongoing (6, 12, 24 months follow-up) obstetric morbidity (OM); miscarriages, fetal deaths, preeclampsia, prematurity, neonatal lupus; were evaluated.

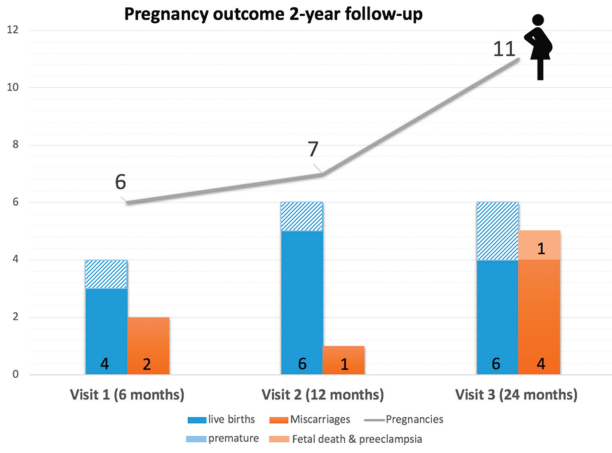
Results: At inclusion, 329 women have ≥1 pregnancy [median (IQR): 2 (1-3)]: Table 1. Of them, 293 (89.1%) had ≥1 live birth and 183 (55.6%) developed OM. Preeclampsia occurred in 49 (14.9%). Among 71 (21.6%) women with anti-SS-A(Ro)/SS-B(La) antibodies, 3 (4.2%) developed neonatal lupus (no cardiac involvement). Antiphospholipid syndrome (APS) was associated with a higher risk of OM (52.2% vs 10.0%; $p < 0.001$). Of the 755 pregnancies reported, 551 (73.0%) resulted in live births, of which 79 (14.3%) were premature. The remaining pregnancies ended in 178 (23.6%) miscarriages and 41 (5.4%) fetal deaths. During 2-follow-up years (Figure 1), 24 single pregnancies occurred. All were under antimalarials; 16 (66.7%) resulted in live births, 4 (25.0%) premature; 12 (50.0%) developed OM. There were 7 (29.2%) miscarriages and one fetal loss (4.2%) related to severe preeclampsia. One cholestasis gravidarum (4.2%) lead to prematurity. No new neonatal lupus developed.

Conclusion: In GLADEL 2.0 cohort, around half of the studied women presented OM, being frequently related to APS. Miscarriages, prematurity, pre-eclampsia and fetal deaths were the most common pregnancy complications. The incidence of neonatal lupus was lower than previously reported.[2]

TABLE.

VARIABLES	OBSTETRIC MORBIDITY		
	No (n = 146)	Yes (n = 183)	*p* value[1]
Age (years)[2]	41 (34-47)	39 (31.5-50)	0.542
Ethnicity			0.299
Afro-Latin American	14/146 (9.6%)	8/183 (4.4%)	
White	30/146 (20.5%)	42/183 (23.0%)	
Amerindian	3/146 (2.1%)	4/183 (2.2%)	
Mestizo	99/146 (67.8%)	129/183 (70.5%)	
Socioeconomic level			0.184
High	29/143 (20.3%)	41/181 (22.7%)	
Medium	42/143 (29.4%)	67/181 (37.0%)	
Low	72/143 (50.3%)	73/181 (40.3%)	
Hypertension	47/83 (56.6%)	73/110 (66.4%)	0.180
Diabetes mellitus	9/83 (10.8%)	6/110 (5.5%)	0.184
Disease duration (months)[2]	76 (28-153)	100 (36.5-162.5)	0.136
Antiphospholipid syndrome	**3/30 (10%)**	**24/46 (52.2%)**	**0.001**
Anti-dsDNA antibodies	107/134 (79.9%)	139/172 (80.8%)	0.885
C3 and/or C4, low	117/141 (83.0%)	147/174 (84.5%)	0.760
Corticosteroids	143/146 (97.9%)	176/181 (97.2%)	0.736
Antimalarials	141/146 (96.6%)	177/181 (97.8%)	0.520
Immunosuppressors	118/146 (80.8%)	152/179 (84.9%)	0.373

[1] statistical significance: $p < 0.05$; [2] median (interquartile range).



Reference 1: Gómez-Puerta JA, et al. A longitudinal multiethnic study of biomarkers in systemic lupus erythematosus: Launching the GLADEL 2.0 Study Group. Lupus. 2021 Jan 28:961203320988586.

Reference 2: Cimaz R, Spence DL, Hornberger L, Silverman ED. Incidence and spectrum of neonatal lupus erythematosus: a prospective study of infants born to mothers with anti-Ro autoantibodies. J Pediatr 2003; 142: 678–83.

Disclosure of Interest: None Declared

Keywords: Antiphospholipid syndrome, Lupus Erythematosus, Systemic, pregnancy

PANLAR2023-1339

MANAGEMENT OF RHUPUS IN PEDIATRIC PATIENTS: A SYSTEMATIC LITERATURE REVIEW

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Objectives: Pediatric Rhupus syndrome is a rare condition in which clinical and/or serological features of Juvenile Idiopathic Arthritis (JIA) are present in patients with Systemic Erythematous Lupus (SLE). We performed a Systematic Literature Review (SLR) of evidence reported in the last two decades and review the treatments applied.

Methods: We systematically searched SCOPUS and MEDLINE following PRISMA guidelines(Figure 1). We selected Mesh terms related to Rhupus, and overlap between JIA and SLE pediatric patients. Only English studies with populations under 18 years old, published between January 2002 and January 2023, were included.

Results: Initially, 4002 articles were found (MEDLINE = 150 and SCOPUS = 3852).Nine publications (7 case reports and 2 case series) met the final inclusion criteria with 19 pediatric patients. Management of the patients is summarized in (Table 1). Among the patients described, 83% were female, the mean age at JIA and Rhupus diagnosis was 9,65 years old and 11,91 years old, respectively, and the mean time between diagnoses was 20 months. The treatment more used at the JIA diagnosis was NSAIDS 75%, MTX 58%; at Rhupus diagnosis was HCQ 79%, and oral steroids 63%. For maintenance, 100% of patients were on oral steroids. Only 33% of patients achieved remission with the treatment provided for Rhupus.

Conclusion: No successful standard treatment for pediatric Rhupus patients was identified. Developing future guidelines regarding management of Rhupus in pediatric patients is imperative.

Disclosure of Interest: None Declared

Keywords: Pediatric Rheumatology, Rhupus, Treatment

TABLE.

Study	*# of Patients*	*Initial JIA treatment*	*Time of remission (years)*	*Initial Rhupus treatment*	*Maintenance treatment*	*Response*
Yuichi, 2022	1	MTX + Anti-TNFα	None	GCC pulses + GCC + HCQ	GCC+ HCQ	Remission
Mitra, 2015	2	1. MTX + HCQ + NSAIDs 2. NSAIDs+MTX + IA steroid	1.None 2.None	1.MTX+ HCQ + NSAIDs + GCC pulse+GCC 2. CP + GCC + AZA.	NA	1.Flares 2.Flares
Sakamoto, 2016	6	NA	NA	NSAID+HCQ+ MTX	NA	NA
Gormezano 2015	1	NSAID	NA	MTX + CP+ CsA	NA	1.Remission
Ziaee, 2013	3	1.GCC + MTX + HCQ 2. GCC+ MTX+ HCQ+ NSAID 3. GCC + MTX+ HCQ	1. 2y 2. Continue relapses 3. 1y	1. GCC + AZA + HCQ 2. GCC (pulse) + HCQ 3. GCC+ AZA+ HCQ	1.GCC + AZA + HCQ 2. GCC + HCQ 3. GCC+ HCQ + AZA	1. Flares 2. Patient dies 3. Remission
Saha, 2013	1	NA	NA	CP+ GCC+ AZA + HCQ	NA	NA
Cavalcante, 2011	3	1.NSAID 2. NSAID 3. NSAID	NA NA NA	1.GCC + HCQ + MTX, CP 2. GCC+ HCQ + AZA 3. GCC + HCQ + MTX	NA	1.Remission 2.Flares 3.Flares
Bazsó,2010	1	Sulfasalazine, MTX, leflunomide, CsA, GCC, NSAID, anti-TNFα	None	CP + AZA+ GCC	GCC + AZA	Flares
Unsal, 2007	1	NSAID	2y	GCC+ MTX	GCC+ MTX	Flares
# of Patients reported	19	12	8	19	6	12

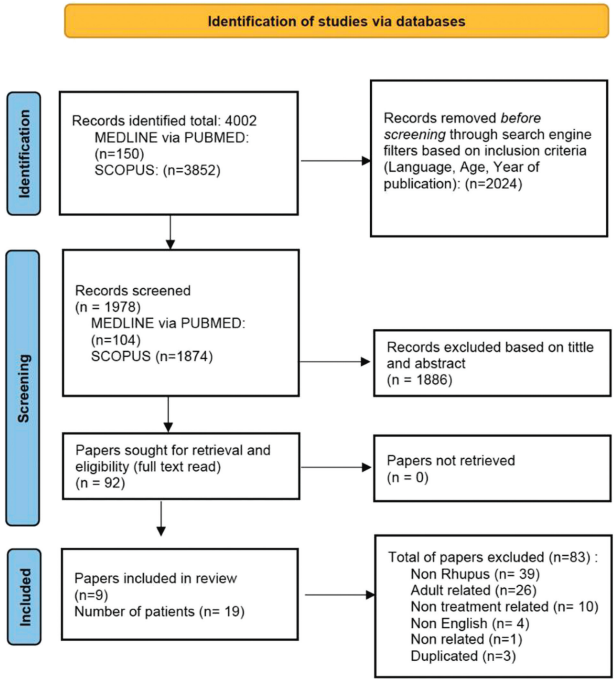

TABLE 1. Population characteristics

Characteristics	n/N (%)
Disease duration	
<5 años	13/23 (57%)
5-10 años	3/23 (13%)
>10 años	6/23 (26%)
Gender	
Female	17/23 (74%)
Male	6/23 (26%)
Background	
Arterial hypertension	6/22 (26%)
smoking	4/23 (17%)
previous or current cancer	4/23 (17%)
dyslipidemia	2/16 (13%)
Treatment	
Corticosteroids	21/23 (91%)
Chloroquine	16/23 (70%)
Azathioprine	13/23 (57%)
cyclophosphamide	8/23 (35%)
hydroxychloroquine	6/22 (27%)
Methotrexate	5/23 (22%)
mycophenolate	4/23 (17%)
biological therapy	3/23 (13%)
Immunological criteria	
Antiphospholipid antibodies	
lupus anticoagulant	7/13 (54%)
B2 glycoprotein I IgM	3/10 (30%)
B2 glycoprotein I IgG	3/10 (30%)
IgM anticardiolipins	2/13 (15%)
IgG anticardiolipin	1/13 (8%)
Complement	
C4 low	15/21 (71%)
C3 low	14/22 (64%)
Anti dsDNA	13/18 (72%)
Anti SM	10/16 (63%)
Anti RNP	7/16 (44%)
Anti RO	3/16 (19%)
Anti LA	3/16 (19%)

PANLAR2023-1407

NEUROLUPUS; MORE THAN A NEUROLOGICAL MANIFESTATION

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Objectives: To describe a cohort of patients with NPSLE in two reference centers in Bogotá, Colombia.

Methods: Cross-sectional study of patients with SLE in the period 2020 - 2021. Review of the medical records of all patients who had a diagnosis of SLE (by ICD10) in hospitalization and outpatient settings, limiting it to patients with neurological manifestations.

Results: 146 patients diagnosed with SLE were included. Of these patients, 23 had involvement in the neuropsychiatric domain (15.75%). The average age was 36 years, being more prevalent in the female sex. The average duration of the disease was less than 5 years. Polyautoimmunity was found in 6 patients (26%), with antiphospholipid syndrome being the most frequent followed by Sjögren's syndrome and rheumatoid arthritis. Antimalarials and corticosteroids were the most commonly received treatment. Patients presented concomitant articular involvement (52.1%), hematological (47.6%), renal (45.4%), and serous (26.1%). 95% of the patients had positive antinuclear antibodies (ANA), most common pattern was homogeneous, more than half presented positive lupus anticoagulant and anti-SM antibodies. (See Table 1).

In neurological involvement, the most prevalent were convulsive episodes (40.9%), followed by cranial and peripheral neuropathy (34.7%), psychosis (26.1%), acute confusional state (17.3%), myelitis (9.%) and multiple mononeuritis (4.3%).

Conclusion: The NPSLE presents with a non-negligible prevalence, being a relevant manifestation given the comorbidity it generates. The frequency of polyautoimmunity in a quarter of the patients is striking. It is important to recognize its associated factors.

Disclosure of Interest: None Declared

Keywords: neuropsychiatric, Systemic lupus erythematosus

PANLAR2023-1449

DISSOCIATION BETWEEN CLINICAL AND LABORATORY PARAMETERS AND THE HISTOPATHOLOGICAL FINDINGS IN RENAL BIOPSY

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Objectives: Lupus nephritis (LN) occurs in approximately 40% to 75% of patients and is associated with a significant morbimortality. Clinical and laboratory test cannot predict histological findings in most of LN cases and renal biopsy should be done whenever possible. Objectives: to evaluate clinical and laboratory parameters and the histopathological findings in renal biopsy, including activity and chronicity index.

Methods: Open multicenter prospective study at tree Federal University hospitals in Brazil. Consecutive patients who agree to participate in the study collected urine and blood sample for laboratory tests and performed renal biopsy. The histopathological analysis was performed by the same nephropathologist using standard techniques and processed for optic microscopy and immunofluorescence and sorted according to ISN/RPS classification.

Results: Kidney biopsies were performed in 49 SLE patients, 39 women and 10 men, who met the SLICC classification criteria for SLE and who had proteinuria >500 mg/24 h with increased serum creatinine or active urinary sediment. Only biopsies with six or more glomeruli were included in the analysis. Among 47 biopsied patients who remained in the study, only one had proteinuria below 1 g (808 mg/24 h), 28 patients had proteinuria between 1 - 3 g and 20 patients had proteinuria >3 g/24 h. Twenty-one (45%) patients did not presented features of active nephritis on renal histology, despite presenting clinical and laboratory parameters suggestive of active nephritis. Twenty-three patients presented histological activity and were classified as class III (n = 4), IV (n = 11), V (n = 4), III/V (n = 3) and IV/V (1) (ISN/RPS). One patient had lupus podocytopathy, other, a lesion suggestive of previous thrombotic

microangiopathy and one other vasculitic lesion. In patients whose activity index (IA) was identified, 10 had mild IA, 4 mild/moderate and 5 moderate, and among those whose chronicity index (CI) were described, 25 had mild CI and 6 moderate. Among patients without active LN, other causes of proteinuria or decreased renal function were hypertension/atherosclerosis, chronic lesions, interstitial fibrosis or tubular atrophy.

Conclusion: Evidence of dissociation between clinical features and renal histology confirms that renal biopsy is an important tool for defining management, identifying patients who will require immunosuppressive therapy, as well avoiding immunosuppressive treatment in those who do not have active LN.

Reference 1: Kostopoulou M, et al. RMD Open 2020;6:e001263. doi:10.1136/rmdopen-2020-001263.

Reference 2: Samir V. Parikh, Salem Almaani, Sergey Brodsky, and Brad H. Rovin. Am J Kidney Dis 2020; XX (XX): 1-17. doi:10.1053/j.ajkd.2019.10.017.

Disclosure of Interest: D. Brito Grant / Research support with: FAFESP/ Brazilian Society of Rheumatology Research Support Fund, G. Carlesso Grant / Research support with: FAFESP/ Brazilian Society of Rheumatology Research Support Fund, E. Reis Neto Grant / Research support with: FAFESP/ Brazilian Society of Rheumatology Research Support Fund, L. Moura Grant / Research support with: FAFESP/ Brazilian Society of Rheumatology Research Support Fund, L. Andrade Grant / Research support with: FAFESP/ Brazilian Society of Rheumatology Research Support Fund, E. Sato Grant / Research support with: FAFESP/ Brazilian Society of Rheumatology Research Support Fund

Keywords: clinical parameters, Lupus nephritis

PANLAR2023-1470

DOES PODOCYTOPATHY EXIST AS THE INITIAL MANIFESTATION IN SYSTEMIC LUPUS ERYTHEMATOSUS?

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Objectives: Identify patients with systemic lupus erythematosus (SLE) with histological criteria for podocyte involvement in renal biopsy.

Methods: We conducted a prospective case series of patients with SLE with renal involvement underwent renal biopsy, with histological findings of podocytopathy, in a third-level institution in Guatemala, from January 2022 to December 2022. The criteria for the diagnosis of podocytopathy in lupus with light microscopy were: glomerular minimal change, mesangial proliferation, or focal segmental glomerulosclerosis (FSGS) patterns without subepithelial or subendothelial deposits. Excluding glomerular scar of proliferative lupus nephritis in the FSGS pattern, proposed by Hu et al. in 2016.

Results: A total of 39 patients with SLE underwent renal biopsy, of which 6 patients were identified with podocytopathy in lupus during the study period. The median age was 42.5 years (SD 5), 83.3% were women and 16.6% men. 66.6% of the patients had proteinuria in the nephrotic range, 83.3% hypoalbuminemia and 50% acute renal failure at the time of the study. The predominant histopathological finding in 50% of the cases was focal segmental glomerulosclerosis with the absence of endocapillary proliferation.

Conclusion: There is histological evidence supporting the presence of podocyte damage in these patients with SLE.

Reference 1: Hu W, Chen Y, Wang S, et al. Clinical-Morphological Features and Outcomes of Lupus Podocytopathy. Clin J Am Soc Nephrol. 2016;11:585-592.

Reference 2: Nestor Oliva-Damaso, Juan Payan, Elena Oliva-Damaso, et al. Lupus Podocytopathy: An Overview, Adv Chronic Kidney Dis. 2019;26:369-375.

Disclosure of Interest: None Declared

Keywords: acute renal failure, Podocytopathy, Systemic lupus erythematosus

PANLAR2023-1125

HOSPITALIZATIONS DUE TO INFECTIONS IN SYSTEMIC LUPUS ERYTHEMATOSUS: CAUSES AND ASSOCIATED FACTORS

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TABLE:. Table 1. Clinical and histopathological characteristics of patients with podocytopathy in SLE

Case	1	2	3	4	5	6
Sex	Female	Female	Female	Female	Female	Male
Age	50 years old	41 years old	39 years old	43 years old	46 years old	36 years old
Time to diagnosis SLE	3 years	4 years	21 years	< 1 year	< 1 year	< 1 year
24 hour urine protein	329.70 mg/24 hrs	5,366 mg/24 hrs	2,164 mg/24 hrs	842 mg/24 hrs	8,000 mg/24 hrs	7,222 mg/24 hrs
Creatinine	1.98 mg/dl	0.64 mg/dl	0.64 mg/dl	2.71 mg/dl	0.52 mg/dl	3.35 mg/dl
Histopathological findings	Mesangial widening and focal segmental sclerosis. No endocapillary or extracapillary hypercellularity	Mesangial proliferation and focal segmental sclerosis, prominence of podocytes. No endocapillary or extracapillary hypercellularity	Enlarged glomeruli, with segmental mesangial proliferation. With podocyte hyperplasia in 4 glomeruli. No endocapillary or extracapillary hypercellularity	Glomeruli with mild mesangial expansion. The podocytes are prominent. No endocapillary or extracapillary hypercellularity	Enlarged glomeruli with mesangial widening. No endocapillary or extracapillary hypercellularity	Enlarged glomeruli with mesangial widening. No endocapillary or extracapillary hypercellularity

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Objectives: To evaluate frequency and associated factors of hospitalizations due to infections in SLE

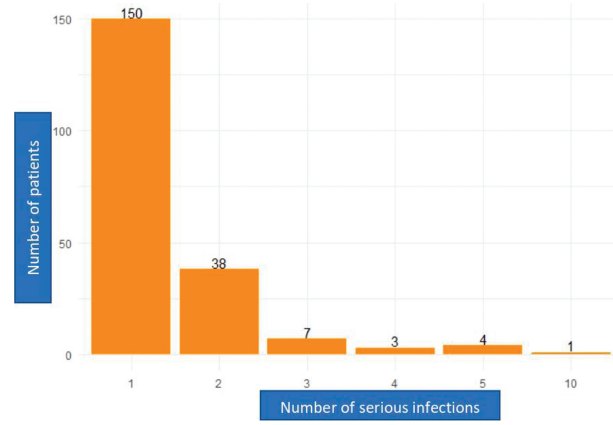
Methods: Cross-sectional study was performed on the SLE RELESSAR registry. Sociodemographic variables, autoantibodies, manifestations, comorbidities and activity and chronicity index were analyzed. A serious infection was defined as one that required hospitalization. Variables were compared between patients hospitalized versus not hospitalized.

Results: 203 cases hospitalized due to infections. Mean time of admissions 1.42 (SD 0.99). Graphic 1 shows the number of serious infections/ patient. We compared 203 patients and 646 patients not hospitalized (Table 1).

In multivariate analysis, age at SLE diagnosis (OR 0.96 95%CI 0.94-0.98, p 0.00), education (OR 0.89 95%CI 0.83-0.94, p 0.00), pericarditis (OR 3.25 95% CI 1.89-5.60, p 0.00), low complement (OR 3.16 95%CI 1.33-8.10, p 0.01), SLICC (OR 1.95 95%CI 1.61-2.37, p 0.00) and 10-30 mg/d of prednisone (OR 3.70 95%CI 1.66-9.00, p 0.00), 30-60 mg/d of prednisone (OR 8.40 95%CI 3.58-21.5, p 0.00), azathioprine (OR 1.67 95%CI 1.02-2.73, p 0.04), mycophenolate (OR 2.15 95%CI 1.27-3.67, p 0.00) and Igiv (OR 8.25 95% CI 2.33-39.3, p 0.00) were variables independently associated to hospitalization due to infection.

TABLE 1. Comparation between hospitalizated due to infections and non hospitalizated patients of RELESSAR-T registry.

	Hospitalization due to infection (N = 203)	Non hospitalization (N = 646)	Total (N = 849)	*p* value
Age at SLE diagnosis Median [Q1, Q3]	25.4 [18.9, 34.6]	30.6 [23.0, 40.7]	29.1 [21.9, 39.2]	<0.001
Years of education Mean (SD)	10.9 (3.76)	12.7 (3.95)	12.3 (3.98)	<0.001
Pericarditis	76 (37.6%)	68 (10.6%)	144 (17.1%)	<0.001
Low complement	136 (68.0%)	333 (53.7%)	469 (57.2%)	<0.001
SLICC Median [Q1, Q3]	1.00 [1.00, 3.00]	0 [0, 1.00]	1.00 [0, 1.00]	<0.001
PDN 10-30 mg/d	89 (47.8%)	131 (25.0%)	220 (30.9%)	<0.001
PDN >30-60 mg/d	67 (36.0%)	50 (9.52%)	117 (16.5%)	<0.001
Azathioprine	100 (51.8%)	149 (25.1%)	249 (31.7%)	<0.001
Cyclophosphamide	105 (54.4%)	90 (15.2%)	195 (24.8%)	<0.001
Mycophenolate	79 (41.6%)	83 (14.0%)	162 (20.7%)	<0.001
Igiv	17 (8.90%)	3 (0.514%)	20 (2.58%)	<0.001



Conclusion: Almost 25% of patients presented at least one hospitalization due to infection. Lower age al diagnosis, lower educational level, higher damage score, low complement, pericarditis, high esteroids doses and immunosuppressant increased the chance of having an admission due to serious infection.

Reference 1: Barber MRW, Clarke AE. Systemic lupus erythematosus and risk of infection. Expert Rev Clin Immunol. 2020 May;16(5):527-538. doi: 10.1080/1744666X.2020.1763793. Epub 2020 Jun 1. PMID: 32478627.

Disclosure of Interest: None Declared

Keywords: hospitalization, infections, SLE

PANLAR2023-1148

RELEVANCE OF ANTI-MITOCHONDRIAL ANTIBODIES TO PROPENSITY TO THROMBOGENESIS ON SYSTEMIC LUPUS ERYTHEMATOSUS

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Objectives: Thrombotic events are a leading cause of mortality in systemic lupus erythematosus (SLE), amounting to up to a quarter of deaths in the long-term. Nonetheless, the four times higher relative risk of thrombosis compared to healthy individuals is not fully accounted to the presence of traditional risk factors, or to auto-antibodies such as anticardiolipin (aCL). As such, improved biomarkers are a clear shortcoming. We aimed to identify and characterize novel antibodies directed against mitochondrial constituents, which could potentially represent a useful biomarker for SLE pro-thrombotic status.

Methods: First, we isolated highly purified mitochondria from HepG2 cells (ATCC HB-8065^{TM}), as previously described. In a cell culture microplate, mitochondria were incubated with sera either from SLE patients (n = 92) or healthy controls (HC, n = 80). To characterize the structure against which the antibodies were directed, mitochondria were pre-treated with trypsin 0.05% prior to incubation. Mitochondria extracts also underwent a Western blotting (WB) analysis in the presence of SLE sera. Sera was obtained from a Swedish Biobank, provided by Lund University. Patients' clinical data were linked to current research's results, and statistical analysis was performed on SPSS 22.0. Mann-Whitney test was used, with a *p* value of 0.05 or below deemed as significant. Data protection and patient anonymization were ensured in accordance with regulation by Research Advisory Boards.

Results: Forty percent of SLE patients were deemed positive for AMA using the 95th percentile of HC as a cut-off. Presence of AMA was associated with severe SLE manifestations, including nephritis (OR = 3.3, p = 0.02), antiphospholipid syndrome (APS; OR = 5.7, p = 0.02), and venous thromboembolism (VTE; OR = 6.7, p = 0.008). Pre-treatment of mitochondria with trypsin induced loss of binding of sera-derived antibodies (p < 0.01), suggesting that AMA were targeting protein components of mitochondria, and not phospholipids, as is the case of aCL. WB confirmed presence of reactivity towards mitochondrial protein antigens, in particular of 35 and 60 kDa. Reactivity towards 17 kDa antigens were also seen in some patients, being associated with APS (p = 0.008).

Conclusion: We pointed to a positive association between AMA presence in serum and a history of VTE. We intend to move forward by depicting the nature of AMA through high-throughput proteomics.

Disclosure of Interest: None Declared

Keywords: Antiphospholipid syndrome, BIOMARKER, Lupus Erythematosus, Systemic

PANLAR2023-1081

TREATMENT WITH ANGIOTENSIN-CONVERTING ENZYME INHIBITORS AND STATINS IN A SYSTEMIC LUPUS ERYTHEMATOSUS COHORT: DATA FROM THE ARGENTINIAN NATIONAL REGISTRY OF LUPUS (RELESSAR-T)

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Objectives: To evaluate the frequency of angiotensin-converting enzyme inhibitors (ACEI) and statins use in a SLE cohort of patients. To determine their association with comorbidities, disease characteristics, morbidity, mortality, and treatment.

Methods: Retrospective, observational and analytical study. Patients ≥18 years with SLE were included, from the Transversal Argentinian SLE Registry (RELESSAR T).

Sociodemographic and SLE features, treatment, morbidity and mortality were recorded. Comorbidities (Charlson index [CI]), their treatment and lipid profile were also recorded. Descriptive analysis was done according to the group of patients treated with ACEI, statins or both. Comparisons were made using Chi2, Fisher, Anova or Kruskal-Wallis were performed.

Results: A total of 1515 patients were included: 92% women, mean age 39.4 ± 13.8 years with 105 ± 110 months of SLE duration.

Most frequent manifestations were lupus rash (65%), leukopenia (50%), alopecia (44%), lupus nephritis (42%), Raynaud's (36%), pleurisy (27%) and pericarditis (21%).

A total of 97% received antimalarials, 96% corticoids, 35% azathioprine, 33% cyclophosphamide and 27% mycophenolate mofetil. Mean SLEDAI 3.1 ± 4.4 and SLICC damage index (SDI) 0.99 ± 1.4. Most common comorbidities: 23% high blood pressure (HBP), 20% dyslipidemia (DLP), 17% thyroiditis, 8% cataracts, 5% gastric ulcer, 3% diabetes (DM), 4% stroke, 2% COPD, 2% heart failure and 1% ischemic heart disease. CI mean was 2 ± 1.5. Hospitalizations were required in 51% and 14% had severe infections.

Frequency of ACEI use was 37% and statins 14%. Twenty-six percent took only ACEI and 3% statins alone, 11% used both. Fifty-six percent who received combined treatment and 39% only with ACEI had HBP.

In addition, 59% on combined treatment and 57% only with statins had DLP. Nineteen percent with HBP and 51% with DLP did not receive treatment. Patients with ACEI and/or statins vs. those without these treatments were older ($p < 0.001$), longer SLE duration ($p < 0.001$), later diagnosis ($p < 0.001$), higher pleurisy prevalence ($p < 0.001$), SDI ($p < 0.001$) and CI ($p < 0.001$). Also associated with mild liver disease ($p < 0.001$), DM ($p = 0.001$) and cataracts ($p < 0.001$). Patients present more hospitalizations ($p < 0.001$) and serious infections ($p < 0.001$).

Conclusion: ACE inhibitors were used 37% and statins 14%. Drug treatment was not received in 19% of patients with HBP and 51% with DLP. Their use was associated with comorbidities, morbidity and mortality, and higher SLE damage.

Disclosure of Interest: None Declared

Keywords: Angiotensin-Converting-Enzyme Inhibitors, Statins, Systemic lupus erythematosus

PANLAR2023-1248

FREQUENCY OF PRIMARY CARDIAC DISEASE IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS. RELESSAR TRANS REGISTRY

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Objectives: To describe frequency of primary cardiac involvement and associated risk factors in patients with Sistemic Lupus Erythematosus (SLE) from the RELESSAR trans registry.

Methods: Descriptive, cross-sectional study. Sociodemographic data, clinical SLE characteristics, comorbidities and treatments were recorded. Primary cardiac compromise due to SLE was defined as the presence of at least one of the following: pericarditis, myocarditis, endocarditis, arrhythmias and/or valvulopathies.

Descriptive analysis was carried out. Comparison between groups according to the presence of primary cardiac compromise due to SLE. Logistic regression model to assess which were associated factors.

TABLE.

	With cardiac involvement (N = 437)	Without cardiac involvement (N = 1078)	*p* value
Oral ulcers	257 (58.9%)	525 (49.2%)	<0.001
Pleural effusion	246 (57.5%)	160 (15.1%)	<0.001
Protein-losing enteropathy	224 (51.9%)	438 (41.2%)	<0.001
Urine celular casts	171 (40.1%)	299 (28.4%)	<0.001
Lupus nephritis	214 (49.2%)	429 (40.2%)	0.002
Leukopenia	236 (55.3%)	494 (46.6%)	0.003
Lymphopenia	176 (41.3%)	344 (32.9%)	0.003
Thrombocytopenia	96 (22.6%)	183 (17.4%)	0.024
dsAnti DNA (+)	329 (76.0%)	673 (63.9%)	<0.001
Anti Sm (+)	150 (40.2%)	284 (30.7%)	0.001
Hypocomplementemia	45 (10.7%)	184 (17.7%)	0.001
Anti Ro/SSA (+)	178 (47.7%)	375 (39.1%)	0.005
Anti La/SSB (+)	97 (26.4%)	151 (15.9%)	<0.001
Antiphospholipid antibodies (+)	145 (46.0%)	280 (36.5%)	0.004
Antiphospholipid syndrome	60 (14.7%)	100 (9.87%)	0.012
Raynaud's phenomenon	173 (41.6%)	361 (35.0%)	0.023
Stroke	24 (5.74%)	29 (2.78%)	0.00985
Corticoids >10 mg daily	291 (74.8%)	524 (58%)	<0.001
Azathioprine	184 (45.8%)	303 (30.4%)	<0.001
Cyclophosphamide	162 (40.1%)	303 (30.6%)	<0.001
Oral anticoagulants	68 (17.0%)	89 (9.06%)	<0.001

Results: We included 1515 patients, 437 had cardiac manifestations. Clinical SLE characteristics, comorbidities and underlying treatments are describe in table 1.

In the multivariate analysis, male sex (OR 2.03, 95% CI 1.12-3.64; p = 0.018), presence of pleurisy (OR 6.94, 95% CI 4.85-10.0; p < 0.001), antiphospholipid antibody positivity (OR 1.66, 95%CI 1.18-2.36; p = 0.004), anti-La antibodies (OR 1.87 95%CI 1.23-2.84, p = 0.003) and higher score on the SDI score (OR 1.63, 95% CI 1.43-1.86; p < 0.001) remained associated to primary cardiac involvement.

Conclusion: Lupus patients presented primary cardiac disease in 28.8% of the cases in this cohort of patients. Male sex, pleurisy, antiphospholipid and anti La/SSB antibodies, as well as greater irreversible damage were significantly associated.

Disclosure of Interest: None Declared

Keywords: Lupus Erythematosus, Systemic, primary cardiac disease, RELESSAR

PANLAR2023-1180

DELAY TO DIAGNOSIS OF SYSTEMIC LUPUS ERYTHEMATOSUS AND ITS IMPACT ON CUMULATIVE DAMAGE AND MORTALITY: DATA FROM A MULTIETHNIC LATIN AMERICAN COHORT

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Objectives: The aim of this study is to examine the variables associated with a delay to diagnosis and their impact in damage accrual and mortality in patients with SLE

Methods: GLADEL a multi-ethnic, multi-national Latin-American SLE inception cohort was studied. Patients were recruited based on the physicians' diagnosis but 97% fulfilled the ACR criteria. Delay to diagnosis was defined as ≥6 months from the first ACR criterion to SLE diagnosis. Socio-demographic, clinical/laboratory, disease activity, damage and mortality were compared using descriptive statistical tests. Multivariable Cox regression (HR) model with damage accrual and mortality as the end points were performed

TABLE 1. Comparison between the two patient groups in relation at the time to SLE diagnosis

Variable	< 6 months (n = 716)	≥ 6 months (n = 721)	*p* value
Age at diagnosis, years (Median, IQR)	25.6 (16.2)	30.4 (15.6)	<0.001
Female, n %	628 (87.7)	662 (91.8)	0.010
Ethnicity, n %			
Mestizo	306 (42.7)	339 (47.0)	
African Latin Americans	116 (16.2)	70 (9.71)	0.001
Caucasian	294 (41.1)	312 (43.3)	
Have medical insurance*(13), n%	606 (84.6)	573 (79.5)	0.020
Clinical manifestations§, n%			
Photosensitivity	327 (45.7)	379 (52.6)	0.009
Psychosis/seizures	39 (5.5)	60 (8.3)	0.031
Livedo reticularis	32 (4.5)	52 (7.2)	0.027
Raynaud's phenomenon	125 (17.5)	190 (26.4)	<0.001
Sicca syndrome	21 (2.9)	52 (7.2)	0.002
Vascular thrombosis	14 (2.0)	28 (3.9)	0.030
Stroke (ischemic)	4 (0.6)	12 (1.7)	0.046
Hypocomplementemia§, n%	487 (68.0)	385 (53.4)	<0.001

SD (standard deviation); IQR (Interquartile range); § Before SLE diagnosis;*(Missing data)

Results: Of the 1437 included in this analysis, the median delay to diagnosis was 5.9 months (Q1-Q3 2.4–16.1) and 721 (50.2%) had ≥6 months delay in SLE diagnosis. Patients with delay to diagnosis were more frequently of female gender, older age at diagnosis, mestizo ethnicity and without medical insurance. The characteristics of patients according to delay in diagnosis are depicted in table 1. Delay to diagnosis did not impact on disease outcome: damage accrual [HR 1.21 (IC 95% 0.78-1.88; p = 0.39)] and mortality [HR 1.30, CI 95% 0.84-2.01; p = 0.24)], after adjusting for age at SLE diagnosis, gender, ethnicity and socioeconomic status

Conclusion: In the GLADEL cohort, delay to diagnosis was associated to sex, age, thrombosis, sicca syndrome, cutaneous and neurological involvement. Furthermore, delay to diagnosis had no apparent negative impact on disease outcome (damage accrual and mortality). Early referral when there are suspicious clinical manifestations of SLE is crucial to reduce the diagnostic delay

Disclosure of Interest: None Declared

Keywords: Registries, Systemic lupus erythematosus

PANLAR2023-1181

PREDICTORS OF FIRST HOSPITALIZATIONS DUE TO DISEASE ACTIVITY AND INFECTIONS IN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS

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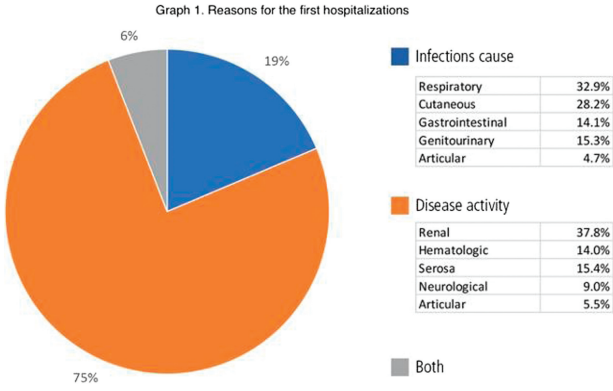
Objectives: The aim of this study is to describe the main causes and predictors of first hospitalizations due to disease activity and infections in SLE patients.

Methods: SLE patients from GLADEL, a multi-ethnic, multi-national Latin-American (LA) cohort were studied. The first hospitalization during these patients' follow-up due to either infection and/or SLE disease activity was examined. Baseline sociodemographic, clinical, damage (SDI) and treatments were evaluated as possible predictors. First, descriptive analyses were performed. Predictors of infection or SLE disease activity associated hospitalization were identified using univariate and multivariate logistic.

Results: A total of 1341 patients were included; 1201 (89.6%) were female. Their median interquartile range (IQR) age at diagnosis was 27 (20-37) years and their median IQR follow up time 27.5 (4.7-62.2) months. 456 (34.9%) patients were hospitalized; 344 (75.4%), 85 (18.6%) and 27 (5.9%) were hospitalized for disease activity, infections, or both, respectively, as depicted in Graph 1.

In the multivariable analysis, arthritis was associated with hospitalizations due to infection (OR 1.93 (95% CI 1.01-3.72) p 0.05). Serositis (OR 1.40 (95% CI 1.02-1.92) p 0.04), disease activity (OR 1.05 (95% CI 1.03-1.07) p < .0001) and damage (OR 1.33 (95% CI 1.18-1.50) p < .0001) were associated with hospitalizations due to disease activity. Older age (OR 0.98 (0.97-0.99) p 0.02), higher socioeconomic status (OR 0.32 (0.17-0.61) p 0.002) and antimalarial use (OR 0.71 (0.51-0.98) p 0.04) were found to be protective.



Conclusion: In this large LA lupus cohort, one third of the patients had at least one hospitalization; of them, were due to SLE disease activity. Our findings call attention for controlling disease activity and preventing damage using antimalarials early in the disease course disease to prevent the first hospitalization.

Disclosure of Interest: R. Quintana: None Declared, R. Nieto: None Declared, R. Serrano: None Declared, M. Ugarte: None Declared, G. Harvey: None Declared, D. Wojdyla: None Declared, J. Gómez: None Declared, M. García: None Declared, L. Catoggio: None Declared, V. Saurit: None Declared, C. Drenkard: None Declared, N. da Silva: None Declared, F. Cavalcanti: None Declared, E. Borba: None Declared, E. Sato: None Declared, O. Neira: None Declared, L. Massardo: None Declared, G. Vásquez: None Declared, L. A. González: None Declared, M. Guibert-Toledano: None Declared, L. H. Silveira Torre: None Declared, I. Garcia-De La Torre: None Declared, M. J. Sauza DEL Pozo: None Declared, R. Chacon: None Declared, G. S. Alarcon: None Declared, A. Orillion Employee with: Janssen Pharmaceutical Companies of Johnson & Johnson, Spring House, PA, USA, U. Sbarigia Employee with: Janssen Pharmaceutica NV, Beerse, BE, F. Zazzetti Employee with: Janssen Pharmaceutical Companies of Johnson & Johnson, Horsham, PA, USA, B. Pons-Estel: None Declared, G. Pons-Estel: None Declared

Keywords: Real-world evidence, Systemic lupus erythematosus

PANLAR2023-1213

ASSOCIATION BETWEEN INITIAL CLINICAL MANIFESTATIONS OF SYSTEMIC LUPUS ERYTHEMATOUS WITH SPECIFIC ANTIBODIES IN A MEXICAN-MESTIZO POPULATION

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Objectives: Systemic lupus erythematosus (SLE) is an autoimmune disease characterized by the presence of autoantibodies. These antibodies are associated with various initial manifestations of SLE, which vary by gender, ethnic group, and geographic distribution [1]. There are few studies on the association of these antibodies with the initial clinical manifestations of SLE in the Mexican-mestizo population [2]. The aim of this study is to analyze the association between specific antibodies and initial clinical manifestations in Mexican-mestizo patients with SLE.

Methods: Cross-sectional study, which includes patients >18 years of age with a diagnosis of Systemic Lupus Erythematosus according to the ACR/EULAR 2019 classification criteria. The association between antinuclear (ANA) and specific antibodies and clinical manifestations was determined by chi-squared test, and the strength of association was calculated by odds ratio (OR) and 95% confidence intervals (95% CI) at a significance level of p < 0.05.

Results: 104 patients were included, of them 88.5% were women with an age in years (standard deviation) 37.29 years (12.7). Only 2 had negative seronegative lupus (1.9%). The most frequent pattern of ANA was homogeneous (49%), followed by speckled (44.1%). The predominant specific antibody was anti-dsDNA (68.6%), followed by anti-Ro (49%). The most prevalent initial clinical manifestation was mucocutaneous. In the bivariate analysis, anti-Sm antibodies (OR 2.92, 95% CI 1.10-7.71; p = 0.03) was associated with glomerulonephritis; anti-La (OR 4.39, 95% CI 1.43-13.46, p = 0.010) and anti-Ro (OR 3.26; 95% CI 1.05-10.08, p = 0.040) were related with serositis and anti-dsDNA (OR 3.46; 95% CI 1.01-6.01, p = 0.047)] was found associated with arthritis.

Conclusion: In this Mexican-mestizo population, the most common pattern of ANA was homogeneous. Seronegative SLE was presented in 1.9%. Initial clinical manifestations of SLE such as glomerulonephritis, serositis, and arthritis were associated with specific antibodies as anti-Sm, anti-Ro/La and anti-dsDNA respectively.

Reference 1: Frodlund M et al. BMJ Open. 2013;3(10):e003608.
Reference 2: Pons-Estel BA et al. Medicine (Baltimore). 2004;83(1):1-17.

Disclosure of Interest: None Declared

Keywords: antibodies, clinical manifestations, Lupus Erythematosus, Systemic

PANLAR2023-1144

SELF-ESTEEM AS A DETERMINANT OF SEXUAL FUNCTION IN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS

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Objectives: We addressed the association between body self-esteem, global self-worth and sexual function (SFx) in SLE patients.

Methods: We performed a transversal study in Mexico City. Patients ≥18 years old who fulfilled EULAR/ACR criteria for SLE were included. Body self-esteem was assessed by the Body Self-esteem Scale (BSES) and global self-esteem by the Rosenberg´s Self-Esteem Scale (RSES). SFx was evaluated by the CSFQ-14 questionnaire. Disease activity and damage were assessed by the SLEDAI and SLICC scores, respectively.

Results: We included 280 patients; most of them were female (87%), the mean age was 41 (±12) years, and BMI was 25.6 kg/m2 (±4.9). The mean SLEDAI and SLICC scores were 2.4 (±2.7) and 0.8 points (±1.04), respectively. The mean score for the RSES was 32 (±5.8) in females and 33.5 (±4.9) in males. The BSES was 189.5 (±47.3) in females and 207 (±36.6) in males. We found that sexual dysfunction (SxD) is associated with lower global self-esteem ($p < 0.0001$). Also, a correlation between both self-esteem questionnaires and CSFQ-14 scores was found. Interestingly, the correlation was higher in male patients (r = 0.45, $p = 0.008$ and r = 0.47, $p = 0.006$) than in women (r = 0.25, $p = 0.0001$ and r = 0.18, $p = 0.004$) in both scores. The multivariate analysis showed that age (0.96 [0.94-0.98 95%CI]) and lower global self-esteem (1.080 [1-1.14 95%CI]) were independent risk factors for SxD.

TABLE 1. Differences between patients with and without sexual dysfunction

Variables	SxD Mean ± SD	No SxD Mean ± SD	Comparison (*p* value)
BMI (kg/m^2)	25.2 ± 4.6	26.1 ± 5.5	0.16
SLEDAI score (points)	2.4 ± 2.7	2.3 ± 2.5	0.71
SLICC-DI score (points)	0.8 ± 1.0	0.6 ± 0.9	0.09
C3 levels (mg/dL)	111.6 ± 30.3	117.1 ± 32.8	0.19
C4 levels (mg/dL)	22.1 ± 10.3	20.7 ± 10.9	0.34
anti-dsDNA antibodies (IU/mL)	151.1 ± 732.4	36.1 ± 63.5	0.16
Prednisone dose (mg)	4.6 ± 8.7	3.8 ± 6.1	0.42
Body Attractive (points)	37.2 ± 13.8	46.8 ± 8.6	<0.0001*
Body Satisfaction (points)	151.2 ± 35.7	162.7 ± 29.1	<0.006*
BSES (points)	188.4 ± 44.9	207.9 ± 40.1	<0.0001*
RSES (points)	31.6 ± 5.0	34.4 ± 6.4	<0.0001*

*statistically significant *p* values.

Conclusion: To our knowledge, this is the first study to demonstrate a reliable association between self-esteem and SxD in SLE patients, particularly in male patients. Considering the high impact of both self-esteem and sexual function on quality of life, our findings reinforce the importance of routinely acknowledging the biopsychosocial aspects (not only the disease-related) in the medical care of these patients.

Disclosure of Interest: None Declared

Keywords: gender: Lupus, Erythematosus, Systemic, sexual

PANLAR2023-1432

MENTAL HEALTH SCREENING IN A LATIN AMERICAN LUPUS CLINIC

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Objectives: Patients with chronic diseases have a higher prevalence of anxiety and depression. The complex relationship between chronic diseases and mental health disorders can influence each other negatively.(1) The aim of this study is to determine the factors associated with mental health disorders in patients with systemic lupus erythematosus (SLE).

Methods: We performed a cross-sectional study in the lupus clinic at Hospital Universitario Dr. José Eleuterio González. Patients >16 years old with SLE diagnosis were included. Sociodemographic and disease activity data were collected from patient files. As mental health screening, we applied the Hospital Anxiety and Depression Scale (HADS) over the last 6 months. A score from 0-7 points is classified as low risk, 8-10 as intermediate risk, and > 11 as high risk. Patients with high risk were referred to an evaluation by Psychiatry.

Results: We included 107 patients (95.3% female), with a mean age of 38.4 ± 1.4 and a mean disease duration of 7.5 +/- .79 years. Only 5.6% (6) patients reported a previous diagnosis of mental health issues. We observed that all patients with intermediate to high risk for anxiety and depression were female (p = .395) (p = .903). No association was found between anxiety or depression risk and age or duration of disease. However, we found an association in patients with comorbidities and a low risk of depression (p = .000).

TABLE 1. Differences between patients with and without sexual dysfunction

Variables	SxD Mean ± SD	No SxD Mean ± SD	Comparison (*p* value)
BMI (kg/m^2)	25.2 ± 4.6	26.1 ± 5.5	0.16
SLEDAI score (points)	2.4 ± 2.7	2.3 ± 2.5	0.71
SLICC-DI score (points)	0.8 ± 1.0	0.6 ± 0.9	0.09
C3 levels (mg/dL)	111.6 ± 30.3	117.1 ± 32.8	0.19
C4 levels (mg/dL)	22.1 ± 10.3	20.7 ± 10.9	0.34
anti-dsDNA antibodies (IU/mL)	151.1 ± 732.4	36.1 ± 63.5	0.16
Prednisone dose (mg)	4.6 ± 8.7	3.8 ± 6.1	0.42
Body Attractive (points)	37.2 ± 13.8	46.8 ± 8.6	<0.0001*
Body Satisfaction (points)	151.2 ± 35.7	162.7 ± 29.1	<0.006*
BSES (points)	188.4 ± 44.9	207.9 ± 40.1	<0.0001*
RSES (points)	31.6 ± 5.0	34.4 ± 6.4	<0.0001*

*statistically significant *p* values.

Conclusion: Unlike anxiety, where different risk groups show no significant differences among them, comorbidities markedly do not show risk for depression. Mental health screening in lupus patients may provide insight into a holistic approach and timely referral to a mental health specialist.

Reference 1: Hayward G, Mandela R, Barr A, Freeston J, Vandevelde C, Marzo-Ortega H. Counselling services embedded within rheumatology clinics could help bridge the gap in mental health care provision for adults with rheumatic diseases. Rheumatol Adv Pract. 2022;6(3):rkac080.

Disclosure of Interest: None Declared

Keywords: Epidemiology, mental health, Systemic lupus erythematosus

PANLAR2023-1461

LUPUS NEPHRITIS IN CHILDREN: A SERIE OF CASES FROM THE COLOMBIAN CARIBBEAN

Gustavo Aroca-Martínez[1], Alex Dominguez Vargas*[1,2], Zilac Espitaleta[1,3], Tatiana González-Vargas[4], Henry González-Tórres[1], Maria Sanguino-Jaramillo[2], Adriana Agamez[1], Carlos G. Musso[5], Eduardo Egea-Bermejo[2], and Antonio Iglesisas-Gamarra[1,6]. *[1]Facultad de Ciencias de la Salud, Universidad Simón Bolívar, [2]División Ciencias de la Salud, Universidad del Norte, [3]Nefrología Pediátrica, [4]Reumatología Pediátrica, Clínica de la Costa, Barranquilla, Colombia, [5]Hospital Italiano, Buenos Aires, Argentina, [6]Facultad de Medicina, Universidad Nacional, Bogotá, Colombia.*

Objectives: To assess the clinical and histopathological presentation and treatment outcomes in children with LN in a reference center from the Colombian Caribbean.

Methods: Twenty-four children with biopsy-proven LN were included in the study (19 girls, and 6 boys). Renal biopsy was classified according to the INS/RPS (International Society of Nephrology/Renal Pathology Society).

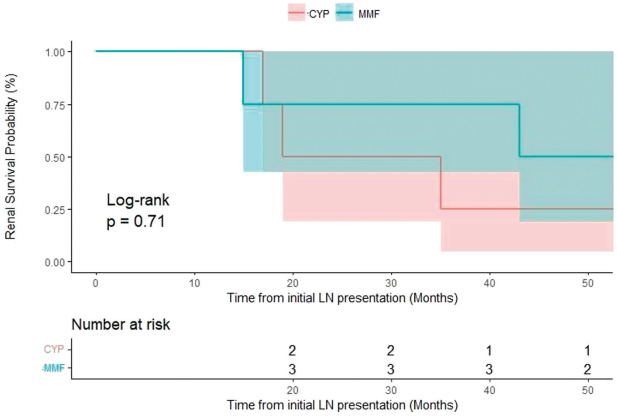
TABLE.

			Clinical Presentation			Renal Biopsy	Extrarrenal presentation		Induction Treatment		
N	Sex	Age of onset (yrs)	AKI	NS	NepS	INS/ RPS	Arthritis/ arthralgia	Raynaud syndrome	CYP	MMF	Outcome
1	F	17	+	+	-	IV-S(A)	+	-	+	-	CKD
2	M	11	-	+	-	IV-G (A)	+	+	-	+	Slight PU
3	F	15	+	-	+	IV-G (A)	+	-	+	-	Died
4	F	12	-	-	+	IV-G (A)	+	+	+	-	Died
5	F	14	+	-	+	III (A)	-	-	+	-	CRR
6	F	10	-	-	+	IV-G (A)	+	-	-	+	PRR
7	F	9	+	+	-	IV-G (A)	+	+	-	-	Slight PU
8	F	15	-	-	+	IV-G (A/C)	-	-	+	-	PRR
9	F	17	+	-	+	IV-G (A/C)	+	-	-	+	CRR
10	F	13	+	+	-	IV-G (A)	+	-	+	-	Slight PU
11	M	13	-	-	+	III (A)	+	-	-	+	PRR
12	M	17	-	+	-	IV-G (A)	+	-	+	-	CRR
13	M	12	+	+	-	IV-G (A/C)	+	+	-	-	Died
14	F	6	+	-	+	IV-G (A/C)	-	-	+	-	CKD
15	F	8	+	-	+	IV-G (A)	+	+	+	-	Died
16	F	15	+	-	+	III (A)	+	-	-	+	CRR
17	F	16	+	-	+	III (A)	+	-	+	-	CRR
18	M	12	-	+	-	IV-G (A/C)	+	-	-	-	Slight PU
19	F	14	-	-	+	IV-G (A/C)	+	-	+	-	PRR
20	F	7	+	+	-	IV-G (A)	+	+	-	-	CRR
21	M	18	-	-	+	IV-G (A)	+	-	-	+	Slight PU
22	F	15	+	-	+	IV-G (A)	-	-	+	-	CKD
23	F	16	-	-	+	IV-G (A/C)	+	-	+	-	CKD
24	F	18	+	+	-	IV-G (A)	+	+	-	-	PRR

AKI: Acute renal injury; NS: Nephrotic syndrome; NepS: Nephritic syndrome; G: Global; S: Segmental; (A): Active; (C): Chronic; CYP: Cyclophosphamide; MMF: Mycophenolate mofetil. ESRD: End-Stage Renal Disease. PU: Proteinuria, CKD: Chronic Kidney Disease, CRR: Complete Renal Remission; PRR: Partial Renal Remission

Patients were treated with steroids and pulses of cyclophosphamide (CYP) or mycophenolate mofetil (MMF), next azathioprine or MMF with prednisone in reduced doses.

Results: The mean age of the children was 12.24 ± 4 years. LN manifested mainly as nephritic syndrome (62%). Class IV (diffuse proliferative) nephritis was the most frequent histopathology profile (83%). Arthritis/arthralgia was the most frequent extrarenal presentation (83%). At the end of the follow-up, the mean observation time was 26.2 ± 15.8 months. Chronic kidney disease and slight proteinuria were observed in 16% and 20% of children, respectively, and 4 (16%) children died (Table). The Kaplan-Meier estimates for End-Stage Renal Disease-free survival probability were not different between patients when analyzed by induction treatment CYP vs MMF (log-rank p = 0.73) (Figure).



Conclusion: In our series of cases, the histopathological profile was characterized by lupus nephritis proliferative classes (III and IV), which could have a negative impact on the prognosis despite immunosuppressant treatments.

Disclosure of Interest: None Declared

Keywords: Children, Histopathology, Lupus nephritis

PANLAR2023-1241

BASELINE CLINICAL-EPIDEMIOLOGICAL CHARACTERISTICS OF THE PATIENTS IN THE COHORT IMMEX

Aida Martinez Badajoz*[1], Francisco Martin Bravo Rojas[1], Mario Cesar Ocampo Torres[2], Astrid Asminda Ramírez Pérez[2], Miguel Angel Vazquez Zaragoza[2], Rocio Catana Hernández[2], and Juan Carlos H Hernández Rivera[3]. *[1]Instituto Politecnico Nacional, Escuela Superior de Medicina, [2]Reumatologia, [3]Unidad de Investigación Médica de Enfermedades Nefrologicas, Hospital de Especialidades, Centro Medico Nacional Siglo XXI , México, Mexico.*

Objectives: The correct classification and study of the behavior of patients with systemic lupus erythematosus (SLE) helps to constantly improve the approach and prognosis, the objective is describe the clinical and epidemiological characteristics of patients with SLE included in a cohort in Mexico.

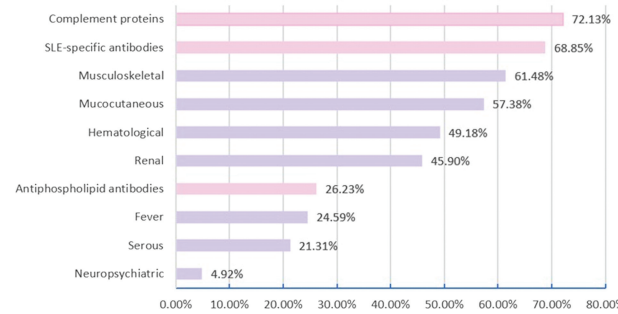
Methods: Descriptive observational study based on the clinical-epidemiological historical review on the day of inclusion in the LUPUS-IMMex registry. Normality tests were applied, the frequencies and percentages were calculated for the categorical variables and the means with their standard deviation or medians with interquartile range (IQR) for the continuous variables depending on their distribution. A comparison of compliance with diagnostic scores was made according to three classification criteria (ACR 1997, SLICC 2012 and EULAR 2019) according to the manifestations of each patient at the time of incorporation into the cohort.

Results: 121 patients with a diagnosis of SLE according to the 2019 EULAR criteria were included. 81% were female, median age at diagnosis 28 years (IQR 23-37) and 7.48% reported a family history of autoimmune diseases. (Table 1). The patients underwent a comparison of the classification criteria, 81.81% met the lupus criteria according to ACR, 94.21% by SLICC and 100% by EULAR. The joint alterations was the most frequent, present in 61.48% of the patients, followed by mucocutaneous manifestations in 57.38%, hematological manifestations in 49.18%, renal manifestations in 45.90%, fever in 24.59%, serous in 21.31% and neuropsychiatric manifestations in 4.92%. The presence of hypocomplementemia was the most frequent data (72.12%) followed by SLE-specific antibodies and antiphospholipid antibodies. (Figure 1).

TABLE 1. Baseline characteristics at the time of diagnosis

Quantitative variables	*Median*	*RIC (25 – 75)*
Age (years)	33	26-41
C3 (mg/dL)	24.22	±4.63
C4 (mg/dL)	6.15	2.90-10.75
Leukocytes (/mm3)	4470	3,470 – 7,400
Lymphocytes (/mm3)	935	682.50 – 1442.50
Creatinine	0.82	0.65-1.29
Quanlitative variables	***Frecuency***	***Percentage (%)***
Sex		
Femine	98	81
Male	23	19
Family history of autoinmune diseases	19	15.57

Figure 1 . Frequency of diagnostic criteria for SLE according to the classification criteria of EULAR 2019



Conclusion: Patients with SLE at our center have both clinical and epidemiological characteristics like those reported by other cohorts. Although the availability of data in our environment is limited, it is necessary to continue with the constant obtaining of information regarding the subject to be able to be on a par with international cohorts.

Disclosure of Interest: None Declared

Keywords: clinical manifestations, Epidemiology, Lupus Erythematosus, Systemic

PANLAR2023-1298

PREVALENCE OF SARCOPENIA IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

Émerson Pena[1,2], Rafaela Cavaleiro do Espirito Santo*[1,2], Leonardo Peterson dos Santos[1,2], Lucas Denardi Dória[1,2], Andrese Aline Gasparin[1], Poli Mara Spritzer[2,3], Tayane Muniz Fighra[2,3], Rafael Mendonça da Silva Chakr[1,2], Ricardo Machado Xavier[1,2], and Odirlei Andre Monticielo[1,2]. *[1]Autoimmune Diseases Laboratory, Division of Rheumatology, Hospital de clínicas de Porto Alegre , [2]Postgraduate Program in Medical Science, Universidade Federal do Rio Grande do Sul (UFRGS), [3]Division of Endocrinology, Hospital de clínicas de Porto Alegre , Porto Alegre, Brazil.*

Objectives: To assess the prevalence of sarcopenia in women with SLE and its associations with clinical parameters.

Methods: In this cross-sectional study, women with SLE (18 to 50 years old) were included. The following data were collected: disease duration, disease chronicity (SLICC/ACR-DI), disease activity (SLEDAI-2 k), treatment regimen,

quality of life (SLEQoL), physical activity level (IPAQ,min/week), muscle strength by handgrip test (kg) and chair stand tests (seconds), Appendicular skeletal muscle mass (ASM;kg) was evaluated Dual energy X-ray absorptiometry (DXA). Sarcopenia diagnosis (handgrip <16 kg or chair stand tests >15 s + ASM <15 kg) was based on the values indicated by the European Working Group on Sarcopenia in Older People-2 (EWGSOP2). Severity of sarcopenia was assessed by the Short Physical Performance Battery (SPPB ≤8 points) test. The descriptive analysis, Pearson's or Spearman's correlation coefficients, and Chi-squared test were performed. The significance was considered $p < 0.05$.

Results: Forty-nine patients were included [median age: 35.0 (28.0–43.5) years; median disease duration: 8.0 (4.0–14.5)] years. Chronicity and disease activity were low, being 0.0 (0.0-1.0) and 2.0 (0.0-4.0), respectively . The median of physical activity level by IPAQ was 583.60 (0.00–409.50) min/week. The majority of patients (83.7%) showed low physical activity level (IPAQ). The patients presented muscle strength by the handgrip test of 24.71 ± 9.01 kg and 14.32 ± 3.68 s using the chair stand test. Eight patients (16.3%) showed low muscle strength by the handgrip test and twenty-four patients (49%) showed low muscle strength by the chair stand test. The mean of ASM was 17.03 ± 2.32 kg. Ten patients (20.4%) had low muscle mass. The prevalence of sarcopenia was 16.3% following the EWGSOP2 criteria. On the other hand, we did not find severe sarcopenia. In addition, we did not find a relationship among sarcopenia and age, disease duration, disease chronicity, disease activity, cumulative corticosteroid dose, quality of life, and physical activity level ($p > 0.05$).

Conclusion: The prevalence of sarcopenia was 16.3% in patients with SLE. Almost half of our patients had low muscle strength in the chair stand test (49%) and only 16.3% had low muscle strength by handgrip test. Furthermore, sarcopenia is not associated with clinical parameters. Therefore, further studies should be developed to assess risk factors for sarcopenia in patients with SLE.

Reference 1: Di Battista M, Marcucci E, Elefante E, Tripoli A, Governato G, Zucchi D, Tani C, Alunno A. One year in review 2018: systemic lupus erythematosus. Clin Exp Rheumatol. 2018 Sep-Oct;36(5):763-777.

Reference 2: Cruz-Jentoft AJ, Bahat G, Bauer J, Boirie Y, Bruyère O, Cederholm T, Cooper C, Landi F, Rolland Y, Sayer AA, Schneider SM, Sieber CC, Topinkova E, Vandewoude M, Visser M, Zamboni M; Writing Group for the European Working Group on Sarcopenia in Older People 2 (EWGSOP2), and the Extended Group for EWGSOP2. Sarcopenia: revised European consensus on definition and diagnosis. Age Ageing. 2019 Jan 1;48(1):16-31.

Disclosure of Interest: None Declared

Keywords: muscle strength, sarcopenia, Systemic lupus erythematosus

PANLAR2023-1581

PERIPHERAL NERVOUS SYSTEM MANIFESTATIONS IN A POPULATION WITH SYSTEMIC LUPUS ERYTHEMATOSUS IN COLOMBIA

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Objectives: Systemic Lupus Erythematosus (SLE) affects a wide range of organs. Neuropsychiatric lupus (NPSLE) includes seven syndromes of the peripheral nervous system (PNS) that has received little attention despite its potential significant impact. Describe and analyze factors associated with the presence of manifestations of the PNS

Methods: Observational cross-sectional study was conducted, 395 patients with diagnosis of SLE (198 with neurologic involvement vs 197 without it); based on ACR a consensus statement. Patients treated at a specialized rheumatology institution in Colombia. Univariate analyzes were performed to describe characteristics of the population. Bivariate analysis was performed using chi-square test, and Fisher's exact test was performed where the event number was less than 5. Multivariate analysis is performed using binary logistic regression with variables with a value of $p < 0.2$ in the bivariate analysis

Results: 392 patients with SLE were analyzed, 49 patiens with PNS manifestations (50 events), 85.0% female sex, median age at diagnosis 28.5 years (IQR 19.9). PNS manifestations were polyneuropathy (62.0%), mononeuropathy (18.0%), cranial neuropathy (16.0%), plexopathy (2.0%), myasthenia gravis (2.0%). The factors associated with the PNS manifestations can be seen in table 1. When performing the OR adjustment it is documented that the presence of positive rheumatoid factor (OR 17.5 (95% CI: 1.4 to 22.6) p:0.027) and corticosteroid therapy (OR 48,1 (95% CI 4.5 to 514.3) p:0.001) was independently associated with the presence of manifestations in the PNS.

TABLE 1. Factors associated with the presence of manifestations in the central nervous system in systemic lupus erythematosus

CNS manifestations	Absent (n:232)		Present (n:163)		
Variable	n	%	n	%	*p* value*
Female sex	189	81.5	147	90.2	0,017
Antiphospholipid syndrome	138	59.7	31	19.0	<0,001
Chronic cutaneous lupus	76	32.8	34	21.0	0,01
Arthritis	161	69.4	131	80.4	0,014
Serositis	40	17.2	48	29.4	0,004
Lupus nephritis	46	19.8	63	38.7	<0,001
AntiDNA positive	167	72.3	102	62.6	0,041
Corticosteroid therapy	166	71.6	137	84.0	0,004
Non-biological Immunomodulator	192	83.1	158	98.1	<0,001

CNS: Central nervous system
*Analyzed by Chi Square Test.

Conclusion: The involvement of the SNP in patients with SLE is similar to that reported in other populations. Patients with SLE and PNS compromise are associated with a high burden of autoimmunity, however care must be taken to rule out other causes of PNS involvement other than SLE

Disclosure of Interest: None Declared

Keywords: clinical manifestations, Lupus Erythematosus, Systemic, Peripheral Nervous System

PANLAR2023-1041

SELF-EFFICACY IS ASSOCIATED WITH A LOWER PROBABILITY OF DAMAGE ACCRUAL IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS (SLE)

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Objectives: Health-related quality of life (HRQoL) is impaired in systemic lupus erythematosus (SLE) patients, but its association with physicians reported disease activity is modest to none. The aim of this study is to determine the impact of patients reported disease activity on their HRQoL.

Methods: We evaluated patient-reported disease activity on SLE patients from the Almenara Lupus Cohort. Disease activity was assessed using the Lupus Foundation of America Rapid Evaluation of Activity in Lupus (LFA-REAL) patient-reported outcome (PRO) which ranges between 0 and 1200 (the higher the score is, the worse the activity is); HRQoL was ascertained using the LupusQoL which ranges between 0 and 100 (the higher the score is, the better the HRQoL).

Generalized estimating equations were performed for each domain of the LupusQoL and the LFA-REAL PRO measured at the previous visit; multivariable models were adjusted for possible confounders measured at the same visit as the LFA-REAL PRO. B was reported per 10 units increase of the LFA-REAL PRO.

Results: A total of 259 patients and 582 visits were included. Mean (SD) LFA-REAL PRO was 242.91 (178.92). The most affected LupusQoL domains at baseline were burden to others 57.5 (SD 31.5), intimate relationship 64.1 (SD 33.1) and body image 62.6 (SD 30.7). LFA-REAL PRO predicted a worse HRQoL in all domains, even after adjustment by possible confounders (table 1).

TABLE 1. Impact of LFA-REAL PRO per 10-unit increase on HRQoL in SLE patients

HRQoL domains	Univariable		Multivariable*	
	B (SE)	*p* value	B (SE)	*p* value
Physical health	-0.74 (0.06)	<0.001	-0.40 (0.05)	<0.001
Pain	-0.89 (0.06)	<0.001	-0.63 (0.06)	<0.001
Planning	-0.81 (0.06)	<0.001	-0.47 (0.06)	<0.001
Intimate relationship	-0.58 (0.10)	<0.001	-0.36 (0.08)	<0.001
Burden to others	-0.72 (0.08)	<0.001	-0.40 (0.07)	<0.001
Emotional health	-0.70 (0.07)	<0.001	-0.43 (0.06)	<0.001
Body image	-0.47 (0.09)	<0.001	-0.35 (0.08)	<0.001
Fatigue	-0.77 (0.06)	<0.001	-0.42 (0.06)	<0.001

SE: Standard error. * Multivariable models were adjusted by age at diagnosis, gender, educational level, disease duration, SLEDAI-2 K, SDI, prednisone dose, antimalarials and immunosuppressive drug use and the same domain of LupusQoL

Conclusion: A higher patient-reported disease activity predicted a worse HRQoL in SLE patients, even after adjustment for possible confounders. Strategies to improve how the patients feel and manage their disease could be useful to improve their HRQoL. Patient-reported disease activity should be included in the evaluation of SLE patients on a regular basis.

Disclosure of Interest: None Declared

Keywords: damage, lupus, outcome

PANLAR2023-1473

LATE-ONSET LUPUS: CHARACTERISTICS AND PARTICULARITIES

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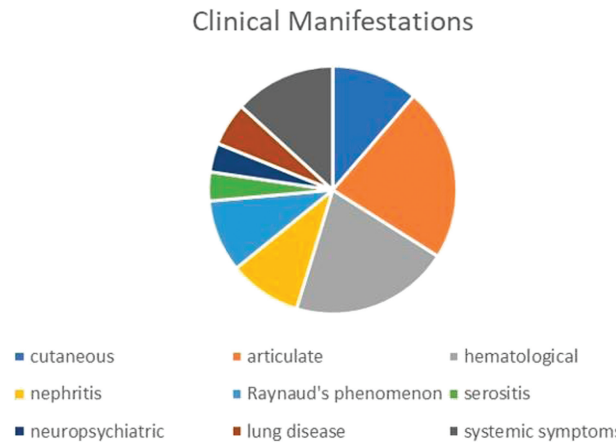
Objectives: To describe clinical and laboratory aspects of patients with late-onset SLE accompanied at a university hospital in Brazil.

Methods: Descriptive retrospective cross-sectional study, performed by reviewing medical records. Patients with a diagnosis of late-onset SLE, who met the Classification Criteria for Systemic Lupus Erythematosus EULAR/ACR 2019, followed at the rheumatology outpatient clinic of the Hospital de Clínicas of the Federal University of Uberlândia were included.

TABLE:. Table 1 - Clinical and Laboratorial characteristics of study patients

Variables	**n = 15**
Age (years) - mean SD	57 ± 7
Gender n(%)	
Male n(%)	2 (13,3)
Female	13 (86,6)
Race n(%)	
White	4 (26,6)
Mulatto	11 (73,3)
Constitutional Symptoms n(%)	7 (46,6)
Fever	3 (20,0)
Adenomegaly	3 (20,0)
Weight loss	5 (33,3)
Neoplasm investigation n(%)	13 (86,6)
Comobidities n(%)	
Systemic Arterial Hypertension	9 (60,0)
Diabetes Mellitus	3 (20,0)
Dyslipidemia	3 (20,0)
Hypothyroidism	3 (20,0)
Depressive or Anxiety Disorder	4 (26,6)
Fybromialgia	2 (13,3)
Smoker n(%)	4 (26,6)
Antibodies n(%)	
anti-ds-DNA	9 (60)
anti-RNP	7 (46,6)
anti-SM	5 (33)
anti-SSA	3 (20)
anti-SSB	2 (13)

Results: Of the total of 15 patients identified with late-onset SLE, 86.6% were female, with a mean age (SD) of 58.0 ± 7 years. The most common comorbidity was systemic arterial hypertension (60%) - Table 1. The frequency of antibodies is also described in Table 1. The most frequent clinical and laboratory manifestations were complement consumption, present in more than 73% of patients; followed by arthritis and hematologic abnormalities, with the presence of lymphopenia and nonspecific anemia in 53% and 46.6% of the patients, respectively – Figure 1. It is noteworthy that almost half of the patients had constitutional symptoms, including fever, adenomegaly and/or involuntary weight loss, as described in Table 1. Investigation of neoplasms for differential diagnosis was performed in 86.6% of cases.



Conclusion: In this study, patients with late-onset SLE had a high frequency of systemic symptoms and nonspecific hematologic abnormalities to the detriment of the classic manifestations of the disease. This particularity has an impact on the delay in the diagnosis of the disease, with the need to evaluate the differential diagnosis, such as common neoplasms in the age group of this population.

Reference 1: 1. Aringer M, Costenbader K, Daikh D, et al: 2019 European League Against Rheumatism/American College of Rheumatology Classification Criteria for Systemic Lupus Erythematosus. *Arthritis Rheumatol* 71 (9):1400–1412, 2019.

Disclosure of Interest: None Declared

Keywords: comsumptive syndrome, Late-onset lúpus, Systemic Lupus Erythematosus

PANLAR2023-1301

ASSESSMENT OF CARDIAC FUNCTION BY ECHOCARDIOGRAPHIC METHODS IN ASYMPTOMATIC PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Objectives: Systemic lupus erythematosus (SLE) is a chronic autoimmune disease. One of the important complications of this disease is the cardiovascular damage which is most often asymptomatic or oligosymptomatic needing clinical surveillance to avoid its progression. The objectives of this work were to study the prevalence of cardiac dysfunction in a local population with SLE and to verify whether the degree of dysfunction is associated with the disease activity measured by the systemic lupus erythematosus activity index (SLEDAI).

Methods: We selected 19 patients asymptomatic from cardiovascular point of view diagnosed with SLE and who met the classification criteria for SLE. These patients had their medical records reviewed for clinical and epidemiological data. Disease activity was measured by SLEDAI and cardiac function was evaluated by transthoracic echocardiography.

Results: The 19 patients studied were female, with a mean age of 41 years. The SLEDAI score ranged from 0–20, with median of 6 (moderate activity). An isolated case of mild pericardial effusion was detected. Regarding the correlation

between disease activity and the functional alterations, after correction of echocardiographic parameters for age and body mass index, only the ejection fraction and left ventricular mass remained significant, with p = 0.02 and 0.03, respectively.

Conclusion: Cardiac dysfunction could not be identified in the sample studied. Higher scores in the lupus activity index showed a correlation with increased left ventricle mass and ejection fraction.

Disclosure of Interest: None Declared

Keywords: Doppler echocardiography, Left ventricle dysfunction, Systemic lupus erythematosus

PANLAR2023-1580

CHARACTERISTICS OF A POPULATION OF PATIENTS WITH ANTI-DFS70+ ANTIBODIES

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Objectives: Anti-DFS70 antibodies are a guiding element to the low probability of systemic autoimmune disease (SAD). The aim of this study is to characterize the cohort of patients with positive anti-DFS70 antibodies and the relationship with autoimmune disease (AD).

Methods: Descriptive, observational, and cross-sectional study. Patients with anti-DFS70+ antibodies were included from the total number of ANAs who presented an ICAP pattern (International consensus on ANA patterns) AC-1 or AC-2 in the years 2019 and 2022 in a private center in Montevideo-Uruguay.

Results: Of 317 patients studied, 29 cases (9%) were DFS70+. Age: 42.5 +/- 15.3. Sex: Men 20.7%, women 79.3%. ANA Title: 1/160, 1/320, 1/640 were 41%, 38%, 21% respectively. Only one patient presented a homogeneous pattern (AC-1), the other had fine dense speckles (AC-2). Anti-DNA was observed in one patient, anti-ENA, antiphospholipids, anti-citrullinated and rheumatoid factor were negative. In 8 (28%) cases with high clinical suspicion, 5 had a diagnosis of SAD/Vasculitis, 3 still remain unclassified, and 21 cases had low clinical suspicion. Arthralgia was the most frequently reason for requesting ANA in 13 (45%) cases.

Of the total number of patients, 16 (55.2%) did not present SAD or organ-specific AD, on contrary 13 (44.8%) had an AD, 3 (10%) SAD and 9 (31%) organ-specific. The SAD were systemic lupus erythematosus, undifferentiated connective tissue disease and Sjögren's syndrome. The organ-specific ADs were: celiac disease 4 (13.8%), skin psoriasis 2 (6.9%), thyroid disease 2 (6.9%), immune thrombocytopenia 1 (3.4%), alopecia areata 1 (3.4%). There were no cases of associated neoplastic or infectious diseases.

Conclusion: Most are young patients with a higher percentage of men in contrast to AD series of patients. ANA titers were moderate to high. Celiac disease stands out as the most frequent AD. In this cohort, as in other series, there is a tendency for DFS70+ to occur in patients without SAD and with negative anti-ENA.

Disclosure of Interest: None Declared

Keywords: ANA, Enfermedades autoinmunes

PANLAR2023-1519

HAND PAIN AND FUNCTION IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Objectives: To evaluate hand function and hand pain in Systemic Lupus Erythematosus (SLE)

Methods: SLE subjects were evaluated regarding hand pain (visual analogue scale/pain-VAS) and hand function (Cochin Hand Function Scale-CHFS), sociodemographic (age, gender, race, marital status - living with or without a partner, occupation - house keeper, retired or employed, education, income) and clinical data (disease duration, disease activity/SLEDAI, hand deformity / Jaccoud index, number of painful and swollen hand joints, presence of Raynaud Phenomenon/RF, Carpal Tunnel Syndrome/CTS, trigger finger, regular practice of physical activity).

Results: 108 patients were accessed.

Mean age was 51.17 yrs (±12.42), 99 (91.7%) were female, 73 (67.6%) were white, mean formal education was 8.66 years (±4.45). Jaccoud Index was 3.71 (±3.65), mean painful and swollen joints wer 8.2 (±9.35) and 6.9 (±7.55) respectively. Mean hand pain was 5.35 (± 2.92) and mean CHFS was 25.48 (±25.87),

Increased hand pain was related to increased age (p = 0.0027), female gender (p = 0.108), fewer years of formal education (p = 0.0081), lower income (p = 0.0081), higher number of swollen (p = 0.110) and painful joints (p = 0.0002), in the presence of CTS (p = 0.0058) and in housekeepers (p = 0.0178).

Worse CHFS was related to increased age (p = 0.0048), SLEDAI (p = 0.0436), Jaccoud Index (p = 0.0005), higher number of painful (p < 0.001) and swollen joints (p = 0.0002), worse HAQ, in retired patients (p = 0.0020), in the absence of regular physical activity (p = 0.0166), in the presence of CTS (p = 0.0268), Raynaud Phenomenon (p = 0.0142), and trigger finger (p = 0.0257).

Conclusion: Hand pain in this SLE sample has been related to age, female gender, few years of formal education, in housekeepers. It was also related to the presence of CTS and overall disability.

Hand function impairment disclosed a multifatorial pattern. It has to be considered sociodemographic and clinical factors such as age, education, retirement, longer disease duration time, disease activity, hand joint pain/swelling/deformity, overall disability, sedentarism, the presence of CTS, Raynaud Phenomenon and trigger finger.

Disclosure of Interest: None Declared

Keywords: function, hand, Lupus Erythematosus Systemic

PANLAR2023-1554

FACTORS ASSOCIATED WITH FOCAL NEUROLOGICAL SYNDROMES IN A POPULATION WITH SYSTEMIC LUPUS ERYTHEMATOSUS TREATED AT A SPECIALIZED RHEUMATOLOGY CENTER IN COLOMBIA

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Objectives: The term neuropsychiatric systemic lupus erythematosus (NPSLE) refers to a series of neurological and psychiatric symptoms directly related to SLE. The American College of Rheumatology 1999 defined 19 NP syndromes (12 central nervous system (CNS)) and seven peripheral nervous system (PNS) syndromes, and further classified them into focal neurological syndromes (FNS) and diffuse neuropsychological syndromes. Identification of risk factors associated with FNS is important for timely diagnosis and treatment

Methods: An observational cross-sectional study was carried out that included 198 with vs 197 without NPSLE. The patients were treated at an institution specialized in rheumatology between 2010 and 2022, in Colombia. Univariate analysis was performed to describe the characteristics of the population. Bivariate analysis was performed using the chi-square test to compare the presence or absence of FNS

Results: 395 patients diagnosed with SLE; Female sex 336 (85.1%) and median age at diagnosis of 28.5 years (IQR: 19.9); 159 focal neurological events

TABLE 1. Factors associated with focal neurological syndromes related to systemic lupus erythematosus.

	Absent n:232		Present n:163		
	n	%	n	%	*p* value
Smoking history	40	17,2	15	9,2	0,023
Antiphospholipid syndrome	138	59,7	31	19	<0,001
Chronic cutaneous lupus	78	33,6	32	19,8	0,003
Arthritis	158	68,1	134	82,2	0,002
Serositis	38	16,4	50	30,7	0,001
Nephritis	48	20,7	61	37,4	<0,001
Rheumatoid factor	9	12	9	34,6	0,009
DNAds	167	72,3	102	62,6	0,041
Low complement	113	48,9	106	65,4	0,001
Corticosteroids therapy	164	70,7	139	85,3	0,001
Nonbiological immunomodulator	191	82,7	159	98,8	<0,001
Biological immunomodulator	19	8,2	29	17,8	0,004

were described; headache (35.8%), seizure disease (23.9%), cerebrovascular disease (22%), myelopathy (7.5%) followed by movement disorders (5.7%) and aseptic meningitis, demyelinating syndrome with 2 .5% each. The factors associated with the FNS can be seen in Table 1

Conclusion: The documented manifestations of FNS are similar to those reported in the world medical literature. The factors associated with FNS are multiple, suggesting various pathophysiological mechanisms (immune, inflammatory, thrombotic, and atherothrombotic), so the clinical evaluation of these patients requires a comprehensive and multidisciplinary diagnostic approach

Disclosure of Interest: None Declared

Keywords: clinical manifestations, Lupus Erythematosus, Systemic, neuropsychiatric

PANLAR2023-1328

PREVALENCE OF ANTICELLULAR ANTIBODIES AND THEIR CORRELATION WITH COMPLEMENT PROTEINS C3 AND C4 IN A LABORATORY IN GUAYAQUIL, APRIL TO JUNE 2022

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Objectives: To determine the prevalence of anticellular antibodies (ANA) and their correlation with C3 and C4

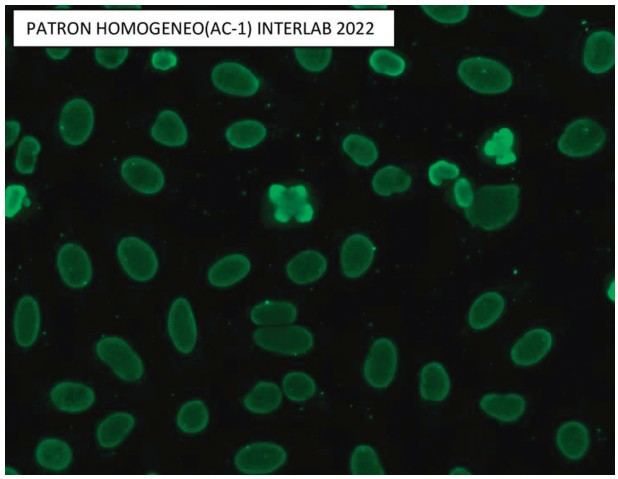
complement proteins in patients with suspected autoimmune diseases in a laboratory in Guayaquil, from April to June 2022.

Methods: A retrospective cross-sectional study was carried out in the second quarter of 2022, where 2641 samples were analyzed, resulting in 472 being positive by the IFI method for the qualitative and combined detection of IgG antibodies against HEp2 cells in human serum processed in the HELIOS-AESKU equipment. SYSTEMS. The complement proteins C3 and C4 were processed in the IMMAGE 800 equipment using the nephelometry procedure.

Results: Of the total samples analyzed, 12.46% of positivity was evidenced for different patterns and dilutions, with a predominance of the Homogeneous (AC-1) and Fine Speckled (AC-4) pattern, respectively; Regarding the proteins of the complement system, 51 samples were positive for C3, which corresponds to 10.8%, and 65 samples for C4 with 13.77%. It should also be noted that there is a minimum percentage of patients with DNA (IFI) positive with 4.44%, which correlates with the aforementioned tests.

TABLE.

TEST	ANA	COMPLEMENT C3	COMPLEMENT C4	DNA
PREVALENCE	472 (12.46%)	51 (10.8%)	65(13.77)	21 (4.44%)



Conclusion: The present study demonstrated the importance of performing anticellular antibody (ANA) tests together with the C3 and C4 complement system proteins, and DNA (IFI) so that they can be correlated with each other and thus contribute to the diagnosis of the patient. at the corresponding stage of the disease.

Disclosure of Interest: None Declared

Keywords: anticellular, COMPLEMENT, Prevalence

PANLAR2023-1563

CHARACTERIZATION OF SURFACE MARKERS IN T AND B LYMPHOCYTE SUBPOPULATIONSIN PATIENTS WITH LUPUS

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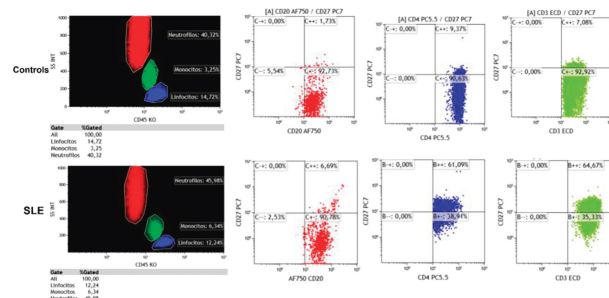
Objectives: Lupus is a chronic autoantibody-mediated inflammatory disease with a diversity of T and B lymphocyte subpopulations involved in tissue damage (1) (2).The aim of this work was the differential characterization of surface markers in T and B lymphocyte subpopulations in lupus patients and controls.

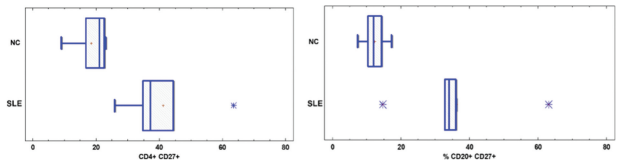
Methods: Case-control study (n = 10) distributed in patients (SLE n = 5) and individuals without autoimmune disease as healthy controls without SLE (n = 5). Cell populations of T and B lymphocytes were isolated and quantified from peripheral blood by flow cytometry (Navios EX). Discrimination of cell surface markers was performed with anti-CD monoclonal antibodies labeled with cytometer-detectable fluorochromes (anti-CD45 ORANGE KROME; anti-CD3 ECD, anti-CD81 APC, anti- CD4 PC5,5; anti-CD8 FITC; anti-HLA-DR PACIFIC BLUE; anti-CD19 APC 700; anti-CD20 ALEXA FLOUR 750; anti-CD25 PE; anti-CD27 PC7); cell population distribution readings were performed with Kaluza C1 analysis software. Statistical analysis implemented the t-test for comparison of percentages of labeled cell populations, distributed as unpaired samples between cases and controls, with significance for $p<0.05$ with 95 % confidence.

Results: CD45+ leukocyte panel panel readings events were obtained in patients (SLE) ($\bar{x} = 111654 \pm 10338$) and controls ($\bar{x} = 87275 \pm 14235$); both populations maintained similar distribution in CD45+ lymphocytes and distribution from complexity and size (SLE: $\bar{x} = 10.8\% \pm 4.67$; NC: $\bar{x} = 10.7\% \pm 5.24$), similarly TCD3+ lymphocytes (SLE: $\bar{x} = 8.9\% \pm 3.79$; NC: $\bar{x} = 8.0\% \pm 4.68$) maintained similar ratios with CD19+ B lymphocyte populations (SLE: $\bar{x} = 0.72\% \pm 0.29$; NC: $\bar{x} = 0.74\% \pm 0.59$) all for a p value> 0.05; however the percentage of tumor necrosis factor receptor protein (TNFR) tagged expression on CD20+ CD27+ B lymphocytes presented a significantly different distribution (SLE: $\bar{x} = 5.4\% \pm 2.83$; NC: $\bar{x} = 1.10\% \pm 1.53$) P< 0.018. HLA-DR, CD25 and CD81 markers did not present differences (P> 0.05).

TABLE 1. Study population characteristics.

Study population	Sample (n)	Age (range), SD	Female / Male	SLEDAI-2 K	Years with disease (range), SD
SLE	5	35,4 (21 - 46), +/- 11.15	5/0	6 (1-18) +/- 2,61	3 (2 - 5), +/-1,64
Control	5	33,4 (23 - 47), +/- 10.5	4/1	N/A	N/A





Conclusion: An increased expression of CD27 on T and B lymphocytes suggests a crucial role in the immune activation process (3,4). Differences in the distribution of CD27+ B cells are useful for the evaluation of disease activity in SLE patients (5).

Disclosure of Interest: None Declared

Keywords: lupus, Lymphocyte, TNF

PANLAR2023-1515

CLINICAL CHARACTERISTICS OF PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOUS ACCORDING TO THE AGE OF ONSET OF THE DISEASE

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Objectives: The aim of this study was to describe the demographic, clinical characteristics and accumulated damage according to the age of onset in patients with SLE with a minimum of one year of follow-up.

Methods: An Observational, analytical, retrospective cohort study was carried on. Patients with SLE according to the ACR 1982 Criteria revised in 1997 and/or SLICC 2012 and/or ACR/EULAR 2019 who attended at a Rheumatology Unit were included. Patients with another autoimmune rheumatic disease were excluded, except for Sjögren's syndrome and/or associated antiphospholipid syndrome. The age of onset of the disease, basal activity and evolution of the disease was determined with the Systemic Lupus Erythematosus Disease Activity Index (SLEDAI), with SELENA-SLEDAI FLARE INDEX (SSFI), damage with SLICC/ACR SDI, respectively. Continuous variables were described as mean and standard deviation (SD) or median and interquartile range (IQR). Categorical variables were expressed as proportions. To compare the activity and accumulated damage according to age, a bivariate analysis and a multiple linear regression model was performed.

Results: One hundred and twenty four patients were included. The mean age in years was 29 (±11), and 93.5% were female. The median follow-up time was 4.3 years (IQR: 2-5). 46% of the patients had remission/mild baseline activity by SLEDAI and 54% had moderate/high activity. In the bivariate analysis, we found that, at a younger age, a worse control of the disease by SELENA-SSFI, at the first and last visit [β coefficient: -2.9. 95% CI: -0.3 to -5.3; β coefficient: -3.3. 95% CI: -0.9 to -5.7, respectively]; Also, at a younger age, the requirement of high-dose glucocorticoids and treatment with immunosuppressants was greater (β coefficient: -4.2. 95% CI: -0.33 to -8.1) (β coefficient: -2.2. 95% CI: -0.39 to -3.9) respectively. In the multivariate analysis, a significant and independent association was found between the age of onset of the disease and the requirement of immunosuppressive treatment (β coefficient: -7.31 95% CI: -3.2 to -11.4).

Conclusion: In our study, we found significant differences that suggest that the evolution of the disease could be more severe when it begi at a younger age.

Disclosure of Interest: None Declared

Keywords: age of onset, clinical characteristics, worse control

PANLAR2023-1487

FREQUENCIES OF ADVERSE EVENTS AFTER VACCINATION FOR COVID-19 IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS FROM A REFERENCE CENTER IN ASUNCIÓN, PARAGUAY

Cynthia Gisela Holt*[1], Eric Hernán Benegas Sosa[1], Liz Marite Cañiza Bareiro[1], Anahí Soledad Romero Rojas[1], Claudia Belén Vallejos Fleitas[1], Guillermo Nicolás Aguirre Bordón[1], Daniel Hernán Robledo Franco[1], Ana Giselle Jourdan Baez[1], Jennifer Iris Vache Genes[1], Isaias Roberto Meza Ávila[1], Luis Nicolás González Cárdenas[1], Astrid Pasts Nicora[1], and Isabel Acosta Colman[1]. [1]*Departamento de Reumatología , Universidad Nacional de Asunción, Facultad de Ciencias Médicas , San Lorenzo , Paraguay.*

Objectives: The objective of this study was to determine the frequency of adverse effects (AE) of vaccination against COVID-19 in patients with SLE who visit medical centers in Asunción, Paraguay.

Methods: The study performed was observational, transverse, descriptive. 152 patients with SLE were included, who received at least one dose of anti-COVID vaccine.

A survey was carried out, which allowed the data collection through phone calls or instant messaging. Each investigator had a spreadsheet that related the generated code with the surveyed patient's name. Once the call ended and if the patient agreed to participate in the study, a code was generated.

Results: 88.5% of the individuals were female, the average age was 33.93 ± 11,102 years. Of these, 94.3% received their first dose, 86.3% the second dose, 39.7% the third dose, and 2.3% the fourth dose. Of the total vaccinated patients, 39.38% were administered Sputnik-V, 26.02% Pfizer, 16.43% AstraZeneca, 13.35% Moderna, 4.1% Covaxin, and 0.68% Hayat Vax.

Of 292 doses administered, 103 AEs were recorded, 79.6% within the first 5 days and the rest within the next 5 days.

44.03% presented the AE after the first dose, 32.11% after the second dose and 23.85% after the third dose.

The mean duration of symptoms was 7.49 ± 9.877 days. The most important side effect was pain at the injection site, followed by fever and fatigue.

The worsening of Lupus due to the administration of the anticovid vaccine was demonstrated in 9.93% of the cases.

Figure 1: Covid-19 vaccine platform applied to patients

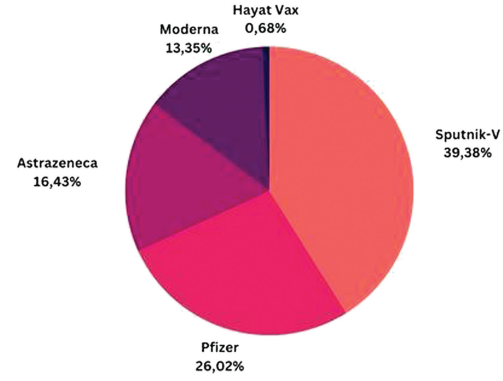
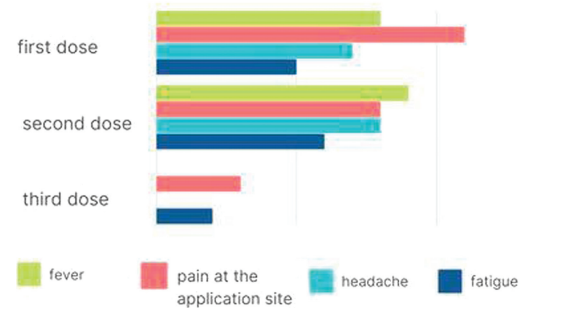


Figure 2: Frequency of adverse events in the first 5 days after anticovid vaccination in patients with SLE



Conclusion: Mild effects were registered. It is concluded that vaccination against COVID-19 is safe for individuals with SLE.

Disclosure of Interest: None Declared

Keywords: adverse events, COVID-19 VACCINES, Lupus Erythematosus, Systemic

PANLAR2023-1552

FACTORS ASSOCIATED WITH DIFFUSE NEUROPSYCHOLOGICAL SYNDROMES IN A POPULATION WITH SYSTEMIC LUPUS ERYTHEMATOSUS TREATED AT A SPECIALIZED RHEUMATOLOGY CENTER IN COLOMBIA

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Objectives: The term neuropsychiatric systemic lupus erythematosus (NPSLE) refers to neurological and psychiatric symptoms that are directly related to SLE. The ACR defined 19 NP syndromes and of these, 12 are of the central nervous system (CNS). Furthermore, these were classified into focal neurological syndromes and diffuse neuropsychological syndromes (D-NPSS). Identifying the risk factors associated with this type of manifestations (D-NPSS) is important for timely diagnosis and treatment

Methods: An observational cross-sectional study was carried out that included 395 patients diagnosed with SLE (198 with neuropsychiatric SLE (NPSLE) vs 197 without NPSLE) from an institution specialized in rheumatology between 2010 and 2022, in Colombia. Univariate analysis was performed to describe the characteristics of the population. Bivariate analysis was performed using the Chi-square test and Fisher's exact test to compare the presence or absence of D-NPSS. The multivariate analysis was performed using binary logistic regression with variables with a value of $p < 0.2$ from the bivariate analysis

Results: 392 patients with SLE were analyzed. 336 females (85.1%) with a 5.7:1 ratio compared to men, median age at diagnosis of 28.5 years (IQR: 19.9). 163 (41.3%) with CNS manifestations of which 58 (35.6%) are D-NPSS. The D-NPSS described in the medical records were mood disorder (62.9%), psychosis (29%), and cognitive dysfunction (8.1%). The factors associated with D-NPSS can be seen in Table 1. The multivariate analysis showed a negative association with the presence of a positive anti-Ro test (OR 0.5 (95% CI 0.2 to 0.9) p: 0.047) and a positive association with the use of non-biological immunomodulatory therapy (OR 12.5 95% CI 1.6 to 95.2) p:0.015) with respect to the presence of D-CNS.

TABLE 1. Factors associated with diffuse neuropsychological syndromes related to systemic lupus erythematosus.

	Absent n:337		Present n:58		
	N	%	n	%	p
Female sex	282	83,7	54	93,1	0,063
antiphospholipid syndrome	160	47,6	9	15,5	<0,001
hemolytic anemia	51	15,3	3	5,3	0,042
Anti Ro positive	109	40,4	12	25,5	0,053
Nonbiological immunomodulator	293	87,7	57	98,3	0,016

Conclusion: In patients with positive NPSLE Anti Ro it is a protective factor for the development of D-CNS; Furthermore, the use of immunomodulatory therapy as an associated factor suggests that patients present greater disease activity requiring greater use of immunomodulatory therapy

Disclosure of Interest: None Declared

Keywords: clinical manifestations, Lupus Erythematosus, Systemic, neuropsychiatric

PANLAR2023-1550

ANALYSIS OF THE FREQUENCY AND CLINICAL CORRELATIONS OF EPSTEIN-BARR VIRUS (EBV) INFECTION IN A COHORT OF PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS IN A UNIVERSITY HOSPITAL IN RIO DE JANEIRO, BRAZIL

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Objectives: Systemic lupus erythematosus (SLE) is an autoimmune disease that causes multiple organ damage. Viral infections have been implicated in the pathogenesis of autoimmune diseases through various mechanisms, including structural or functional molecular mimicry/cross-reactivity, innate immune activation mediated by interferon and epigenetic factors. Previous studies show a higher viral load of EBV in patients with systemic lupus erythematosus (SLE). However, the clinical relevance of this finding when correlated with disease activity requires investigation. Therefore, our study aimed to report the frequency of Epstein-Barr infection (EBV) infection in a cohort of SLE patients.

Methods: This is a cross-sectional study performed with SLE patients followed at a Rheumatology outpatient clinic in a university hospital in Rio de Janeiro, Brazil, from 2019 to 2022. The study was approved by the Ethics Comittee. EBV infection was assessed by detecting DNA viral load using a quantitative polymerase chain reaction (qPCR) test and the disease activity was investigated using SLEDAI-2 K criteria.

Results: In four years (2019-2022), 74 patients with SLE were included. Of these, 9 (12.1%) were hospitalized. The mean of SLEDAI-2 K was 4 ± 6.9. We observed that EBV viral load was detected in a high frequency of patients (40.5%, n = 30/74). The frequency of EBV infection among hospitalized patients was 44.4% (mean SLEDAI-2 K of 8 ± 7.9), in comparison to 40% in non-hospitalized patients (mean SLEDAI-2 K of 4 ± 6.6).

Conclusion: Our study demonstrated a high frequency of EBV infection in a cohort of Brazilian, which was similar between hospitalized and non-hospitalized patients.

Disclosure of Interest: None Declared

Keywords: Epstein-barr Virus, infection, Systemic lupus erythematosus

PANLAR2023-1555

RISK FACTORS ASSOCIATED WITH THE PRESENCE OF URINARY INFECTIONS IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Objectives: To determine the presence of risk factors for urinary tract infections in patients with Systemic Lupus Erythematosus (SLE).

Methods: Observational, descriptive cross-sectional study, the sample size was 66 patients with SLE in the period from august to november 2022, selected in a non-probabilistic manner, at convenience. Data were collected through an electronic record with specific data related to urinary tract infections. The SPSS program was used for data analysis, for the descriptive analysis means, standard deviation, frequencies and percentages were used. For the association study between urinary tract infection and associated risk factors, the chi-square test was used and values less than 0,05 were considered statistically significant p.

Results: Patients with SLE were included, with a mean age of 35,34 ± 10,735 years, of which 87,9% were female. The 16,6% presented a history of previous urinary tract infections in the last 12 months. The risk factors predisposing to a urinary infection were: treatment with immunosuppressant 83,3%, renal phenotype 60%, treatment with glucocorticoids 42,4%, sexual intercourse more than 4 times per month 31,8%, disease with SLEDAI greater than four (4) 30,3%, chronic constipation 19,6%, urinary or gynecological procedures 13,6%, previous bladder catheterization 3% and pregnancy 1,5%. A statistically significant association was found between urinary infection and renal manifestations ($p = 0.033$).

Conclusion: The most prevalent risk factors were treatment with immunosuppressants, glucocorticoids, and a history of previous urinary tract infections. This study found an association between urinary tract infection in patients with SLE with renal manifestations.

Disclosure of Interest: None Declared

Keywords: Immunosuppressive Agents, Lupus Erythematosus, Systemic, Urinary tract infections

MISCELLANEOUS

PANLAR2023-1336

ADJUVANTED RECOMBINANT ZOSTER VACCINE IN IMMUNE MEDIATED INFLAMMATORY DISEASES: A SYSTEMATIC REVIEW

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Objectives: To evaluate available data of IMIDs patients and report incidence of HZ (vaccine efficacy) and safety (including flares) after received at least one dose of the RZV

Methods: A comprehensive search of the literature was conducted in three databases until December 2022. We included studies with IMIDs patients who received at least one dose of RZV. Screening and classification of search items was performed using the web-based platform Rayyan. Two independent reviewers performed study selection, data collection and risk of bias assessment. Our primary outcome was the incidence of episodes of HZ following the vaccine. Secondary outcomes included: adverse events (AEs) and flares of the underlying IMIDs.

Results: The search identified 271 potentially relevant records. Six studies fulfilled inclusion criteria. Two studies reported incidence of HZ; the first is a post-hoc analysis with IMIDs patients of two pivotal RCTs (ZOE-50/70) where the global incidence was of 0.4% vs 4% in controls non vaccinated (follow-up 4.4 years). Other study without control group revealed a similar incidence, of 0.6% (follow-up 36 weeks). The analysis made from RCTs revealed that efficacy against HZ was 90.5% (95% CI: 73.5, 97.5). AEs were reported in four studies. Most of them were mild and ranged from 6.4% to 14.6% across the studies (similar to AEs found in RCTs). Four analyzed flares ranging from 6.7% to 16%. One study found that GC use was associated with flare after vaccination: HR 2.4 (95% CI 1.3-4.5) after first dose and a flare after first dose was associated with flare HR 3.9; (95%CI 1.7-9) after second dose. In this study, baseline treatment included GC in 35% (median dose 5 mg/day), MTX in 23%, TNFi 14% and JAKi in 5%. Finally, one study performed in 517 patients with gout found that vaccination was associated with 2-fold higher odds of gout flare (OR 1.99; 95% CI 1.01 to 3.89).

Conclusion: In ZOE-50/70 participants with pre-existing IMIDs, RZV was effective in preventing HZ and the incidence of AEs was similar between RZV and placebo. Also, studies were consistent that both, flares and AEs were not increased in patients who received RZV. However, in one study that reported higher flares in gout patients was hypothesized that aluminium adjuvants vaccines can activate inflammasome. Further real-world studies in different IMIDs patients treated with immunosuppression and vaccinated with RZV are needed.

Disclosure of Interest: None Declared

Keywords: Flares, Herpes Zoster vaccine, Immune Mediated Inflammatory Diseases

PANLAR2023-1245

DESIGNING OF A PHASE 2, MULTICENTER, RANDOMIZED, PLACEBO-CONTROLLED, DOUBLE-BLIND STUDY TO ASSESS THE EFFICACY AND SAFETY OF NIPOCALIMAB, AN FCRN INHIBITOR, IN ADULTS WITH PRIMARY SJÖGREN'S SYNDROME

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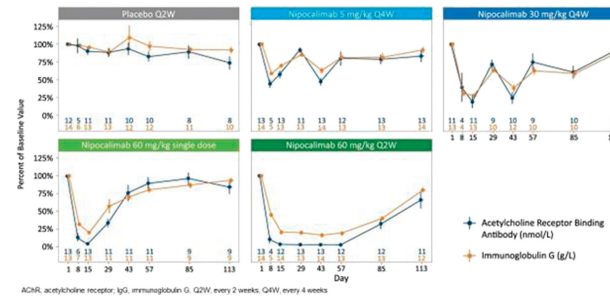
Objectives: In primary Sjögren's Syndrome (pSS) no licensed therapy has been shown to alter the disease course. Nipocalimab is a high-affinity, fully human monoclonal antibody that reduces circulating immunoglobulin G (IgG) levels by selectively blocking the interactions of IgG, including pSS autoantibodies, with the neonatal Fc receptor (FcRn). Here, we describe key data from Vivacity-MG, a phase 2 study in generalized myasthenia gravis (gMG) patients that illustrate the therapeutic potential of nipocalimab in IgG autoantibody-driven conditions and review the design of a phase 2 study evaluating the efficacy and safety of nipocalimab in patients with pSS (NCT04968912).

Methods: Study feasibility assessments involved evaluating results from the phase 2 placebo-controlled trial Vivacity-MG. Of the 68 patients enrolled, 54 patients were randomized 1:1:1:1:1 to 4 treatment groups or a placebo group.

Results: In Vivacity-MG, there were no discontinuations due to treatment-emergent adverse events (TEAEs), severe AEs, or related serious AEs with nipocalimab. The incidence of infections and headaches with nipocalimab were comparable to placebo. Treatment with nipocalimab resulted in rapid and dose-dependent reductions in serum total IgG levels and anti-AChR IgG autoantibodies (**Figure 1**), as compared to placebo. The safety and pharmacodynamic data from Vivacity-MG support the hypothesis that nipocalimab has the potential to treat pSS through lowering pathogenic IgGs. As such, we developed a phase 2, multicenter, randomized, placebo-controlled, double-blind study enrolling adults with moderately-to-severely active pSS. The pSS study consists of a ≤ 6-week screening period, a 24-week double-blind treatment period, and a 6-week follow-up period. Participants are randomized 1:1:1 to treatment every 2 weeks with intravenous nipocalimab (low or high dose), or placebo, through Week 22. The primary efficacy endpoint is change from baseline in Clinical European League Against Rheumatism Sjögren's Syndrome Disease Activity Index (clinESSDAI) score at Week 24. Safety assessments include TEAEs, abnormal vital signs, and laboratory parameters.

Figure 1. Change from Baseline in IgG and AChR Autoantibodies



AChR, acetylcholine receptor; IgG, immunoglobulin G; Q2W, every 2 weeks; Q4W, every 4 weeks

Conclusion: Vivacity-MG demonstrated that nipocalimab has the potential to offer an important new and targeted treatment option for patients with IgG-mediated diseases. The ongoing phase 2 study evaluates the safety and efficacy of treatment with nipocalimab in patients with moderately-to-severely active pSS.

Disclosure of Interest: J. J. Hubbard Employee with: Janssen Research & Development, LLC and may own Johnson & Johnson stock or stock options, K. Campbell Employee with: Janssen Research & Development, LLC and may own Johnson & Johnson stock or stock options, K. Sivils Employee with: Janssen Research & Development, LLC and may own Johnson & Johnson stock or stock options, R. W. Hoffman Employee with: Janssen Research & Development, LLC and may own Johnson & Johnson stock or stock options, K. H. Lo Employee with: Janssen Research & Development, LLC and may own Johnson & Johnson stock or stock options, J. H. Leu Employee with: Janssen Research & Development, LLC and may own Johnson & Johnson stock or stock options, A. M. Bravo Perdomo Employee with: Janssen Research & Development, LLC and may own Johnson & Johnson stock or stock options, S. G. Liva Employee

with: Janssen Research & Development, LLC and may own Johnson & Johnson stock or stock options, Q. Zuraw Employee with: Janssen Research & Development, LLC and may own Johnson & Johnson stock or stock options, A. M. Stevens Employee with: Janssen Research & Development, LLC and may own Johnson & Johnson stock or stock options, L. E. Ling Employee with: Janssen Research & Development, LLC and may own Johnson & Johnson stock or stock options, K. Karcher Employee with: Janssen Research & Development, LLC and may own Johnson & Johnson stock or stock options, S. Ramchandren Employee with: Janssen Research & Development, LLC and may own Johnson & Johnson stock or stock options, H. Sun Employee with: Janssen Research & Development, LLC and may own Johnson & Johnson stock or stock options, R. H. Scofield: None Declared, R. Seror Grant / Research support with: GlaxoSmithKline and Amgen, Consultant with: GlaxoSmithKline, Boehringer, Janssen and Novartis, D. J. Wallace Consultant with: Amgen, Eli Lilly and Company, EMD Merck Serono, and Pfizer

Keywords: FcRn, Nipocalimab, Sjogren's Syndrome

PANLAR2023-1195

INTEGRATION OF A GROUP OF PATIENTS EXPERTS IN RHEUMATOID ARTHRITIS IN AN INTEGRAL HEALTH MANAGEMENT MODEL. THE IMPACT OF THE PATIENT-PATIENT RELATIONSHIP

Gabriel Santiago Rodríguez-Vargas[1], Fernando Rodríguez-Florido*[2], Pedro Rodríguez-Linares[1], Noralma Pinto-Flórez[3], Adriana Rojas-Villarraga[4], and Pedro Santos-Moreno[1]. *[1]Scientific direction, [2]Patients education, BIOMAB - Center for Rheumatoid Arthritis, [3]Expert Patient, UniversitAR, [4]Research Institute, Fundación Universitaria de Ciencias de la Salud FUCS, Bogotá, Colombia.*

Objectives: Patients' education is a powerful tool that allows them to participate more efficiently in the relationship with the medical teams. However, there is a high possibility of establishing better relationships between medical teams and patients, thanks to the intermediation of expert patients. An expert patient is a person who has received education for the care of their health condition and has been trained to educate, guide and support other patients who have the same health condition.

The aim of this study is to implement a participation model that integrates expert patients into healthcare teams, so that they can help other patients to learn about the benefits of a correct relationship between doctor and patient and how to be more adherents to their treatment.

Methods: After the training and certification of 50 expert patients in Rheumatoid Arthritis (RA) in a multicomponent educational program, a review of the literature was carried out to find evidence on intervention strategies in which expert patients had a leading role. Then, expert patients were educated in: knowledge of the health care model, the algorithm used for the intervention of the interdisciplinary team, the importance of therapeutic adherence in the treatment of a chronic disease, clinimetry and characterization of patients to determine a treatment by objectives (T2T Strategy). Finally, a strategy was designed so that expert patients can interact with other patients. The results of the interventions will be measured through a qualitative measurement about the impact of the interactions with the expert patients.

Results: The expert patient intervention model will be designed, so that groups between 2 or 3 expert patients can intervene individually or in groups at the medical center. The duration of each day of intervention will be 6 hours, which denotes a reach of 72 patients per day and an impact on nearly 1400 patients who come to the center per month. Expert patients will exchange experiences, resolve concerns, conduct literacy, and provide feedback to the medical team and other relevant information (Figure 1).

Conclusion: This study will provide evidence of the inclusion of expert patients in medical care models. This participation can generate high impacts on the doctor-patient relationship and improve the degrees of adherence in the population, thanks to the relationship between patients as peers, leading to a better understanding of the role of patients in his treatment.

Disclosure of Interest: G. S. Rodríguez-Vargas: None Declared, F. Rodríguez-Florido: None Declared, P. Rodríguez-Linares: None Declared, N. Pinto-Flórez: None Declared, A. Rojas-Villarraga: None Declared, P. Santos-Moreno Grant / Research support with: Abbvie, Abbott, Biopas-UCB, Bristol, Janssen, Pfizer, Roche, Sanofi, Speakers Bureau with: Abbvie, Abbott, Biopas-UCB, Bristol, Janssen, Pfizer, Roche, Sanofi

Keywords: Expert Patient, Rheumatoid Arthritis

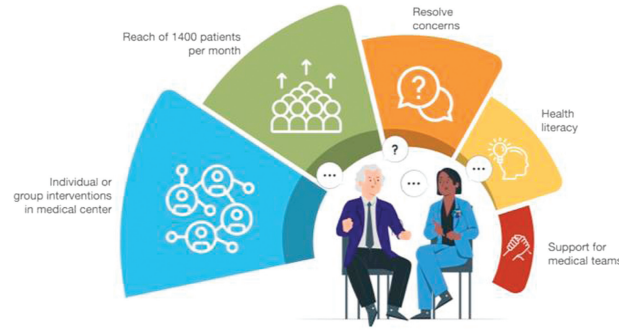


Figure 1: Intervention method of expert patients in care model

PANLAR2023-1356

HIGH BODY MASS INDEX IS ASSOCIATED WITH FATIGUE, PAIN, LOW QUALITY OF LIFE AND PHYSICAL ACTIVITY IN PATIENTS WITH PRIMARY SJÖGREN'S SYNDROME: DATA FROM BRAZILIAN SJÖGREN'S SYNDROME REGISTRY (REBRASS)

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Objectives: The body mass index (BMI) is connected with lifestyle, obesity-related comorbidities, and mortality. This study aims to assess whether high BMI is associated with symptoms, disease activity, inflammatory biomarkers, anxiety, depression, and quality of life (QoL) of patients with primary Sjögren's syndrome (pSS).

Methods: Data were included from the Brazilian registry on primary Sjögren's syndrome, a prospective national cohort of Brazilian Society of Rheumatology. All subjects fulfilled the 2002 AECG or 2016 ACR-EULAR classification criteria. Research Electronic Data Capture (REDCap) served to record clinical and demographic information; disease activity (EULAR SS Disease Activity Index - ESSDAI); disease damage (Sjögren's Syndrome Disease Damage Index - SSDDI); inflammatory blood parameters; self-assessment (EULAR SS Patient-Reported Index - ESSPRI); fatigue (PROFAD), anxiety and depression (Hospital Anxiety and Depression Scale - HADS), sleep disturbance (Epworth sleepiness scale - ESS); physical activity (International Physical Activity Questionnaire - IPAQ-SF); and QoL (EuroQol 5 Domain EQ-5D).

Results: A total of 653 pSS patients from 11 centers, covering all regions of the country, were included. The mean age was 56.9 ± 17.5 years, with 96.9% of females. Positivity for xerostomia, xerophthalmia, anti-Ro, and anti-La was 96%, 94.2%, 78%, and 40.4%, respectively. Among those who underwent labial biopsy, 90.9% (n = 594/653) had FS ≥ 1. The mean values of the main variables analyzed were: BMI 27.32 ± 6.6; ESSDAI at baseline 8.1 ± 8.7; current ESSDAI 4.26 ± 6.6; ESSPRI 5.8 ± 3.9; SSDDI 2.1 ± 1.7; PROFAD (physical) 4.2 ± 4.4; PROFAD (mental) 4.0 ± 3.9; HADS (depression) 7.4 ± 4.6; HADS (anxiety) 8.5 ± 4.7; ESS 8.5 ± 4.7; IPAQ-SF 1,697 ± 3,439; EQ-5D 63.3 ± 21.5. Higher BMI was associated with cardiovascular risk factors (hypertension, diabetes, dyslipidemia), fibromyalgia, higher rates of physical and mental fatigue, anxiety, depression, and less vigorous physical activity ($p \leq 0.05$, Spearman correlation). When stratified into obese (n = 185, BMI ≥30) and non-obese (n = 468, BMI <30) subgroups, the non-obese group presented a higher frequency of anti-La (43% vs. 31%, p = 0.001), higher ESSDAI (4.7 ± 7.2 vs. 2.8 ± 3.4, p = 0.001), association with constitutional, hematological, and biological manifestation.

Conclusion: Obesity is associated with more comorbidities, pain, fatigue, depression, anxiety, and poorer QoL. Lifestyle change and physical activity are central non-pharmacological interventions in patients with pSS.

Disclosure of Interest: None Declared

Keywords: Body Mass Index, Quality of life, Sjögren's Syndrome

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PANLAR2023-1059

MUSCLE THICKNESS IS ASSOCIATED WITH DISEASE ACTIVITY AND STRENGTH IN SYSTEMIC SCLEROSIS WOMEN: PRELIMINARY DATA

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Objectives: Systemic sclerosis(SSc) is an autoimmune disease characterized by cutaneous and visceral fibrosis and disseminated vasculopathy. SSc patients may present low muscle mass, impacting negatively on their daily activities. There are several methods to assess muscle mass but the high costs of the equipments and the lack of portability make them uncommon in clinical practice. Ultrasonography has been used to evaluate muscle mass in different populations. The aim of this study was to assess the quadriceps muscle thickness and verify associations with clinical features, strength and physical performance in SSc.

Methods: Women with SSc according to the 2013 ACR-EULAR classification criteria were included. Age(y), disease duration(y), modified Rodnan skin score (mRSS), European Scleroderma Trials and Research Group(EUSTAR) SSc activity index (EScSG-AI) and the health assessment questionnaire(HAQ) were obtained from medical records. Muscle thickness (MT) was assessed by an ultrasound device (Esaote S.p.A MyLab 50 X Vision; SãoPaulo, Brazil). An experienced evaluator analyzed the MT of vastus lateralis (VL,cm), rectus femoris (RF,cm), vastus intermedius (VI,cm) and vastus medialis (VM,cm). Strength was assessed by chair stands test(CST,secs) and physical performance was assessed by the timed up and go test (TUG,secs). Frequency analysis and Pearson's or Spearman's correlation coefficients were explored. We considered $p < 0.05$ significant.

Results: We included 45 women with SSc, 32(71.1%) with diffuse disease, age 62.00(54.50-66.50)years, disease duration 10.91(4.88-18.68)years, EScSG-AI 1.33(0.33-2.34), mRSS 4.00(2.00-8.00) and HAQ 0.62(0.25-1.06). The means of MT were: VL 1.38 + 0.32 cm, RF 1.06 ± 0.35 cm, VM 1.16 ± 0.47 cm and VI 1.17 ± 0.33 cm. The median of CST was 13.57(10.92-16.24)secs and TUG was 8.67(7.22-10.40)secs. Disease activity by EScSG-AI was negatively associated with VL(r = -0.410, p = 0.016) and VI(r = -0.394, p = 0.021). CST was negatively associated with VL(r = -0.316, p = 0.035) and TUG was not associated with MT.

Conclusion: Low quadriceps MT is associated with higher disease activity and lower muscle strength. We found no associations between MT and physical performance in SSc women. Our findings highlight the importance of aiming for disease activity and muscle wasting control in SSc women.

Disclosure of Interest: None Declared

Keywords: disease activity, muscle thickness, systemic sclerosis

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PANLAR2023-1167

EXPERIENCE FROM A MULTICENTER RHEUMATOLOGY OCULAR MUCOUS MEMBRANE PEMPHIGOID STUDY: A PRELIMINARY REPORT

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Objectives: To analyze the clinical/epidemiological data and the established treatments of patients with Ocular Mucous Membrane Pemphigoid (OMMP) in different Argentinian rheumatology centers.

Methods: Observational and multicenter study. Medical records of patients diagnosed with OMMP by an ophthalmologist, from different rheumatology centers in the Argentine Republic, were reviewed from May 2006 to July 2022.

Results: One hundred forty-seven medical records of patients diagnosed with OMMP were analyzed, mostly with confirmatory biopsy. Seventy-two percent were female. The mean age at diagnosis was 64 years (SD13). The time from the first symptoms to diagnosis was 30 months (0-300). Most of the patients (72%) were diagnosed in the last 5 years. On the analysis of 120 patients who had reported Foster's stage, 73% had stage II or less. Another associated autoimmune disease was presented in 29% and the most frequent was Sjogren's Syndrome. The most widely used treatment in 80% of patients was methotrexate and 62.5% continued with this medication until the end of the observation. In 30% of the patients the treatment had to be modified to control the disease and the most used drugs were mycophenolate, azathioprine, cyclophosphamide and rituximab. When patients were discriminated by current treatments according to Foster's stage (n: 120) patients with earlier Foster's stages used methotrexate more frequently, reaching 60% considering Foster's stages 0, I and II. Mycophenolate, azathioprine, and cyclophosphamide were used in patients with

Foster's stage II or higher, while rituximab was used mainly in Foster's stage 4. Systemic steroids were used in 58% of the patients and 23% continued using it at the last visit. Adverse events that led to stopping treatment were observed in 12% of all treated patients. In Addition, one death due to sepsis secondary to cyclophosphamide was recorded. Foster's stage progressed in 31% of patients despite treatment and 8.1% (n:12) finished with blindness.

Conclusion: Most of the patients were diagnosed in recent years and three quarters present initial stages. Due to the inflammatory, autoimmune, progressive and scarring nature of OMMP, early initiation of immunosuppressive/immunomodulatory therapy is essential, in order to suppress inflammation and avoid sequelae. Methotrexate seems to be a good starting alternative and treatment should be escalated according to evolution. Interdisciplinary management between rheumatologists/immunologists and ophthalmologists is essential.

Disclosure of Interest: None Declared

Keywords: Ocular Mucous Membrane Pemphigoid

PANLAR2023-1269

BIOELECTRICAL IMPEDANCE ANALYSIS OF APPENDICULAR SKELETAL MUSCLE MASS IN WOMEN WITH SYSTEMIC SCLEROSIS: PRELIMINARY DATA

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Objectives: (1) Our objective was to compare appendicular skeletal muscle mass (ASM) measured by BIA versus DXA and (2) to verify the associations with clinical features in women with systemic sclerosis (SSc).

Methods: Women with SSc according to ACR/EULAR 2013 criteria were consecutively included at a tertiary public hospital in Rio Grande do Sul, Brazil (Hospital de Clínicas de Porto Alegre, HCPA) in 2022. Modified Rodnan's skin score (mRSS), EUSTAR activity index were calculated. The ASM by BIA (In Body 370 s) and DXA (GE FamBeam 4500A) were calculated from sum lean mass of arm and legs (kg). Low muscle mass (BIA or DXA) was defined according to the European Working Group on Sarcopenia in Older People 2 (EWGSOP2) less than 15 kg. Pearson's and intraclass correlation coefficients, dependent samples t-test and simple linear regression for Bland–Altman plot were performed. The significance level was set at $p < 0.05$.

Results: Until this moment, 62 women with SSc were included. The mean age was 62.0 ± 10.1 years-old and median disease duration was 15.0 (7.0–21.0) years. Forty-one patients (66.1%) had limited cutaneous disease, 14 (22.6%) diffuse-cutaneous and 7 (11.3%) sine scleroderma. The median mRSS was 4.0 (2.0–8.0) and the EUSTAR index was 1.5 (0.6 - 2.4). The mean appendicular skeletal muscle mass measured by DXA was 16.0 ± 2.2 kg while by BIA was 15.5 ± 2.3 kg (Δ = 0.5 kg; p = 0.005), underestimating the ASM. On other hand, the mean differences between DXA and BIA showed within the confidence interval (p = 0.358; CI 95%: -2.8 – 1.8; Figure 1). ASM by BIA was strongly correlated (r = 0.866, $p < 0.001$) and had a high agreement (Intraclass Correlation Coefficient = 0.919, $p < 0.001$) with ASM by DXA. We found only weak association between ASM by BIA and age (r = -0.282; p = 0.026). Low muscle mass in women with SSc was found in 18 patients (29%) by DXA and in 26 patients (42%) by BIA with a sensitivity of 80% and specificity of 94%.

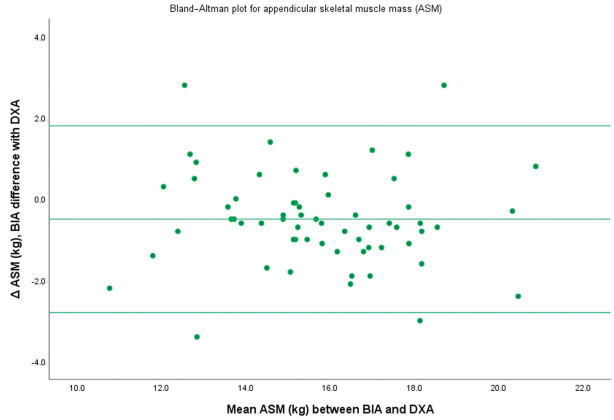

Figure 1. Agreement between DXA and BIA

Conclusion: BIA and DXA show high correlation and agreement in ASM assessment of women with SSc. Our findings suggest BIA as a useful tool due to its high specificity with DXA for the early assessment of low ASM in women with SSc. Furthermore, completion of this study is needed to confirm these results.

Disclosure of Interest: None declared

Keywords: Bioelectrical impedance, Muscle mass, systemic sclerosis

PANLAR2023-1572

THE LEFT VENTRICULAR GLOBAL LONGITUDINAL STRAIN CAN BE A USEFUL TOOL IN PATIENTS WITH IDIOPATHIC INFLAMMATORY MYOPATHIES

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Objectives: to evaluate if the left ventricular (LV) global longitudinal strain (GLS) assessed by Speckle Tracking Echocardiography (STE) technique, has prognostic value in idiopathic inflammatory myopathies (IIM) patients.

Methods: Patients were recruited from Rheumatic Disease out-patient clinic of a tertiary centers. LV GLS were assessed by STE performed by the same specialist. The study had two phases. First, the cross-sectional phase, included 61 IIM patients, according to ACR/EULAR - 2017 classification criteria (patient group) and 32 individuals without IIM (control group); and the longitudinal phase, where the patients were divided into two subgroups: 26 with reduced LV GLS and 35 with normal LV GLS and followed by mean of 25 months. The subgroups were compared regarding the occurrence of cardiovascular events and the criteria for IIM activity. All patients performed a test for myositis-specific and myositis-associated autoantibodies.

Results: The mean LV GLS was lower in patients when compared to controls (18.5 ± 2.9% vs 21.6 ± 2.5%; $p < 0.001$). The mean NT-proBNP dosage in patients was higher than in controls (103.0 ± 125.6 vs 61.3 ± 90.6, p = 0.006). There was no difference in relation to other cardiac involvements. Anti-Jo1 positivity was associated with general ECG changes (p = 0,018 e odds ratio = 4,650) and VE diastolic dysfunction (p = 0,005, odds ratio = 6,833). Other antibodies were not associated with cardiac involvement. After a mean follow-up of 25.0 ± 3.0 months, it was observed that subgroup with reduced LV GLS had higher means of CPK, MYOACT (8,25 ± 4,9 vs 4,14 ± 5,4, p = 0,002), physician VAS (2,99 ± 1,9 vs 1,73 ± 1,7, p = 0,006), patient VAS (3,19 ± 1,9 vs 1,96 ± 1,8, p = 0,009) and HAQ (0,665 ± 0,490 vs 0,368 ± 0,467, p = 0,014), in addition to a greater proportion of patients with disease recurrences. There was no difference between the subgroups in relation to mortality, hospitalizations, and cardiovascular events.

Conclusion: This is a first study evaluating the LV GLS as predictor of IIM evolution. Abnormal LV GLS measures were associated with more frequent relapses and increased disease activity during the follow-up. LV GLS can be an interesting tool in IMM patients for predicting relapse and activity.

Disclosure of Interest: None Declared

Keywords: Inflammatory Myopathies, Left ventricular global longitudinal strainprognosis

PANLAR2023-1405

SELF-PERCEIVED ORAL HEALTH OUTCOMES IN PATIENTS WITH SJÖGREN'S SYNDROME, RHEUMATOID ARTHRITIS AND CONTROLS

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Objectives: The relationship between oro-dental diseases and rheumatic diseases is well documented, such is the case of rheumatoid arthritis (RA), which is related to a higher incidence of periodontitis as well as a negative relationship of disease activity with this gingival disorder. Sjögren's syndrome (pSS) has also been linked to oral health problems secondary to decreased salivary flow, manifested as xerostomia.

To compare the results of Geriatric/General Oral Health Assessment Index Spanish Version (GOHAI-SP) in disorders that most report deterioration of oral health (pSS and RA) and controls.

Methods: A cross-sectional and comparative study was carried out in the rheumatology outpatient clinic of *Hospital Universitario Dr. José Eleuterio González*. GOHAI-SP was applied to patients who met criteria for AR and SLE during their follow-up visit. A control group of patients was also included. GOHAI-SP comprises 12 questions which assess 3 domains: oral functionality (items 1-4), psychosocial status (items 6, 7 and 9-11) and reported discomfort or pain (items 8 and 12); which are answered on a 1-5 Likert-type scale.

Results: We included 59 patients with pSS, 100 with RA and 41 controls. Age means were: 53.4 (12.6), 51.3 (14.1) and 53.49 (12.7) respectively. More than 90% were women in each group. Overall scores of GOHAI-SP survey were 51 (±7.8) for pSS, 53.3 (±7.2) in RA and 54.15 (6.7) in controls. pSS group had lower scores than AR and control groups in functionality, psychosocial and reported pain domains with a statistically significant difference. The GOHAI-SP score results are shown in Table 1.

TABLE 1. Comparison of GOHAI-SP scores for Sjögren's syndrome, rheumatoid arthritis and controls.

Sociodemographics	pSS n = 59	RA n = 100 Mean (SD)	Controls n = 41	pSS vs RA	pSS vs Controls *p*	All groups
Sex, n (%)						
Female	57 (96.6%)	92 (92%)	39 (95.1%)			
Male	2 (3.4%)	8 (8%)	2 (4.9%)			
Age	53.42 (12.68)	51.34 (14.16)	53.49 (12.74)			
GOHAI-SP domains						
Functionality	4.05 (0.78)	4.42(0.75)	4.53 (0.68)	**<0.001**	**<0.001**	**<0.001**
Psychosocial	4.23 (0.78)	4.56 (0.58)	4.57 (0.52)	**0.003**	**0.016**	**0.006**
Pain and discomfort	3.85 (0.89)	4.11 (0.73)	4.28 (0.83)	0.118	**0.009**	**0.032**
Total	51 (7.8)	53.37 (7.2)	54.15 (6.79)	**<0.001**	**<0.001**	**<0.001**

Conclusion: Patients with pSS show worse oral function, greater psychosocial involvement due to dental appearance and related problems, as well as increased pain than AR and control groups. Similarly, AR patients had lower scores than control group, proving that there is also a detriment in self-perceived oral health in this group.

Disclosure of Interest: None Declared

Keywords: GOHAI-SP, Oral health, Sjögren's syndrome

PANLAR2023-1153

EVALUATION OF OSTEOPATHIC MANIPULATIVE TREATMENT IN PATIENTS WITH CHIKUNGUNYA FEVER IN THE CHRONIC PHASE: A RANDOMIZED CLINICAL TRIAL

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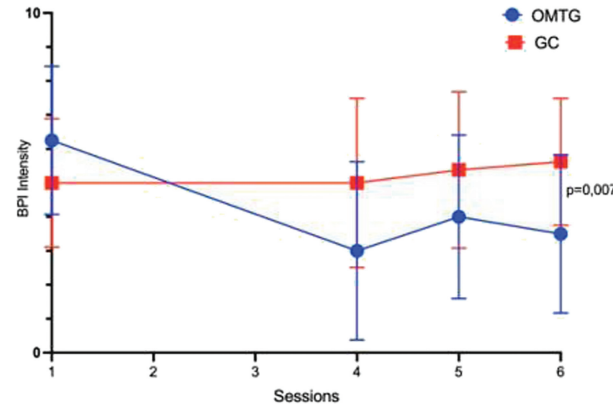
Objectives: To evaluate the effects of osteopathic manipulative treatment (OMT) in reducing chronic musculoskeletal manifestations such as pain and joint functional limitation in patients with Chikungunya Fever (CF).

Methods: A randomized, controlled clinical trial, blinded to volunteers and evaluators, was conducted at the Rheumatology outpatient clinic of the Hospital das Clínicas (Federal University of Pernambuco, Brazil). The instruments used for evaluation were Brief Pain Inventory Questionnaire (BPI), Visual Analog Scale (VAS) for pain, algometry and joint functional limitation, evaluated by Disabilities of the Arm, Shoulder, Hand Questionnaire (DASH) and the nine-pin connector test (9HPT). The primary outcome was a reduction in the BPI pain intensity score (reduction of at least two points). Secondary outcomes were BPI pain interference score, pain VAS scale, algometry pressure, DASH, runtime of 9HPT. Four OMT sessions were performed (S1 to S4), once a week, and two post-treatment evaluations, within 15 (S5) and 30 days (S6) after the last session. For the analysis of the results, the significance level of $p \leq 0.05$ was adopted.

Results: Forty-four patients were evaluated, divided into two groups: OMT group (OMTG), with 24 patients and control group (CG), with 20 patients. The mean age of the sample was 53.5 (16.5) years, the majority were female (95.0%) and the groups had similar clinical characteristics. Of the total of 24 GOMT patients, 16 reached the primary endpoint, and only 3 in the CG, with a calculated efficacy of 77.3% and maintenance of efficacy in S5 and S6 of 91.5% and 81.2%, respectively. In the analysis between the groups, a statistically significant reduction in pain intensity in the GOMT can be observed when compared to the control group (CG) (Figure 1). In the intragroup analysis, only the GOMT showed a statistically significant reduction in relation to the primary outcome. Regarding secondary outcomes, efficacy was observed in all evaluated instruments and in the 15-day and 30-day follow-up after receiving the OMT, except for algometry and the 9HPT test, where there was no statistically significant improvement in the intragroup and intergroup analyses.



Conclusion: OMT proved to be effective in reducing pain and improving functionality in patients with musculoskeletal manifestations in the chronic phase of CF.

Disclosure of Interest: None declared

Keywords: chikungunya, Osteopatic, Pain

PANLAR2023-1289

EFFICACY AND SAFETY OF NIPOCALIMAB IN ADULT PATIENTS WITH ACTIVE SYSTEMIC LUPUS ERYTHEMATOSUS: DESIGN OF A PHASE 2 STUDY

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Objectives: Autoantibody-mediated diseases, such as systemic lupus erythematosus (SLE), are caused by pathogenic antibodies that can damage tissues or organs. Approved treatments are few and associated with limitations including suboptimal response. Nipocalimab is a novel high affinity, fully human, aglycosylated, effectorless IgG1 monoclonal antibody that selectively blocks the neonatal Fc receptor (FcRn). Clinical studies conducted with nipocalimab in healthy volunteers (NCT02828046) and in adult generalized myasthenia gravis patients (NCT03896295) demonstrated rapid and durable serum IgG and pathogenic autoantibody reductions. Here we describe the protocol of a Phase 2 study evaluating the efficacy and safety of nipocalimab in patients with active SLE (NCT04882878).

Methods: This is a phase 2, multicenter, randomized, placebo-controlled, double-blind, parallel-group study enrolling adults with active, autoantibody-positive SLE

with an inadequate response to one or more standard of care treatments. The study consists of a ≤ 6-week screening period, a 52-week double-blind treatment period, and a 6-week follow-up period. A target of approximately 225 participants will be enrolled. Participants will be randomized in a 1:1:1 ratio to receive nipocalimab dose 1, dose 2 or placebo intravenously every 2 weeks through Week 50.

Results: The primary efficacy endpoint is the percentage of participants achieving an SLE Responder Index (SRI)-4 composite response at Week 24. Secondary efficacy endpoints assessed at Week 24 include the percentage of participants achieving: ≥50% reduction in Cutaneous Lupus Erythematosus Disease Area and Severity Index Activity score (CLASI), ≥50% reduction in active joints, ≥4 points improvement in SLE Disease Activity Index 2000 (SLEDAI 2 K), and British Isles Lupus Assessment Group Composite Lupus Assessment response (BICLA); time to first disease flare; and reduction in corticosteroid use. Percentage of participants achieving an SRI-4 composite response at Week 52 will also be assessed. Safety endpoints include adverse events (AEs), serious AEs, AEs of special interest (severe infections, grade ≥ 3 hypoalbuminemia), and AEs leading to treatment discontinuation through Week 58. Additional assessments include pharmacokinetic, pharmacodynamic, and immunogenicity evaluations.

Conclusion: This ongoing phase 2 study will evaluate the safety and efficacy of nipocalimab in adults with active SLE, using multiple clinical outcome measures.

Disclosure of Interest: F. Liu-Walsh Employee with: Janssen Research & Development, LLC and may own stock or stock options in Johnson & Johnson., B. V. Hartingsveldt Employee with: Janssen Biologics Europe, Leiden, Netherlands and may own stock or stock options in Johnson & Johnson., Q. Zuraw Employee with: Janssen Research & Development, LLC and may own stock or stock options in Johnson & Johnson., R. W. Hoffman Employee with: Janssen Research & Development, LLC and may own stock or stock options in Johnson & Johnson., T. Rooney Employee with: Janssen Research & Development, LLC and may own stock or stock options in Johnson & Johnson., S. Gao Employee with: Janssen Research & Development, LLC and may own stock or stock options in Johnson & Johnson., A. M. Bravo Perdomo Employee with: Janssen Latin America and may own Johnson & Johnson stock or stock options., R. Gordon Employee with: Janssen Research & Development, LLC and may own stock or stock options in Johnson & Johnson., J. H. Leu Employee with: Janssen Research & Development, LLC and may own stock or stock options in Johnson & Johnson., C. Calderon Employee with: Janssen Research & Development, LLC and may own stock or stock options in Johnson & Johnson., F. Zazzetti Employee with: Janssen-Cilag Argentina and may own stock or stock options in Johnson & Johnson., A. M. Stevens Employee with: Janssen Research & Development, LLC and may own stock or stock options in Johnson & Johnson., G. Vratsanos Employee with: Janssen Research & Development, LLC and may own stock or stock options in Johnson & Johnson.

Keywords: Systemic Lupus Erythematosus, Autoantibodies, Nipocalimab

PANLAR2023-1399

REPRODUCTIVE HEALTH OF MEN WITH AUTOIMMUNE RHEUMATIC DISEASES

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Objectives: Background: Men with autoimmune rheumatic diseases (ARDs) present challenges in family planning, contraception, fertility, sexual health among others that will have a negative impact on quality of life. The scarce literature on reproductive health in men with ARDs and the lack of discussion of the topic between patient and rheumatologist pose several uncertainties. Knowing the challenges of family planning in men will broaden perspectives on reproductive health.

Objective: To evaluate the impact on male reproductive health in patients with autoimmune rheumatic diseases.

Methods: A cross-sectional study was carried out at the Mexican Hospital *"Dr. José Eleuterio González"*. The participants were men older than 18 years with ARDs. The Rheumatic Reproductive Behavior virtual questionnaire built and validated in Mexican women with ARDs and adapted to the male population was applied. The statistical analysis was made with SPSS v.25.

Results: A total of 50 men with ARDs were included. The mean age of the patients was 52.84 years (SD 13.70). The most diagnoses were rheumatoid arthritis 56% (n = 28) and Spondyloarthritis 28% (n = 14) and the most used drug was methotrexate 56% (n = 28). Table 1. The participants reported not wanting to have children at some point in their life 60% (n = 30), of which 42% (n = 21) were due to satisfied parity. Participants reported that during their medical appointments they never discussed reproductive health with a rheumatologist 74% (n = 37), however 84% (n = 42) reported being confident with their rheumatologist to discuss these issues. The male condom used in 38% (n = 19) was considered the most effective planning method in 82% (n = 41); Facebook with 26% (n = 13) was the largest source of information on planning methods.

TABLE 1. Patient characteristics (n = 50)

	Mean (SD) or n (%)
Age, yrs, mean (SD)	52.84 (13.70)
Relationship status	
Married	27 (54)
Single	15 (30)
Education	
University or more	22 (44)
High school	8 (18)
ARD	
Rheumatoid arthritis	28 (56)
Spondyloarthritis	14 (28)
Systemic lupus erythematosus	5 (10)
Reproductive preferences	
Not parenting	30 (60)
Relationship - Rheumatologist	
No counseling	37 (74)
Trust	42 (84)
Contraception	
Male condom	19 (38)
Medications	
Methotrexate	28 (56)

SD standard deviation, ARD Autoimmune Rheumatic Diseases

Conclusion: Most men with ARDs have an active sexual life, however not all have a current family planning method evidenced by the lack of discussion about reproductive health with their rheumatologist.

Disclosure of Interest: None Declared

Keywords: None

PANLAR2023-1414

RELATIONSHIP BETWEEN ESSPRI SCORE AND SELF-PERCEIVED ORAL HEALTH IN PATIENTS WITH PRIMARY SJÖGREN'S SYNDROME

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Objectives: Exocrine salivary gland destruction in primary Sjögren's syndrome (SS) is symptomatically manifested as xerostomia. This group has a tendency to develop higher oral disorders such as dental, nutritional and speech problems. The Geriatric/General Oral Health Assessment Index Spanish Version (GOHAI-SP) has been used to assess the self-perception of oral status in SS patients.

To describe oral health status using the GOHAI-SP in patients with primary (pSS) and secondary (sSS) SS and correlate it with EULAR SS Patient Reported Index (ESSPRI) and unstimulated salivary flow (USF).

Methods: A cross-sectional and descriptive study was carried out in the rheumatology service of the Hospital Universitario Dr José Eleuterio González. Patients meeting ACR/EULAR criteria for pSS and sSS were included and assessed with ESSPRI and GOHAI-SP during their follow-up appointment. The last index includes 12 questions on a 1 to 5 Likert-type scale. The lowest obtainable score is 12 and the highest 60. Scores ≤44 were classified as poor

oral health, moderate from 45 to 50, and good ≥51. Questions 1-4 assesses oral functionality, 6,7,9-11 psychosocial status; 8 and 12 for pain. USF/15 minutes was obtained from records.

Results: We included 41 patients: 31 (75.6%) with pSS and 10 (24.4%) with sSS, most of them were woman (n = 40, 97.6%) with a mean age of 53.41 (±12.58). The median score of GOHAI-SP was 50 [43.5-52]. Medians for dryness, fatigue, and pain reported in ESSPRI domains were 3 [0-7], 2 [0-6.5] and 1 [0-5]; and USF 1.5 [0.5-2.2]. The self-perceived health status was good in 19 (46.3%), moderate and poor both in 11 (26.8%). The results showed a significant relationship between the reported severity of dryness ($p < 0.001$), fatigue (p0.003) and pain (p0.002) with a worse self-perceived oral health status. No significant differences were found when compared to USF test. Results for Spearman's correlation model are shown in Table 1.

TABLE 1. Correlation between GOHAI-SP and ESSPRI

	GOHAI-SP domains								
	Median [IQR]	Oral functionality 4[3.5-4.37]		Psychosocial 4.2[4-4.5]		Pain 4[3-4.75]		Total 50[43.5-52]	
ESSPRI		*r*	*p* value	*r*	*p* value	*r*	*p* value	*r*	*p* value
Dryness	3[0-7]	-0.37	**0.016**	-0.42	**0.006**	-0.51	**<0.001**	-0.58	**<0.001**
Fatigue	2[0-6.5]	-0.29	**0.066**	-0.14	NS	-0.58	**<0.001**	-0.46	**0.002**
Pain	1[0-5]	-0.36	**0.018**	-0.13	**0.038**	-0.54	**<0.001**	-0.44	**0.004**

Conclusion: The worse the self-perceived oral condition, the higher ESSPRI medians for dryness, fatigue and pain were reported. A moderate correlation was found between pain reported by GOHAI-SP and symptom severity status in all ESSPRI domains.

Disclosure of Interest: None Declared

Keywords: ESSPRI, Oral health, Sjögren's syndrome

PANLAR2023-1418

ASSESSMENT OF SELF-PERCEIVED ORAL HEALTH IN PATIENTS WITH RHEUMATIC DISEASES

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Objectives: Patients with rheumatologic diseases are more likely to have oral disorders than the general population, including changes in salivary composition, oral microbiota and structural changes that contribute to local and systemic pathologies. The Geriatric/General Oral Health Assessment Index Spanish version (GOHAI-SP) is a self-assessment tool for patients' oral health perception.

To describe self-perceived oral health in patients with rheumatologic diseases using GOHAI-SP.

Methods: A cross-sectional and descriptive study was carried out in the outpatient clinic of the *Hospital Universitario Dr José Eleuterio González*. Patients older than 18 years old with a rheumatologic diagnosis were included. An evaluation was performed with the GOHAI-SP tool which consists of 12 questions that are answered with a range of 1-5 represented on a Likert-type scale. Questions 1-4 assess functionality, 6, 7, 9-11 psychosocial status; 8 and 12 for pain. The minimum score is 12 and the maximum 60. Oral health was classified as poor with scores ≤44, moderate from 45 to 50 and good ≥51.

Results: A total of 350 patients were included, the majority were women, 326 (93.1%). The mean age was 50.56 (±14.9) years and time of diagnosis 7.02 (±7.84) years. The most frequent diagnosis was rheumatoid arthritis (RA) in 196 (56%), followed by primary Sjögren's syndrome (pSS) in 59 (16.9%), systemic lupus erythematosus (SLE) in 44 (12.6%), osteoarthritis in 16 (4.6%), scleroderma in 8 (2.3%), ankylosing spondylitis in 6 (1.7%) and 21 remaining diagnoses classified as others. The general GOHAI-SP score was 52.89 (±7.29). Perceived poor oral health was reported in 49 (14%) patients, moderate in 58 (16.6%) and good in 243 (69.4%). Question 12 evaluated abnormal sensitivity to heat, cold or sweet taste and obtained the lowest mean with 3.82 (±1.2) points. GOHAI-SP scores by disease are shown in Table 1.

TABLE 1. Sociodemographic parameters and results obtained from GOHAI-SP.

Sociodemographics, mean (SD)	
Age	50.56 (±14.95)
Female	326 (93.1%)
Male	24 (6.9%)
Oral health classification, n (%)	
Poor oral health	49 (14%)
Moderate oral health	58 (16.6%)
Good oral health	243 (69.4%)
GOHAI score, mean (SD)	
RA	53.21 (±7.12)
pSS	49.41 (±7.8)
SLE	54.55 (±6.47)
Others	54.25 (±6.92)

Conclusion: Seventy percent of the patients reported good oral health and the rheumatologic diagnosis with the worst average was pSS, classified as moderate self-perceived oral health. Evaluation by a specialist is required to objectively assess oral health status.

Disclosure of Interest: None Declared

Keywords: GOHAI-SP, Oral health, Rheumatic diseases

PANLAR2023-1084

PHYSICAL EXERCISE IN PATIENTS ATTENDING A RHEUMATOLOGY CENTER

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Objectives: In rheumatic diseases, physical exercise shows favorable effects. The aim of this study was to describe the frequency of physical exercise practice and its characteristics in patients of a rheumatology service.

Methods: Observational, descriptive, cross-sectional and analytical study. All patients ≥18 years who attended to the evening consultation of a rheumatology center in 30 days period were included. Sociodemographic data, habits, comorbidities, body mass index (BMI), diagnosis, disease duration and pain visual analogue scale (VAS) were recorded. All participants completed a self-administered questionnaire on exercise practice. Reasons were recorded in those who did not exercise.

Results: A total of 109 patients were included. Patient characteristics and rheumatic diseases are shown in the **Table.** Median disease duration was 72 months

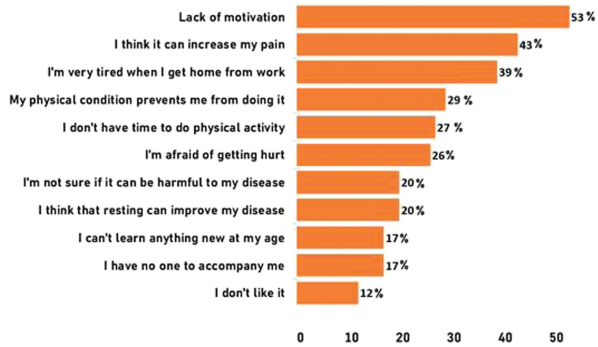
TABLE. Patient characteristics (n = 109)

Age (years), mean (SD)	55 (14)
Women, n (%)	98 (89)
Educational level, n (%)	
- Complete primary school	34 (31)
- Complete secondary school	20 (18)
- Complete higher education	8 (7)
Habits, n (%)	
- Smoking	12 (11)
- Enolism	7 (6)
Comorbidities, n (%)	
- Diabetes	18 (35)
- Chronic thyroiditis	13 (25)
- Hight blood pressure	9 (17)
- Lung disease	8 (15)
- Heart disease	7 (13)
BMI (kg/m2), mean (SD)	27 (5)

***SD** = Standard deviation, **BMI** = Body mass index.*

(IQR 48-168); 77% reported pain in the last week, with a mean pain VAS of 54 mm (SD 29). Most affected areas were hands (38%), knees (18%) and lumbar spine (13%). Physical exercise was reported in 36% (n = 39), of which only 16% was prescribed by a physician (39% by a rheumatologist). Average exercise frequency was 4 ± 2 days in the last week and 56% spent <1 hour per day exercising. Regarding the type of exercise, 67% did low-impact sports, 41% muscle strengthening, 36% flexibility and 15% balance. The intensity for exercise was: 72% light, 41% moderate and 10% high. The **Figure** shows the reasons for not doing exercise. Comparing patients who did sports with respect to those who did not, those who exercised had a higher educational level (p = 0.021), lower pain VAS (p = 0.021) and lived in Ciudad Autónoma de Buenos Aires (p = 0.019).

Figure. Reasons linked to absence of physical exercise (n=70)



Conclusion: Only 36% of the patients evaluated exercised. Low impact exercise was the most frequent, with mild to moderate intensity. In the other side, 64% did not practice any sport and a large group had predetermined beliefs that exercise would worsen their disease.

Reference 1: Siscovick D, Laporte R, Newman J, et al. Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. Public Health Rep. 1985;100:126-31.

Reference 2: Piercy K, Troiano R, Ballard R, et al. The Physical Activity Guidelines for Americans. J Am Med Assoc. 2018; 320:2020–2028

Disclosure of Interest: None Declared

Keywords: exercise, patients, physical exercise

PANLAR2023-1413

CONNECTIVE TISSUE DISEASE-RELATED INTERSTITIAL LUNG DISEASE: AN EXPERIENCE OF A MULTIDISCIPLINARY TEAM IN COLOMBIA

Camila Borda Samper*[1], Juan Sebastián Sierra-Duarte[2], Maria Díaz[1], Carlos Andrés Celis-Preciado[2], and Daniel Gerardo Fernández-Ávila[1]. *[1]Rheumatology, [2]Pulmonology, Hospital Universitario San Ignacio, Bogota, Colombia.*

Objectives: Interstitial lung disease (ILD) associated with a classifiable connective tissue disease (CTD) is referred as CTD-ILD. Approximately 15% of ILDs will have a background CTD. Our aim is to describe clinical, serological, and radiological characteristics of patients who present with CTD-ILD at a reference ILD center in Colombia.

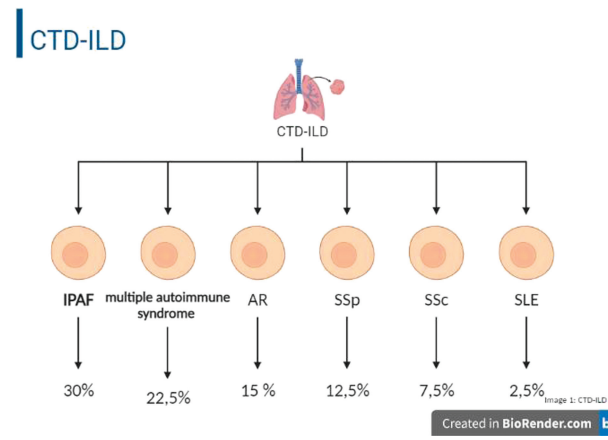
Methods: A descriptive study of patients with ILD diagnosed by HRCT who have a confirmed autoimmune disease or at least one autoimmune feature: clinical or serological.We developed an ILD registry from our inpatient and outpatient ILD-clinic between 2021 and 2022. Analysis was done in statistical package for the social sciences (SPSS) v. 21.0.

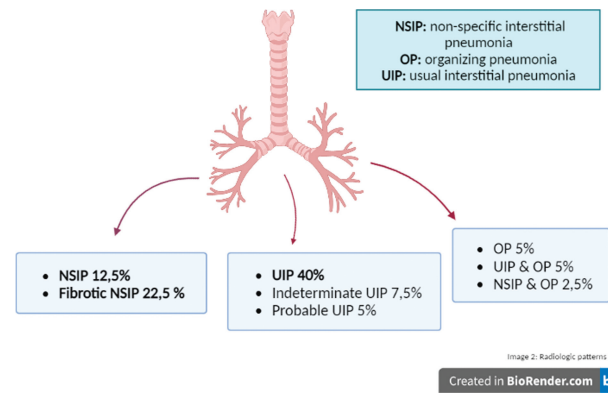
Results: Forty patients with ILD were included; 57% were hospitalized, and 65% were women(table1). The majority of patients with ILD were diagnosed as interstitial pneumonia with autoimmune features (IPAF, 30%), followed by multiple autoimmune syndromes (22,5%) and rheumatoid arthritis (15%)(image1). The most common radiologic pattern was usual interstitial pneumonia (40%)(image 2). The mean CVF in L(%) was 173 ± 89,8(72,6 ± 27,2) and DLCO(%)52,6 ± 21. Progressive pulmonary fibrosis was frequent (20%), and 12.5% received antifibrotic therapy. Our mortality rate related to ILD was 21.7%.

TABLE 1. General characteristic

Characteristic	N = 40
Age - yr	65 ± 11.6
Female sex – no. (%)	26 (65)
All cause mortality – no. (%)	5 (12,5)
Age at onset - yr	63 ± 12
Diagnosis confirmed by biopsy	9 (22,5)
Immunological profile no. (%)	
ANA †	25 (62,5)
anti-SS-A/Ro (SS-A)	11 (27,5)
anti-SS-B/La (SS-B)	4 (10)
anti-Smith	2 (5)
anti-RNP	3 (7,5)
C- ANCA	1 (2,5)
P- ANCA	2 (5)
Rheumatoid factor	10 (25)
Anti CCP †	6 (15)
Anti SCL-70	2 (5)
DNA ds	2 (5)
Antibodies related to IIM †	2 (5)

† SLE, *systemic lupus erythematosus. RA, Rheumatoid arthritis. APS, antiphospholipid syndrome, AAV anti-neutrophil cytoplasmic antibody-associated vasculitis* † ANA, anti-nuclear antibody † IIM, Idiopathic inflammatory myopathy





Conclusion: In our 1-year cohort, we found that IPAF was the most prevalent CTD-ILD, followed by multiple autoimmune syndromes. The most common radiologic pattern overall was UIP, followed by fibrotic NSIP. CTD-ILD had a high mortality rate.Our results highlight the importance of early disease detection and early therapeutic interventions. Treatment decisions must be individualized, and the risk of disease progression must be considered.

Reference 1: Sambataro D et al. Patients with Interstitial Lung Disease secondary to autoimmune diseases: How to recognize them? Diagnostics (Basel). 2020;10(4):208.

Reference 2: Kondoh Y al. 2020 guide for the diagnosis and treatment of interstitial lung disease associated with connective tissue disease. Respir Investig. 2021;59(6):709-740.

Disclosure of Interest: None declared

Keywords: connective tissue disease, interstitial lung disease, multidisciplinary team

PANLAR2023-1396

AUTOIMMUNE THYROIDITIS IN THE RHEUMATOLOGY CLINIC: FINDINGS IN A COHORT OF PATIENTS FROM SOUTHWESTERN COLOMBIA

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Objectives: To compare the characteristics and levels of fatigue of the group of patients with autoimmune thyroiditis (AITD) and autoimmune/autoinflammatory pathologies (group 1) with those of the group of patients with AITD and other non-autoimmune rheumatological pathologies (group 2) who attend the consultation rheumatology (osteoarthritis, osteoporosis, fibromyalgia).

Methods: Prospective cohort that included all patients with AITD. The autoimmune etiology was verified through autoantibodies or biopsy (n = 3). Clinical, anthropometric and sociodemographic variables were analyzed. Follow-up at 12 months with fatigue assessment scale (FACIT) after starting treatment with Thiamine and Selenium. Univariate and bivariate analysis (SPSS V24)

Results: 374 AITD patients were included, mean age 53.1 standard deviation (SD, 11.9), 88.8% were women. 205 patients in Group 1 and 169 in Group 2. 84.8% were positive for anti microsomal antibodies and 46.8% for anti thyroglobulin. In group 1, the most prevalent pathologies were 27% RA, 21% spondyloarthropathies, 14% chikungunya arthritis, and 12.1% systemic lupus. Within the autoimmune-only subgroup, 4 patients had two additional autoimmune AITDs and 11 patients had concomitant autoimmune and autoinflammatory pathologies. The significant differences between the two groups are shown in the table

Variable	Group 1	Group 2	*p* value
Age[a]	48,9 (11,6)	60,1 (8,7)	<0.001 [c]
BMI[a]	27 (5,4)	28,7 (4,8)	0.023 [c]
FACIT baseline[a]	24,6 (10,3)	23,1 (11,1)	0.006 [c]
FACIT 3 months[a]	30,4 (10,7)	29,6 (12,9)	0.000 [c]
Inflammatory arthralgia [b]	114 (55,6)	10 (5,9)	<0.001 [d]
Sleep disorders [b]	109 (53,2)	121 (71,6)	<0.001 [d]
Osteopenia [b]	26 (12,8)	47 (28,8)	<0.001 [d]
Osteoporosis[b]	18 (8,9)	21 (12,9)	<0.001 [d]
Vitamin D insufficient	108 (54,5)	113 (67,7)	0.011 [d]

[a] Mean (Standard deviation) [b] n(%) [c] T-student test [d] Chi square Pearson

Conclusion: Patients with AITD who have concomitant non-autoimmune/autoinflammatory rheumatic pathologies are older, have a higher body mass index, a higher degree of fatigue at baseline and at 3-month follow-up, and a higher proportion of sleep disturbances and bone metabolism disorders. AITD is frequent in the rheumatology clinic and special attention should be paid to the comorbidities that accompany it and its possible outcomes.

Reference 1: Physical fatigability and muscle pain in patients with Hashimoto thyroiditis. J Neurol. 2021; 268(7): 2441–2449. Published online 2021 Jan 28. doi: 10.1007/s00415-020-10394-5. PMCID: PMC8217009. PMID: 33507372

Reference 2: Rheumatic manifestations of autoimmune thyroid disease: the other autoimmune disease. JRheumatol 2012 Jun;39(6):1125-9. doi: 10.3899/jrheum.120022. Epub 2012 Apr 15.

Disclosure of Interest: None declared

Keywords: AITD, Chronic pain, Thyroiditis

PANLAR2023-1460

SCREENING FOR CHANGES IN MUSCLE FUNCTION IN SYSTEMIC SCLEROSIS – APPLICATION OF THE SARC-F QUESTIONNAIRE

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Objectives: Systemic sclerosis (SS) may cause microvascular damage, skin thickening and fibrosis of internal organs, caused by an intense inflammatory response. It has the highest mortality among the rheumatic diseases and it is clinically classified as limited, diffuse and scleroderma sine scleroderma. Sarcopenia is defined as skeletal muscle insufficiency and is associated in patients with SS with a more aggressive disease, its diffuse form, a longer disease activity duration and greater skin involvement including a higher Rodnan score. The main causes of sarcopenia in SS are malnutrition, chronic inflammation, advanced age, associated comorbidities and physical inactivity due to the progression of the disease itself. The objective of this study was to correlate the presence of positive screening of the SARC-F questionnaire and the presence of some clinical features in patients with the diagnosis of SS.

Methods: This is a cross-sectional study, of patients older than 18 years of age, diagnosed with SS who are being followed at the rheumatology clinic of a tertiary hospital. Patients using corticosteroids chronically and those with overlap syndromes were excluded. the SARC-F questionnaire was applied to screen for sarcopenia at the end of the study visit; this questionnaire was subsequently correlated with the Rodnan score, interstitial lung disease and body mass index.

Results: We obtained data on 36 patients, of whom10 screened positive for sarcopenia. There was no statistical significance between positive screening for sarcopenia and cutaneous involvement (diffuse (47.2% p = 0.836), limited (41.7% p = 0.379) and scleroderma sine scleroderma (11.1% p = 0.293)), interstitial lung disease, pulmonary hypertension or the association of both (66.66% p = 0,273) and the use of supplemental oxygen (8.3%, p = 0.262). There was also no difference in skin involvement, according to the Rodnan Score (p = 0.484). Regarding BMI, there was a statistical significance with obesity (8.3%, p = 0.004).

Conclusion: Sarcopenia was not frequent in the population studied. These results may be explained by the limited number of patients screened and the low sensitivity of the SARC-F questionnaire. Sarcopenic obesity, with muscle loss and progressive accumulation of adipose tissue, proved to be relevant; it may be associated with sedentary lifestyle and immobility. Future studies are needed to improve sarcopenia screening in SS patients with a timely approach.

Disclosure of Interest: None declared

Keywords: Obesity, Sarcopenia, Systemic sclerosis

PANLAR2023-1070

DIACEREIN EVALUATION IN PATIENTS WITH DEGENERATIVE OSTEOARTHRITIS AND ITS IMPACT ONWOMAC IN A SOUTH AMERICAN HOSPITAL

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Objectives: Although diacerein was introduced in 1994 in other countries, the current literature has not established a defined role for chondroprotection according to a Cochrane review. The aim of this study iwa to demonstrate the effects of diacerein in osteoarthritis patients based on functional assessment with an analog pain scale, the modified Knee Society Score and the Western Ontario and McMaster Universities Arthritis index (WOMAC index). We tested the null hypothesis of no difference between treatment with and without diacerein in terms of pain relief and improved function.

Methods: 100 patients with osteoarthritis of the knee were randomly divided into two groups, with group 1 patients receiving only anti]inflammatory treatment and group 2 patients receiving anti-inflammatory treatment plus diacerein. They were followed for 6 months. WOMAC index, the modified Knee Society Score and visual analog scale were applied.

Results: Both groups showed improvement from the initial assessment on the WOMAC index but significant difference at 6 months for the 3 scores. Women showed a significant improvement in only 1 of 6 possible combinations on follow up (WOMAC index), while men showed significant improvement in 5 out of 6 (all measurements except for the modified Knee Society Score).
Conclusion: Differences between patients with and without diacerein with respect to pain relief and improved function at 6 months follow up were found. Women showed lower response to treatment compared to men in the 3 evaluation scores.

Disclosure of Interest: None declared
Keywords: Arthrosis, Experimental, Treatment

PANLAR2023-1524

CHARACTERIZATION AND CLINICAL OUTCOMES OF PATIENTS WITH SYSTEMIC SCLEROSIS AND POLYAUTOIMMUNITY

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Objectives: Systemic sclerosis (SSc) is a heterogeneous disease characterized by fibrosis, vasculopathy and immune activation. SSc may present as a single entity or as part of a combination of two or more autoimmune diseases (polyautoimmunity); this has been reported in up to 46% of patients with SSc. Polyautoimmunity mechanisms may lead to changes in clinical presentation, treatment approach and outcomes in patients with SSc. The study aimed to describe clinical manifestations, laboratory findings, treatments and outcomes among patients with isolated SSc or SSc polyautoimmunity.
Methods: Descriptive study using the medical records of patients older than 16 years being followed at a high-complexity health institution in Cali, Colombia, between 2011 and 2019. Patients fulfilled EULAR/ACR 2013 classification criteria to SSc and were divided into two groups, isolated SSc or SSc and polyautoimmunity.
Results: 325 patients were included. 59.4% patients had only SSc and 40.6% had SSc and polyautoimmunity, most patients were female (90% and 94%, respectively) and had limited cutaneous SSc. Median age at diagnosis was 53 years. The most frequent autoimmune diseases were thyroid disorders (34.8%), Sjogren's syndrome (25.8%) and autoimmune liver diseases (21.2%), however, systemic lupus erythematosus (SLE) and rheumatoid arthritis (RA) were also frequent. Main cutaneous clinical manifestations were similar in both groups: Raynaud's phenomenon, sclerodactyly and telangiectasias. Nevertheless, extracutaneous manifestations were more frequent in the SSc polyautoimmunity group compared to isolated SSc: cytopenias (78% and 42%), gastrointestinal involvement (34% and 28%), articular manifestations (33% and 24%) and ILD (31% and 21%) in each group. Steroids were used in 59.6% patients with isolated SSc and 69.7% in patients with polyautoimmunity; 5.7% and 10.6% patients died in each group, respectively.
Conclusion: The frequency of polyautoimmunity was similar to previously reported in SSc. SLE and RA association, as well as hematological abnormalities, gastrointestinal manifestations, joint involvement, ILD, steroid use and deaths were more common in patients with SSc and polyautoimmunity. Our findings suggested that patients with SSc and polyautoimmunity may develop a more aggressive phenotype of the disease and may require different treatment approaches.

Disclosure of Interest: None declared
Keywords: Polyautoimmunity, Systemic sclerosis

PANLAR2023-1160

GLOMERULAR INVOLVEMENT IN THE ANTIPHOSPHOLIPID SYNDROME

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Objectives: Antiphospholipid syndrome nephropathy (APSN) is considered a small vessel renal vasculopathy, that can present acutely or chronically. The aim of this study was to identify glomerular lesions in patients with APSN.
Methods: We reviewed the medical records of 114 patients (51 male, 63 female) who fulfilled classification criteria for APS. Renal and extra-renal symptoms were analyzed. None of the patients developed SLE during their follow up. 18 patients who had evidence of renal involvement underwent renal biopsies. All cases had proteinuria and 5 of them presented a nephrotic syndrome.
Results: Of the 18 patients who had a kidney biopsies, 8 were male and 10 female. The biopsies show membranous glomerulonephritis in 4, diffuse proliferative glomerulonephritis in 2, mesangial C3 nephropathy in 2, minimal change disease in 2 and focal segmental glomerulosclerosis in 1; the other 7 had classic pathologic findings consistent with APSN. Chronic lesions with fibrous intimal hyperplasia were the most common. Thrombotic microangiopathy (TMA) in glomeruli was characterized by fibrin thrombi without inflammatory cells or immune complexes. Double contour of the glomerular basement membrane was associated with mesangiolysis and endothelial cell swelling in 5 patients with APSN. Electron microscopy confirmed subendothelial edema. Segmental glomerulosclerosis was observed in 4 patients. The tubulointerstitium was injured with interstitial fibrosis and tubular atrophy. Patients with APS and renal involvement were older ($p < 0,05$), had LA positive test ($p < 0,005$) and low complement levels ($p < 0,05$) more frequently. Hypertension was present in all APSN cases , reduced glomerular filtration rate was present in 4. All cases had proteinuria and 5 of them presented with nephrotic syndrome. Microscopic hematuria was observed in 4 patients.
Conclusion: The occurrence of kidney abnormalities including hypertension, proteinuria, and/or increased serum creatinine levels in patients with APS should lead to a kidney biopsy. Renal pathology revealed that some findings including arterioles obstructed by thrombi and organized components, diffuse collapsed glomeruli and no tubulitis suggest that the extensive tubulointerstitial damage was caused by chronic ischemic changes due to vascular occlusion upstream to the glomeruli. Other findings including mesangiolysis with endothelial cell swelling and arterioles obstructed by non-organized fibrin thrombi indicated that acute TMA was superimposed on chronic TMA.

Disclosure of Interest: None declared
Keywords: Antiphospholipid syndrome, Kidney, TMA

PANLAR2023-1307

SYSTEMIC AUTOIMMUNE DISEASES ASSOCIATED WITH POLYCLONAL HYPERGAMMAGLOBULINEMIA: A STUDY IN 2 TERTIARY HOSPITALS

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Objectives: To determine the causes of polyclonal hypergammaglobulinemia (PHGG) in two tertiary care hospitals in Mendoza and to examine the frequency of systemic autoimmune diseases (SAIDs) as an etiological cause.
Methods: We reviewed the data from protein electrophoresis (PE) performed during 1 year from 07/01/2021 to 06/30/2022 using a capillary electrophoresis system (CAPILLARIES PROTEIN(E) 6). Values with gamma globulin level ≥ 2 g/dl were selected, those with monoclonal components and patients with no defined diagnosis were not further evaluated. Descriptive statistics and univariate analysis were performed for categorical variables with χ^2 and numerical variables with Student's test, error α <5%.
Results: 3306 PE were analyzed, 170 had PHGG ≥2 g/dL, of which 143 met inclusion criteria, ranging from 2.03 to 5.46 g/dL. The associated etiologies were: SAIDs 65 patients (45.45%), liver diseases 41 patients (28.28%), infectious diseases 30 patients (20.98%), hematological diseases 20 patients (13.99%), non-hematological neoplastic diseases 10 patients (6.99%).

TABLE 1. COMPARATIVE ANALYSIS OF THE DISTRIBUTION OF ETIOLOGIES IN PATIENTS WITH PHGG 2- 2.99 AND ≥ 3 g/dl.

Etiologies	Gamma: 2-2,99 g/dl	Gamma: ≥ 3 g/dl	*p* value
SAIDs	52 (45,22%)	13 (46%)	0,9
Liver diseases	30 (26.00%)	11 (39,29%)	0,16
Infections	24 (20,84%)	6 (21,43.00%)	0,94
Hematological diseases	18 (15,6%)	2 (7,14.0%)	0,24
Non-hematological diseases	8 (6,96%)	2 (7,14.00%)	0,97

TABLE 2. ETIOLOGIES ASSOCIATED WITH SAIDs

SAIDs	N = 65	%
SLE	22	33,85
Primary Sjogren's syndrome	15	23,08
Rheumatoid arthritis (RA)	10	15,63
Vasculitis	3	4,62
Other	16	24,61

Conclusion: In this study, SAIDs were the most prevalent cause of PHGG with values ≥2 g/dl, in contrast to the literature where hepatopathies are the most frequent. The order of frequency was maintained when comparing patients with PHGG between 2 to 2.99 g/dl and ≥ 3 g/dl. Within the SAIDs the most prevalent were SLE and primary Sjogren's syndrome.

Disclosure of Interest: None Declared

Keywords: Autoinmunity, Polyclonal hypergammaglobulinemia

PANLAR2023-1494

PULMONARY INVOLVEMENT IN PRIMARY SJÖGREN SYNDROME: A CROSS-SECTIONAL COMPARATIVE ANALYSIS

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Objectives: To evaluate interstitial lung disease (ILD) in primary Sjögren syndrome (pSS) patients.

Methods: Between May and October 2020, a single-center medical records review study was conducted to compare pSS patients, according to the 2016 classification criteria, with (ILD group) and without (non-ILD group) interstitial lung disease. Pulmonary involvement was defined by the presence of respiratory symptoms, with altered PFTs and/or HRCT scan. P value below 0.05 was considered significant.

TABLE:.

Variable (*n* (%)	ILD (n = 10)	Non-ILD (n = 50)	*p* value
Age (years)	53.4 ± 11.61	51.54 ± 12.92	0.68
Female gender	8 (80)	47 (94)	0.19
pSS duration (years)*	3 (0-14)	3 (0-20)	0.34
ESSDAI at pSS diagnosis*	**11 (2-32)**	**2 (0-19)**	**0.002**
Occular sicca symptoms	**5 (50)**	**41 (82)**	**0.04**
Oral sicca symptoms	**4 (40)**	**37 (74)**	**0.04**
OSS ≥ 4	5 (50) (n = 7)	21 (42) (n = 35)	0.76
Schirmer's test ≤5 mm	5 (50) (n = 7)	30 (60) (n = 39)	0.79
FS ≥ 1	4 (80) (n = 5)	35 (92) (n = 38)	0.40
ANA >1:80	10 (100)	47 (94) (n = 49)	0.8
RF positive	6 (60)	27 (60)	0.63
RF value*	**157 (107-207)**	**35.8 (9-512)**	**0.01**
SSA (Ro) antibody	10 (100)	43 (86)	0.26
SSB (La) antibody	4 (40)	20 (40) (n = 49)	0.83
Dyspnea at ILD diagnosis	8 (89)		
Cough at ILD diagnosis	7 (78)		
FVC%	64.5 ± 19.09		
FEV_1%	60 ± 29.69		
DLCO%	58 ± 11.31		
ILD CT patterns (n = 8)			
NSIP	3 (37.5)		
PIU (indeterminate)	1 (12.5)		
LIP	2 (25)		
AD	2 (25)		

pSS: primary Sjögren's syndrome. ILD: interstitial lung disease. ESSDAI: EULAR Sjögren's syndrome disease activity index. FS: focus score. RF: rheumatoid factor. OSS: *Ocular surface staining using the van Bijsterveld scale. FS:* focus score in salivary gland biopsy. FVC: forced vital capacity. FEV_1: forced expiratory volume in 1 s. DLCO: diffusing capacity for carbon monoxide NSIP: non-specific interstitial pneumonia. LIP: lymphocytic intersticial pneumonia. AD: Airway disease. Mean (Standard Deviation) *Median (Min-Max) *Mann-Whitney or Chi-Square tests for comparative analyses*

Results: In total, 60 patients with pSS were included, 10 (17%) with ILD. ILD was diagnosed prior to pSS in 7, concomitant in 2, and 1 year after pSS diagnosis in 1 patient. Dry cough and dyspnea were frequent in ILD patients. The median ESSDAI score at diagnosis and RF value were higher in patients with ILD. Patients with dry symptoms had lower frequency of ILD. Non-specific interstitial pneumonia (NSIP) was the main tomographic pattern. (Table)

Conclusion: ILD in pSS was associated with higher RF titers and pSS activity at diagnosis. The lower frequency of sicca symptoms in the ILD-group may explain the delayed pSS diagnosis, mainly after ILD detection.

Disclosure of Interest: None declared

Keywords: Interstitial lung disease, Sjogren's syndrome

PANLAR2023-1593

D I A P S SCOPE REVIEW. IRREVERSIBLE DAMAGE ASSESSMENT IN THROMBOTIC ANTIPHOSPHOLID SYNDROME IN REAL SCENARIOS

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Objectives: Antiphospholipid Primary Syndrome (APS) has significant impact, especially by thrombotic manifestations. Considering the real consequence of this serious entity is necessary. DIAPS is a specific instrument that distinguish disease activity from damage; its initial development in Latinoamerican patients, demonstrated internal validity (content, criterion, and construct validity) and good correlation with quality of life. DIAPS is a new and promising damage score system for thrombotic APS

Objectives: Assess the external validity of DIAPS; To determine the feasibility, appropriateness, and utility application of DIAPS in real clinical and research world

Methods: A scope review was conducted, through a systematic search of health databases searching for studies assessing cumulative damage in APS with DIAPS; identifying the available evidence of application of DIAPS and examine how research is conducting on cumulative damage in APS. Period of search: Dec 2015-Dec 2022; All ages and any clinical design were included. No restriction in languages. Search terms : #Antiphospholipid Primary Syndrome, #Antiphospholipid Secondary Syndrome AND, OR, # Cumulative damage, #Irreversible damage, #chronic damage index, #Damage Index in Antiphospholipid Syndrome, #DIAPS. The studies selected were evaluated by 2 reviewers (GEC and MVGR), to report the characteristics of the populations studied, clinical design, associations, and outcomes reported.

Results: Eleven studies applied DIAPS summarizing a total 1180 patients in different populations, with diverse age groups, including one in pediatric population and different population than the original Latinoamerican (mostly Mestizos) where DIAPS had been validated. Regarding design: there were eight longitudinal studies including primary and secondary APS and three cross sectional surveys. The outcomes reported: significative relationship with clinical and laboratory features, comorbidities, quality of life and DIAPS scores. Two surveys detected differences in DIAPS between patients with Lupus and APS diagnosis. One study calculated prediction of mortality; and the association with others constructed scores like adjusted global antiphospholipid score were reported.

Conclusion: These scoping review demonstrates reproducibility of DIAPS, as well as its sensitivity to change, and specificity for thrombotic APS; another quality of DIAPS is its applicability in various real scenarios and its usefulness both in clinical and research settings.

Disclosure of Interest: None declared

Keywords: Antiphospholipid syndrome, Damage index, Thrombosis

PANLAR2023-1384

CHARACTERISTICS OF PATIENTS WITH UVEITIS UNDER BIOLOGICAL TREATMENT AT THE UVEITIS UNIT OF HOSPITAL DE CLINICAS DR. MANUEL QUINTELA IN MONTEVIDEO, URUGUAY

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del Uruguay, [3]Autoimmune Diseases, Hospital Evangélico, [4]Ophthalmology, [5]Autoimmune Diseases, Hospital de Clínicas, Montevideo, Uruguay.

Objectives: To describe the characteristics of patients with uveitis undergoing biological treatment at the Uveitis Unit of the *Hospital de Clínicas Dr. Manuel Quintela* in Montevideo, Uruguay.

Methods: Medical records review study of patients aged ≥15 years, being cared for from 10/01/2018 to 10/01/2020, diagnosed with uveitis undergoing biological therapy and included in the uveitis unit database.

Results: A total of 136 patients were seen for all causes of ocular inflammatory diseases. Of 110 patients with uveitis, 7 patients (7.7%) (Figure 1) received biological therapy. As detailed in Table 1, most were women (n = 5; 62.5%) and had received a median of 2 immunosuppressants prior to starting anti-TNF therapy. The indication for anti-TNF therapy was due to ocular complications in 4 patients (57.1%), or due to the underlying disease in 3 patients (42.9%). At the last visit, moderate low vision was observed in none of the right eyes but in one left eye, as well as severe low vision in 2 right eyes and 1 left eye.

Conclusion: The first data of patients with uveitis undergoing biological treatment in Uruguay are presented. Similar to other studies, the majority of the patients were women, with etiologies that required anti-TNF drugs, mostly due to ocular complications of uveitis, or due to the underlying disease.

Disclosure of Interest: None declared

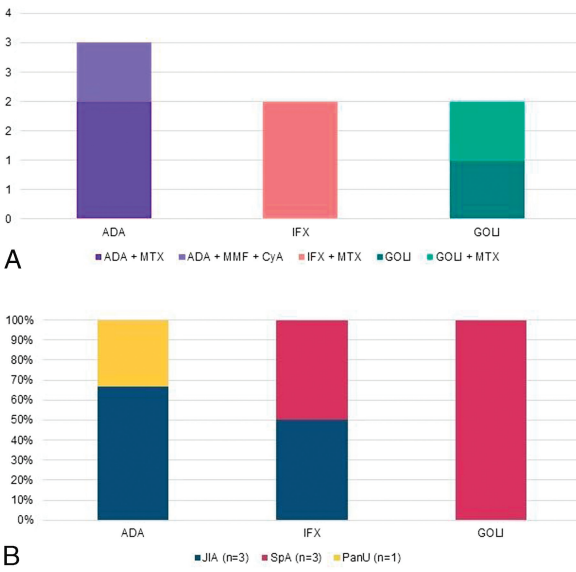
Keywords: Anti-tnf-alpha, Biological therapies, Uveitis

TABLE 1.. Characteristics of patients with uveitis who required biological therapy.

Pt	Sex	Age of uveitis onset (years)	Clinical - etiological features	Ongoing treatment	No. of immunosuppressants prior to BT	BT indication	VA RE 1st visit	VA LE 1st visit	VA RE last visit	VA LE last visit
1	F	23	Recurrent bilateral AU; SpA	GOLI	1	UD	0.6	0.4	0.6	0.5
2	F	21	Recurrent bilateral AU; JIA	ADA + MTX	2	UD	1.0	0.2	1.0	1.0
3	M	22	Idiopathic chronic bilateral PanU	ADA + MFM + CyA	3	OC	0.2	CF	CF	HM
4	M	13	Recurrent bilateral AU; JIA	IFX + MTX	2	UD	0.8	0.8	1.0	1.0
5	F	22	Unilateral recurrent AU; SpA	GOLI + MTX	2	OC	0.1	0.8	0.4	1.0
6	F	9	Unilateral recurrent AU; JIA	ADA + MTX	2	OC	HM	0.3	HM	1.0
7	M	32	Recurrent bilateral AU; SpA	IFX + MTX	1	OC	0.2	0.1	1.0	0.3
8	F	19	Acute unilateral AU; JIA	IFX	No data	No data	No data	No data	No data	No data
Median					2		0.4	0.4	1.0	1.0
Moderate low vision (VA ≤ 0.3 > 0.1)							2	1	0	1
Severe low vision (AV ≤ 0,1)							2	1	0	1

ADA, adalimumab; AU, anterior uveitis; BT, biological therapy; CF, counting fingers; CyA, cyclosporin; F, female; GOLI, golimumab; HM, hand motion; IFX, infliximab; JIA, juvenile idiopathic arthritis; LE, left eye; M, male; MFM, mycophenolate; MTX, methotrexate; SpA, spondyloarthritis; OC, ocular complications; PanU, panuveitis; Pt, patient; RE, right eye; UD, underlying disease; VA, visual acuity.

Figure 1. A) Anti-TNF drugs as monotherapy or in combination with another immunosuppressive drug, in absolute frequencies. B) Anti-TNF drugs, according to etiology of uveitis.



ADA, adalimumab; CyA, cyclosporine; GOLI, golimumab; IFX, infliximab; JIA, juvenile idiopathic arthritis MMF, mycophenolate mofetil; MTX, methotrexate; PanU, panuveitis; SpA, spondyloarthritis.

PANLAR2023-1018

PERCEIVED DIGNITY IN PATIENTS WITH RHEUMATIC DISEASES: AN UNRECOGNIZED SOURCE OF EMOTIONAL DISTRESS

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Objectives: Dignity is generally considered a fundamental feature of human individuals, related to human rationality and morality. This connotation of dignity is recognized as intrinsic dignity. However, in the clinical setting, the notion of dignity evokes how patients see themselves and are seen by others and how the nature of the illness in question affects the person's life and identity. Perceived dignity might be affected by the patients feeling a diminished sense of worth and a burden to others, which are well recognized among patients with rheumatic diseases (RMDs).

The study's primary objective was to determine distress related to perceived dignity (DPD) among Mexican patients with RMDs. The rationale and methods for the adaptation and validation process of the Mexican version of the Patient Dignity Inventory (PDI-Mx) in the population are additionally described.

Methods: This cross-sectional study was developed in 2 phases. Phase 1 consisted of pilot testing and questionnaire feasibility (n = 50 patients), and the PDI-Mx content validity (judgment experts' agreement), construct validity (exploratory factor analysis), criterion validity (Spearman correlations), and reliability (internal consistency and temporal stability) in 220 outpatients, among whom 30 underwent test-retest. Phase 2 consisted of DPD quantification in 290 outpatients with RMDs. DPD was defined when the PDI-Mx score was ≥54.5 (Min 25-Max 125, with higher scores indicating more DPD).

Results: Overall, patients were representative of typical ambulatory patients with RMDs from a National tertiary care level center. The most frequent diagnoses

were Systemic Lupus Erythematosus (33.4%) and Rheumatoid arthritis (31.4%). DPD was present in 78 patients (26.9%). The 25-item PDI-Mx was found feasible, valid (experts' agreement ≥82%; a 4-factor structure accounted for 68.7% of the total variance; the strength of the correlations was moderate to high between the PDI-Mx, the Depression, Anxiety, and Stress scale dimensions scores, and the Health Assessment Questionnaire Disability Index score) and reliable (Cronbach's = 0.962, ICC = 0.939 [95%CI = 0.913-0.961]). The structure of the PDI-Mx underwent mild modifications after factorial analysis (**Figure**).

Conclusion: DPD was homogeneously present in up to 27% of Mexican patients with different RMDs. The PDI-Mx process validation was rigorous, and its critical quality indicators were validity, reliability, and feasibility.

Disclosure of Interest: None declared

Keywords: Mexico, Perceived dignity, Rheumatic diseases

Figure. PDI-Mx structure pre and post-factorial analysis.

PANLAR2023-1019

FACTORS ASSOCIATED WITH DISTRESS RELATED TO PERCEIVED DIGNITY IN PATIENTS WITH RHEUMATIC DISEASES

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Objectives: From the human rights approach, dignity is accepted as a universal need, required for the well-being of every individual. However, in the clinical context, what dignity entails in practice evokes the patient's sense of autonomy and control.

The loss of perceived dignity is an existential source of Human suffering rarely explored among patients with rheumatic diseases (RMDs), which contrasts with their observations that dignity, identity, and Quality of Life (QoL) are essential areas for research focus. We recently observed that distress related to perceived dignity (DPD) was present in 26.9% of Mexican outpatients with different RMDs.

The current study investigates the factors associated with DPD in patients with RMDs.

Methods: This cross-sectional study was performed in February-September 2022. Consecutive primarily outpatients with RMDs completed patient-reported outcomes (PROs) (to assess mental health, disease activity/severity, disability, fatigue, QoL, satisfaction with medical care, and family function) and had a rheumatic evaluation to assess disease activity status and comorbidity. Sociodemographic variables and disease-related and treatment-related variables were retrieved with standardized formats. DPD was defined based on the adapted and validated Mexican version of the Patient Dignity Inventory score (PDI-Mx). Multivariate regression analysis was used to identify factors associated with DPD (the dependent variable).

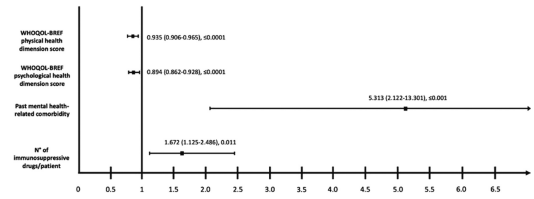
Results: Four hundred patients were included, and representative of patients with RMDs; 10% were inpatients and patients from the emergency care unit. The most frequent diagnoses were SLE (34%) and RA (31%). One hundred and seven patients (26.8%) had DPD. They differed from their counterparts (lesser educated, with intensive treatment, with mental health comorbidity, and worse PROMs). Past mental health-related comorbidity, the number of immunosuppressive drugs/patient, the physical health dimension score of the WHOLQOL-BREF, and the emotional health dimension score of the WHOLQOL-BREF were associated with DPD (**Figure**).

Conclusion: We observed that DPD was present in a substantial proportion of patients with RMDs and was associated with previous mental health comorbidity, intensive treatment of the underlying RMD, and the patient QoL. Recognizing factors associated with DPD is an essential step in the right direction toward understanding the impact of RMDs in patients' lives and preventing poorer prognoses.

Disclosure of Interest: None declared

Keywords: Mexico, Perceived dignity, Rheumatic diseases

Figure. Results from multivariate regression analysis to identify factors associated with DPD



PANLAR2023-1594

ASSOCIATION OF DERMATOLOGICAL LESIONS IN INFLAMMATORY MYOPATHY WITH THE PHOTOTYPE AND THE AUTOIMMUNE PANEL OF MYOSITIS

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Objectives: Inflammatory myopathies (MII) are autoimmune diseases that involve the skin as a target organ. The skin's ability to adapt to the sun (phototype), may be related to the different prevalence of antibodies.

To determine if there is an association between skin lesions, phototype, and autoantibody positivity in autoimmune myositis.

Methods: This is an observational and descriptive study. Patients from 2016-2022 were recruited, a single dermatological performed the assessment to determine dermatological lesions, with evaluation of the phototype and with serological determination of previous or current myopathy.

Results: 61 patients diagnosed with MII were included; The female gender was predominant, mean age of 49 years. Dermatomyositis was the most common (73.4%) myopathy; the time to diagnosis from symptom onset was 2 years. The most common antibody was Mi2 (35.9%). Phototypes III and IV were the most common (37.5 and 59.4%). The association between dermatological activity and lesions was performed and a significant association was found between the activity score and periungual damage (p = <0.001) as well as alopecia (p = 0.021). A correlation analysis between phototype and dermatological lesions was performed, finding greater damage according to the CDASI scale in those with phototype II and III compared to those with phototype IV (p = .017).

Conclusion: No association between the phototype variables and the myositis panel was found. Likewise no association between the different components of the CDASI scale.r was found. However, our study had several limitations including a small sample size and little variability of phototypes; despite that, an association between the CDASI scale and phototype, with less damage in those with phototype IV, compared to those with phototype II and III was found. *(p = .017)*

Disclosure of Interest: None declared

Keywords: Dermatomyositis, Myositis, Skin lesions

TABLE:.

Damage	Global n = 64	Remission n = 25	Activity n = 39	*p* value
Scalp	35	15(60)	20(51)	0.49
Malar area	33	14(56)	19(48)	0.57
Periorbital area	28	13(52)	15(38)	0.28
Rest of the face	10	5(20)	5(12)	0.44
V neck area	9	2(8)	7(18)	0.46
Back of the Neck	17	5(20)	12(31)	0.34
Back and shoulders	21	11(44)	10(26)	0.12
Lower back and buttocks	28	13(52)	15(60)	0.28
Abdominal erythema	42	19 (76)	23(59)	0.16
Upper part of the lower extremities and thighs	36	13(52)	23(59)	0.58
Rest of lower extremities and feet	13	8(32)	5(13)	0.06

Continued next page

TABLE:. *(Continued)*

Arm	47	17(68)	30(77)	0.43
Mechanic hands	3	2(8)	1(3)	0.55
Back of hands	4	2(8)	2(5.1)	0.64
Gottron sign (no hands)	6	3(12)	3(7.7)	0.61
Gottron	9	4(16)	5(12)	0.72
Peringueal				<0.001
Absent	22	17(68)	5(12)	
Faint/pink/red/microscopic telangiectasias	39	8(32)	31(79)	
Visible telangiectasias	3	0(0)	3(7)	
Alopecia	32	8(32)	24(61)	0.021

PANLAR2023-1551

ARGENTINE LONGITUDINAL REGISTRY OF AUTOIMMUNE INTERSTITIAL LUNG DISEASE. EPIMAR 2: BASELINE DATA OF THE FIRST 120 PATIENTS

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Objectives: To describe the baseline sociodemographic, clinical, serological, functional, and treatment characteristics in patients with autoimmune interstitial lung disease (Ai-ILD).

Methods: EPIMAR 2 is a real-life, longitudinal, observational, and multicenter registry of patients with Ai-ILD in Argentina, started in April 2022.

Patients >18 years of age with Ai-ILD of ≤5 years of disease duration were included. They were classified into 3 subgroups: ILD associated with connective tissue disease (CTD-ILD); interstitial pneumonia with autoimmune findings (IPAF) or ILD associated with antineutrophil cytoplasmic antibodies (ANCA-ILD).

Subclinical ILD (absence of respiratory symptoms) was included.

Statistic analysis: A descriptive analysis was performed; categorical variables were compared with the Fisher's exact test and the continuous ones with the Wilcoxon test. The statistical software R and a significance level of 5% were used.

Results: Data on 120 patients were recorded, 88 (73%) women, median age 58.6 [50.4, 67.6], history of smoking 62 (65%), 19 (16%) had a certificate of disability, Caucasians 45 (38%).

The subtypes were: CTD-ILD 71 (77%), IPAF 15 (16%) and 6 (6.5%) ANCA-ILD. CTD subgroups were: Systemic Sclerosis 38 (55%), Rheumatoid Arthritis 22 (31%), Sjögren's Syndrome 11 (16%), Inflammatory Myopathy 9 (13%).

The most frequent serological data were: antinuclear antibodies (ANAs) 64 (75%), Rheumatoid Factor (RF) 32 (39%), antiRo/SSa 18 (22%), antiCCP 12 (15%).

Baseline lung function tests were: median forced vital capacity (FVC): 2.30 [1.77, 2.88] liters, 68% (19.5), median DLCO: 13.6 [10.4, 20]ml/min/mmHg, 57% (21).

The most used treatments were: glucocorticoids 57 (75%), mycophenolate mofetil 32 (44%), methotrexate 23 (32%), intravenous cyclophosphamide 19 (26%), hydroxychloroquine 18 (24%), rituximab 16 (23%) and nintedanib 12 (17%).

There were 37 (41%) patients with subclinical ILD and 52 (59%) with symptomatic ILD. When comparing both groups, there was higher frequency of Sjögren's (24% vs 3.33%, p = 0.019) and positive ANAs in symptomatic ILD (83% vs 63%, p = 0.036) with less functional impact in subclinical ILD (DLCO 64% vs 54%, p 0.09).

Conclusion: This is the first report of baseline data from the EPIMAR2 longitudinal registry. The CTD-ILD subgroup was the predominant one (80%). Patients with subclinical ILD had less functional impairment. Multidisciplinary approach could be one of the explanations for the finding of subclinical ILD in this cohort.

Disclosure of Interest: None declared

Keywords: Interstitial lung disease, Rheumatoid arthritis

PANLAR2023-1376

SARS- COV-2 VACCINATION COVERAGE IN A MEXICAN POPULATION WITH RHEUMATIC DISEASE

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Objectives: Latest recommendation on SARS-CoV-2 vaccination in patients with systemic rheumatic diseases (SRD) by the American College of Rheumatology (ACR) and the European League Against Rheumatism (EULAR) is 3 doses while the Centers for Diseases Control and Prevention (CDC) recommends 5 doses.

Methods: We performed a cross-sectional study from April to November 2022 about SARS-CoV-2 vaccination in an outpatient rheumatology clinic in northeast Mexico. Consecutive SRD patients with a history of COVID-19 vaccination were invited to participate. Patients without SRD were excluded. Eligible participants completed a survey that included demographic data (age, sex, rheumatic disease diagnosis) and SARS-CoV-2 vaccination history (number of doses, and type of vaccine).

Results: We recruited 252 patients. Vaccine types administered were: BNT162b2 (Pfizer-BioNTech) 55 (23.11%); ChAdOx1 nCoV-19/AZD1222 (Oxford-AstraZeneca) 130 (54.62%); Ad5-nCoV (CanSinoBIO) 31 (13.03%); Coronavac (Sinovac) 9 (3.78%); mRNA-1273 (Moderna)13 (5.46%). (See Table 1 and Table 2)

Conclusion: Two thirds of our patients met SARS-CoV-2 vaccination recommendations by ACR and EULAR and 5.95% met CDC criteria. Population without any dose represents 6.74%. SARS-CoV-2 infection in vaccinated patients with SRD is associated with a better outcome compared with unvaccinated. Efforts to increase vaccination coverage need to be done.

Disclosure of Interest: None declared

Keywords: COVID-19, Systemic rheumatic diseases, Vaccines

TABLE 1. Population characteristics, coverage by dose, and type of vaccines.

Population characteristics	*n = 252*
Age in years, mean (SD)	50.48 (15.67)
Sex, n (%)	
Women	236 (93.65)
Coverage by dose, n (%)	
First dose	17 (6.74)
Second dose	12 (4.76)
Third dose	158 (62.70)
Fourth dose	15 5.95)

TABLE 2. Distribution of disease and doses.

Rheumatologic diagnosis,	No dose	First dose	Second dose	Third dose	Fourth dose
Rheumatoid arthritis	12	8	19	102	10
Systemic lupus erythematosus	2	1	19	27	2
Inflammatory myopathies	1	0	2	6	0
Systemic sclerosis	0	1	2	1	0
Mixed connective tissue disease	0	0	0	1	0
Vasculitis	1	0	1	0	0
Primary Sjögren's syndrome	0	0	2	2	1
Fibromyalgia	1	1	2	9	0
Osteoarthritis	0	1	0	6	1
Axial spondyloarthritis	0	0	1	0	1
Bone mineral metabolism disorders	0	0	2	4	0

PANLAR2023-1541

CONSENSUS OF A GROUP OF ARGENTINEAN EXPERTS RECOMMENDATIONS ARGENVISCO 2022

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Objectives: To implement algorithms and discuss their effectiveness in the treatment of Knee (K) and hip (H) osteoarthritis (OA).

Methods: Review of the global literature to confirm the effectiveness and safety of IA treatment with HA. (PUBMED, EMBASE< Google, Scholar and COCHRANE Databases) English articles with levels of evidence 1 and 2 were chosen and selected ones were sent to the Panel members. They studied , discussed and voted 18 statements. To support each statement, each member of the Panel gave their score between 0 and 10 (Likert scake, 0stood for "I am in total disagreement" while 10 meant "I am in Total agreement") indicating approval level for each statement and final concept. After voting, the scores were grouped in 3 categories: from 1 to 3 it meant "disagreement, from 4 to 6 it was considered as " on different attitude and from 7 to 9 indicated " agreement.

Results: Statement 1: Majority agreement with a strong level of consensus ($\bar{X}$ 9,5; Average:9); 2: Majority agreement with a moderate level of consensus

(X¯:4,2; Average: 5); 3: Majority agreement with a moderate level of consensus (X¯:5,8; Average:7); 4: Positive majority agreement with a strong level of consensus (X¯:8,5; Average:8); 5) Positive majority agreement with a strong level of consensus (X¯:8,9; Average: 9); 6: Majority agreement with a strong level of consensus (X¯:9,7; Average:10); 7: Majority agreement with a strong level of consensus (X¯:9,1;

Average:9); 8: Positive majority agreement with a strong level of consensus (X¯:7,8; Average:8); 9: Majority agreement with a moderate level of consensus (X¯:7,2; Average:8);10: Majority agreement with a strong level of consensus (X¯:8,8; Average:9); 11: Total disagreement in this statement (X¯:0,6; Average:0); 12: Majority agreement with a strong level of consensus (X¯:7,8; Average:7); 13: Majority agreement with a strong level of consensus (X¯:7,9; Average: 8); 14: Majority agreement with a strong level of consensus (X¯:7; Average:7); 15: Majority agreement with a strong level of consensus (X¯:9; Average:9); 16: Majority agreement with a strong level of consensus (X¯:8,9; Average:9); 17: Majority agreement with a strong level of consensus (X¯:7,8; Average:8); 18: Majority agreement with a strong level of consensus in this statement (X¯:8; Average:8).

Conclusion: According to the Medicine Data based on evidence and clinical experience of the ARGENVISCO members, it is recommended VS in HIP and Kee OA.

Disclosure of Interest: None declared

Keywords: None

PANLAR2023-1286

PERFORMANCE OF THE FRACTURE RISK ASSESSMENT TOOL (F R A X)® ACCORDING TO THE NATIONAL OSTEOPOROSIS GUIDELINE GROUP (N O G G) METHODOLOGY ON FRACTURE PREDICTION IN ELDERLY COMMUNITY-DWELLING: THE SÃO PAULO AGEING & HEALTH (S P A H) STUDY

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Objectives: SPAH is a longitudinal cohort of ≥65-year-old community-dwelling at high risk of fractures (40.3/1,000 person-years in women and 30.6/1,000 in men for vertebral fractures [VF]; 15.6/1,000 in women and 6.3/1,000 in men for non-vertebral fractures [NVF]). These incidences were higher than those of the studies that originated the FRAX Brazil. One of the main risk factors for fractures in this population is hip BMD (RR 1.42 for VF and RR 1.68 for NVF), what justifies the comparison between FRAX and NOGG models with and without BMD.

The purpose of the present study was to determine the performance of FRAX Brazil and NOGG with and without Bone Mineral Density (BMD) regarding fracture prediction in the population from SPAH.

Methods: 705 elderly individuals (447 women; 258 men) were followed for 4.3 ± 0.8 years. FRAX risk for major osteoporotic fractures with and without BMD was calculated at the baseline visit. Incident NVF was defined as a new hip , proximal humerus or forearm fracture. Incident VF was defined as a higher grade of deformity on vertebral morphology comparing baseline and final radiographs. A bivariate analysis was performed to verify the associations between FRAX or NOGG, with and without BMD, and the incidence of VF, NVF and major fractures (MF), divided by sex. Poisson multiple regression with adjustment for age was performed to determine fracture prediction by FRAX with and without BMD. A ROC curve analysis was done to better describe FRAX performance.

Results: New fractures occurred in 100/22% women (24/5.3% NVF; 76/17% VF) and 39/15% men (5/1.9% NVF; 34/13% VF). FRAX with and without BMD were higher in women with fractures (NVF, VF and MF) $p < 0.001$. Only NOGG without BMD was associated with NVF $p = 0.047$ and MF $p = 0.024$. ROC curves for FRAX with and without BMD had areas of 0.74, 0.64 and 0.61 for NVF, VF and MF, respectively. Poisson multiple regression revealed FRAX to be associated with NVF, and this model's ROC curves had areas of 0.67-0.75, with no difference with or without BMD. The best cut-off values were 10.5% for FRAX without BMD, and 9.45% with BMD. No statistically significant associations were seen in men probably due to few outcomes.

Conclusion: FRAX Brazil predicted NVF (than VF or MF) in this population with high fracture risk, regardless of BMD. These results reiterate that FRAX Brazil may be used without BMD considering that elderly Brazilians have a known higher fracture risk than those of the studies that originated the FRAX Brazil.

Disclosure of Interest: None declared

Keywords: Bone mineral density, Fracture, Osteoporosis

PANLAR2023-1331

FRACTURE RISK IN PATIENTS WITH RHEUMATIC DISEASES: A COMPARISON USING FRAX VS FRISK

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Objectives: FRISK predicts the fracture risk at 2 years in >60-year-old patients using age, weight, prior fracture, bone mineral density (BMD), and a measure of falls. Besides, FRAX calculates the 10-year probability of major osteoporosis-related fracture based on clinical risk factors such as age, body mass index (BMI), history of fragility fractures, BMD, steroid treatments used in patients with autoimmune rheumatic diseases (ARD). Since falls are not considered when calculating fracture risk, this is underestimated. The aim of this study is to compare the fracture risk using the FRAX tool vs the FRISK tool in patients >60 years old with ARD.

Methods: A cross-sectional study was carried out from September to December 2022. We included >60-year-old-ARD patients with a previous BMD test. To compare the risk classification between FRAX and FRISK, we set a cut-off for FRAX being ≥20% probability of a major fracture or ≥ 3% probability of a hip fracture categorized with a positive risk fracture and ≥ 5.4 as a cut-off for FRISK. Non-traditional risk factors were collected using a semi-structured form.

Results: A total of 84 patients were included: 82 (97.6%) were women and 2 (2.4%) were men with a median age of 65.50 (IQR 63-73). Other characteristics can be found in **Table 1**. The mean spine T-score was -1.92 ± 1.14 and the mean hip T-score was -1.37 ± 1.08. The risk fracture classification using FRAX and FRISK is shown in **Table 2**.

Conclusion: There was a higher frequency of fracture risk using FRAX. We found significant differences between FRISK and FRAX fracture risk. Since both scales can be used for screening, it is important to use both to detect fracture risk and prevent future complications.

Disclosure of Interest: None declared

Keywords: FRAX, FRISK, Osteoporosis

TABLE 1. Clinical characteristics.

	n = 84
BMI, n (%)	
Normal	28 (33)
Overweight	37 (44)
Obesity	19 (22.6)
Main diagnosis, n (%)	
RA	37 (44)
Osteoporosis	25 (29.8)
Osteoarthritis	9 (10.7)
SLE	4 (4.8)
Others	9 (10.7)
FRAX items, n (%)	
Prior fragility fracture	14 (16.7)
Parents' history of hip fracture	7 (8.3)
Tobacco smoking	6 (7.1)
Alcohol consumption	5 (6.0)
Long-term glucocorticoid use	33 (39.3)
Non-traditional risk factors, n (%)	
Visual problems	55 (65.5)
Periodontal disease	26 (31.0)
Two or more falls in the last year	18 (21.4)
Sedentarism	(71.4)

TABLE 2. Fracture risk by FRISK and FRAX with BMD.

	FRAX, n (%)	**FRISK, n (%)**	**p = 0.015**
With fracture risk	37 (22.0)	21 (12.5)	
Without fracture risk	47 (28.0)	63 (37.5)	

PANLAR2023-1171

DETERMINATION OF RISK FACTORS FOR OSTEOPENIA AND OSTEOPOROSIS IN THE FRAMEWORK OF AN EDUCATION PROGRAM FOR PATIENTS OF A COLOMBIAN INSTITUTION PROVIDER OF HEALTH SERVICES (IPS), LOGISTIC REGRESSION AND DESCRIPTIVE ANALYSIS

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Objectives: To determine the risk factors and their association with the deterioration of BMD in a population

Methods: In an education program for patients attending an IPS in Bogotá-Colombia, a one-minute questionnaire was filled out to identify osteoporosis risk factors and bone densitometry was performed, if they met the inclusion criteria: Women ≥65 years of age and men ≥70 years, no BMD measurement in the 18 months previous, signed informed consent. The BMD was measured with a General Electric equipment, iDXA model. The sample size was of convenience. A descriptive analysis was carried out. For the bivariate analysis, a value of $p < 0.05$ was considered significant. To compare groups, the Wilcoxon signed rank test and the χ^2 test or Fisher's exact test were used according to the type of variable. Univariate and multivariate logistic regression models were built, with a value of $p < 0.25$ according to the Hosmer and Lemeshow methodology.

Results: In total, 432 patients were included in the study, 74.1% were women. The median for age, 73 years, IQR: 8. 2.8% were smokers; 10.9% had early menopause; 7.6% were impotent; 7.6% had parents with a fracture; 8.1% had fragility fractures; height loss of more than 3 cm occurred in 50.7%; 7.2% had rheumatoid arthritis; secondary osteoporosis, 7.9% of the cases; 11.3% received corticosteroids. 21.1% received calcium and 21.8% Vitamin D, hormone replacement therapy 2.1%; anticoagulants 5.1%; antithyroid 28.7%; 2 patients received antiretrovirals. 10.2% of the patients had a previous diagnosis of osteoporosis, and of them, only 52.3% received antiresorptive medication. Median weight 65 Kg Confidence interval (CI): 17 and body mass index 27.3 Kg/m2 CI: 6.49. A normal BMD was evidenced in 16.9%, osteopenia in 47.7% and osteoporosis in 35.4% of the patients. The results of the univariate and multivariate analysis showed an increased risk for women OR 2.58, vitamin D supplementation OR 4.64, use of antithyroid drugs OR 1.94, BMI ≤ 24.9 Kg/m2 OR 2.60. The use of anticoagulants was found to be a protective factor OR 0.33.

Conclusion: 83.1% of the patients had osteopenia or osteoporosis. In this group of patients, female sex, BMI, receiving calcium and/or vitamin D supplementation were associated with a lower BMD.

Disclosure of Interest: None declared

Keywords: Risk factors, Osteoporosis, Logistic regression

PANLAR2023-1367

A RISK FRACTURE COMPARISON DETERMINED BY FRAX WITH AND WITHOUT BONE MINERAL DENSITY IN PATIENTS WITH RHEUMATIC DISEASES

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Objectives: FRAX calculates the probability of a major osteoporotic fracture over the upcoming 10 years according to risk factors such as age, body mass index (BMI), history of fragility fractures, and steroid treatments used in patients with autoimmune rheumatic diseases (ARD). The FRAX score obtained without bone mineral density (BMD) is comparable to the fracture risk calculated with BMD. The aim of this study is to compare the fracture risk using FRAX with and without BMD in patients with ARD.

Methods: A cross-sectional study was carried out from September to December 2022. We included >40-year-old-ARD patients with a previous BMD test. The risk fracture scores were compared using FRAX with and without BMD. There were classified as low (<10% probability of a major fracture), intermediate (10%-19%) and high risk (≥20%).

Results: A total of 146 patients were included: 142 (97.3%) were women and 4 (2.7%) were men with a mean age of 61.49 ± 9.22. The risk factors used for the FRAX calculation can be found in **Table 1**. The risk fracture scores using FRAX with and without BMD are shown in **Table 2**.

Conclusion: Higher hip fracture and major fracture risks were identified in the FRAX without BMD group. We found significant differences between the hip fracture risk of FRAX with and without BMD. No differences were found in the major fracture risk of FRAX with and without BMD; this is of critical importance if patients cannot have their BMD measured, making it possible to offer a timely diagnosis.

TABLE 1. Clinical characteristics.

	n = 146
T score	
Spine, median, [IQR]	-1.7 [(-2.5)-(-0.8)]
Hip, mean ± SD	-1.06 ± 1.21
BMI, n (%)	
Normal	46 (31.5)
Overweight	63 (43.2)
Obesity	37 (25.4)
Main diagnosis, n (%)	
RA	67 (45.0)
Osteoporosis	36 (24.7)
Osteoarthritis	21 (14.4)
SLE	5 (3.4)
Others	17 (11.6)
FRAX items, n (%)	
Prior fragility fracture	25 (17.1)
Parents' history of hip fracture	14 (9.6)
Tobacco smoking and alcohol consumption	12 (8.2)
Long-term glucocorticoid use	59 (40.4)

TABLE 2. Fracture risk by FRAX with and without BMD and risk classification.

	FRAX with BMD	FRAX without BMD	*p* value
Mayor fracture risk, median, (IQR)	9.30 (6.07-15.0)	9.85 (6.60-17.0)	0.313
Hip fracture risk, median, (IQR)	1.10 (0.40-3.10)	1.95 (0.80-4.73)	0.002
Risks of major osteoporotic fracture assessed by FRAX, n (%)			0.598
Low	81 (27.7)	73 (25)	
Intermediate	43 (29.5)	46 (15.8)	
High	22 (7.5)	27 (9.2)	

Disclosure of Interest: None declared

Keywords: Fracture risk, FRAX, Osteoporosis

Pediatric Rheumatolog

PANLAR2023-1186

CLINICAL FEATURES, LABORATORY FINDINGS AND OUTCOMES IN MULTISYSTEM INFLAMMATORY SYNDROME (MIS-C) FOLLOWING COVID-19 INFECTION – A MULTICENTER, OBSERVATIONAL, AMBIDIRECTIONAL COHORT STUDY IN RIO DE JANEIRO STATE, BRAZIL

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Objectives: As of March 5th, 2022, around 1.585 cases of MIS-C and 98 deaths (6,4%) were reported in Brazil. The state of Rio de Janeiro State (RJ) having 94 cases (5,9%) and 4 deaths (4,2%)[1].Our aim was to evaluate clinical and laboratory features, and management of MIS-C in seven pediatric hospitals in RJ, Brazil.

Methods: Multicenter, observational, ambidirectional cohort study in seven tertiary hospitals in RJ(Brazil), assessing medical charts of pediatric inpatients (0-18 years) diagnosed with MIS-C according to WHO/CDC criteria, from August, 2020 to February, 2022. Descriptive statistics were used to analyze distributions of continuous variables, frequencies, and proportions.

Results: A total of 112 cases of MIS-C were enrolled. The mean age was 4.2 years and thre was male predominance (59,8%). All cases had a SARS-CoV-2 contact (29.5% close contact; 31.3%:positive PCR; serology:43.8%).Only 12.5% had comorbidities. Length of stay (LOS) was 7 days. Median duration of fever was 8 days. Most common symptoms were: rash(67%);gastrointestinal (67%); conjunctivitis (42%); neurological(39.6%); cardiovascular(37.5%); cervical lymphadenopathy (36.6%), and shock/hypotension(28.6%).Co-infection occurred in 3 patients. Forty-four patients fulfilled criteria for Kawasaki disease. Most patients were admitted to PICU(12;62,5%) for a median of 2 days. Respiratory distress was seen in 18,7%; hypotension:28,6%, and shock in 23,2%. Main laboratory findings were: high C-reactive protein in 95%;D-dimer:77%, anemia:77%, thrombocytosis:63%; transaminitis:43.8%, lymphopenia:38%; hypoalbuminemia:34%; thrombocytopenia:29%; hypertriglyceridemia:28%, and high pro-BNP in 27%. Echocardiogram was performed in 91/112 patients; abnormal in 70,3%;exhibiting myocardial dysfunction(25%);pericardial effusion(21%);coronary dilation/aneurysms(11%) and, valvulitis (14.5%). IVIG+corticosteroids (CTC) were administered in 59.8%(67/112);18.6%(18/112) IVIG only;10.7%(12/112) CTC only; 3.4%(4/112)biologics, and 15(13.3%) received no treatment. ASA low dose in 77.7% (87/112) and moderate/high dose in 34.8%. Oxygen support was needed in 27,7%; vasoactive amines:18,7%; dialysis:5,3%, and transfusion:18,7%.One patient died from a cytokine storm syndrome.

Conclusion: Our study reports a higher number of MIS-C cases in RJ than the number reported to Brazilian authorities, highlighting underreporting. Our patients were younger, had fewer comorbidities, cardiovascular/gastrointestinal/renal involvement, shortest LOS in ICU, and a higher frequency of myopericarditis.

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Disclosure of Interest: None declared

Keywords: COVID-19, Kawasaki diseaseMultisystemic inflammatory syndrome

PANLAR2023-1465

DIFFERENT SCORING SYSTEMS APPLIED FOR PATIENTS WITH MACROPHAGE ACTIVATION SYNDROME

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Objectives: Macrophage activation syndrome (MAS) is a secondary hemophagocytic lymphohistiocytosis (HLH), complicating pediatric rheumatic diseases. It is a severe, potentially fatal overwhelming systemic inflammatory reaction, associated with cytokine storm syndromes (CSS). Existing scoring systems for CSS may be used for MAS aiming an early diagnosis and treatment.

Methods: Descriptive, historical, cross-sectional, single-center study. Data were collected from the medical records of patients youngerthan 18 years of age with rheumatic diseases, admitted between 2010-2019 to a Pediatric Rheumatology University Center of. Demographics, clinical and laboratory data, disease course and treatment variables were reviewed. Five scoring systems were tested in the cohort of patients: the HLH-2004 criteria, the HScore, the 2016 systemic juvenile idiopathic arthritis (SJIA)/MAS criteria (EULAR/ACR/PRINTO), the 2019 MAS/SJIA (MS) score and the ferritin/erythrocyte sedimentation rate (ESR) ratio.

Results: Twenty MAS episodes were included, with a female predominance, and a median age at diagnosis of 8 years and 10 months. All MAS episodes were triggered by active rheumatic illness and half of them also by an associated infection. Fifteen occurred in patients with SJIA, two in juvenile systemic lupus erythematosus (JSLE), two in Kawasaki disease (KD) and one in a patient with mixed connective tissue disease (MCTD). MAS episodes occurred together with the presentation of the underlying rheumatologic disease in 8/14 episodes. Sixteen episodes presented with persistent fever, the main clinical feature, only absent in four episodes of subclinical MAS in patients with SJIA. Most cases (18/20) had hyperferritinemia over 500 ng/mL and likewise, most of them showed an increase in the ferritin/ESR ratio. The HLH-2004 criteria and HScore only identified 6/20 cases as having MAS/CSS, followed by the 2016 sJIA/MAS criteria and the 2019 MS score (7/20 cases).

Conclusion: MAS diagnosis is challenging as there is no single clinical or laboratory parameter nor a biomarker. In the absence of a validated diagnostic criteria, its recognition is often delayed and should be suspected early on a clinical and laboratory basis for each patient with unremitting fever, hyperferritinemia and increased ferritin/ESR ratio.

Disclosure of Interest: None declared

Keywords: cytokine storm, hyperferritinemia, Macrophage Activation Syndrome

PANLAR2023-1445

THE PREDICTORS OF TEMPORO-MANDIBULAR JOINT INVOLVEMENT IN JUVENILE IDIOPATHIC ARTHRITIS: PRELIMINARY DATA FROM A HISTORICAL STUDY.

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Objectives: To compare the clinical characteristics of patients with juvenile idiopathic arthritis depending on the presence of temporomandibular joint (TMJ) involvement.

Methods: We analyzed the data of 753 patients with juvenile idiopathic arthritis aged 2-17 years, depending on the presence of TMJ arthritis (n = 43; 5.7%) or no (n = 710; 94.3%). Clinical, laboratory characteristics and treatment regimens were compared. Odds ratio (OR) analysis of sensitivity (Se) and specificity (Sp) was performed to obtain the predictors of TMJ involvement.

Results: Despite the similar age of onset, TMJ arthritis was associated with a longer disease course, polyarticular JIA category, use of systemic corticosteroids and longer achievement of remission with similar rate of administration of biologics. TMJ arthritis was associated with involvement of the cervical spine, hips and shoulders. Delayed hip involvement and hip osteoarthritis, and avascular hip necrosis were also frequent in the TMJ group. Oligoarticular JIA category and uveitis were protective against TMJ involvement (table).

TABLE:.

Parameters	TMJ arthritis, yes	TNJ arthritis, no	*p* value
Onset age, years	6.1 (2.8; 11.0)	6.0 (3.0; 10.4)	0.775
JIA duration,years	5.5 (2.7; 11.7)	4.2 (1.9; 7.4)	0.058
JIA category			
Oligoarthritis	1 (2.3)	203 (28.6)	
Polyarthritis	25 (58.1)	240 (33.8)	
Psoriatic arthritis	2 (4.7)	38 (5.4)	0.0006
Enthesytis-related arthritis	9 (20.9)	177 (24.9)	
Systemic arthritis	6 (14.0)	52 (7.3)	
Active joints, n (%)	17(10.0; 42.0)	6,0 (3,0; 11,0)	0,000
Hip osteoarthritis	8/13 (61.5)	40/140 (28.6)	0.014
Delayed hip involvement	8/10 (80.0)	58/125 (46.4)	0.041
Oral corticosteroids, n (%)	17/42 (40.5)	135/710 (19.0)	0.0007
Corticosteroids pulse-therapy, n (%)	13/43 (30.2)	122/707 (17.3)	0.032
Time before biologic treatment, years	3.9 (1.0; 9.7)	4.2(1.9; 7.6)	0.912
Time before remission	4.2 (1.7; 10.8)	3.1 (1.5; 6.3)	0.042

Conclusion: TMJ involvement is a marker of poor disease prognosis. Early initiation of biologics and avoidance of corticosteroids might improve the risk of TMJ involvement.

Disclosure of Interest: None declared

Keywords: Juvenile Idiopathic Arthritis, Temporomandibular Joint, Temporomandibular joint arthritis

PANLAR2023-1558

CHRONIC NONBACTERIAL OSTEOMYELITIS: EXPERIENCE FROM A RHEUMATOLOGY PEDIATRIC CENTER

Fernanda de Carvalho Zonis*[1], Flávio Roberto Sztajnbok[1], Marta Cristine Félix Rodrigues[1], Priscila Rodrigues de Souza[1], Rozana Gasparello de Almeida[1], João Lucas Monteiro[1], Adriana Rodrigues Fonseca[1]. [1]*Reumatologia pediatrica, IPPMG/UFRJ, Rio de Janeiro, Brazil.*

Objectives: Chronic nonbacterial osteomyelitis (CNO) is an autoinflammatory disease that affects children and adolescents and presents with sterile bone inflammation, associated or not with systemic symptoms. It can lead to sequels with severe quality of life impairment. The aim of this study is to describe the demographic, clinical, laboratorial, histopathological and therapeutic aspects, and outcome, of a group of patients from a pediatric rheumatology service.

Methods: A medical records and cross-sectional observational study was conducted on 16 patients with the diagnosis of CNO, from a pediatric rheumatology university center. Medical follow-up took place between 2000 and 2022. Diagnosis was the result of clinical evaluation and imaging and/or histopathological investigation.

Results: Data were collected from 16 patients (10 male, 6 female). The mean age of symptoms onset was 9.2 years and at diagnosis, 11 years. Mean time from symptom initiation to diagnosis was 20 months (range 0-96). CNO was the initial diagnosis in 5 patients (31.2%). Whole-body MRI was performed in 11 patients (68.7%); and whole-body scintigraphy in 3 (18.7%). Bone biopsy was performed in 7 patients (43.7%) and suggested CNO in all of them. The number of lesions ranged from 1 to 22 (mean 8). The most frequent lesions were found in the lower and upper limbs, clavicles, mandibles, and vertebrae. The most common comorbidity was spondyloarthritis (56.2%), although there was also association with Crohn's disease, psoriasis, acne, lipodystrophy, thyroid disorders, sicca syndrome and celiac disease. Eleven patients received nonsteroidal anti-inflammatory drugs, 3 prednisone, 7 methotrexate, 6 sulfasalazine, 5 adalimumab and 1 etanercept. The mean follow-up time was 30.7 months (range 2-168). Only one patient had a monocyclic course of disease, while the remainder (93.7%) had a persistent course.

Conclusion: Although CNO is more frequently described in females, in this study it prevailed among male patients, involving multiple sites; a poor response to treatment led to a predominant persistent course of disease. In addition, an association with spondyloarthritis was verified in more than half of the patients. Even though early diagnosis can be challenging, early interventions can reduce complications and sequels. Therefore, CNO should be considered in cases of musculoskeletal pain in pediatric populations.

Disclosure of Interest: None declared

Keywords: Chronic nonbacterial osteomyelitis, Musculoskeletal pain, Spondyloarthritis

PANLAR2023-1565

CARNITINE DEFICIENCY MIMICKING INFLAMMATORY MYOSITIS: A CASE SERIES

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Objectives: OBJECTIVE: To describe clinical and laboratory features in paediatric patients with diagnosis of carnitine deficiency followed up at a single university center. Carnitine deficiency encompasses a multifatorial group of metabolic lipidic myopathies with presentations ranging from early with systemic manifestations to late with muscular manifestations (muscle carnitine palmitoyl transferase-CPT2 deficiency) and a recurrent course of myalgia and weakness, triggered by fasting, exercise and viral infections.

Methods: We report a case series of patients who presented with recurrent myalgia and weakness associated with carnitine concentration below the reference value of the laboratory and increased muscle enzymes, followed up at a pediatric rheumatology outpatient clinic of a university hospital from 2015 to 2022. Infectious, inflammatory, and autoimmune myopathy as a cause of these symptoms were ruled out.

Results: Six patients were included, and in three cases there was consanguinity. The mean age at diagnosis was 8 years. The interval between the onset of symptoms and diagnosis ranged from 2 months to 4 years. The female to male ratio was 1:2. All patients had recurrent muscle pain associated with fatigue and weakness, especially after physical activity, and increased muscle enzymes. Five patients were hospitalized at least once due to pain and muscle weakness. Five patients had increased CK, LDH and AST; three of the patients had increased aldolase and ALT. CK values were increased from 2 to 80 times the normal value; LDH increased about 2 to 4 times the normal value and AST increased from 2 to 8 times the normal value. All patients showed a decrease in plasma free carnitine ranging from 18.7 to 30.9 (reference 35-83mcmol/L). One patient underwent muscle biopsy with deposit of lipids in muscle fibers. Three patients had an acylcarnitine profile with normal results but were asymptomatic during the collection period. All were treated with L-carnitine supplementation at doses between 80-150 mg/kg/day, with complete clinical and laboratory response between 2 and 5 months. One patient had recurrence of muscle weakness during treatment at a therapeutic dose.

Conclusion: Carnitine deficiency is a rare disease and should be considered as a differential diagnosis in all patients with recurrent attacks of unexplained muscle weakness, fatigue and myalgia. It has a favorable prognosis with early diagnosis and L-carnitine supplementation, which must be continued for life.

Disclosure of Interest: None declared

Keywords: Carnitine deficiency, Metabolic myopathies, Muscle weakness

PANLAR2023-1489

PROFILE OF PATIENTS WITH SYSTEMIC ONSET JUVENILE IDIOPATHIC ARTHRITIS AT A CHILDREN'S UNIVERSITY HOSPITAL

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Objectives: Systemic Onset Juvenile Idiopathic Arthritis (SoJIA) is a rare childhood inflammatory disease associated with significant morbidity. The course of the disease is variable, monocyclic, polycyclic, or relapsing. The aim of this study is to describe the clinical, epidemiological, and therapeutic profile of patients diagnosed with SoJIA in a single university center.

Methods: A cross-sectional, descriptive, historical study was carried out, analyzing medical records of patients with the diagnosis of SoJIA, between 0--17 years of age. Pediatric rheumatology follow-up took place between 2011 and 2022. The diagnosis was made according to the ILAR criteria (International *League Against Rheumatism*).

Results: Data were collected from 31 patients (14 male and 17 female). The mean age at onset of symptoms was 6.5 years (1-11) and at diagnosis was 7 years (2-11). The mean time to diagnosis was 4.7 months (1-14). Regarding the presenting manifestations, all patients presented with arthritis and fever and 29 (93.5%) had rash. Other clinical manifestations occurred: hepatomegaly (n10 – 32%), splenomegaly (n5 – 16%), serositis (n5 – 16%), and lymph node enlargement (n4 – 12.9%). Only 2 patients (6.4%) presented with macrophage activation syndrome (MAS) as a manifestation at the onset of SoJIA. The most common laboratory findings were: increased erythrocyte sedimentation rate (ESR) (n31 – 100%), high C-reactive protein (CRP) (n24 – 77.4%), anemia (n16 – 51.6%), elevation of liver enzymes (n14 – 45%) and hyperferritinemia (n13 – 41.9%). Concerning drug treatment, 29 patients (93.5%) received systemic corticosteroids, 26 (83.8%) methotrexate, 25 (80%) tocilizumab, 7 (22.5%) anti-TNF agents, 6 cyclosporine (19.3%), 4 abatacept (12.9%) and 3 anakinra (9.6%). The mean time to treatment response was 5.7 months (2-14) and 15 patients (48%) achieved disease control. However, 18 patients (58%) evolved to erosive arthritis, and 5 patients (16%) developed macrophage activation syndrome (MAS). There were no pulmonary complications or deaths.

Conclusion: Despite the advances in SoJIA treatment, more than half of our patients evolved into a chronic erosive arthritis, and almost half still have persistent disease activity, even with the use of biological drugs. Besides, 7 patients (22.5%) developed MAS. This study highlights the importance of an early diagnosis and treatment and of the need for faster access to biological treatment, to avoid acute and chronic complications that may affect the quality of life of these patients.

Disclosure of Interest: None declared

Keywords: Juvenile idiopathic arthritis, Macrophage activation syndrome, Tocilizumab

PANLAR2023-1570

JUVENILE LOCALIZED SCLERODERMA: PROFILE OF CHILDREN AND ADOLESCENTS FOLLOWED UP AT A PEDIATRIC RHEUMATOLOGY UNIVERSITY TERTIARY CENTER IN RIO DE JANEIRO DURING 2022

Priscila Rodrigues de Souza*[1], João Lucas Monteiro[1], Flávio Roberto Sztajnbok[1], Fernanda de Carvalho Zonis[1], Marta Cristine Félix Rodrigues[1], Rozana Gasparello de Almeida[1], Adriana Rodrigues Fonseca[1]. [1]*Reumatologia pediatrica, IPPMG/UFRJ, Rio de Janeiro, Brazil.*

Objectives: To describe the clinical, epidemiological and therapeutic profile of children and adolescents diagnosed at a university hospital in Rio de Janeiro.

Methods: A cross-sectional, descriptive and historical study including children and adolescents between 2 and 16 years diagnosed with localized scleroderma and followed up at a pediatric rheumatology outpatient clinic of a university hospital during 2022. Diagnosis was based on typical skin thickening or skin biopsy.

Results: Sixteen patients were included. The female to male ratio was 1,5:1. The mean age at diagnosis was 7 years. The time between the onset of symptoms and diagnosis was 2.8 years. The most frequent form was of localized scleroderma (linear scleroderma), affecting 37.5% of patients, followed by mixed morphea (31.25%), circumscribed morphea (25%) and pansclerotic morphea (6.25%). The most affected anatomical sites were the lower limbs (93%), followed by the trunk (56%), upper limbs (37.5%), abdomen (25%) and head-neck (18. 7%). Skin biopsies were performed in 75% of patients, showing scleroderma and active inflammation in 83%. Laboratory alterations were observed in 25% of the patients, such as eosinophilia (12.5%), high acute phase reactants (12.5%) and antinuclear antibodies (25%). Most patients (68.5%) received subcutaneous or oral methotrexate (68.5%). Methylprednisolone pulse therapy was prescribed for 25% of the patients. Topical Tacrolimus 0,03% was used in 43.7% of patients. The mean time to achieve response to therapy was 5 months. Remission was achieved in 81,8% of patients who received methotrexate with or without tacrolimus, and 75% of patients (3 of 4 patients) who received methotrexate combined with pulse therapy. The mean treatment time was 32 months. Only 18.75% of patients had disease reactivation during treatment. There was functional disability due to joint contractures in a patient with pansclerotic morphea. One patient had lichen sclerosus associated with scleroderma.

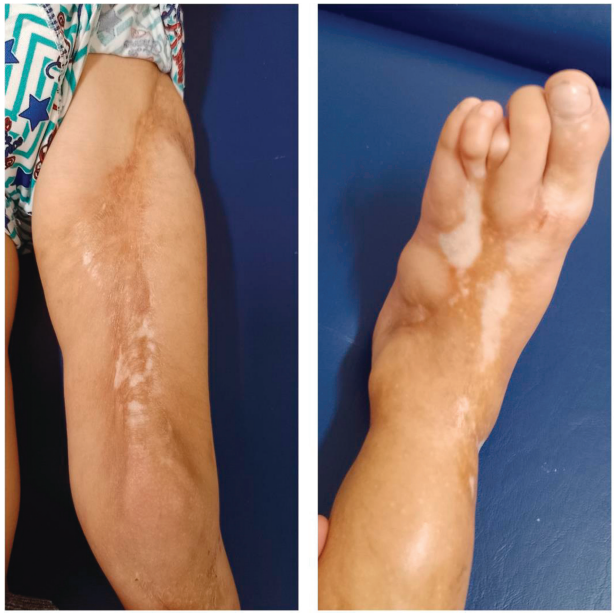

FIGURE 1.

Conclusion: Our study confirms what is described in the current literature about localized scleroderma being a disease with a limited course and good prognosis. In some cases, it can lead to important deformities and dysfunction, so early diagnosis and treatment are important to reduce these risks.

Disclosure of Interest: None declared
Keywords: Juvenile localized scleroderma, Linear scleroderma, Morphea

PANLAR2023-1535

ASSESSMENT OF DISEASE ACTIVITY IN ADOLESCENT PATIENTS WITH CHRONIC INFLAMMATORY DISEASES AFTER VACCINATION AGAINST COVID-19AT A UNIVERSITY HOSPITAL IN MANAUS

Samuel Elias Basualto Dias*[1], Natália Seixas de Melo[1], Marcos Mavignier Sousa Dias[1], Vitória Miki Pang Takatani[1], Clara Pinheiro Martins[1], Bruna Guimaraes Dutra[1], Gabriella Bacellar Marques[1], Davi Queiroz Rego[1], Daniel Buzaglo Gonçalves[1], Roberta Beatriz Nazareth Alagia[1], Maria Izabel Andrade dos Santos[1], Bárbara Letícia da Costa Corrêa[1], Gabriela Alarcón Alcântara[1], Gustavo de Albuquerque Barros[1], Larissa Maria Contiero Machado[1], Rosely Holanda da Silva Sanches[1], Raquel Lima de Lima[1], Sérgio Henrique Oliveira dos Santos[1], Juliana Bühring[1], Antônio Luíz Boechat[1], Camila Maria Paiva França Telles[1], Sandra Lúcia Euzébio Ribeiro[1], SAFER. [1]*Universidade Federal do Amazonas, Manaus, Brazil.*

Objectives: Chronic Inflammatory Immune-mediated Diseases (CIMD) can cause pain and severe discomfort to the patient, leading to significant reductions in his/her quality of life. Vaccination against COVID-19 has proven to be an efficient method in preventing cases and serious repercussions. However, there is insufficient evidence on the safety of these vaccines in the CIMD population. Objective: To assess disease activity in adolescent patients with CIMD after vaccination against SARS-CoV-2.

Methods: Observational, longitudinal, ambidirectional study with follow-up of groups of adolescent patients with CIMD who received the vaccine provided by the National Immunization Program — Pfizer/BioNTech. Sociodemographic and clinical disease activity data were collected before and after each vaccine dose. Data were stored through an online platform (REDCap). This study is associated to the SAFER Project from the Brazilian Society of Rheumatology and was approved by the local Research Ethics Committee.

Results: Nineteen adolescents aged between 12 and 17 years were included, all of whom met the inclusion/exclusion criteria. Of the total, 31.6% have Juvenile Idiopathic Arthritis (JIA) — 14.33 ± 2.25 years of age, whose subtypes included persistent oligoarticular JIA (16.7%), Polyarticular Rheumatoid Factor (RF) negative (33.3%), Polyarticular RF positive (16.7%) and Systemic (33.3%); 68.4% have Systemic Lupus Erythematosus (SLE) — 14.77 ± 1.96 years of age. Regarding JIA patients, at inclusion, the mean disease activity assessed by the physician was 3 ± 3.83 and 3.25 ± 3.77 as assessed by the patient. After the 1st dose, the mean activity assessed by the physician was 2.8 ± 3.9 and after the 2nd dose it was 3 ± 4.24. The mean activity after the first dose as assessed by the patient was 3.2 ± 3.96, and after the 2nd dose it was 2.8 ± 3.11. In the SLE patients, at inclusion, the mean degree of disease activity was 1.92 ± 1.83 and of the SLEDAI-2 K was 4.67 ± 5.14. After the 1st dose, the mean disease activity was 1.11 ± 1.96, and after the 2nd dose, it was 2.25 ± 2.76. After the 1st dose, the SLEDAI-2 K was 1.11 ± 1.76, and after the 2nd dose it was 4.25 ± 5.28. No reports of worsening of disease activity after the vaccine were found.

Conclusion: The vaccination proved not to contribute to worsening of clinical activity of rheumatic diseases in adolescents, without significant changes in SLE assessment indices and in the personal and medical assessment of JIA patients.

Disclosure of Interest: None declared
Keywords: COVID-19 Vaccines, disease activity, Juvenile Idiopathic Arthritis

PANLAR2023-1137

BIOLOGIC THERAPIES USE PATTERNS IN JUVENILE IDIOPHATIC ARTHRITIS IN URUGUAY

Rodrigo Suárez*[1], Rosario Jurado[1], on behalf of Rodrigo Suarez Lucía Drago[1]. [1]*Montevideo, CHPR, Montevideo, Uruguay.*

Objectives: To describe the general characteristics of the use of biologic therapies in children, adolescentes and adults with Juvenile Idiopathic Arthritis (JIA) in the *República Oriental del Uruguay*, between March 2018 and June 2022.

Since 2011 our country has biologic drugs for the treatment of Juvenile Idiopathic Arthritis, with free and universal coverage.

This universal accessibility distinguishes our country from the rest of the world, and this is possible thanks to the *Fondo Nacional de Recursos*, organism that brings financial coverage to procedures, devices and expensive medications to all people based in their nationality, regardless of the kind of health coverage they may have.

Methods: Descriptive study of the registered cases with the *Fondo Nacional de Recursos* in the aforementioned period; the data were accessed through a request for access to public information, law 18381 of 2008.
Results: In the examined period, 210 new treatments were started, 65% of the patients were female, 57,3% of the cases were of polyarthis and 24,8% of oligoarthritis. 9,5% of the patients were between the ages of 2 and 6 years, 19% between 7 and 11 years, 48,5% between 12 and 16 years, and 22,8% between 17 and 27 years.

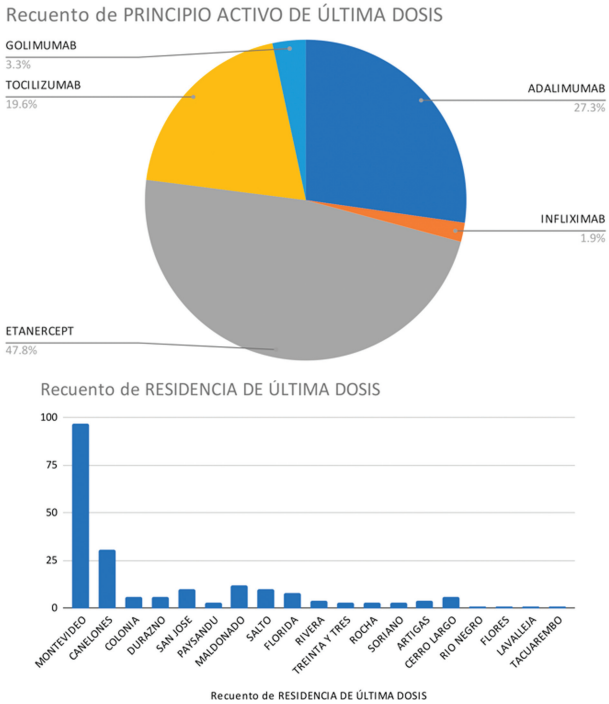

FIGURE 2.

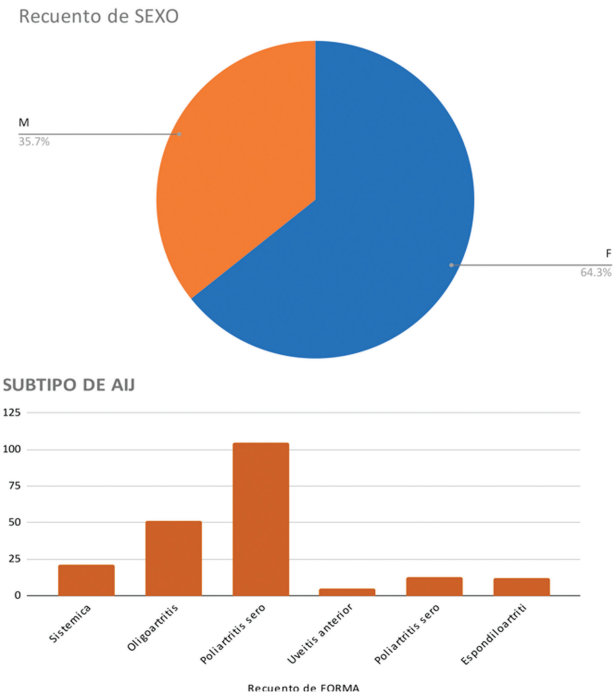

FIGURE 1.

Etanercept (50%), Adalimumab (27%), and Tocilizumab (19%), were the most frequently used drugs during that period.
Conclusion: Uruguay does not have any systematic, data bases or studies of prevalence and incidence of childhood rheumatic diseases; this is the first attempt to reflect the reality of these pathologies in our country.

The universal financial coverage of these treatments in JIA facilitates access to them.

In this population of children, adolescents, and adults with JIA under treatments with biologic drugs, the representation of subtypes of chronic arthritis has differences with the global epidemiology, with an overexpression of the polyarticular cases, and a sub representation of the oligoarticular cases.

Just like in the international literature, the anti TNF drugs are the most utilized, and between them, Etanercept and Adalimumab lead the indication.

It is fundamental to deepen the knowledge of local epidemiology o know the reality of the childhood rheumatic diseases in all ages, just like the impact of the use of recently introduced biosimilars, which also presents new challenges to our specialty.

Disclosure of Interest: None declared
Keywords: Biologics, JIA

PANLAR2023-1523

EPIDEMIOLOGY OF JUVENILE IDIOPATHIC ARTHRITIS: PEDIATRIC HOSPITAL BACA ORTIZ. QUITO - ECUADOR.

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Objectives: To determine the prevalence, incidence and main characteristics of the different forms of Juvenile Idiopathic Arthritis in the Baca Ortiz Pediatric Hospital (BOPH), Quito-Ecuador.
Methods: A historical observational study was conducted in BOPH to identify patients diagnosed with JIA according to The International League Against Rheumatism (ILAR) criteria, between January 1, 2022 and December 31, 2022; with the population of 158044 children who had a hospital consultation during this period. The data were analyzed with the IBM SPSS Statistics software version 29.0.0.0.
Results: During the year 2022, 27 patients with JIA were identified, according to the ILAR criteria; 10 boys (37%) and 17 girls (63%). The female/male ratio was 1.7.

TABLE 1. Characteristics of the patients with JIA.

Form of JIA	Age at diagnostic (SD)	Male/ Female	ANA Positive (%)	RF Positive (%)	HLA-B27 Positivo (%)
Systemic	5.66 (± 3.77)	1/5	1/6 (16.67)	0	0
RF-Positive Polyarthritis	5.83 (± 3.18)	1/5	2/6 (33.33)	6/6 (100)	0
RF-Negative Polyarthritis	9,70 (± 3.16)	3/7	1/10 (14.28)	0	0
Enthesitis-Related Arthritis	9,5 (± 5.19)	0/4	0	0	1/4 (25)
Undifferentiated arthritis	1	1/0	0	1 (100)	0

JIA: Juvenile Idiopathic Arthritis, ANA: antinuclear antibody, RF: rheumatoid factor, HLA: human leukocyte antigen.

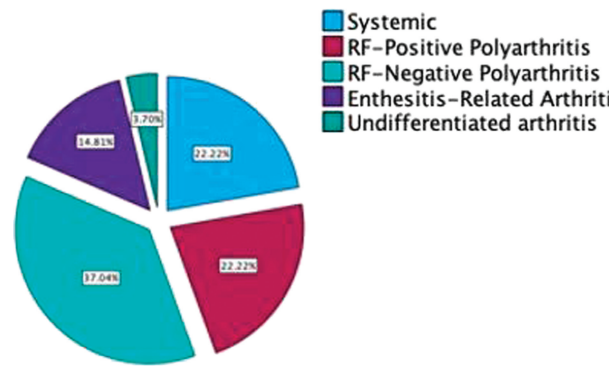

FIGURE 1.

The age range at diagnosis was from 2 to 13 years, with an average age of 7.7 ± 3.95 years. The incidence was 6.32 per 100,000 inhabitants per year (CI 6.29 - 6.35) and the prevalence was 17.8 per 100,000 inhabitants (CI 7.11 - 18.19).

The most frequent form of JIA was polyarticular rheumatoid factor negative with 37% (n = 10) as shown in graph 1. Clinical characteristics of each form of JIA are detailed below, as shown in table 1.

Conclusion: The results of the study indicate that the incidence and prevalence rates of JIA in the BOPH are comparable to the data published worldwide. The most common form of JIA is polyarticular rheumatoid factor negative. This is the first epidemiological study carried out in Ecuador.

Reference 1: Thierry S, Fautrel B, Lemelle I, Guillemin F. Prevalence and incidence of juvenile idiopathic arthritis: a systematic review. Joint Bone Spine. 2014 Mar;81(2):112-7. doi: 10.1016/j.jbspin.2013.09.003.

Reference 2: Martini, A., Lovell, D.J., Albani, S. *et al.* Juvenile idiopathic arthritis. *Nat Rev Dis Primers* **8**, 5 (2022). https://doi.org/10.1038/s41572-021-00332-8

Disclosure of Interest: None declared

Keywords: Epidemiology, ILAR criteria, Juvenile idiopathic arthritis

PANLAR2023-1537

ADVERSE EFFECTS OF VACCINES AGAINST COVID-19 IN ADOLESCENT PATIENTS WITH CHRONIC INFLAMMATORY IMMUNE DISEASES IN MANAUS - AMAZON

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Objectives: In the Chronic Inflammatory Immune-mediated Diseases (CIMD), infections mainly occur in the respiratory tract and their occurrence is related to drug-induced immunosuppression, underlying diseases and comorbidities. To reduce this morbidity and mortality, vaccination is an effective means of prevention. However, the available studies on SARS-CoV-2 vaccines have not addressed this group of patients with CIMD, and there are still many doubts regarding the indications, adverse effects, safety and efficacy of these vaccines. Objective: to evaluate the adverse effects of vaccines against SARS-CoV-2 in adolescent patients with CIMD.

Methods: Research associated to the SAFER Project from Brazilian Society of Rheumatology. It is an observational, longitudinal, ambidirectional study, with follow-up of groups of vaccinated adolescent patients with CIMD, vaccine by Pfizer/BioNTech. Sociodemographic data were collected, stored on an online platform, and adverse events were presented by filling in diaries issued for each patient. This study was approved by the local Research Ethics Committee.

Results: We included 19 adolescents, aged between 12 to 17 years, who met the inclusion and exclusion criteria. The mean age was 14.63 ± 2.01 years. Of these, 68.4% were female. In relation to CIMD, 31.6% have Juvenile Idiopathic Arthritis and 68.4% have Systemic Lupus Erythematosus. All were vaccinated with the Pfizer vaccine. In the 1st dose, the main adverse effects presented were Pain at the injection site (85.7%), Headache (42.9%), Tiredness (33.3%) and Edema and skin induration at the injection site (26, 7%). After the 2nd dose, the only adverse effect reported was Pain at the injection site (57.1%), with no other complaints.

Conclusion: The adverse effects reported are of mild to moderate reactogenicity; no serious adverse events were reported.

Disclosure of Interest: None declared

Keywords: Adverse events, COVID vaccine, Pediatric rheumatology

Rheumatoid arthritis

PANLAR2023-1394

MAJOR ADVERSE CARDIOVASCULAR EVENTS (MACE) AND VENOUS THROMBOEMBOLISM (VTE) ACROSS UPADACITINIB CLINICAL TRIAL PROGRAMS IN RHEUMATOID ARTHRITIS, PSORIATIC ARTHRITIS, AND ANKYLOSING SPONDYLITIS

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Objectives: Patients with untreated immune-mediated inflammatory diseases have increased risk for major adverse cardiovascular events (MACE) and venous thromboembolic events (VTE). We describe events and risk factors for MACE and VTE in the RA, PsA, and AS of upadacitinib (UPA) clinical trial programs.

Methods: Treatment-emergent adverse events (TEAEs) of MACE (cardiovascular [CV] death; non-fatal myocardial infarction; non-fatal stroke) and VTE (pulmonary embolism [PE]; deep vein thrombosis) from 9 (6 RA; 2 PsA; 1 AS) randomized, controlled trials were summarized for UPA 15 mg (approved rheumatology dose), UPA 30 mg (UPA30), adalimumab (ADA) 40 mg, and MTX. TEAEs were blindly adjudicated by an independent CV adjudication committee. Patients were not censored at the time of event; data are presented as exposure adjusted event rates (EAERs) in events per 100 patient-years (E/100 PY), with cutoff date of 30 June 2021. Kaplan-Meier analyzed time-to-event, and EAERs were evaluated over 6-month increments. Cox-regression univariable analyses assessed the relationship between potential risk factors and MACE/VTE occurrence on UPA.

Results: Across trials, 4298, 2125, 1008, and 314 patients received ≥1 dose of UPA15, UPA30, ADA 40 mg, and MTX, respectively. At baseline, 40%–50% had ≥2 CV risk factors (% ≥65 years, 6–23%). EAERs of MACE and VTE in RA and PsA are presented in **Figure 1**, with 0 MACE and 1 VTE (PE) reported in AS. Of the 41 MACE reported with UPA15 across RA and PsA, only 2 RA patients did not have ≥1 CV risk factors at baseline. There were 2 fatal VTEs across trials, both on UPA15 in RA. Overlapping confidence intervals were observed across UPA doses and comparators for MACE and VTE in RA and PsA. There was no pattern of time-to-event of EAERs by 6-month intervals over 42 months observed on UPA. Factors potentially associated with MACE (Figure 2) or VTE (data not shown in abstract) occurrence in RA pts receiving UPA15 included age ≥ 65y, baseline hypertension, diabetes mellitus, smoking, history of CV event or VTE, and use of aspirin, statins, or antithrombotics. In PsA, aspirin use was associated with increased risk of MACE.

Conclusion: Rates of adjudicated MACE and VTE with UPA were infrequent and consistent with background rates in RA, PsA, and AS populations. The pt characteristics found to be associated with MACE and VTE are known risk factors for these events. Continued follow-up is ongoing to further contextualize the risk of MACE and VTE in UPA clinical trials.

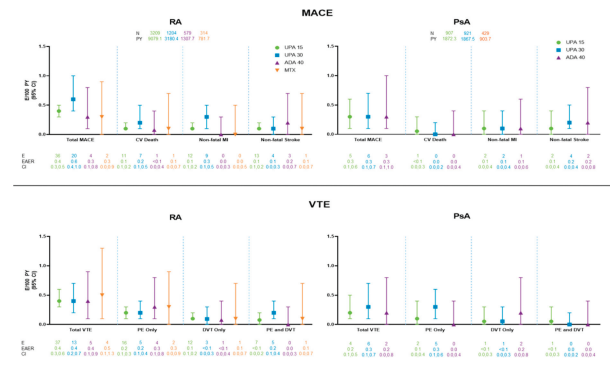

FIGURE 1.

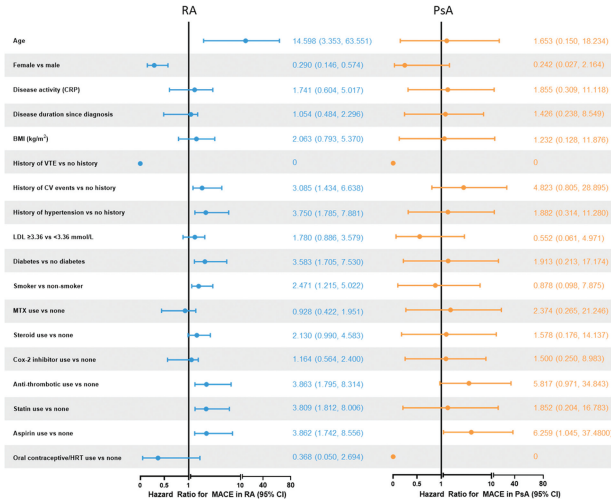

FIGURE 2.

Disclosure of Interest: E. Mysler Grant / Research support with: AbbVie, Amgen, Astra Zeneca, Eli Lilly, BMS, Janssen, Novartis, Pfizer, Sanofi, Sandoz, and Roche, Speakers Bureau with: AbbVie, Amgen, Astra Zeneca, Eli Lilly, BMS, Janssen, Novartis, Pfizer, Sanofi, Sandoz, and Roche, C. Charles-Schoeman Grant / Research support with: Pfizer, BMS, and AbbVie, Consultant with: Pfizer, Gilead, Abbvie, Regeneron- Sanofi, E. Choy Grant / Research support with: AbbVie, Amgen, Bio-Cancer, Biocon, Biogen, Bristol Myers Squibb, Celgene, Chugai Pharma, Eli Lilly, Galapagos, Gilead, Inmedix, Janssen, Merck Serono, Novimmune, Novartis, ObsEva, Pfizer, Regeneron, Roche, R-Pharm, Sanofi, SynAct Pharma, and UCB, Speakers Bureau with: AbbVie, Amgen, Bio-Cancer, Biocon, Biogen, Bristol Myers Squibb, Celgene, Chugai Pharma, Eli Lilly, Galapagos, Gilead, Inmedix, Janssen, Merck Serono, Novimmune, Novartis, ObsEva, Pfizer, Regeneron, Roche, R-Pharm, Sanofi, SynAct Pharma, and UCB, I. McInnes Grant / Research support with: from AbbVie, AstraZeneca, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, EveloBio, Janssen, LEO, Lilly, Novartis, Pfizer, and UCB., Consultant with: from AbbVie, AstraZeneca, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, EveloBio, Janssen, LEO, Lilly, Novartis, Pfizer, and UCB, P. Nash Grant / Research support with: AbbVie, Bristol-Myers Squibb, Celgene, Eli Lilly, Gilead, and Janssen., Consultant with: AbbVie, Bristol-Myers Squibb, Celgene, Eli Lilly, Gilead, and Janssen, Speakers Bureau with: AbbVie, Bristol-Myers Squibb, Celgene, Eli Lilly, Gilead, and Janssen, K. Yamaoka Speakers Bureau with: AbbVie GK, Astellas, BMS, Chugai, Mitsubishi-Tanabe, Pfizer, and Takeda, R. Lippe Employee with: AbbVie, N. Khan Employee with: AbbVie, A. Shmagel Employee with: AbbVie, H. Palac Employee with: AbbVie, J. Suboticki Employee with: AbbVie, J. Curtis Grant / Research support with: AbbVie, Amgen, ArthritisPower, Aqtual, Bendcare, BMS, CorEvitas, FASTER, GSK, IlluminationHealth, Janssen, Labcorp, Lilly, Myriad, Novartis, Pfizer, Sanofi, Scipher, Setpoint, UCB, and United Rheumatology, Consultant with: AbbVie, Amgen, ArthritisPower, Aqtual, Bendcare, BMS, CorEvitas, FASTER, GSK, IlluminationHealth, Janssen, Labcorp, Lilly, Myriad, Novartis, Pfizer, Sanofi, Scipher, Setpoint, UCB, and United Rheumatology.

Keywords: None

PANLAR2023-1425

EFFECTIVENESS OF THE IMPLEMENTATION OF AN INTRA-INSTITUTIONAL PHARMACY SERVICE IN RHEUMATOID ARTHRITIS ACTIVITY, IN A SPECIALIZED RHEUMATOLOGY CENTER, COLOMBIA.

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Objectives: In the care of Rheumatoid arthritis (RA) in Colombia we find barriers that limit access to the timely delivery of medicines, so it is necessary to evaluate the effect on RA activity of the immediate delivery of medications, after medical encounters, at the same institution

Methods: Observational-analytical, historical, follow-up study of a cohort of adult patients with RA treated between 2017 and 2018 with follow-up from June 2019 to June 2020 (after implementation of the pharmacy service); the diagnosis of RA was based on the 2010 ACR/EULAR classification. Univariate analyses were performed to describe the characteristics of the population. Bivariate analyses were performed using Chi-square, considering statistical significance $p < 0.05$. A binary logistic regression model to establish the association of the implementation of the pharmacy service with the dependent variable of disease remission (DAS28(ESR) <2.6) was done.

Results: 302 patients were analyzed. Female sex (78.8%); median age at diagnosis of 44.6 years (IQR = 18.3), 77.0% with seropositive RA. Duration of follow up 8.1 years (IQR = 10.5).The factors associated with the presence of clinical manifestations are described in Table 1. When performing the multivariate analysis, a negative association was found with the use of biological therapy (OR 0.5 (95% CI 0.2 to 0.9) $p < 0.001$) and corticosteroid therapy (OR 0.5 (95% CI 0.3 to 0.7) $p < 0.001$), in addition, a positive association with implementation of a pharmacy service (OR 1.9 (95% CI 1.3 to 3.8) $p = 0.015$) and the presence of remission of RA measured by DAS28(ESR) <2.6

TABLE 1. Therapeutic characteristics and activity, before and after implementation of the intra-institutional pharmacy service (n: 302)

Pharmacy service	Before		After		
	n	%	n	%	*p* value
NSAID therapy	2	0.7	4	1.3	0,163
Corticosteroids therapy	236	78.1	133	44.0	0,032
DMARD therapy	293	97.0	297	98.3	0,487
Biological therapy	23	7.6	44	14.6	<0,001
Adherence to therapy <80%	93	30.8	54	17.9	<0,001
DAS28 (ESR)					
< 2,6	153	50.7	217	71.9	<0,001
> 3,2	113	37.7	51	16.9	

NSAID: Non-steroidal anti-inflammatory drugs; DAS28: Disease Activity Score 28-joint counts; DMARD: Disease-modifying antirheumatic drugs; ESR : erythrocyte sedimentation rate

Conclusion: The implementation of a pharmacy service that delivers medications immediately after specialized medical care, without the need for the patient to travel, is associated with remission of RA disease activity and possibly associated with better adherence by lowering the barriers to access the current health system.

Disclosure of Interest: None declared

Keywords: Disease activity, Adherence, Rheumatoid arthritis

PANLAR2023-1097

PREDICTORS OF SERIOUS INFECTIONS IN RHEUMATOID ARTHRITIS – A LONGITUDINAL BRAZILIAN COHORT

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Objectives: This study aims to evaluate the incidence and factors related to the occurrence of serious infections, defined as the need for hospitalization or the use of intravenous antibiotics among patients with rheumatoid arthritis (RA) in Brazil.

Methods: We analyzed data from the REAL, a longitudinal observational study, that evaluated Brazilian RA patients, with clinical and laboratory data collected over a year in eleven tertiary health care centers. Patients18 years of age or older, who fulfilled classification criteria for RA and who were previously followed up in rheumatology services for at least 6 months prior to inclusion were included. Exclusion criteria was the absence of information regarding the occurrence of infections in two or more visits. Univariate and multivariate models using *Generalized Estimating Equations* (GEE) were performed with the primary outcome being the occurrence of a serious infection.

Results: 841 patients were included with an average follow-up time of 11,2 months (SD 2,4). Eighty-nine serious infections occurred, corresponding to 13 infections per

100 patient-years. Pulmonary fibrosis, chronic kidney disease (CKD) and central nervous system disease increased the probabilities of serious infection by 3.2 times (95% CI: 1.5 to 6.9), 3.6 times (95% CI: 1.2 to 10.4) and 2.4 times (95% CI: 1.2 to 5.0), respectively. The use of corticosteroids in moderate doses increased the probability by 5.4 times (95% CI: 2.3 to 12.4), and for each increase of 1 unit in the health assessment questionnaire (HAQ), the probability of a serious infection increased 60% (95% CI: 20 to 120%) - table 1.

TABLE 1. - Multivariable analysis

	Coef.	*p* value	OR	95% CI
Time (Visit)	0,81	<0,001	2,2	(1,8-2,8)
Pulmonary fibrosis	1,17	0,003	3,2	(1,5-6,9)
Chronic kidney disease	1,27	0,02	3,6	(1,2-10,4)
CNS Disease	0,89	0,015	2,4	(1,2-5,0)
Prednisone (or equivalent) dose (≥ 15 mg)	1,68	<0,001	5,4	(2,3-12,4)
HAQ	0,46	0,005	1,6	(1,2-2,2)

Legend: Coef - coefficients. OR - Odds Ratio. 95%CI - 95% confidence interval. CNS - Central nervoussystem. HAQ - health assessment questionnaire

Conclusion: We observed a high incidence rate of serious infections in this Brazilian cohort compared with cohorts from developed countries. The factors that were independently associated with them were neurological and pulmonary comorbidities, reduced kidney function, use of corticosteroids in moderate doses and reduced functional capacity. These findings may affect therapeutic decisions in RA patients.

Disclosure of Interest: A. L. Bagno De Almeida: None Declared, M. F. B. Resende Guimarães Speakers Bureau with: personal fees and/or nonfinancial support from AbbVie, Bristol-Myers-Squibb, Janssen, Novartis, Pfizer, Roche and UCB., L. M. Henrique da Mota Grant / Research support with: AbbVie, Janssen, Pfizer and Roche, Speakers Bureau with: AbbVie, Boehringer Ingelheim, GSK, Janssen, Libbs, Lilly, Novartis, Pfizer, Roche, Sandoz, and UCB., G. da Rocha Castelar-Pinheiro: None Declared

Keywords: Real word, Rheumatoid arthritis, Serious infection

PANLAR2023-1076

RELATIONSHIP BETWEEN THYROID DISEASE AND RHEUMATOID ARTHRITIS, COHORT STUDY FROM A SOUTH AMERICAN HOSPITAL.

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Objectives: Hypothyroidism is a systemic, chronic disease characterized by decreased production of thyroid hormones. In many cases, the immunological disorder is part of the etiopathogenic mechanism of the disease. It is often associated with other autoimmune diseases, such as rheumatoid arthritis (RA), thus generating a complex symptom process in which both conditions can coexist, resulting in significant degrees of functional disability and a decreased perception of health-related quality of life. Objectives: Describe the relationship between thyroid diseases and rheumatoid arthritis.

Methods: Descriptive study in 265 patients with RA according to the criteria of the American College of Rheumatology to describe the relationship between this disease and thyroid gland disorders. Pearson's correlation coefficient was used to determine the relationship between both conditions.

Results: Average age foir the entire group was 58.39 years and for those patients with hypothyroidism it was 66.32 years. Predominance of female patients (76.98%) and with disease duration between 3 and 5 years. 29.81% of the cases presented a confirmed diagnosis of hypothyroidism, which occurred predominantly in female patients (86.08%), older than 65 years (49.37%), and with RA disease duration longer than five years (53.16%).

Conclusion: There is a high percentage of patients with hypothyroidism and RA; Although both conditions share common immunological mechanisms, no direct relationship between the two could be found; Thus, a cause-and-effect relationship cannot be established between these two conditions.

Disclosure of Interest: None declared

Keywords: Epidemiology, Rheumatic diseases, Rheumatoid arthritis

PANLAR2023-1290

JAK INHIBITORS VS BIOLOGICS FOR RHEUMATOID ARTHRITIS: PRELIMINARY RESULTS FROM A BRAZILIAN OBSERVATIONAL REAL-WORLD COHORT

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Objectives: JAK inhibitors (JAKi) and biologics (bDMARD) are recommended as second-line therapy for Rheumatoid Arthritis (RA), with proven efficacy and safety in trials, while comparisons in real-world populations are scarce. This study aims to compare efficacy and safety of JAKi vs bDMARD in a real-world RA cohort in Brazil.

Methods: A preliminary analysis of 69 patients (34 JAKi and 35 bDMARD) enrolled in an ongoing Brazilian observational cohort was performed. Descriptive and comparative analysis from baseline appointment and at 3, 6, 12, 18 and 24 months follow-up are presented.

Results: Mean age (SD) was 57.1 (±12.0) and RA duration 15.2 (±9.4) years. Most patients (88%) were female, with positive rheumatoid factor (88%) and/or anti-citrullinated protein antibodies (71%). Extra-articular disease or rheumatoid nodules occurred in 14.5%, and 71% presented erosions on hand radiographies. They had failed 4 (2-9) previous treatment regimens. Most patients (88%) used combination therapy with leflunomide, methotrexate or sulfasalazine. The mean Charlson comorbidity index was 1.65 (±0.90). Both groups were similar in these characteristics. JAKi presented increased number of previous treatments [4 (2-9) vs 3 (2-7); p = 0.02]. The 24 months follow-up suggested similar efficacy for JAKi and bDMARD (table). About 30% of the patients had adverse events, similar in both groups (mainly non-serious infections, thrombotic events and zoster; the last two with JAKi). Despite a slightly higher number of adverse events in JAKi (37% vs 23.5%, p = 0.22), most were non-serious. One third of the patients discontinued treatment, with a higher number in JAKi (15 vs 8, p = 0.09), mainly due to failure (60%).

TABLE:.

	JAKI vs bDMARD	
	DAS28	CDAI
Baseline (n = 69)	4.53 ± 1.34 vs 4.61 ± 0.88, p = 0.77	22.4 ± 12.12 vs 22.35 ± 10.62, p = 0.91
3 months (n = 65)	3.73 ± 1.14 vs 3.25 ± 0.86, p = 0.08	13.87 ± 9.75 vs 10.65 ± 7.5, p = 0.25
6 months (n = 61)	3.36 ± 1.06 vs 2.93 ± 0.93, p = 0.12	10.27 ± 7.26 vs 7.71 ± 5.9, p = 0.18
12 months (n = 53)	3.47 ± 1.25 vs 2.78 ± 0.96, p = 0.04	12.67 ± 9.21 vs 9.96 ± 7.96, p = 0.24
18 months (n = 39)	3.44 ± 0.67 vs 2.80 ± 1.25, p = 0.09	13.66 ± 5.39 vs 10.12 ± 9.9, p = 0.06
24 months (n = 31)	3.60 ± 1.16 vs 3.12 ± 1.16, p = 0.32	14 ± 8.16 vs 8.35 ± 7.11, p = 0.09

Conclusion: In this real-world cohort, evaluating long-standing and multi-failed RA patients, JAKi and bDMARD had similar efficacy and safety up to 24 months. Treatment failure leading to discontinuation was more frequent in JAKi, probably because of these patients higher number of previous failures. Limitations of the study include small sample and data loss at follow-up. The ongoing recruitment will allow further analysis.

Disclosure of Interest: L. M. Carvalho De Oliveira: None Declared, M. F. Brandão de Resende Guimarães Grant / Research support with: Financiamento pela Sociedade Mineira de Reumatologia (SMR), M. R. da Costa Pinto: None Declared, D. Cerqueira Calderaro: None Declared

Keywords: Biological therapies, JAK inhibitor, Rheumatoid arthritis

PANLAR2023-1120

PATIENTS WITH ESTABLISHED RHEUMATOID ARTHRITIS APPEAR TO HAVE IMPAIRED QUADRICEPS MUSCLE MORPHOLOGY WHEN ASSESSED BY ULTRASOUND AND MUSCLE STRENGTH IS IMPAIRED OVER TIME: A COHORT STUDY

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Objectives: Rheumatoid arthritis (RA) patients usually present extra-articular manifestations, which affect muscle strength, muscle mass and physical function.

Among the various methods for assessing muscle mass, muscle ultrasound (MU) has been suggested as an alternative for assessing muscle morphology. Therefore, our objectives are to assess the MU of the quadriceps muscle (QM) and verify changes in muscle thickness and pennation angle, as well as changes in clinical features, muscle strength, and physical function over time (1-year) in RA patients.

Methods: RA patients, age ≥ 18 years and who met 2010 ACR criteria were included. Morphological parameters in QM consisted of the muscle thickness and pennation angle of rectus femoris (RF), vastus intermedius (VI) and vastus lateralis (VL). RA activity was measured by 28-joint disease activity score (DAS28) assessed by the C-reactive protein (CRP), muscle strength by handgrip, and physical function by the Health Assessment Questionnaire (HAQ) and timed-up-and-go (TUG) test.

Results: At baseline, 155 patients with a median age of 60.00 (52.00-65.00) years, disease duration of 11.00 (6.00-20.00) years and a DAS28-CRP of 2.77 (2.02-3.76) were included. Up to the present time, twenty-two patients have completed the 1-year follow-up. Among these patients, there was a decrease in the VL (-11%) and VI (-13%) pennation angles of QM and decrease in muscle strength (-36%) after 1-year. No changes were observed in muscle thickness, RF pennation angle, DAS28-CRP, HAQ, and TUG test over time ($p > 0.05$).

TABLE. Changes after 1-year in quadriceps morphological parameters, clinical features, muscle strength, and physical function in RA patients.

	Δ,[n]	*p* value
Muscle thickness(cm)		
RF	-0.07(-0.22–0.13),[22]	0.485
VI	-0.02(-0.06–0.01),[22]	0.115
VL	-0.02(-0.23–0.08),[22]	0.230
Pennation angle(°)		
RF	0.03(-1.79–0.51),[22]	0.338
VI	-0.59(-1.22–0.07),[22]	0.013*
VL	-1.23(-2.37– -0.03),[22]	0.003*
Handgrip test(kg)	-2.50(-11.25–2.25),[22]	0.049*
DAS28-CRP	-0.31(-1.76–0.31),[22]	0.088
HAQ(score)	0.12(-0.44–0.44),[13]	0.944
TUG(s)	-0.49(-1.15–0.92),[18]	0.514

Abbreviation: Δ, Delta (1 year - at baseline); cm, centimeters; °, degrees; kg, kilograms; s, seconds. *$p < 0.05$.

Conclusion: These preliminary observations indicate that established RA patients have impaired muscle quality (pennation angles) and impaired muscle strength over time. However, it is necessary to complete the remainder of the reassessments to confirm these findings;verifying the associations with clinical parameters is also necessary.

Disclosure of Interest: None declared

Keywords: Muscle mass, Rheumatoid arthritis, Ultrasound

PANLAR2023-1423

RELATIONSHIP BETWEEN BODY COMPOSITION AND NUMBER OF DMARDS USED IN RHEUMATOID ARTHRITIS AND SYSTEMIC LUPUS ERYTHEMATOSUS

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Objectives: To describe the body composition of patients with rheumatoid arthtritis (RA) and systemic lupus erythematosus (SLE) and its association with the number of DMARDs used.

Methods: A cross-sectional and descriptive study was conducted in the rheumatology service of Hospital Universitario Dr José Eleuterio González. Patients with RA or SLE diagnoses were included. Body composition was assessed with InnerScan TANITA BC-533 monitor (Yesod, Japan) which uses bioelectrical impedance analysis.

Results: We included 323 patients, 248 (79.1%) with RA and 75 (20.89%) with SLE. Mean age were 51.79 (±12.7) and 42 (±14.8), respectively. In the RA group a BMI <25 kg/m^2 was found in 25.8% and > 25 kg/m^2 in 73.8%, high total fat in 59.7%, low muscle mass in 85.5% and abdominal obesity in 65.7%. Anthropometric evaluation and therapeutic regimens are shown in table 1. We found a relationship between the 2 DMARD combined regimen with being obese type 2 ($p = 0.02$) and prednisone use with type 3 obesity ($p = 0.005$). In SLE group BMI <25 kg/m^2 was found in 24% and > 25 kg/m^2 in 76%, high total fat in 60%, low muscle mass in 81.3% and abdominal obesity in 68%. Being obese type 3 and having high visceral fat was related with the use of 3 combined DMARDs ($p = <0.001$); and having an older metabolic age with intramuscular steroid use ($p = 0.012$)

TABLE.

	RA N = 248/100%	SLE N = 75/100%
BMI	29.03 (±6.6)	29.02 (±7.3)
Waist-Hip Ratio	0.86 (±0.11)	0.86 (±0.12)
Low BMI	8 (3.2)	6 (8.0)
Overweight	85 (34.3)	29 (38.7)
Obesity type 1	56 (22.6)	12 (16.0)
Obesity type 2	28 (11.3)	10 (13.3)
Obesity type 3	14 (5.6)	6 (8.0)
% Fat	36.1 (±8.9)	34.8 (±11.9)
% WATER	44.5 (±5.9)	46.1 (±8.2)
Kg Muscle	41.9 (7.5)	43.2 (±6.9)
Metabolic age	43.52 (±11.0)	40.62 (±14.0)
High total fat	148 (59.7)	45 (60.0)
High visceral fat	40 (16.1)	12 (16)
Low muscle mass	212 (85.5)	61 (81.3)
Low body water	155 (62.5)	46 (61.3)
Sarcopenic obesity	148 (59.7)	45 (60.0)
Treatment regimens		
	n = 233/100%	n = 70/100%
1 DMARD	117 (47.2)	22 (29.3)
2 DMARDs	78 (31.5)	38 (50.7)
3 DMARDs	27 (10.9)	7 (9.3)
Prednisone	132 (53.2)	43 (57.3)
Intramuscular steroids	42 (16.9)	7 (9.3)

Conclusion: Sixty percent of our population had sarcopenic obesity and more than 80% had low muscle mass. These parameters increase with disease activity and the number of drugs required for control.

Disclosure of Interest: None declared

Keywords: Body composition, Rheumatoid srthritis, Systemic lupus erythematosus

PANLAR2023-1456

HAND FUNCTION IN RHEUMATOID ARTHRITIS

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Objectives: To evaluate hand function in rheumatoid arthritis (RA).

Methods: We have evaluated patients with Rheumatoid arthritis regarding gender, age, race, income, disease duration, clinical disease activity score (CDAI), rheumatoid factor (RF), Anti-cyclic citrullinated peptides (anti-CCP), Hand function (Cochin hand Function Scale - CHFS), hand pain (visual analogue scale - VAS-pain), grip strength (mmHg - dynamometer), disability (Health Assessment Questionnaire - HAQ), quality of life (12-Item Short Form Health Survey- SF-12), hand deformities (Rheumatod Arhtirtis Articular Damage score - RAAD), presence of Carpal Tunnel syndrome (CTS), trigger finger, Dupuytrein contracture and hand sensitivity impairment (Semmes-Weinstein monofilaments).

Results: 52 patients were evaluated. Table shows variables values and their relation wih CHFS (p values). Reduced CHFS was related with increased hand pain ($p = 0.036$), CTS ($p = 0.016$), sensitivity loss ($p = 0.012$), reduced hand grip strength ($p < 0.001$), impaired on the mental ($p = 0.0454$) and physical health ($p = 0.0006$) components of the SF-12, HAQ ($p < 0.001$) and CDAI ($p = 0.0007$).

Conclusion: Hand function (CHFS) in RA was mainly related with increased hand pain, with the presence of CTS, hand sensitivity impairment, reduced handgrip strength, disease activity, impaired quality of life and disability. Hand function was not related to age, income, disease duration, hand deformities (RAAD) and the presence of trigger finger. These are preliminary results. The small number of subjects in this study does not allow extrapolating these conclusions to the general population.

Disclosure of Interest: None declared

Keywords: Disability, Function, Rheumatoid arthritis

TABLE:. Relation between hand function (CHFS) and clinical and sociodemographic variables.

Variable	Value	*p value*
CHFS*	14.40 (±19.26)	-
Age*	57.06 years (±9,30;39-82)	0.4694[1]
Income*	1,417.71 R$ (±620.72; 400-3,200)	0.7029[1]
Disease duration*	16.90 years (±11,74)	0.7871[1]
Women**	48 (92.31%)	0.4292[2]
Race - white**	32 (61.54%)	0.7065[2]
Pain-VAS*	4.81 (±3.14)	0.0036[1]
Rheumatoid Arthritis Articular Damage score*	10.58 (±16.18)	0.9242[1]
Positive RF*	40 (76.92%)	0.1641[2]
Anti-CCP-positive*	34 (69.39%)	0.1312[2]
CTS**	15 (28.85%)	0.0016[2]
Trigger finger**	12 (23.08%)	0.8279[2]
Dupuytren disease**	2 (3.85%)	0.3172[2]
Sensitivity loss**	32 (61.54%)	0.0012[2]
Handgrip strength*	14.40 (±7.49)	<0.001[1]
SF12 - physical health*	9.17 (±1.38)	0.0006[1]
SF12 - mental health*	20.48 (±2.39)	0.0454[1]
HAQ*	1.19 (±0.68)	<0.001[1]
CDAI*	16.08 (±9.83)	0.0007[1]

*Mean (standard deviation), **number (%), [1]Spearman Correlation, [2]Mann-Whitney Test

PANLAR2023-1251

INCIDENCE OF HEPATOTOXICITY IN PATIENTS WITH RHEUMATOID ARTHRITIS TREATED WITH METHOTREXATE AND LEFLUNOMIDE

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Objectives: To evaluate the incidence of hepatotoxicity in patients with rheumatoid arthritis (RA) treated with methotrexate (MTX), leflunomide (LFN) or the combination of both, in a real-world clinical setting.

Methods: Observational, historical, descriptive and analytical study. Inclusion criteria: Patients >18 years of age, diagnosed with RA, evaluated between 2016 and 2022, under MTX, LFN or MTX plus LFN for at least one month. Patients with previous liver disease were excluded. Transaminases, bilirubin and alkaline phosphatase were analyzed. Transaminases above twice the upper limit of normality were considered hepatotoxicity.

Results: 118 patients were included, 88.1% female, age (±SD) 51.5 ± 11.6 years, 87.2% had seropositive RA. 115 patients received MTX at some point during the course of their disease, 75.0 ± 68.3 months. The average dose of MTX was 18.2 ± 3.6 mg/week. 53 patients received LFN for a period of 32.4 ± 25.4 months. The median LFN dose was 20 mg/day. 104 patients received MTX monotherapy, 12 patients received LFN monotherapy and 45 patients received combined treatment with MTX and LFN during their follow-up, with an estimated exposure time of 109.0 patient-years.

Hepatotoxicity was found in 14 patients, 7 received combined MTX-LFN, 6 MTX alone, and 1 LFN alone. As a concomitant medication, 10 patients received prednisone (5 mg/day), 6 received paracetamol, and 8 NSAIDs. Three patients had elevated transaminases greater than 5 times the normal limit; 6 between 3 and 5 times and 5 between 2 and 3 times. Four patients presented cholestasis. 71% of the patients decreased the dose or stopped it and after that, all of them improved or normalized their liver enzymes. The estimated incidence of hepatotoxicity in patients with MTX monotherapy was 0.96 per 100 patient-years (95%CI 0.35-2.19), in LFN monotherapy was 2.69 (95% CI 0.07-14.98) and in combined treatment, the estimated incidence was 6.42 per 100 patient-years (95% CI 2.58-13.23). A significant increase in the incidence of hepatotoxicity was observed in patients on the MTX-LFN combination compared to those on MTX monotherapy (IRR 6.65 [95%CI 1.92-23.99], p < 0.01).

Conclusion: MTX is the first step in the treatment of RA. When the therapeutic goal of remission is not achieved, LFN can be added. Although the incidence of hepatotoxicity associated with MTX treatment is relatively low, the combination with LFN can increase the risk of such adverse event.

Disclosure of Interest: None declared

Keywords: DMARDs, Hepatotoxicity, Rheumatoid arthritis

PANLAR2023-1261

ASSOCIATION OF LEFT VENTRICULAR GEOMETRY AND LOW DOSE PREDNISONE USE IN RHEUMATOID ARTHRITIS PATIENTS

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Objectives: To evaluate the association between the doses of prednisone (PDN) and left ventricle (LV) geometry in RA patients.

Methods: Observational, cross-sectional study. Patients aged 40 to 75 who met the 2010 ACR/EULAR Classification Criteria for Rheumatoid Arthritis were included. Patients with a history of cardiovascular disease were excluded. Patients were divided into 2 groups if receiving ≤5 or > 5 mg of PDN daily. Transthoracic echocardiography was performed by one certified echocardiographer blinded to clinical information. LV geometry was assessed by relative wall thickness (RWT) and indexed LV mass. The distribution between groups was evaluated with the Kolmogorov-Smirnov test. The correlation between the use of low doses of prednisone and left ventricle geometry parameters was assessed by Spearman's correlation coefficient. A value of $p \leq 0.05$ was considered statistically significant.

Results: A total of 63 patients were included. The mean age of RA patients was 54.8 ± 9.0, mostly women (96.8%), with a prevalence of dyslipidemia (30.2%) and obesity (30.2%). There was no correlation between the dose of PDN (high or low) and LV geometry (Figure 1).

Figure 1. Correlation between the use of doses of PDN and left ventricular geometry in RA patients.

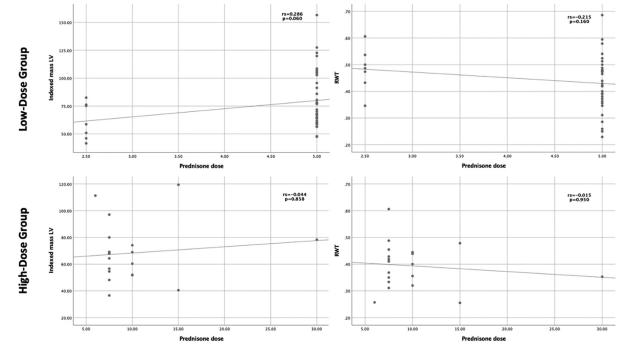

FIGURE 1.

Conclusion: There was no difference between the use of low-dose and high-doses of PDN and left ventricle geometry parameters.

Disclosure of Interest: None declared

Keywords: Corticosteroids, Heart, Rheumatoid arthritis

PANLAR2023-1317

FREQUENCY OF STATIN USE IN A COHORT OF PATIENTS WITH RHEUMATOID ARTHRITIS.

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Objectives: The aim of this study was to describe statin use frequency in a cohort of RA patients and its association with sociodemographic characteristics, comorbidities, lipid profile, and RA features.

Methods: Multi-center, observational, descriptive, cross-sectional, and analytical study. Patients ≥18 years with RA diagnosis were included. Sociodemographic data, habits, comorbidities and RA characteristics were recorded. BMI, blood pressure and lipid profile at last visit were also collected. In statin-using patients, prescribing date, treatment duration, adherence and concomitant hypolipemic treatments were registered. Statistical analysis were performed.

Results: A total of 138 patients from 8 centers were included. Patient characteristics and RA data are shown in **Tables 1** and **2**. Mean total cholesterol was 200 ± 36 mg/dl, LDL 118 ± 31 mg/dl, HDL 56 ± 1 mg/dl, non-HDL 143 ± 36 mg/dl and triglycerides 126 ± 55 mg/dl. Statin use frequency was 25% (n = 35); median duration of treatment was 12 months (IQR 5-36). Almost 40% patients were non-adherent to statin therapy. Statin use was associated with previous smoking ($p = 0.034$), comorbidities ($p = 0.013$), adherence to hygienic-dietary measures ($p < 0.001$), high levels of LDL ($p = 0.04$) and non-HDL ($p < 0.001$). Longer time of statins use was related to less erosive disease ($p = 0.04$) and this association was stronger among adherent patients ($p < 0.009$). Logisticc regression analysis adjusted for DMARs use were performed, showing that statins reduce the odds ratio of erosions by 29% per year (OR0.7 CI95 0.48-0.90 p = 0.041).

TABLE 1. General patient characteristics (N = 138)

Age in years, mean (SD)	**58 (12)**
Women, n (%)	**119 (86)**
Years of education, mean (SD)	**9 (4)**
Smoking, n (%)	**95 (65)**
Comorbidities, n (%)	**95 (65)**
Type of comorbidity, % (N = 95)	
- High blood pressure	**61**
- Hypotiroidism	**39**
- Dyslipidemia	**30**
- Hepatic steatosis	**23**
- Diabetes	**14**
BMI, mean (SD)	**27 (5)**

Standard deviation; **COPD** = Chronic obstructive pulmonary disease; BMI = Body mass index.

TABLE 2. Characteristics of RA (N = 138)

Disease duration (month), median (IQR)	**120 (66-180)**
Erosive disease, n (%)	**98 (71.5)**
RF, n (%)	**122 (88.0)**
ACPA, n (%)	**109 (79.0)**
Extra articular manifestations, n (%)	**51 (37.0)**
DAS28, median (IQR)	**3.1 (2.5-4.3)**
HAQ-A, median (IQR)	**0.1 (0.5-1.5)**
Treatment, n (%)	
- csDMARDs	**112 (81.0)**
- tsDMARDs	**25 (18.0)**
- bDMARDs	**39 (25.0)**

Standard deviation; **IQR** = Interquartile range; **RF** = Rheumatoid factor; **ACPA** = Anti-citrullinated protein/peptide antibodies; **DAS28** = Disease Activity Score-28; **csDMARDs** = Conventional synthetic disease-modifying antirheumatic drugs; **tsDMARDs** = Targeted synthetic DMARDs; **bDMARDs** = biologic DMARDs.

Conclusion: Statin use frequency was 25%. It was associated with smoking, comorbidities, high LDL/non-HDL levels, and adherence to hygienic-dietary measures. Sustained statin use showed a protective effect against erosions.

Disclosure of Interest: None declared

Keywords: frequency, Rheumatoid arthritis, Statin

PANLAR2023-1468

ASSESSING DISEASE ACTIVITY IN PATIENTS LIVING WITH RHEUMATOID ARTHRITIS THROUGH TELEHEALTH: A CLINIMETRICS-BASED APPROACH

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Objectives: For patients living with rheumatoid arthritis, an adequate control of disease activity is required to aid quality of life and decrease adverse outcomes. Therefore, clinimetrics have an essential role in allowing rheumatologists to appropriately adjust therapy. Most clinimetrics-based tools require joint count strategies for calculating a disease activity score. As telehealth becomes more prevalent, new strategies are needed for an adequate assessment. Our research aims to propose a novel way of assessing activity in this disease.

Methods: The first phase of the study consisted of a literature search meant to extract variables used to describe disease activity in rheumatoid arthritis; then a focal group composed of17 experts took place. During the meetings with the experts, these variables were subjected to voting to classify the variables most suggestive of activity, which could possibly be assessed without physician input. Finally, we created a curated 8-item checklist composed by those variables to be assessed through telehealth, for defining disease activity.

Results: The most frequently mentioned variables in the literature included: The Disease Activity Score (DAS) 28 (26.18%), the C-Reactive Protein (CRP) quantitative measurement (21.89%), the Erythrocyte Sedimentation Rate (ESR) quantitative measurement (13.30%) and the Clinical Disease Activity Index (CDAI) (10.30%). After expert input, the best ranked variables which compose our 8-item checklist, include: Self-reported joint tenderness and swelling, pain due to rheumatoid arthritis, joint stiffness, requiring systemic steroids or NSAIDs, and the value for CRP and ESR.

Conclusion: Clinimetrics-based approaches are useful as tools for defining changes in therapy. We propose an 8-item checklist for the assessment of disease activity in patients living with rheumatoid arthritis, when in-person assessment is not possible. We include items reflecting the latest reports in the literature but curated by structured opinions of experts rheumatologists. Future studies will aim to create a proper clinimetrics-based tool containing the aforementioned data, which will be available for use in different languages.

Disclosure of Interest: None declared

Keywords: Clinimetry, Telehealth

PANLAR2023-1078

ADVERSE EVENTS RELATED TO CONVENTIONAL SYNTHETIC DMARDS IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Objectives: To estimate the incidence rate of adverse events in RA patients during treatment with csDMARDs.

Methods: Cohort study of patients with established Rheumatoid Arthritis receiving csDMARD therapy, treated at Medicarte, a center for specialized care in Immune-Mediated diseases in Colombia, between 2016 and November 2022. Patients ≥18 years of age were included, with diagnosis of RA according to the 2010 EULAR classification criteria. AE was defined in accordance with the WHO Programme for International Drug Monitoring. Median and interquartile

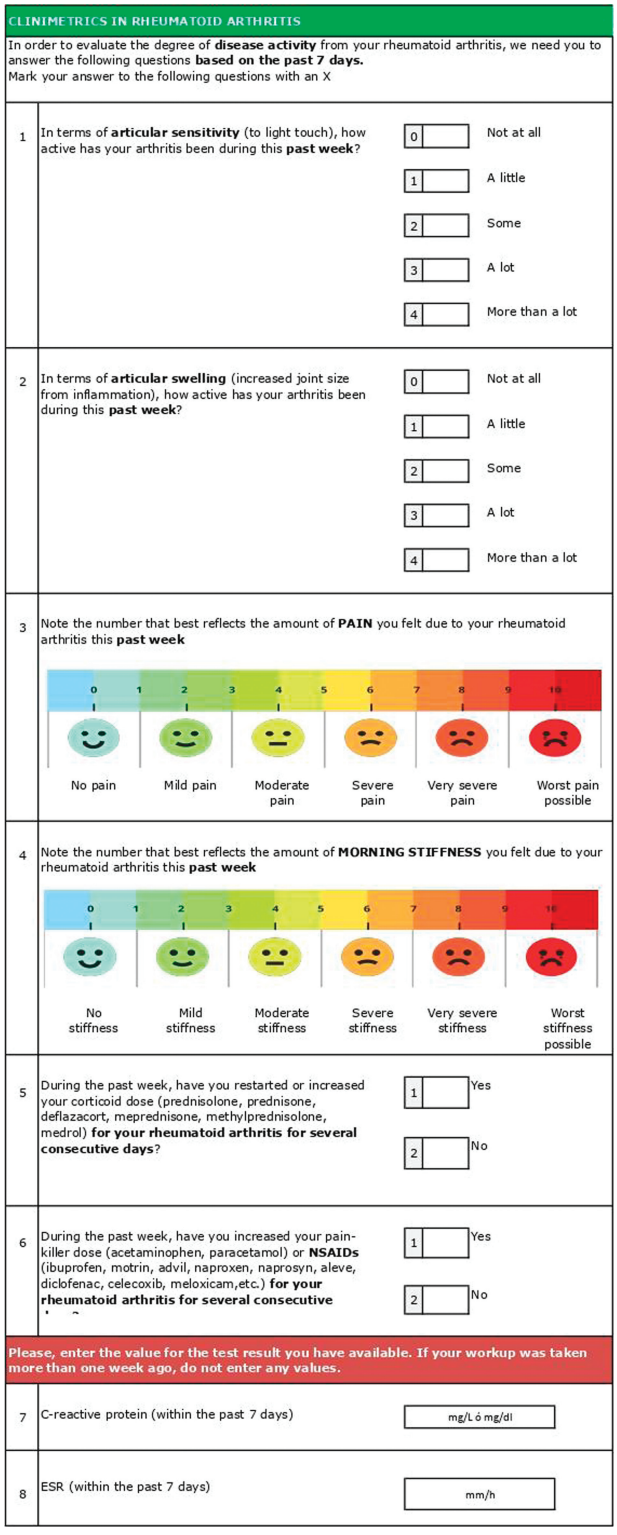

FIGURE 1.

range (IQR) are presented for quantitative variables; qualitative ones with frequencies, percentages and 95% CI. Adverse events incidence rate ratios were estimated overall in the cohort and by csDMARDs.

Results: 4242 patients were included, 85.9% women, median age 58.8 (IQR: 49.1-67.1) years, the most common prescribed csDMARD was methotrexate 47.9%, leflunomide 46.7%, hydroxychloroquine 4.8% and sulfasalazine 0.6%, median drug exposure time was 1.6 years (IQR: 0.6-3.5) and total exposure reached 13191.7 patient-years. During follow-up, 746 AE occurred and overall incidence rate was 5.4 AE per 100 person-years at risk. Leflunomide presented the highest incidence rate, follow by sulfasalazine and hydroxychloroquine (table 1). The most frequently AE reported were infections (30.5%), gastrointestinal disorders (22.5%) skin and subcutaneous tissue disorders (15.7%), and hepatobiliary disorders (9.2%), while others were pooled in 22.%. The majority of them (93.1%) were classified as not serious. For causality, after case revision, 66.6% were possible, 30.9% were probable, 3.4% were definite, 1.3% not classifiable and 0.6% unlikely. (table 1),

TABLE. Adverse event Incidence rate x100 person years according to csDMARD

DMARD	Person-year	# AE	Incidence rate	95%CI
Leflunomide	6625.8	486	7.3	6.7 - 8.0
Sulfasalazine	69.2	5	7.2	3.0 - 17.3
Hydroxychloroquine	477.6	27	5.7	4.3 - 9.1
Methotrexate	6018.9	188	3.1	2.7 - 3.6

Conclusion: In general, AE incidence rate with csDMARDs was relatively low and the majority were not serious. Leflunomide presented higher AE than methotrexate, as reported in the literature.

Reference: Lampropoulos CE, Orfanos P, Bournia VK, et al. Adverse events and infections in patients with rheumatoid arthritis treated with conventional drugs or biologic agents: a real world study. Clin Exp Rheumatol. 2015 Mar-Apr;33(2):216-24

Disclosure of Interest: None declared

Keywords: Aadverse events, csDMARD, Rheumatoid arthritis

PANLAR2023-1306

COMPARISON BETWEEN THE CLINIMETRY MEASUREMENTS MADE BY THE PATIENTS AND BY THE RHEUMATOLOGIST UNDER DIFFERENT EDUCATIONAL CONTEXTS

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Objectives: Education in rheumatoid arthritis (RA) patients for self-knowledge and active participation in follow-up is crucial. The objective was to compare the clinimetry performed by the rheumatologist (RC) with that performed by the patient (PC) when educated through different strategies.

Methods: A cross-sectional study including RA patients under treatment with a T2T (Treat to target) strategy. Group 1 education under an RA program with thematic deepening (three levels in 12-14 months), Group 2 with short education (digital format through video, 75 minutes divided in 7 talks. Group 3 without any educational intervention. The three groups performed the PC by means of a digital form and later they were evaluated by the rheumatologist who developed the RC (blind). Disease activity, functional class and quality of life were measured. RC and PC measurements were compared in the three groups.

Results: 28 patients were included in Group 1, 26 in Group 2, and 37 in Group 3. 100% were women. 46.2% had secondary level studies (higher proportion in Group 1). In group 1, there were no significant differences between the RC and PC, except for fatigue (Table). In Groups 2 and 3, significant differences were found in 4 variables,. The RAPID 3 and PAS variables did not have significant differences when analyzing the total group nor when analyzing subgroups.

Conclusion: When the RC is compared with the PC, no differences were found in the group of patients who have in-depth educational training; however, when the education was short, differences were found between them.. Similar findings occurred when there was not such education. These results deserve to be corroborated in other contexts.

Disclosure of Interest: G. S. Rodríguez-Vargas: None Declared, N. Pinto-Flórez: None Declared, Z. Castaño-Sierra: None Declared, F. Rodríguez-Florido: None Declared, J. A. Rubio-Rubio: None Declared, P. A. Rodríguez-Linares: None Declared, A. Rojas-Villarraga: None Declared, P. Santos-Moreno Grant /

TABLE 1. Three groups Comparison (Wilcoxon test for paired samples)

	Group 1 n = 28			Group 2 = 26			Group 3 n = 37		
Variable*	RC	PC	Ppvalue	RC	PC	*p* value	RC	PC	*p* value
Global VAS	4.5 (3)	5 (3)	NS	5.7 (1.4)	6 (3)	***0.042***	5 (4)	6 (4)	NS
Pain VAS	5 (2.9)	5 (4)	NS	5.5 (2.6)	6 (2)	***0.040***	5 (4.5)	6 (3)	***0.039***
Fatigue	4 (7)	5 (6)	***0.021***	3.5 (6)	4 (4)	NS	5 (5)	6 (5)	***0.023***
MDHAQ	1.7 (2.9)	1.3 (2.5)	NS	3 (2.1)	2 (2.5)	***0.010***	2.7 (2.3)	2.3 (2)	***0.008***
HAQ	0.50 (0.83)	0.41 (0.72)	NS	0.89 (0.60)	0.60 (0.72)	***0.012***	0.79 (0.68)	0.69 (0.59)	***0.007***
RAPID 3	11 (6.4)	11.5 (8.7)	NS	13.3 (4.3)	14.1 (7)	NS	12.2 (9.2)	14.7 (8.3)	NS
PAS	3.6 (2.1)	3.8 (2.8)	0.569	4.42 (1.41)	4.7 (2.3)	0.638	4 (3)	4.8 (2.8)	0.792
TTO EQ5	0.812 (0.259)	0.710 (0.338)	0.100	0.665 (0.267)	0.675 (0.240)	0.322	0.648 (0.267)	0.640 (0.605)	0.140

*Median (Interquartile range) RC: Rheumatologist Clinimetry. PC: Patient Clinimetry NS: Non significant

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Keywords: Clinimetry, Rheumatoid arthritis

PANLAR2023-1420

MAGNETIC RESONANCE EVALUATION OF THE TEMPOROMANDIBULAR JOINTS IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Objectives: To evaluate the temporomandibular joints by magnetic resonance in patients with rheumatoid arthritis (RA).

Methods: Observational, descriptive, cross-sectional study. Thirty patients with RA who consecutively were seen at the Rheumatology Service of a Polyvalent Hospital were included. Patients met the American College of Rheumatology criteria for RA. They were evaluated by a dentist and a rheumatologist. They signed an informed consent. Among the inclusion criteria were patients between 18 and 65 years of age, who had not lost vertical dimension of the stomatognathic system. Same operator performed the MRI on all patients and same medical specialist in diagnostic imaging analyzed and reported the findings. The study was carried out with an open and closed mouth, in a 1.5 T Siemens resonator, using a surface coil. This work was approved by CIEIS of the Hospital.

Results: Resonances showed alterations at the lower jaw and the temporal bone. They presented important modifications in the discs that can affect the functionality of the joints. Regarding the articular disc, the left side presented greater abnormalities; for example, while on the right side only 4% showed a tear/rupture of the disc, on the left side 14% did. Change in the intensity of the disc fibrocartilage, 32% on the right side and 54% on the left side were affected. There were degenerative disc changes in 32% on the right and in 43% on the left. Regarding disc irregularities, 11% were affected on the right side and 18% on the left side. In reference to the articular surfaces, a more similar relationship was observed between the percentages of the right side and the left side; condylar dimorphism was present in 32% in both sides. Erosions were present in 4% in both sides. Condylar irregularities on the right side were observed in 46% of the patients and in 39% on the left side. Subchondral alterations were present in 18% on the right joint and in 32% on the left. The right side did not show temporary dimorphisms and the left side show it in 7%. There were no osteophytes on the right side, but there were in 4% on the left side. Joints with geodes occurred in 7% on the right side and in 14% on the left side

Conclusion: Due to its resolution, MRI shows data that are essential for accurate diagnosis and adequate therapeutic planning in a joint as complex as the TMJ. Decisions that must be made betweendifferent health professionals are

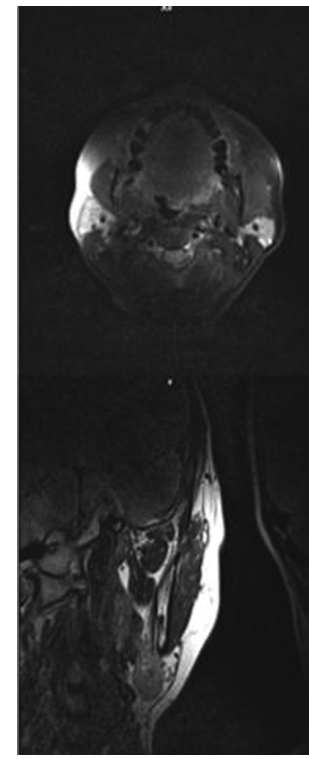

FIGURE 1.

facilitated by these studies since early diagnosis and prognosis depend on the identification of the problem.

Disclosure of Interest: None declared

Keywords: Magnetic resonance imaging, Rheumatoid arthritis, Temporomandibular joints

PANLAR2023-1293

CORRELATION BETWEEN THE OUTCOMES AS MEASURED BY THE PATIENTS AND BY THE MEDICAL TEAM ACCORDING TO THE LEVEL OF ADHERENCE AND AN EDUCATIONAL TOOL FOR PATIENTS

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Objectives: Adherence to treatment in patients with rheumatoid arthritis (RA) is important to achieve adequate control of the disease. Educational strategies in self-care and knowledge of RA help improve adherence and promote knowledge for self-measurement of clinimetry. The objective was to evaluate the correlation of the clinimetry measurements made by the physician (MM) with those made by the patient (PM) in patients with education about their disease, and those without specific education and the level of adherence.

Methods: A cross-sectional study. Two groups were included, Group A: Patients with educational training in RA (12-14 months), Group B: Patients without training. Both patient groups assessed their clinimetry by means of a digital form and they were evaluated by MM (blind). The Morisky Green Adherence Scale was applied. Correlations were made (Pearson coefficient).

Results: All the participants were women (Group A: 28, Group B: 63). Group A had a significantly higher proportion of higher than secondary schooling and RA severity. The total group had a low level of disease activity (DAS28). A significant correlation (Table) was found between all the MM variables with the corresponding PM ones, with the highest coefficients found in group A (except in MDHAQ). There was a significantly higher proportion of adherent patients in group A (78.5%) than in group B (42.8). When analyzing the correlations in the subgroup of adherent patients, all the coefficients increased (except global VAS), maintaining the same ratio of superiority of correlation coefficients in group A compared to group B.

TABLE. Correlation coefficients between clinimetry measurements made by the doctor with those made by the patient in two groups of patients.

	Total group				
	Global VAS	Fatigue	MDHAQ	RAPID-3	EQ5
Group A	**0,591**	**0,578**	**0,660**	**0,693**	**0,865**
Group B	**0,498**	**0,457**	**0,679**	**0,658**	**0,662**
	Adherents only				
Group A	**0,459**	**0,661**	**0,653**	**0,602**	**0,791**
Group B	**0,325***	**0,510**	**0,745**	**0,549**	**0,742**

Group A: Educated patients. Group B: Non educated.
All the coefficients were significant except*

Conclusion: MM has a higher correlation with PM in patients with educational training in RA. These correlations were even greater in the group that was adherent to the treatment, persisting higher in the trained group. The results deserve to be replicated in patients with different levels of severity to those studied here.

Disclosure of Interest: P. Santos-Moreno Grant / Research support with: Abbvie, Abbott, Biopas-UCB, Bristol, Janssen, Pfizer, Roche, Sanofi, Speakers Bureau with: Abbvie, Abbott, Biopas-UCB, Bristol, Janssen, Pfizer, Roche, Sanofi, N. Pinto-Flórez: None declared, L. Realpe-García: None declared, F. Rodriguez-Florido: None declared, G. S. Rodríguez-Vargas: None declared, J. A. Rubio-Rubio: None declared, P. A. Rodríguez-Linares: None declared, A. Rojas-Villarraga: None declared

Keywords: Education, Patient reported outcome, a

PANLAR2023-1308

DRUG SURVIVAL IN CHRONIC INFLAMMATORY ARTHRITIS. ANALYSIS FROM THE BIOBADAGUAY REGISTRY.

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Objectives: To explore biologic therpy (BT) survival among patients with chronic inflammatory arthritis (CIA) from the BIOBADAGUAY registry (the Paraguayan/Uruguayan registry of adverse events in patients with inflammatory rheumatic conditions under BT.

Methods: Patients with CIA (i.e., rheumatoid arthritis, (RA), spondylarthritis (SpA), psoriatic arthritis (PsA) and juvenile onset arthritis (JIA)) included in the BIOBADAGUAY registry where analyzed. Diagnosis different than theseCIAs were grouped as others. BT with less than 25 registries were not included in the study. Survival was estimated using Kaplan-Meier analysis and Cox proportional hazard models were used to estimate hazard ratios (HRs).

Results: A total of 1378 treatments (RA 876, SpA 176, JIA140, others 98, PsA 88) were included. The mean BT survival according to diagnosis was 300.9 (95%CI, 230.6-444.4) wks for RA; 541.6 (95%CI, 409.6-541.6) wks for SpA; 154.1 (95%CI, 125.0-194.7) wks for JIA and 555.3 (95%CI, 282.1-611.6) wks for PsA. When analyzed survival according to diagnosis, BT survival for SpA patients ($p < 0.05$; HR = 1.23 [95% CI 0.97-1.56]) was higher when compared to other CIA. On the other hand, JIA diagnosis was significantly associated with a lower BT survival ($p < 0.05$; HR = 1.85 [95% CI 1.36 – 2.52]). On the general analysis, no significant differences between BT were found ($p > 0.05$). When each drug was studied according to diagnosis, adalimumab showed a significant difference in SpA patients ($p < 0,05$; HR = 0.55 [95% CI, 0.39 - 0.76]) and JIA patients ($p = <0.005$; HR 1.8 [95% CI 1.36 – 2.52]). Etanercept had a significant difference in RA ($p < 0.005$; HR = 0.57 [95% CI, 0.40 - 0.82]) and JIA patients ($p = <0.005$; HR = 2.07 [95% CI, 1.39 – 3.06]). After these results, we analyzed JIA patients, and found that remission was the principal reason for discontinuation in this group of patients ($p < 0.005$, HR = 10.700 [95% CI, 5.91 – 19.36]). Multivariable analysis showed that the number of previous BTs ($p = 0.01$, HR = 1.18 [95% CI, 1.03- 1.34), corticoid treatment ($p = 0.05$; HR = 1.18 [95% CI; 0.99 – 1.40), SpA ($p = 0.01$; HR = 0.688 [95% CI 0.51 - 0.91) and JIA diagnosis ($p = 0.02$; HR = 1.4 [95% CI, 1.06 - 2.02]) where associated with BT survival.

Conclusion: We found different BT survival profiles according to diagnosis, concomitant treatment and number of previous treatments.

Disclosure of Interest: G. Ávila Pedretti Grant / Research support with: Casa Boller-Roche, S. Cabrera Villalba Grant / Research support with: Casa Boller-Roche, Z. Morel Ayala Grant / Research support with: Casa Boller-Roche, R. Rolón Grant / Research support with: Casa Boller-Roche, S. Consani: None Declared, M. Zarza Grant / Research support with: Casa Boller-Roche, M. Soto: None Declared, P. Pusineri Grant / Research support with: Casa Boller-Roche, C. Parodi Grant / Research support with: Casa Boller-Roche, P. De Abreu Trigueros Grant / Research support with: Casa Boller-Roche

Keywords: None

PANLAR2023-1335

ASSOCIATION OF ANTIBODY LEVELS AND CLINICAL ACTIVITY WITH CAROTID INTIMA-MEDIA THICKNESS IN RHEUMATOID ARTHRITIS PATIENTS

Aldo Valdovinos-Bañuelos*[1], Victor M. Beltrán-Aguilar[1], Iris J. Colunga-Pedraza[1], Dionicio A. Galarza-Delgado[1], Jose R. Azpiri-Lopez[2], Jesus A. Cárdenas-De la Garza[1]. *[1]Rheumatology, [2]Cardiology, Hospital Universitario "José E. González", Monterrey, México.*

Objectives: To determine the association between antibody positivity and clinical disease activity and carotid intima-media thickness (cIMT) in rheumatoid arthritis (RA) patients.

Methods: Descriptive, cross-sectional, and comparative study. We enrolled RA patients between 40 and 75 years of age who fulfilled 2010 ACR/EULAR classification criteria and who were recruited at the Rheumatology service of a

tertiary care hospital. Antibody levels were analyzed, including ACPA (positive ≥5) and Rheumatoid Factor (RF; positive ≥20). DAS-28 CRP was used for clinical activity measurement. A carotid ultrasound (cUS) was donein all patients. We used the Kolmogorov-Smirnov test for normality. Variables with non-normal distribution were described using the median and 25th and 75th percentiles (p25-p75) and frequencies for categoric variables. Spearman's coefficient was used to evaluate correlations.

Results: We included 202 RA patients. Results are shown in table 1. Spearman's coefficient did not show a significative correlation between variables: DAS-28 CRP- cIMT 0.041 (p = 0.566); ACPA-cIMT -0.030 (p = 0.678); RF IgG-cIMT 0.065 (p = 0.372); RF IgM-cIMT -0.096 (p = 0.182); RF IgA-cIMT 0.060 (p = 0.406).

TABLE 1.. Results (n = 202)

Variable	RA patients (n = 202)
Duration of disease, years. median (p25-p75)	8.22 (3.15-15.26)
Women, n (%)	191 (94.6)
Age, years,median (iQR)	56 (49-61)
Comorbidities, n (%)	
Active smoking	21 (10.4)
Dyslipidemia	70 (34.7)
T2DM	33 (16.3)
Hypertension	66 (32.7)
Overweight/obesity	161 (79.7)
Clinical activity of disease, median (iQR)	
DAS 28-CRP	3.20 (2.01-4.25)
Positivity of antibodies, n (%)	
ACPA	117 (57.9)
RF IgG	36 (17.8)
RF IgM	160 (79.2)
RF IgA	115 (56.9)
cUS findings	
cIMT, mm. median (iQR)	0.08 (0.06-0.12)
Intimal hyperplasia, n (%)	42 (20.8)

This table shows patients characteristics. iQR interquartile range; T2DM Type 2 diabetes mellitus; DAS 28-PCR disease activity score 28; CRP C reactive protein; ACPA anti-citrullinated protein antibodies; RF Rheumatoid Factor; cIMT carotid intima-media thickness; cUS carotid Ultrasound.

Conclusion: A correlation between clinical activity (measured by DAS-28 CRP) and antibody levels with cIMT was not found. More studies with a larger sample are needed to determine if exists this correlation with more certainty.

Disclosure of Interest: None declared

Keywords: Clinical activity, Imaging, Rheumatoid arthritis

PANLAR2023-1205

PREVALENCE OF HEART VALVULAR REGURGITATION IN RHEUMATOID ARTHRITIS ACCORDING TO DISEASE DURATION

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Objectives: To determine the prevalence of valvular regurgitation, according to the length of disease duration in Rheumatoid arthritis (RA) patients.

Methods: Descriptive, comparative, and cross-sectional study. We enrolled RA patients between 40 and 75 years of age who fulfilled the 2010 ACR/EULAR classification criteria and recruited at the Rheumatology Service from a tertiary care hospital. Patients were divided by time of disease duration into quartiles. A transthoracic echocardiogram was performed by a certified cardiologist blinded to the clinical data. Normality was assesed by the Kolmogorov-Smirnov test. Variables with normal and non-normal distribution were described by mean and standard deviation or as median and interquartile range (p25-p75), respectively. Differences between groups were analyzed by ANOVA, Kruskal-Wallis test or Chi-square test, accordingly.

Results: We included 151 RA patients. Results are on table 1. Overweight/obesity was found between 62-87% of patients, hypertension between 26-34%, and Type 2 Diabetes mellitus between 8-26%. The tricuspid valve was the most affected (73-84%). There was no differences in the prevalence of valvular regurgitation.

TABLE 1.. Results (n = 151)

Variable	1st Quartile (n = 38)	2nd Quartile (n = 38)	3rd Quartile (n = 38)	4th Quartile (n = 37)	*p* value
Duration of disease, years. median (p25-p75)	1.5 (1.0-2.0)	5.0 (3.9-6.0)	10.6 (9.4-12.6)	20.5 (16.5-25.2)	
Women, (n)%	37 (97)	34 (89)	36 (94)	35 (94)	NS
Age, years. mean (±SD)	54 (9.6)	56 (8.5)	55 (8.8)	56 (8.0)	NS
Comorbidities, n (%)					
Overweight/Obesity	28 (73.7)	33 (86.8)	31 (81.6)	23 (62.2)	NS
Hypertension	13 (34.2)	13 (34.2)	10 (26.3)	12 (32.4)	NS
T2DM	6 (15.8)	10 (26.3)	8 (21.1)	3 (8.1)	NS
Valvular regurgitation, n (%)					
Aortic valve	3 (7.9)	7 (18.4)	2 (5.3)	8 (21.6)	NS
Mitral valve	26 (68.4)	21 (55.3)	17 (44.7)	20 (54.1)	NS
Pulmonary valve	9 (23.7)	7 (18.4)	9 (23.7)	8 (21.6)	NS
Tricuspid valve	28 (73.7)	31 (81.6)	31 (81.6)	31 (83.8)	NS
Any of valves	32 (84.2)	33 (86.8)	33 (86.8)	31 (83.8)	NS

Demographic and clinical characteristics of RA patients. Quartiles were divided according to disease duration;each variable is described individually. T2DM Type 2 Diabetes Mellitus.

Conclusion: RA patients have a high prevalence of valvular regurgitation, which could predispose them to develop heart failure, therefore it is important to consider echocardiography in the approach of this population, despite not showing an increase in valvular regurgitation.

Disclosure of Interest: None declared

Keywords: Heart, Imaging, Rheumatoid arthritis

PANLAR2023-1188

CHANGES IN LEFT VENTRICULAR FUNCTION IN PATIENTS WITH AUTOIMMUNE INFLAMMATORY DISEASES

Jose R. Azpiri-Lopez[1], Dionicio A. Galarza-Delgado[2], Iris J. Colunga-Pedraza[2], Ángel G. Arias-Peralta*[1], Victor M. Beltrán-Aguilar[2], Valeria Gonzalez-Gonzalez[2], Natalia De Ávila-Gónzalez[2], Jesús A. Cárdenas-De la Garza[2]. *[1]Cardiology, [2]Rheumatology, Hospital Universitario "Dr. José E. Gónzalez", Monterrey, México.*

Objectives: To compare left ventricular (LV) systolic and diastolic function in patients with autoimmune inflammatory diseases as compared with healthy controls.

Methods: A cross-sectional and comparative study. Patients included in the cohort were between 30–75 years of age, fulfilling the 2006 Classification Criteria for Psoriatic arthritis (PsA); between 40-75 years of age and fulfilling the 2010 ACR/EULAR criteria for Rheumatoid arthritis (RA); older than 18 years of age and fulfilling the 2019 ACR/EULAR Criteria for Systemic lupus erythematosus (SLE), and Controls. A transthoracic echocardiogram was performed by a certified cardiologist. Normality was assessed by the Kolmogorov-Smirnov test and the Kruskall-Wallis test for the comparison between groups; p value <0.05 was considered significant.

Results: 186 patients were included in the study, divided as shown in Table 1. Most of the patients were women (146); the average age was 48.6 years in the rheumatic group and 42.8 years in the control group, the most common comorbidities were hypertension (36%, 20%, and 17.5% in the RA, SLE, and Control groups, respectively); and dyslipidemia (73%) in the PsA group. Echocardiographic findings are shown in Table 1.

TABLE 1.. Echocardiographic findings.

	Rheumatic patients (N = 146)	*p* value	RA (N = 75)	SLE (N = 48)	PsA (N = 23)	Control (N = 40)	*p* value
LV ejection fraction,% (iQR)	60% (56-65)	**0.007**	60% (57-64)	58[1]% (52-64)	65[†]% (57-67)	62% (57-68)	**<0.001**
LV end-diastolic volume,ml (iQR)	72 ml (61-93)	NS	66[††]ml (59-80)	83*ml (69-101)	74 ml (64-101)	73 ml (61-89)	**<0.001**
LV end-systolic volume,ml (iQR)	29 ml (23-38)	NS	27[†]ml (22-32)	34[1]ml (26-45)	25 ml (23-38)	28 ml (20-34)	**0.001**
Left Atrial volume index,ml/m^2 (iQR)	25.6 ml/m^2 (20-32)	**0.004**	24.3 ml/m^2 (19-32)	27[1]ml/m^2 (26-45)	25.3 ml/m^2 (21-29)	20.7 ml/m^2 (16.8-28)	**0.016**
E,m/s(iQR)	0.1 m/s (0.08-0.11)	**0.002**	0.1 m/s (0.08-0.11)	0.1 m/s (0.08-0.12)	0.08[1]m/s (0.07-0.1)	0.11 m/s (0.9-0.13)	**0.001**
E/E(iQR)	8.07 (6.24-10)	**0.040**	8.88 (7.08-10.97)	6.38*[††] (5.69-8.24)	9.12 (7.72-11.5)	6.86*[††] (5.43-9.15)	**<0.001**

LV, left ventricle; iQR, Interquartile range; NS, Non-significant.
[1] p < 0.05 compared to control
* p < 0.05 compared to RA
† p < 0.05 compared to SLE
†† p < 0.05 compared to PsA
*†† p < 0.05 compared to RA and PsA

Conclusion: LV systolic and diastolic function changes in the rheumatic disease population, especially RA, SLE, and PsA, are higher in comparison with healthy people and affect the prognosis in these patients; these changes can be detected by echocardiogram, which is a feasible and safe tool that may prevent complications and improve the prognosis with early detection and management of these patients' cardiac involvement.

Disclosure of Interest: None declared

Keywords: Heart, Rheumatoid arthritis, Systemic lupus erythematosus

PANLAR2023-1040

PLATELET/LYMPHOCYTE AND NEUTROPHIL/ LYMPHOCYTE RATIOS: SIMPLE AND INEXPENSIVEBIOMARKERS IN THE ASSESSMENT OF ACTIVITY IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Objectives: NLR and PLR are easily measured, reproducible, and inexpensive markers of inflammation that could guide our therapeutic decisions in patients with Rheumatoid Arthritis (RA) in absence of less accessible tests such as CRP or ESR. The objective of the study was to assess the correlation of NLR and PLR with disease activity.

Methods: The study included 190 patients with a diagnosis of RA in accordance with the the 2010 ACR/EULAR classification criteria. Patients with systemic diseases, such as diabetes mellitus, hypertension, chronic renal failure, coronary artery disease, chronic obstructive pulmonary disease, cancer, hematologic disease, acute or chronic infection, pregnancy or in the post-partum period or with a granulomatous chronic disease were excluded. All patients underwent a workup including detailed clinical history and physical examination. The activity of RA was determined with the DAS28 CRP score.

All analysis were performed using a $p < 0.05$ as significant and the statistical package SPSS v. 15.0. Characteristics of our population are reported as number and percentage or as mean and standard deviation. Continuous values of NLR, PLR and DAS28-CRP were considered for correlation análisis. The relationship of NLR and PLR to DAS28-CRP was analyzed using bivariate Spearman's correlation

Results: 99% of our population was mestizo, 88.42% (168) were women, the mean age was 59.8 (SD 12.2); the average time of disease duration was 18 years (SD 10.32), 77.9% of our population used corticosteroids, the average dose of prednisone in the last 3 months was 4.1 mg (SD 2.3). 95.3% (181) of the patients used some synthetic DMARD (38.4% methotrexate, 25.3% leflunomide, 20% methotrexate and leflunomide) and 19.5% (37) used a biological DMARD. Using Spearman´s correlation, a significant association was found between NLR and CRP with a coefficient of 0.66, between NLR and DAS 28 CRP with a coefficient of 0.66, between PLR and CRP with a coefficient of 0.34 and between PLR and DAS 28 CRP with a coefficient of 0.46, the significance in all correlations was less than 0.001

Conclusion: The NLR and PLR were significantly correlated with CRP and DAS 28 CRP. So they could be complementary and useful indicators in settings with less availability of laboratory tests such as Latin America. However, further studies are required to ascertain the potential clinical use of these simple and relatively inexpensive markers.

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Disclosure of Interest: None declared

Keywords: Biomarker, Rheumatoid arthritis

PANLAR2023-1296

ESTIMATION OF CARDIOVASCULAR RISK IN A COHORT OF PATIENTS WITH RHEUMATOID ARTHRITIS

Paola Pusineri*[1], Sonia Cabrera-Villalba[1], Gabriela Avila-Pedretti[1], Evelyn Leiva[1], Vannia Valinotti[2], Lourdes Roman[2], Isabel Acosta-Colman[1], Teresa Martinez[3], Paloma de Abreu[2], Osmar Centurion[2]. [1]*Reumatología, Hospital de Clínicas FCM-UNA, San Lorenzo,* [2]*Sociedad Paraguaya de Reumatología,* [3]*Laboratorio Curie, Asunción, Paraguay.*

Objectives: Rheumatoid arthritis (RA) patients have a higher mortality rate, due to cardiovascular complications. There are cardiovascular risk (CVR) scales that take RA separately as a risk factor, although there is still a tendency to underestimate the CVR demonstrated by asymptomatic atherosclerosis in patients previously categorized in intermediate or low-risk strata.

This study was aimed to at identifying high-risk individuals based on estimation scales, who had carotid lesions in ultrasonography (US) examinations.

Methods: Descriptive, cross-sectional study, in a Paraguayan cohort of patients with RA meeting the 2010 ACR/EULAR criteria. Physical examination, a carotid US evaluation by a qualified specialist, and a standardized questionnaire based on the variables included in the CVR project (PINV15-0346), from the National Sciences and Technology Council (CONACYT), were made to assess subclinical atherosclerosis using carotid intima-media thickness (CIMT) >0,9 mm and/or the presence of carotid plaques. For determining CVR, the 2008 Framingham score, QRisk III, and modified mSCORE were applied. Qualitative and quantitative characteristics are shown as frequencies. For comparisons between dichotomous variables, the Chi-square and Student's t tests were used; statistical significance level was set at $p \leq 0.05$.

Kappa coefficient was performed between scales, interpreted as: ≤ 0 as no agreement and 0.01–0.20 as none to slight, 0.21–0.40 as fair, 0.41– 0.60 as moderate, 0.61–0.80 as substantial, and 0.81–1.00 as almost perfect agreement. All patients signed informed consent.

Results: 100 individualswere included, with 87% of them being female, mean age of 51 years, and mean duration of disease of 130.9 ± 102 months. Based on the QriskIII, Framingham 2008, and ScoreM measures, respectively, 9 (9%), 13 (13%), and 5 (%) were categorized as high risk.

According to the Framingham score, 27.1% of patients had subclinical atherosclerosis, outpacing high-risk patients by 14%, whereas mSCORE and QriskIII underestimated cardiovascular risk in 22% and 18%, respectively.

According to QRiskIII, the kappa coefficient for concordance in high-risk patients was 0.593 (moderate) in comparison to Framingham, but ScoreM had a kappa coefficient of 0.401 (fair) in comparison to Framingham.

Conclusion: These findings reveal that CVR identified by carotid artery US more accurately identifies high-risk patients than the estimation scales used in clinical practice, which have a tendency to underrate the risk in RA patients.

Disclosure of Interest: None declared

Keywords: Cardiovascular risk, Rheumatoid arthritis

PANLAR2023-1525

THE FECAL MICROBIOME AND THE LIPID PROFILE OF PATIENTS WITH RHEUMATOID ARTHRITIS: A COMPLEX RELATIONSHIP WITH PATHOPHYSIOLOGICAL AND THERAPEUTIC IMPLICATIONS

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Objectives: The intestinal microbiome is related to lipid metabolism in a bidirectional but incompletely understood manner. Rheumatoid arthritis (RA) is associated with increased cardiovascular risk, even in the absence of metabolic disease. Nevertheless, alterations in lipid metabolism and of the microbiome have been identified in patients with RA. The relation of the fecal microbiome and the lipid profile was evaluated in a group of patients and healthy controls from Colombia.

Methods: We performed a cross-sectional, analytical study in female patients diagnosed with RA being seen at two rheumatology centers in Bogotá. All patients had moderate to high disease activity, BMI < 30 kg/m2, and were naïve to biological treatment. Healthy controls paired by age and anthropometrics were included for comparison. Measurements of lipid metabolism, and a sequencing of the V3-V4 region of the 16S intestinal microbiome ribosomal RNA by Miseq were performed

Results: We included 24 patients and 36 healthy women. A differential enrichment of *Prevotella spp*, *Megasphaera spp* and *Soleaferrea spp* was identified. The *Prevotella spp* enrichment was correlated with *Megasphaera spp* enrichment (r[38] = 0,393; p = 0,011) and the waist circumference (r[38] = -0,368; p = 0,019). A significant association between *Prevotella spp* and the diagnosis of RA was found and tested with a lineal model controlling for related clinical variables (β = 8.43; 95% CI 0.14 – 16.72; p = 0.046) with which a correlation was also found, such as the total cholesterol level (r[37] = -0.344; p = 0.031), HDL (r[37] = -0.441; p = 0.004), and LDL (r[37] = -0.345; p = 0.031)

Conclusion: Women with RA that had moderate to high disease activity have an abundance of *Prevotella spp*. in their fecal microbiome and, paradoxically, of *Megasphaera spp*, a species considered normal microbiota that rarely cause disease. The overexpression of *Prevotella spp* is associated with chronic inflammatory processes, a species-dependent effect, and *Megasphaera spp* is related to anti-inflammation by way of the accumulation of products of fermentation such as butyrate and hydrogen. The intestinal microbiome may be involved in the metabolic profile, particularly of HDL, known for its reverse transport of cholesterol, to which a cardioprotective effect is attributed. A therapeutic approach in RA aimed at controlling disease activity and maintaining cardiovascular health should consider the complex interaction between the microbiome and lipid metabolism

Reference:

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Disclosure of Interest: None declared

Keywords: Cardiovascular disease, Cardiovascular risk, Microbiome

PANLAR2023-1151

EVALUATION OF THE POSSIBLE INCREASE IN CHOLESTEROLEMIA IN RHEUMATIC PATIENTS TREATED WITH JAK INHIBITORS AND SUBSEQUENT THERAPEUTIC APPROACH.

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Objectives: Assess the possible increase in plasma cholesterol levels due to the use of different janus kinase inhibitors (iJAK), as well as the rheumatologist therapeutic approach f in case of hypercholesterolemia.

Methods: Patients who had received iJAK for at least 6 months were included, collecting total cholesterol (TC), high-density lipoprotein (HDL-C) and low-density lipoprotein (LDL-C) values both at the beginning of treatment and at 3-6 months after its initiation.

For patients with hypercholesterolemia >200 mg/dL and iJAK, it was assessed whether a lipid-lowering treatment had been started or modified, based on current international recommendations[1] considering the total individual cardiovascular risk (CVR), estimated through SCORE2 and SCORE2-OP calculator (in patients under and over 70 years of age, respectively), as well as their LDL-C levels.

Results: A total of 43 patients using iJAK treatments due to rheumatoid arthritis [15 (34.9%) upadacitinib, 14 (32.5%) tofacitinib, 9 (21%) baricitinib, and 5 (11.6%) filgotinib], have been sampled and analyzed. Their average age was of 59.86 ± 12.71 years and the 81.4% (n = 35) of them were women.

At the beginning of iJAK treatment, the average TC was of 189.44 ± 37.30 mg/dL, while it reached 213.59 ± 36.46 mg/dL in months 3-6 (24.5 mg/dL difference), being the cholesterol values >200 mg/dL in 67.4 % of the patients (n = 29). 2 patients who had been previously diagnosed with a cardiovascular disease were assessed with a very high CVR and were provided statin treatment. Remaining patients had an average CVR of 4.16%, as estimated by the SCORE2 and SCORE2-OP calculator.

No therapeutic action was noted on the 3 patients assessed with a very high CVR (SCORE2 > 10%), on 2 out of 4 with a high CVR (SCORE2 5-10%), on 10 out of 16 with a moderate CVR (SCORE2 1-5%) or on 3 out of the 4 assessed with a low CVR (SCORE2 > 1%), regardless of them having >55, >70, >100 and > 116 mg/dL LDL-C values, respectively.

Lipid-lowering treatment was not modified in 2 patients assessed with high CVR and in 4 assessed with moderate CVR despite of all having higher LDL-C levels than recommended for their CVR. Also, statin treatment was adequately started only in 2 patients with high CVR, in 1 with moderate CVR and in 1 with low CVR.

Conclusion: In clinical practice, treatment with iJAK leads to an increase in cholesterol levels, which in most cases is not handled according to the internationally-agreed recommendations on lipid-lowering treatments.

Reference 1: 2019 ESC/EAS guidelines for the management of dyslipidaemias: Lipid modification to reduce cardiovascular risk. Atherosclerosis. 2019 Nov;290:140-205. doi: 10.1016/j.atherosclerosis.2019.08.014.

Disclosure of Interest: None declared

Keywords: Cardiovascular risk, Cholesterolemia, Janus kinase inhibitors

PANLAR2023-1208

CLINICAL ACTIVITY OF RHEUMATOID ARTHRITIS IS NOT ASSOCIATED WITH CARDIOVASCULAR RISK BY TRADITIONAL RISK SCALES

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Objectives: To compare cardiovascular risk (CVR), by six scales: ACC/AHA ASCVD 2013, Framingham lipids and BMI, SCORE2, QRISK3 and Reynolds risk score, according to clinical activity in rheumatoid arthritis (RA) patients using the DAS-28 CRP.

Methods: Descriptive, comparative and cross-sectional study. We enrolled RA patients between 40 and 75 years of age who fulfilled the 2010 ACR/EULAR classification criteria and recruited in the Rheumatology service from a tertiary care hospital. Patients were divided by time of disease duration into quartiles. CVR results from scales were multiplied by 1.5 factor according to the EULAR 2016 recommendation. Normality was assesed by Kolmogorov-Smirnov test and variables were described, correspondingly. Differences between groups was analyzed by Kruskal-Wallis or Chi-square tests, accordingly.

Results: A total of 377 RA patients were included. Results are shown in table 1. As severity of clinical activity increased, CVR did not show significative changes, regardless of which of the scales it was measured with.

Conclusion: CVR did not increase according to RA clinical activity, which suggests that such severity cannot explain by itself the increased in CVR shown in this population.

Disclosure of Interest: None declared

Keywords: Cardiovascular risk, Rheumatoid arthritis

TABLE 1.. Results (n = 377)

Variable	Remisión(n = 121)	Low activity (n = 51)	Moderate activity (n = 156)	High activity (n = 49)	*p* value
Duration of disease, years. median (p25-p75)	7.0 (3.0-14.0)	7.9 (2.7-14.9)	7.0 (3.0-15.4)	5.1 (1.6-12.9)	NS
Women, (n)%	103 (85)	47 (92)	149 (95)	49 (100)	0.002
Age, years. median (p25-p75)	57 (49-62)	53 (48-63)	54 (48-59)	55 (45-58)	NS
BMI, kg/m2. median (p25-p75)	27.2 (25.0-30.4)	26.7 (24.7-30.8)	28.0 (24.6-31.8)	28.4 (24.7-32.3)	NS
Cardiovascular risk scores, %. median					
ASCVD	4.8	2.8	2.6	3.1	NS
FRS-Lipids	8.8	7.6	7.3	7.8	NS
FRS-BMI	12.5	11.1	9.3	11.1	NS
SCORE 2	6	4.5	4.5	4.5	NS
Q-RISK III	6.1	5.3	4.5	5.7	NS
RRS	1.5	1.5	1.5	1.5	NS

Demographic and clinical characteristics of RA patients. BMI Body Mass Index; ASCVD Atheroesclerotic Cardiovascular Disease; FRS Framingham Risk Score; RRS Reynolds Risk Score; SCORE 2 Systematic Coronary Risk Evaluation 2.

PANLAR2023-1055

ADVERSE EVENTS RELATED TO TARGET SYNTHETIC AND BIOLOGIC DMARD THERAPY IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Objectives: To estimate the incidence rate of adverse events in RA patients receiving tsDMARDs or bDMARD

Methods: Cohort study of established RA patients at Medicarte, a center for Immune-Mediated diseases in Colombia, between 2016 and November 2022. Patients ≥18 years of age were included, with diagnosis of RA according to the 2010 EULAR classification criteria. The Adverse event was defined as stated by the WHO Programme for International Drug Monitoring. Quantitative variables are presented as median (interquartile range, IQR); qualitative as frequencies, percentages and 95%CI. AE incidence rate ratios were estimated overall in cohort and by DMARD use.

Results: 2910 patients were included, 85.9% women, median age 58.8 (IQR: 49.1-67.1) years, median time on treatment 1.6 years (IQR: 0.6-3.5) and total exposure time 8236.4 person-years. The most frequent bDMARD used was rituximab 24.5%, adalimumab 14.3%, abatacept 13.7%, etanercept 13.4%, tocilizumab 10.9%. In tsDMARD group, tofacitinib was most frequently used. During follow up, there were 1372 AE. Overall incidence rate was 16.6 AE per 100 person-years at risk. Baricitinib, upadacitinib, adalimumab and certolizumab had the highest AE incidence rate unlike infliximab, etanercept, tocilizumab and abatacept (table 1). Baricitinib showed a higher AE incidence rate compared to upadacitinib and tofacitinib. The most common AE reported were infections (31.6%), skin and subcutaneous tissue (17.4%), gastrointestinal (16.5%) and hepatobiliary disorders (8.1%), while others were grouped in 26.4%. According to causality, after case review, 65.9% were possible, 27.9% were probable, 3.9% were definite, and 3.8% not classifiable and majority of them (95.1%) were not serious.

TABLE 1.. Adverse event Incidence rate x100 person years according to bDMARD

DMARD	Person-year	# AE	Incidence rate	95%CI
Rituximab	1795.4	314	17.5	15.6 - 19.5
Abatacept	1225.0	203	16.6	14.4 - 19.0
Etanercept	1649.9	202	12.2	10.7 - 14.1
Adalimumab	853.6	166	19.4	16.7 - 22.6
Tocilizumab	1000.8	164	16.4	13.9 - 18.8
Tofacitinib	536.2	99	18.5	15.2 - 22.5
Golimumab	535.3	89	16.6	13.5 - 20.5
Certolizumab	391.4	73	18.6	14.8 - 23.5
Baricitinib	83.9	41	48.9	35.9 - 66.4
Infliximab	125.1	11	8.8	4.9 - 15.8
Upadacitinib	30.2	7	23.2	11.0 - 48.6

Conclusion: In our cohort, baricitinib, upadacitinib, adalimumab and certolizumab presented the highest rate of AEs, while infliximab, etanercept, tocilizumab, abatacept and golimumab were lower. The majority AEs were mild and not impacted negatively the treatment strategy

Disclosure of Interest: None declared

Keywords: Adverse events, bDMARD, Rheumatoid arthritis

PANLAR2023-1163

KIDNEY INVOLVEMENT IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Objectives: Renal diseases occurring in patients with rheumatoid arthritis (RA) may have variable clinicopathological features. Little is known about the effects of using the novel biological agents on the risk of kidney disease in these patients (pts). The aim of this study was to determine the relationship between the effect of therapy and kidney involvement in pts with RA and to evaluate the histopathological findings (HPF) and associated clinical manifestations (CM).

Methods: In this historical study, 275 pts with RA were included. In 48 pts renal biopsy (RB) was performed. The patients were divided into 3 groups according to changes in RA management: 1991-2001, 2002-2011 and 2012-2022 year. Data of demographic characteristics, clinical symptoms and pathological diagnosis were extracted from medical records and pathological reports.

Results: In our study amyloidosis (RAm) was the most common histologic pattern, followed by chronic glomerulonephritis (GN) and tubulointerstitial nephritis (TIN). RAm was diagnosed in 13 pts, membranous GN (MGN) – in 9, mesangioproliferative GN (MPGN) - in 7, focal segmental necrotizing GN (FSNGN)– in 5, focal segmental sclerosis (FSS) – in 4, minimal change disease – in 3, TIN – in 7 patients. Between 1991 and 2001 year the most common CM was nephrotic syndrome and the most common HPF - RAm, followed by MGN and FSNGN. The MGN was related to the use of gold salts and its frequency decreased after 2001. The MPGN was the leading cause of kidney disease between 2002 - 2011 years and FSS – between 2012-2022. In our study 68 patients had a decrease of glomerular filtration rate (GFR) < 60 mL/min/ m^2. No KB were performed in these cases because no urine abnormalities were detected. We found that age, disease duration, arterial hypertension and C-reactive protein were significant risk factors for GFR decline in pts with RA. Pts with RA who are treated with biologic agents are less likely to experience progressive decline in kidney function than those not receiving biologic treatment (hazard ratios {HRs} [95% CI], 0,84 [0,68-1,02]}.

Conclusion: In all patients with RA, renal function should be monitored and in the case of abnormal results, KB should be performed. Suspected causal drug should be removed from the treatment and specific immunosuppressive therapy initiated. Improved pain management associated with biologic treatment may help reduce the need for potentially nephrotoxic anti-inflammatory agents such as NSAIDs and certain types of non-biologic DMARDs.

Disclosure of Interest: None declared

Keywords: Biological therapy, infection, rheumatoid arthritis, kidney, side effects

PANLAR2023-1272

PRESENCE AND EFFECT OF MUSCLE GDF-8 AND GDF-11 IN THE SYNOVIUM OF PATIENTS WITH RHEUMATOID ARTHRITIS

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Objectives: Myokines, such as the growth differentiation factor (GDF) 8 and 11, have the function of regulating autocrine and paracrine activities on muscle tissue metabolism. In Rheumatoid Arthritis (RA), there is increased expression of GDF-8 in the synovial membrane compared to osteoarthritis (OA) patients, more specifically by fibroblast-like synoviocytes (FLS). On the other hand, the GDF-11 treatment appears to have a protective effect against the development of experimental arthritis. Therefore, the objective of this study was to evaluate the GDF-8 and GDF-11 levels in serum and synovial membrane in RA patients and to assess their *in vitro* effect on FLS.

Methods: Patients diagnosed with RA and patients with knee OA with the indication of knee arthrocentesis were included in the study. The evaluation of serum and synovial fluid levels of GDF-8 and GDF-11 was performed by ELISA. FLS were isolated from the synovial fluid of RA patients, and cell viability was determined in the presence and absence of GDF-8 and GDF-11 (10 nM; 20 nM and 50 nM) for 24 h and 48 h by the MTT assay. Kolmogorov–Smirnov, Mann-Whitney U and Spearman's correlation tests were performed using SPSS version 20.0 (accepted at $p \leq 0.05$).

Results: As preliminary data, samples from 11 patients with RA and 5 patients with knee OA were evaluated. GDF-8 synovial fluid levels were lower than serum levels in RA patients (31.30 (31.30-181.80) vs 817.20 (334.30- 994.70); p = 0.007) and were negatively correlated with disease duration (r = -0.684, p = 0.02). GDF-11 levels in synovial fluid were also lower than in serum in RA (31.30 (31.30- 88.13) vs 347.50 (31.30- 1818.00); p = 0.018) and were higher in RA patients than in the OA group (347.50 (31.30- 1818.00) vs 31.30 (31.30-31.30); p = 0.052). Furthermore, treatment with different concentrations of GDF-8 and GDF-11 did not affect FLS viability.

Conclusion: In this preliminary research, we found lower GDF-8 and GDF-11 synovial fluid levels than in serum in RA patients and higher GDF-11 serum levels in the RA group compared to the OA group. These results could be due to local compensatory mechanisms against the inflammatory state. *In vitro*, both GDF-8 and GDF-11 did not induce FLS proliferation or death, and more studies are undergoing to examinetheir impact on the FLS phenotype. Our results contribute to the knowledge about the participation of myokines in the pathogenesis of RA.

Disclosure of Interest: None declared

Keywords: Myokines, Rheumatoid arthritis, Synovial membrane

PANLAR2023-1314

ASSOCIATION OF LEFT VENTRICULAR GEOMETRY PATTERNS WITH DISEASE DURATION IN RHEUMATOID ARTHRITIS

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Objectives: To compare left ventricular geometry (LVG) patterns in RA patients and their association with disease duration.

Methods: Descriptive, comparative and cross-sectional study. We enrolled RA patients between 40 and 75 years of age who fulfilled 2010 ACR/EULAR classification criteria and who were recruited from the Rheumatology service of a tertiary care hospital in Monterrey, Mexico. Patients were divided by time of disease evolution into quartiles. A transthoracic echocardiogram was performed by a certified cardiologist blinded to clinical data. Central tendency and dispersion measures were used, according to normality distribution by Kolmogorov-Smirnov test. For comparative analysis, ANOVA and Kruskal-Wallis or Chi-squared tests were used. Spearman's coefficient was used to assess the correlation between variables.

Results: We included 147 RA patients. Results are shown in table 1.There was no difference on the LVG patterns between groups (p = 0.075), with concentric remodeling being the most often pattern in all groups. Spearman's coefficient shows a positive correlation between LVG patterns and time of disease duration (ρ of Spearman = 0.195; p = 0.018).

TABLE 1. Results (n = 147)

Variable	1st Quartile (n = 37)	2nd Quartile (n = 37)	3rd Quartile (n = 38)	4th Quartile (n = 35)	*p* value
Duration of disease, years. median (p25-p75)	1.6 (1.0-2.0)	5.0 (3.9-6.1)	10.6 (9.4-12.3)	20.2 (16.1-24.7)	
Women, (n)%	36 -97	33 -89	36 -94	34 -97	NS
Age, years. media (±SD)	54 (9.7)	56 (9.1)	55 (8.4)	56 (8.5)	NS
BMI, kg/m². media (±SD)	**28.4 (4.7)**	**29.5 (5.1)**	**28.4 (5.5)**	**26.2 (4.3)**	**0.046**
Left ventricule geometry patterns, n (%)					
Normal	14 (37.8)	4 (10.8)	8 (21.1)	4 (11.4)	
Concentric remodeling	20 (54.1)	30 (81.1)	28 (73.7)	25 (71.4)	
Concentric hypertrophy	3 (8.1)	3 (8.1)	2 (5.3)	5 (14.3)	NS
Excentric hypertrophy	0 0	0 0	0 0	1 (2.9)	
LVG abnormalities total	23 (62.2)	33 (89.2)	30 (79.0)	31 (88.6)	

Demographic and clinical characteristics of RA patients. Quartiles according to disease duration; each variable is described individually. BMI Body Mass Index; LVG Left Ventricule Geometry.

Conclusion: RA patients have a higher prevalence of LVG abnormalities , which makes them susceptible to developing CV diseases. The correlation between LVG abnormalities and disease duration expresses the impact of RA on the heart.

Disclosure of Interest: None declared

Keywords: Heart, Imaging, Rheumatoid arthritis

PANLAR2023-1319

THE RELATIONSHIP BETWEEN CENTRAL SENSITIZATION AND ALEXITHYMIA IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Objectives: Rheumatoid arthritis (RA) is a chronic autoimmune inflammatory disease that has negative effects not only on the physical and social aspects of patients, but also on their psychological well-being. Recent evidence has demonstrated that Central Sensitization (CS) may be a new mechanism for the pain experienced by these patients [1]. The pain in patients with RA often impacts the psycho-emotional sphere with the subsequent development of cognitive dysfunction in the form of alexithymia [2].

The aim of this study was to evaluate the relationship between central sensitization and alexithymia in patients with RA.

Methods: The study involved patients with RA according to the 2010 ACR/EULAR criteria. The presence of CS was determined by the CS Inventory (CSI). Alexithymia was assessed by Toronto Alexithymia Scale (TAS-20). Statistical analysis was performed using MS Excel and SPSS22 software (©SPSS Inc.). Correlation between scores was analyzed using Pearson`s correlation coefficient. Odds Ratio (OR) and 95% Confidence Intervals (CI) were calculated. Descriptive statistics were performed with mean and standard deviation (M ± SD).

Results: A total of 104 patients (82% females), with a mean age of 50.6 ± 12 years and disease duration of 7.5 ± 4.7 years, were included in the study. Most patients had high disease activity (DAS-28 – 5.4 ± 1.1; SDAI – 31.4 ± 10.4; CDAI – 30.3 ± 10.2). CS (CSI ≥ 40) were reported in 32% of RA patients.

The mean CSI in patients was 34.1 ± 14.1. The presence of alexithymia (TAS-20 ≥ 61) was registered in 19% of patients with RA. The mean TAS-20 in patients was 43.8 ± 12.3. The group of patients with CS had higher TAS-20 compared to patients without CS (52 ± 14.2 versus 40 ± 9.2 ($p < 0.01$). A significant correlation was found between CSI and TAS-20 ($r = 0.416$, $p < 0.01$). Alexithymia was observed in 20 out of 33 (61%) patients with CS. We found CS to be associated with the development of alexithymia in patients with RA.

RA patients with CS had an odds ratio of 44.0 [95% CI: 11.5 – 168,3] ($p < 0.0001$) for the development of alexithymia. According to the Receiver Operator Curve (ROC) analysis, the presence of CS in patients with RA has a sensitivity of 94% and specificity of 70% for detecting alexithymia (Figure).

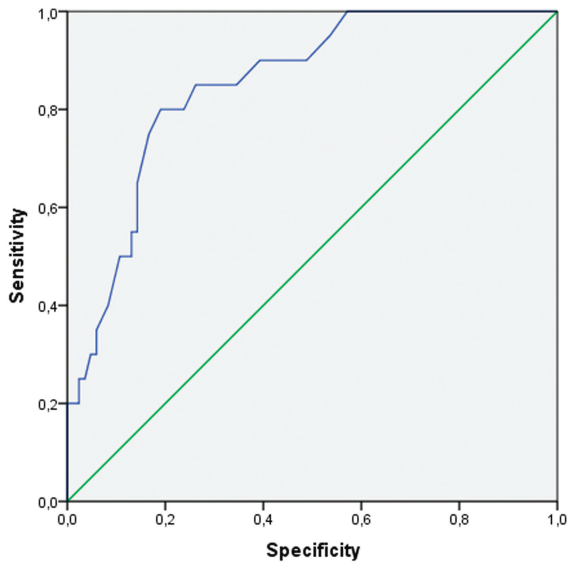

Figure. ROC-analysis of sensitivity and specificity of detection of alexithymia in RA patients with CS.

Conclusion: CS as well as alexithymia are common in RA patients. The prevalence of alexithymia in RA patients with CS is 61%. CS can be considered a risk factor for alexithymia in patients with RA.

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Disclosure of Interest: None declared

Keywords: Alexithymia, Central sensitization, Rheumatoid arthritis

PANLAR2023-1310

ADVERSE EVENTS AND ADVERSE REACTIONS WITH THE USE OF ANTITNF'S DETECTED BY THE PHARMACOVIGILANCE PROGRAM AT A SPECIALIZED RHEUMATOLOGY CENTER

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Objectives: Pharmacovigilance is the science responsible for the detection and monitoring of possible drug adverse events (DAE) in the administration of medications. In pharmaceutical service process, the information generated through its programs constitutes evidence that provides a solution to the management of drug-related problems, especially those obtained by biotechnology. The aim of this study was to show the main DAEs and drug adverse reactions (DARs) with the use of anti-TNF (Anti-Tumor Necrosis Factor) drugs detected by the Pharmacovigilance program of an IPS specialized in rheumatology during the period 2018-2022.

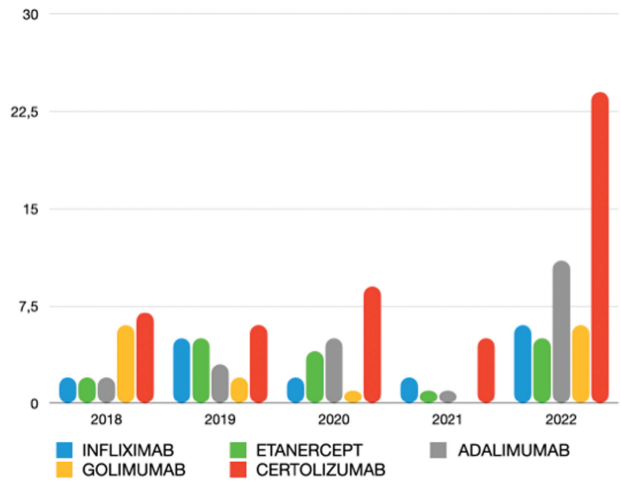
Methods: The current method carried out in the institution is the so-called S*pontaneous Notification*. A historical review of the DAE and DAR detected by an institutional Pharmacovigilance program with the use of Anti-TNF drugs, in patients with autoimmune diseases, during the period 2018-2022, was carried out. Indicators were established through descriptive statistics to measure the frequency of DAE and DAR.

Results: 408,914 medical records were reviewed, the Table shows the comparative percentages of DAE and DAR detected by the program between conventional disease-modifying antirheumatic drugs (csDMARDs) and biologics during the follow-up period. The Pharmacovigilance program had growth in the detection of DARs with the use of anti-TNF drugs, strengthening knowledge in the information for these. The causality with the anti-TNF was established, being the DAE classified as probable and the DAR as possible. Of the total subgroup of patients treated at the institution for medication application (46,832), notifications were received as follows: (Infliximab 17, Etanercept 17, Adalimumab 22, Golimumab 15, Certolizumab 51). Additionally, dermatological reactions were the most recurrent types of reactions. Herpes was found as the main DAR with Certolizumab in the last year. According to the results obtained, Certolizumab presented the most DAR during the follow-up period (Figure).

TABLE. COMPARISON OF ADVERSE REACTIONS BETWEEN CONVENTIONAL AND BIOLOGICAL DMARDs

YEAR	DAR	DAE	csDMARD	BIOLOGIC
2018	52,5%	46.0%	62,9%	28,7%
2019	39,3%	52,3%	26,1%	61,4%
2020	40,2%	40.0%	31,3%	65,5%
2021	25,0%	51.0%	45,8%	52,1%
2022	35,5%	36.0%	32,0%	68,9%

Figure. Rate of reports of adverse reactions to anti-TNF biologics



Conclusion: Dermatological reactions are the most frequent with anti-TNF drugs. Infliximab and Certolizumab stand out for this type of involvement. Studies are needed in populations from the same country to compare these results and generate more knowledge.

Disclosure of Interest: W. Rivero-Morales: None Declared, P. A. Rodríguez-Linares: None Declared, F. Rodríguez-Florido: None Declared, G. S. Rodríguez-Vargas: None Declared, A. Rojas-Villarraga: None Declared, P. Santos-Moreno Grant / Research support with: Abbvie, Abbott, Biopas-UCB, Bristol, Janssen, Pfizer, Roche, Sanofi, Speakers Bureau with: Abbvie, Abbott, Biopas-UCB, Bristol, Janssen, Pfizer, Roche, Sanofi

Keywords: Adverse events, Pharmacovigilance, Rheumatoid arthritis

RHEUMATOID ARTHRITIS

PANLAR2023-1065

DIFFICULTY ACCESSING BIOLOGIC MEDICATIONS IN PUBLIC HOSPITALS AND ITS IMPACT ON DISEASE ACTIVITY IN PATIENTS WITH RHEUMATOID ARTHRITIS

Maria Luz Martin*[1], Julieta Morbiducci[1], Aixa Mercé[1], Lia Ingolotti[1], and Anastasia Secco[1]. [1]*Reumatologia, Hospital Bernardino Rivadavia, CABA, Argentina.*

Objectives: To determine the frequency of under treatment with Biologic DMARDs(BD) and JAK inhibitors(JAKi) in patients with rheumatoid arthritis (RA) who do not receive treatment regularly due to difficulties in provision. To estimate the time between indication and delivery.To compare the educational level, employment and medical coverage as surrogates of accessibility to medication and compare the disease activity and functional capacity of those who receive treatment regularly versus those who do not.

Methods: Observational, analytical, cross-sectional study with historical data collection.Patients with RA according to the 1987 ACR and/or the 2010ACR/EULAR criteria treated with BD or JAKi in a public hospital in Argentina were included.Patients with other rheumatic diseases, less than 6-months of follow-up, those who were on BD or JAKi but lacked data and those who were treated erratically for reasons other than supply issues were excluded.Irregular treatment was defined as not receiving the correct dosage due to difficulties in provision.Continuous variables were expressed as mean and standard deviation (SD) or median and interquartile range.Categorical variables were expressed as proportions.Continuous variables were compared between groups by the Student's t or Mann-Whitney tests. Categorical variables were analyzed by Chi-squared or Fisher's exact tests.

Results: 100 patients with RA were included. The sociodemographic data are described in Table 1.39% of the patients received irregular treatment due to difficulties in the provision. The mean time to delivery was 5.57 months (SD: 4). All patients received DMARDs:86% Methotrexate or Methotrexate plus Leflunomide. At the time of prescription,51% were in high activity due to DAS28,34% moderate,7% low and 7% remission. All patients who were in remission or low activity at the time of the indication received corticosteroids. At 3 months, 57% of those who received regular treatment achieved corticosteroid-free remission vs. 22% of those who received it irregularly($p < 0.001$). Similarly, at 6 months 72% of those who received regular medication achieved corticosteroid-free remission vs. 42 % of those who received it irregularly ($p < 0.001$). When socioeconomic features were examined no statistically significant differences were found.

Conclusion: Difficulties in provision affect the efficacy of treatment and the progression of the disease.It is imperative to generate actions to facilitate access.

Disclosure of Interest: None declared

Keywords: Disease activity, Rheumatoid arthritis, Socioeconomic factors

TABLE:.

	n:100
FEMALE n(%)	83(93)
POOR PROGNOSIS FACTORS(%)	(48)
USE OF CORTICOSTEROIDS(%)	(86)

PANLAR2023-1264

CLINICAL ACTIVITY OF RHEUMATOID ARTHRITIS IS ASSOCIATED WITH LEFT VENTRICULAR SYSTOLIC FUNCTION

José R. Azpiri-Lopez[1], Dionicio A. Galarza-Delgado[2], Iris J. Colunga-Pedraza[2], Valeria Gonzalez-Gonzalez*[2], Victor M. Beltr'an-Aguilar[2], Ángel G. Arias-Peralta[1], Natalia De Ávila-Gonzalez[2], Jesús A. Cárdenas-de la Garza[2], and Gisela Garcia-Arellano[2]. [1]*Cardiology,* [2]*Rheumatology, Hospital Universitario "Dr. José Eleuterio González", Monterrey, México.*

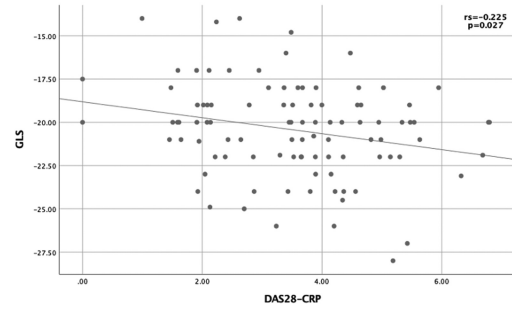
Objectives: To evaluate the association of disease activity and left ventricular function by echocardiogram in RA patients.

Methods: Observational and cross-sectional study. Patients aged 40 to 75 years who met the 2010 ACR/EULAR Classification Criteria for RA were included. Patients with a previous history of cardiovascular disease were excluded. Transthoracic echocardiography was performed by one certified echocardiographer blinded to clinical information. Clinical activity was assessed by DAS28-CRP and left ventricular function by global longitudinal strain (GLS). Normality distribution was explored by Kolmogorov-Smirnov test and correlation by Pearson's or Spearman's coefficients, accordingly, was done. A value of $p < 0.05$ was considered significant.

Results: A total of 97 patients were included. Mean age was 55.2 ± 8.6, mostly women (95.9%), with a high prevalence of dyslipidemia (34.0%). A low negative correlation was found between DAS28-CRP and global longitudinal strain (GLS) (rs = -0.225, $p = 0.027$). (Figure 1).

Conclusion: In this group of patients, greater clinical activity of the disease by DAS28-CRP was associated with lower GLS.

Figure 1. Scatterplots of correlations between disease activity and left ventricular function in RA patients.



Disclosure of Interest: None declared

Keywords: Heart, imaging, Rheumatoid arthritis

PANLAR2023-1480

DISEASE CHARACTERISTICS, SOCIODEMOGRAPHIC ASPECTS AND COMORBIDITIES IN DIFFICULT-TO-TREAT RHEUMATOID ARTHRITIS PATIENTS AND THE IMPACT OF JOINT ULTRASOUND

Marina Teresa Hacbarth Freire*[1], Amanda Bernardes[1], Daniele Hayashi[1], Leticia Serrano Sartori[1], Larissa Andrade Santiago de Oliveira[1], Lucas Victória de Oliveira Martins[1], Sonia Maria Alvarenga Anti Loduca[1], Roberta de Almeida Pernambuco[1], Nathalia de Carvalho Sacilotto[1], and Rina Dalva Neubarth Giorgi[1]. [1]*Reumatologia, Hospital do Servidor Publico Estadual, São Paulo, Brazil.*

Objectives: To assess how disease characteristics, sociodemographic aspects and comorbidities can contribute to the persistence of disease activity in patients with difficult-to-treat (D2T) RA and the impact that joint ultrasound (US) may have on clinical decision.

Methods: In this historical study 24 D2T and 36 non-D2T patients were enrolled; their data were evaluated through the review of medical records. After a year, joint US was performed according to the US10 score in the pacients that maintained moderate/high disease activity according to the CDAI.

Results: The D2T group had a higher mean CDAI, SDAI and pain VAS, a higher frequency of glucocorticoid and tsDMARD current therapy and difference in number of failed b/tsDMARD, also higher BMI mean and frequency of fibromyalgia, depression and anxiety (Table 1). There were no differences in education (years), working situation and economic classification. After one year, 7 patients that maintain moderate/high disease activity according to CDAI were submitted to joint US. In the day of the exam, there was evidenced in 51 of synovitis in physical exam (mean:7.28/SD:2.81), while the US showed 28 synovitis by grey scale (mean:4/SD:2,87) and 19 joints with power doppler (mean:2.71/SD:2.11). Before performing the US, the attending physician was asked if he would modify the treatment, the answer was positive in 4 cases, after receiving the US result the treatment was modified in 2 cases (p: 0,655).

Conclusion: In the D2T group, obesity, pain and mood disorders were identified as contributing factors. These factors impact in disease activity, show the clinical complexity of RA and must be assessed when tailoring the therapeutic strategies for a personalized medicine. In this study the joint USG did not help in clinical decision.

Reference 1: Roodenrijs NMT, de Hair MJH, van der Goes MC, et al. Ann Rheum Dis 2018;0:1-5. Doi:10.1136/ annrheumdis-2018-213687

Reference 2: Nagy G, et al. Ann Rheum Dis 2021;80:31–35. Doi:10.1136/ annrheumdis-2020-217344

Disclosure of Interest: None declared

Keywords: Difficult-to-treat, Joint ultrasound, Rheumatoid arthritis

TABLE:.

	D2T	Non-D2T	*p* value
Sociodemographic			
Age, mean + SD	56,9 ± 7,95	57,53 ± 6,41	0,76
Female %	95,8	91,7	0,64
Disease characteristics			
Disease duration, mean + SD	15,13 ± 6,12	12,31 ± 8,03	0,15
RF/ACPA presence, %	91,7	94,4	0,56
CDAI, mean + SD	13,38 ± 11,80	6,92 ± 6,13	0,01
SDAI, mean + SD	18,11 ± 13,94	7,92 ± 6,53	0,02
Pain VAS, mean + SD	4,43 ± 2,21	3,14 ± 2,20	0,03
HAQ, mean + SD	0,86 ± 0,71	0,93 ± 0,79	0,80
Current therapy			
Glucocorticoid, %	75	44,4	0,019
csDMARD, %	70,8	83,3	0,25
bDMARD, %	58,3	61,1	0,83
tsDMARD %	37,5	2,8	0,01
Failed DMARD			
csDMARD	2(0-3)	1(0-4)	0,60
Total b/tsDMARD, median	3(2-6)	0(0-3)	0,001
Comorbidities			
Comorbidities presence %	100	72,2	0,004
BMI, mean + SD	29,31 ± 5,17	26,61 ± 3,75	0,02
Fibromyalgia, %	25	2,8	0,013
Depression, %	45,8	5,6	0,001
Anxiety, %	45,8	5,6	0,001

PANLAR2023-1309

IMPACT OF ANEMIA AND HEMOGLOBIN (HGB) LEVELS IN RHEUMATOID ARTHRITIS

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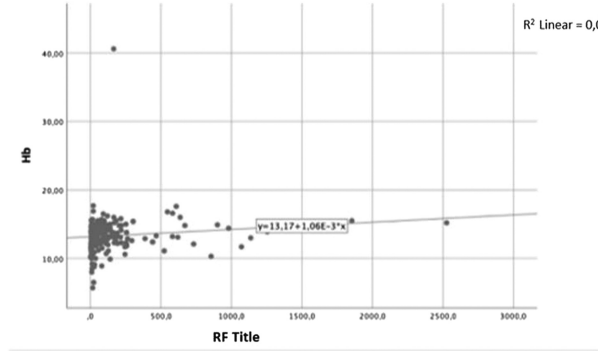
Objectives: Evaluate the correlation between Hgb levels in a cohort of patients with RA and different numerical estimators of the disease. To analyze the association of RA characteristics with low Hgb values.

Methods: Cross-sectional study, which included patients with RA diagnosis (recent and follow-up). In the first visit the following were performed/ collected: laboratory studies (RF and ACPA), X-ray films of hands and feet, hand ultrasound and sociodemographic data, clinical data and clinimetry (VAS pain, joint count, HAQ).. Each evaluator did not know the data of the other studies or the treatment indicated by the patients' primary care physicians. The cut-off value for a low Hgb was less than 13. Statistical analysis: descriptive statistics, Chi^2 and Fisher exact tests (categorical variables) and Students or Mann Whitney tests (continuous variables), according to their distribution; binomial logistic regression (variables with significant p), Pearson and Sperman correlation were performed.

Results: We included 271 patients with RA who fulfilled the complete baseline evaluation, 73% were female, mean age 54 years (SD: 14), median duration of follow up 24 months (RIQ: 12-60), 52% were newly diagnosed (less than 2 years), 80% were seropositive. The mean Hgb value was 13,3 (SD + 2.3), frequency of anemia 18%. Hgb levels correlated positively with RF (CC: 0.196 p 0.01), NAD (CC 0.13 p 0.03). Anemia was associated with: RF+ (60 vs 76 p 0.02), Age (57.4 vs 54 p 0.005), Schooling (13.2 vs 12.2 p 0.04), HAQ (0.8 vs 0.7 p 0.001), TNF Blocking agents use (47% vs 31% p 0.04), MTX dose (27% vs 13% p 0.002). In patients with low Hgb levels (<13): Early arthritis (42% vs 57% p 0.01), Female sex (74% vs 58% p 0.005), RF+ (64 vs 81 p 0.02), More than 3 comorbidities (4% vs 11% p 0.02), Age (55 vs 53 p 0.004), VAS pain (50.8 vs 52 p 0.02), HAQ (0.74 vs 0.75 p 0.02). In multivariate analyses, for dependent variable, anemia was independently associated: RF+ (OR: 0.37 CI95% 0.17-0.8), MTX dose (OR: 1.1 CI95% 1.01-1.2). And for the dependent variable, low Hgb levels: Female sex (2.4 CI95% 1.2-4.6), RF+ (OR 0.4 CI95% 0.2-0.8).

Conclusion: Hgb levels correlated with RF titer, anemia was negatively associated with RF positivity, and higher doses of MTX. In the female sex, a Hgb of less than 13 was observed. In our cohort Hgb levels did not correlate with disease activity and were only associated with sex and MTX use.

Image N° 1



Correlation of Hb and RF

Disclosure of Interest: None declared

Keywords: Anemia, Rheumatoid arthritis

PANLAR2023-1322

COMPARISON OF CAROTID PLAQUE PRESENCE ACCORDING TO DISEASE DURATION IN RHEUMATOID ARTHRITIS PATIENTS

Iris J. Colunga-Pedraza[1], Dionicio A. Galarza-Delgado[1], José R. Azpiri-Lopez[2], Victor M. Beltrán-Aguilar*[1], Valeria Gonzalez-Gonzalez[1], Ángel G. Arias-Peralta[2], Natalia De Ávila-Gonzalez[1], and Jesús A. Cardenas-De la Garza[1]. [1]*Rheumatology,* [2]*Cardiology, Hospital Universitario "José E. González", Monterrey, México.*

Objectives: Compare Carotid plaque (CP) presence in RA patients, according to their disease duration.

Methods: Descriptive, cross-sectional, and comparative study. We enrolled RA patients between the ages of 40 and 75 years, who fulfilled the 2010 ACR/ EULAR classification criteria and were recruited at a Rheumatology service from a tertiary care hospital, in Monterrey, Mexico. Patients were divided by time of disease duration into quartiles. A carotid ultrasound (cUS) was done in all patients. CP presence was defined as carotid intima-media thickness (cIMT) ≥1.2 mm or focal thickness ≥ 0.5 mm. We used the Kolmogorov-Smirnov test

TABLE 1.. Results (n = 208)

Variable	1st Quartile (n = 54)	2nd Quartile (n = 50)	3rd Quartile (n = 52)	4th Quartile (n = 52)	*p* value
Duration of disease, years. median (p25-p75)	1.69 (1.00-2.81)	5.07 (4.00-6.00)	10.92 (9.58-12.84)	20.35 (16.81-24.73)	
Sex, n (%)					
Women	50 (92.6)	45 (90.0)	51 (98.1)	50 (96.2)	NS
Age, years. media (±SD)	53 (7.97)	55 (9.28)	56 (8.49)	58 (9.08)	0.040
BMI, kg/m2. median (p25-p75)	28.08 (24.71-32.52)	29.85 (26.49-34.46)	27.18 (24.62-30.11)	27.11 (24.60-30.34)	0.010
Presence of Carotid Plaque, n (%)					
Unilateral	6 (11.1)	6 (12.0)	7 (11.5)	10 (19.2)	
Bilateral	14 (25.9)	12 (24.0)	13 (25.0)	10 (19.2)	NS
Total	20 (37.0)	18 (36.0)	20 (38.4)	20 (38.4)	

Demographic and clinical characteristics of RA patients. Quartiles according to disease duration; , each variable is described individually. BMI Body Mass Index.

for normality and variables were described, correspondingly. We used ANOVA and Kruskal-Wallis test or Chi-square test to compare differences between groups.
Results: Two hundred-eight RA patients were included. Results are shown in table 1. For longer time of disease duration, no significant differences in uni or bilateral CP presence between groups (p = 0.322) was found; bilateral presence of CP was more often than unilateral.
Conclusion: We did not find a significant increase in CP frequency between quartiles according to disease duration; however, the inclusion of cUS in the managment of RA patients could be important due to the high prevalence of CP in this patient population.

Disclosure of Interest: None declared

Keywords: Rheumatoid Arthritis, Ultrasound

PANLAR2023-1028

COMPARING COST PER CLINICAL REMISSION OF JANUS KINASE INHIBITORS (JAKI) THERAPIES IN THE TREATMENT OF RHEUMATOID ARTHRITIS IN ARGENTINA

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Objectives: Janus kinase inhibitors (JAKi) are a class of targeted therapies for rheumatoid arthritis (RA) with established clinical efficacy. However, little is known about the cost per response of these therapies compared to each other. This study estimates the incremental cost per remission (CpR) [DAS28-CRP] for JAKi in patients with moderate to severe RA who had inadequate response to conventional synthetic disease modifying antirheumatic drugs (csDMARD) in Argentina.
Methods: Using a model developed in Excel, which combines clinical remission rates (defined as DAS28 < 2.6) and treatment costs, we estimated the CpR of the following JAKi treatments available in Argentina: baricitinib (BAR), tofacitinib (TOF) and upadacitinib (UPA). The analysis considers CpR at 12 and 24 weeks according to the timeframe used to assess efficacy outcomes in clinical trials for RA. Efficacy inputs (% remission) for comparing JAKi with csDMARD were obtained from a published network meta-analysis. Costs of treatments (considering JAKi with csDMARD) were estimated based on approved regimens and doses of each original drug as well as drug prices obtained from a publicly available price list. The incremental CpR compared to csDMARD was calculated as the incremental cost of treatment of interest divided by the incremental efficacy rate. Incremental CpR are expressed in Argentinean Pesos ($) (exchange rate 1US$ = 173.75$, Nov 2022).
Results: At 12 weeks, the remission rates for these therapies were: UPA 15 mg 32.3%; BAR 4 mg 25.3%; TOF 5 mg 24.4%; BAR 2 mg 22.3%; and csDMARD 7.1%. At the same time, the treatment costs were: UPA 15 mg $531,877; BAR (2 or 4 mg) $584,946; TOF 5 mg $612,902; and csDMARD $13,168. UPA treatment showed the lowest incremental CpR (Figure 1). Considering clinical remission at 24 weeks, UPA yielded lower treatment costs than BAR and TOF (Table 1). The incremental CpR were, in increasing order: UPA 15 mg $3,015,750; BAR 4 mg $4,467,014; BAR 2 mg $5,633,278; and TOF 5 mg $15,377,801.
Conclusion: The results suggest that in Argentina among JAKi therapies for the treatment of patients with moderate to severe RA who were inadequate responders to csDMARD- , UPA would have the lowest incremental CpR.

Disclosure of Interest: J. Elgart Consultant with: JE has received consulting and speaker honorariums from pharmaceutical industry including Abbvie., M. D. L. A. Britos Employee with: MAB is employee of AbbVie Argentina and may own AbbVie stock or stock options., G. Calvi Employee with: GC is employee of AbbVie Argentina and may own AbbVie stock or stock options., D. Kanevsky Employee with: DK is employee of AbbVie Argentina and may own AbbVie stock or stock options., A. Secco: None Declared

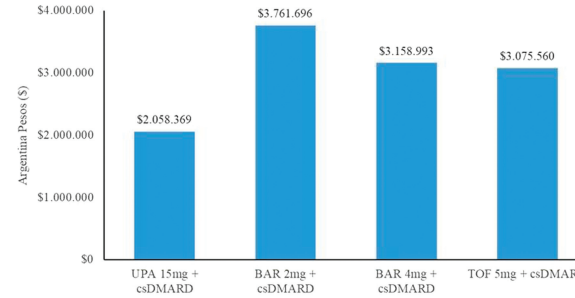
Keywords: Cost per response, Janus kinase inhibitors, Treatment cost

TABLE: 1.. Remission rate, costs, and incremental CpR for JAKi at 24 weeks

Treatment	Clinical Remission	Treatment cost (for 24-weeks) *	Incremental CpR *
csDMARD	12.3%	$26,336	-
UPA 15 mg + csDMARD	46.7%	$1,063,754	$3,015,850
BAR 2 mg + csDMARD	32.6%	$1,169,891	$5,633,278
BAR 4 mg + csDMARD	37.9%	$1,169,891	$4,467,014
TOF 5 mg + csDMARD	20.1%	$1,225,804	$15,377,801

* In Argentinean Pesos ($).

Figure 1. Incremental cost per remission for JAK inhibitors at 12 weeks



UPA, upadacitinib; BAR, baricitinib; TOF, tofacitinib; csDMARD, conventional synthetic disease modifying antirheumatic drug.

PANLAR2023-1320

EFFECTIVENESS OF SUBCUTANEOUS METHOTREXATE IN PATIENTS WITH RHEUMATOID ARTHRITIS AND ITS PERSISTENCE IN THE LONG TERM

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Objectives: Methotrexate (MTX) has been established as the cornerstone of treatment for rheumatoid arthritis (RA). However, many patients treated with oral MTX experience adverse events. For this reason, new forms have been developed, such as the subcutaneous presentation in a prefilled syringe, which improves tolerance, adherence and response to treatment. The aim of this study is to describe the effectiveness of treatment with subcutaneous MTX (SC MTX) in a prefilled syringe in a reference center for the management of patients with RA and the persistence of treatment during 5 years of follow-up.
Methods: Historical observational cohort study (1-Jan-2018 and 31-Dec-2022) in patients with RA, with more than one year of treatment with MTX SC; Patients <12 months with MTX SC and those who had concomitant biological therapies were excluded. Response to treatment was assessed by the DAS28.
Results: 1062 patients treated with MTX SC were included. At the time of analysis, 877 patients persisted in treatment and 185 had abandoned due to adverse events (17.4%). 190 received it as monotherapy, 285 in combination with other conventional DMARDs, 184 with a corticosteroid, and 218 with a cDMARDs and a corticosteroid. 368 (42%) started therapy due to intolerance to the oral formulation, 20 (2.3%) received the 7.5 mg dose, 114 (13%) 10 mg and 234 (26.7%) 15 mg, while 509 patients (58%) did so to optimize the dose, 259 (29.5%) with 20 mg and 250 (28.5%) with 25 mg.

At one year of follow-up, there was an increase in the number of patients who achieved low disease activity [573 (65.3%) remission and 139 (15.85%) low activity] and there was a decrease in patients with moderate and high

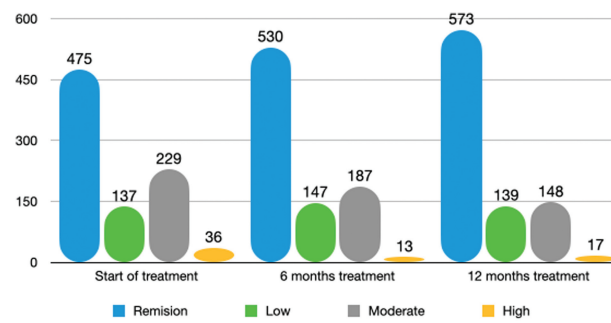

Figure 1. Patients by disease activity group at baseline, 6, and 12 months of treatment with MTX SC

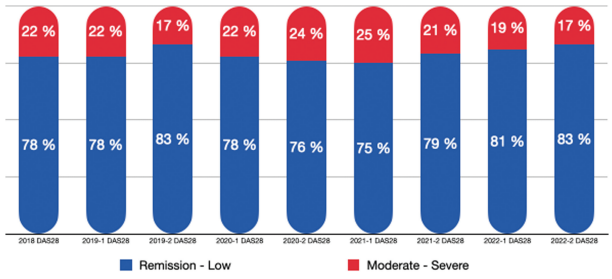

Figure 2. Persistence of the effectiveness of subcutaneous methotrexate over 5 years

activity (figure 1). Of the 877 patients, 27.6% have remained in treatment between 12 and 24 months, 18.8% between 25 and 36, 19% between 37 and 48, and 34.5% for more than 48 months. Over the 5 years, a gradual increase in the percentage of patients achieving low disease activity was observed (Figure 2).

Conclusion: This study shows high effectiveness of treatment with MTX SC in patients with RA; an increase in the percentage of patients who achieved remission was observed, with low treatment discontinuation rates. After 5 years of follow-up, high persistence rates were observed. This makes MTX SC an excellent alternative for patients with intolerance or insufficient response to oral MTX.

Disclosure of Interest: None declared

Keywords: Methotrexate, Rheumatoid Arthritis, Treatment

PANLAR2023-1318

COMPARISON OF CARDIOVASCULAR RISK AS MEASURED BY TRADITIONAL RISK SCALES ACCORDING TO DISEASE DURATION IN RHEUMATOID ARTHRITIS

Iris J. Colunga-Pedraza[1], Dionicio A. Galarza-Delgado[1], José R. Azpiri-Lopez[2], Victor M. Beltáan-Aguilar*[1], Valeria Gonzalez-Gonzalez[1], Ángel G. Arias-Peralta[2], Natalia De Ávila-Gonzalez[1], and Jesús A. Cárdenas-De la Garza[1]. *[1]Rheumatology, [2]Cardiology, Hospital Universitario "José E. González", Monterrey, México.*

Objectives: To compare cardiovascular risk (CVR) by six scales: Framingham lipids and BMI, ACC/AHA ASCVD 2013, Reynolds (RRS), SCORE 2 and QRISK III, according to the time of disease duration in RA patients.

Methods: Descriptive, comparative and cross-sectional study. We enrolled RA patients between 40 and 75 years of age who fulfilled the 2010 ACR/EULAR classification criteria and who were recruited at the Rheumatology service in a tertiary care hospital. Patients were divided by disease duration into quartiles. CVR results from scales were multiplied by 1.5 factor according to 2016 EULAR recommendation. Normality was assesed by Kolmogorov-Smirnov test. Variables with a non-normal distribution were described by median and interquartile range (p25-p75). Differences between groups were analyzed by Kruskal-Wallis or Chi-square tests, accordingly.

Results: A total of 406 RA patients were included. Demographic characteristics are shown in table 1. The longer the disease duration, the more the increase in the CV scales (except for RRS; p = 0.123).

Conclusion: CVR increased according to disease duration. Despite the fact , that most of the scales showed such increased, there was variability between the different scales; this may be attributable to the variables evaluated in each one. More studies are required to define which scale is the best to predict CVR in RA patients.

TABLE 1.. Results (n = 406)

Variable	1st Quartile (n = 102)	2nd Quartile (n = 101)	3rd Quartile (n = 102)	4th Quartile (n = 101)	*p* value
Duration of disease, years. median (p25-p75)	1.12 (0.93-2.00)	4.84 (3.62-5.70)	10.62 (9.03-12.80)	19.69 (15.94-24.43)	
Women, (n)%	94 (92)	89 (88)	98 (96)	93 (92)	NS
Age, years. median (p25-p75)	56 (49-62)	55 (48-62)	56 (48-60)	57 (49-62)	0.002
BMI, kg/m^2. median (p25-p75)	27.2 (24.6-31.1)	28.6 (26.1-32.1)	28.1 (24.5-32.5)	26.9 (23.1-29.4)	0.012
Cardiovascular risk scales, %. median					
ASCVD	2.1	3.3	2.92	4.65	0.008
FRS-Lipids	6.3	8.1	7.95	9.3	0.028
FRS-BMI	8.55	10.95	11.85	12.6	0.023
SCORE 2	3	4.5	6	6	0.006
Q-RISK III	5.55	8.7	7.8	10.8	0.001
RRS	1.5	1.5	1.5	4.5	NS

Demographic and clinical characteristics of RA patients studied. Quartiles according to disease duration; each variable is described individually. BMI Body Mass Index; ASCVD Atheroesclerotic Cardiovascular Disease; FRS Framingham Risk Score; RRS Reynolds Risk Score; SCORE 2 Systematic Coronary Risk Evaluation 2.

Disclosure of Interest: None declared

Keywords: Cardiovascular risk, Rheumatoid arthritis

PANLAR2023-1015

SLEEP QUALITY AND PREDICTORS OF OPTIMAL SLEEP IN PATIENTS WITH RHEUMATOID ARTHRITIS: DATA FROM A RECENT-ONSET COHORT

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Objectives: Sleep disorders are part of the symptomatology of rheumatoid arthritis (RA) and might be related to disease characteristics and comorbidities. Questionnaires are often the instrument of choice to assess sleep. The Medical Outcome Study Sleep Measure/Scale (MOS-SS) is valid, reliable, and feasible for assessing sleep quality in RA patients.

The study aimed to describe sleep quality, identify predictors of optimal sleep, and examine the relationship between sleep quality and patient-reported outcomes (PROs) behaviors in patients with variable disease duration that belong to a recent-onset RA cohort.

Methods: Patients whose data were analyzed were identified from the recent-onset RA cohort initiated in 2004. In 2010, the MOS-SS was incorporated into patients' assessments.

Through December 2019, the cohort comprised 187 patients with at least one MOSS-SS application (in 78 patients at cohort entry) and six months of outcomes´ behavior (cumulative) previous to MOS-SS application: DAS28-ESR, pain-VAS, fatigue, HAQ-DI, SF-36, treatment (corticosteroids, DMARDs/patient and adherence), Charlson score, and major depressive episodes (DSM-IV). A trained data abstractor reviewed the patients medical recirds.

Multiple logistic regression analysis estimated Odds ratios (95% [confidence interval]) to define baseline and cumulative predictors of optimal sleep (dichotomized variable derived from the quantity of sleep dimension of the MOSS-SS).

Results: At the first MOSS-SS application, patients were primarily middle-aged women with short disease duration and low disease activity. The sleep quality description is summarized in the **figure** (the dimension scores varied from 0-100, with higher scores indicating more of the named dimension).

Ninety-six patients (51.3%) had optimal sleep (7-8 hours/night, last four weeks). Lower baseline BMI (0.897 [0.833-0.967], better baseline fatigue score (1.022 [1.002-1.042]), longer follow-up at the clinic (1.575 [1.163-2.134]), and better SF-36 physical summary score (1.022 [1.003-1.041]) were predictors of optimal sleep (mental summary score remained in the model when switched to the physical summary score).

Seventy-seven patients had five consecutive MOSS-SS (first two years of follow-up). In them, sleep quality behavior correlated (moderately) with fatigue and the physical and emotional components of the SF-36.

Conclusion: Optimal sleep is achieved by half of the RA patients and is predicted by BMI, patient-reported outcomes, and follow-up.

Disclosure of Interest: None declared

Keywords: Mexico, Rheumatoid Arthritis, Sleep Quality

PANLAR2023-1366

LONG-TERM CLINICAL OUTCOMES OF PUERTO RICANS WITH RHEUMATOID ARTHRITIS THAT FAILED INITIAL TREATMENT WITH METHOTREXATE

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Objectives: The standard initial pharmacologic treatment of rheumatoid arthritis (RA) is methotrexate (MTX), either as monotherapy or in combination with other antirheumatic drugs. It is estimated that 30-50% of patients fail to respond to MTX. However, it is uncertain if MTX treatment failure would be detrimental to the long-term outcome of RA patients. Thus, we aimed to determine the clinical outcome in RA patients who failed initial treatment with MTX.

Methods: A historical cohort study was performed in Puerto Ricans with RA who received initial treatment with MTX. Those who did not achieve clinical remission or low disease activity by six months of therapy were considered non-responders. Demographic features, disease activity (per Disease Activity Score [DAS28]), functional status (per Health Assessment Questionnaire Disability Index [HAQ-DI]), joint deformities, radiographic joint damage, cumulative comorbidities, and pharmacologic treatment were assessed at study visit. Differences between MTX responders and non-responders were determined using Chi-square, Fisher's exact test, or Students *t*-test, as appropriate.

Results: A total of 111 patients were studied; 92.8% were women and the mean (SD) age was 54.3 (11.6). Sixty-three (56.8%) patients failed MTX therapy, and 48 (43.2%) patients had an adequate response. The following disease-modifying antirheumatic drugs (DMARDs) were added to those who failed MTX therapy after six months: adalimumab (47.6%), etanercept (27.0%), abatacept (11.1%), hydroxychloroquine (6.3%), tofacitinib (3.2%), tocilizumab (1.6%), upadacitinib (1.6%), and infliximab (1.6%). No significant differences were observed for sex, gender, lifestyle behaviors, disease activity, functional status, joint deformities, radiographic joint damage, and comorbidities between non-responders and responders to MTX.

Conclusion: In this group of RA patients from Puerto Rico, 56.8% failed initial treatment with MTX. In most of these patients, biologic and synthetic DMARDs were added to MTX. MTX non-responders had a similar clinical outcome to those who responded to MTX. These findings suggest that adding early alternative treatment to MTX in non-responders may result in a favorable long-term clinical outcome.

Disclosure of Interest: None declared

Keywords: Methotrexate, Outcome, Rheumatoid arthritis

PANLAR2023-1464

INCIDENCE OF CARDIOVASCULAR EVENTS IN PATIENTS WITH RHEUMATOID ARTHRITIS AFTER 5 YEARS OF FOLLOW UP

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Objectives: Cardiovascular events (CVE) are increased in rheumatoid arthritis (RA) patients compared to the general population. There is still need for information about CVE in South American patients with Rheumatoid Arthritis (RA).

To determine the incidence of CVE in patients with RA after 5 years of follow up.

Methods: Analysis of data after 5 years of follow-up from the longitudinal study "Cardiovascular Risk in immune mediated diseases" (PINV15-0346), of the National Council of Sciences and Technology (CONACYT-Paraguay), that includes patients with RA. Patients included in the study were followed-up by their rheumatologists to identify the occurrence of a CVE: cerebrovascular accidents (CVA), heart failure (HF), heart attack (HA), peripheral arterial disease (PAD), and mortality from these causes. CVE cumulative incidence was calculated after 5 years from the beginning of the project. Kaplan-Meier estimators, and Cox proportional hazard models were used to analyze related variables to CVE.

Results: 100 RA patients were included in the study, 91 patients completed 5 years of follow up. 88% were women, with a mean age of 51,36 ± 11,03 years. During the 5-year follow up period 4 patients had a first CVE (2 CVA, 1 HA, 1 HF). Only 1 patient died due to a CVE (HF and atrial fibrillation), and 3 died due to other causes (1 sudden death, 2 related to infections). CVE cumulative incidence was 0.04. Mean survival time for CVE was 57.0 (95% CI 56.09- 57.9) months. We did not find an association with obesity, altered LDL, HDL, TG or sex.

Conclusion: CVE incidence was low in this cohort of RA patients. We did not find any association between CVE and traditional cardiovascular risk factors in the present study.

Disclosure of Interest: None declared

Keywords: None

PANLAR2023-1503

COMORBIDITIES IN A COHORT OF PARAGUAYAN PATIENTS WITH RHEUMATOID ARTHRITIS

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Objectives: To determine the frequency of comorbidities and their relationship with disease features.

Methods: Descriptive and analytical cross-sectional study of a cohort of patients with established RA, according to the 2010 ACR/EULAR criteria, from three rheumatology reference centers. Epidemiological (i.e., sex, age), clinical (i.e., comorbidities, affected joints, DAS28, presence of extra-articular manifestations, treatment, form of onset), radiographical and laboratorial variables were determined. The qualitative variables are expressed in frequencies and percentages, and the quantitative ones in means. Chi square was used for qualitative variables and Students t for means. The statistical analysis were performed with the statistical program SPSS V.23.0.

Results: 438 patients were included, 84.7% female; mean age 55.26 ± 14.35 years. 71.3% were anti-CCP positive, 31.3% had erosions, 68% were being treated with methotrexate, 45.2% with leflunomide, 17% with biological therapy. 26.5% were in remission. Regarding comorbidities: 43.4% had arterial hypertension, 13.7% DM-2, 25.5% dyslipidemia, 23.3% Obesity, 9.1%; osteoporosis, 30.3%; hypothyroidism; 3.7% cancer; 2.5% heart failure. When comparing the presence of comorbidities with the characteristics of the disease, we found that arteria hypertension was associated with greater RA activity (p: 0.008), and with the presence of extra-articular manifestations (p 0.02). DM-2 was also associated with greater disease activity (p 0.03). Patients with hypothyroidism had fewer radiographic erosions. Patients with dyslipidemia, obesity, presented on average a higher number of swollen joints (p: 0.013, p 0.01).

Conclusion: In this cohort of patients, the most frequent comorbidities were hypertension, hypothyroidism, dyslipidemia, and obesity. The presence of hypertension and DM-2 were associated with greater RA activity.

Disclosure of Interest: None declared

Keywords: Artritis Reumatoidea, comorbidities

PANLAR2023-1556

PRESENCE OF OSTEOPOROSIS IN A COHORT OF PARAGUAYAN PATIENTS WITH RHEUMATOID ARTHRITIS

Vannia Valinotti[1], Gabriela Ávila-Pedretti[1,2], Lourdes Román[3], Angélica Amarilla*[1], Mariela Zarza[1], Evelyn Leiva[2], Paola Pusineri[2], Paloma de Abreu[4], and Sonia Cabrera-Villalba[1,2]. *[1]Hospital Central del Instituto de Previsión Social, [2]Hospital de Clínicas, Universidad Nacional de Asunción, [3]Ministerio de Salud Pública y Bienestar Social, [4]Sociedad Paraguaya de Reumatología, Asunción, Paraguay.*

Objectives: To determine the frequency of OP and its association with disease related features in patients with RA.

Methods: Descriptive and analytical cross-sectional study of a cohort of patients with established RA, according to the 2010 ACR/EULAR criteria, from

two reference centers: Hospital Central del Instituto de Previsión Social and Hospital de Clínicas-Universidad Nacional de Asunción. Epidemiological (i.e. sex, age), radiographic, laboratorial and clinical (i.e., gynecological data, comorbidities, DAS28, presence of extra-articular manifestations, treatment) variables were determined. The qualitative variables are expressed in frequencies and percentages and the quantitative ones in mean. Chi square was used for qualitative variables and the Student's t test for means. The statistical analysis was performed with the statistical program SPSS V.23.0.

Results: 141 patients diagnosed with RA were included, 94.3% were women, mean age 63.28 ± 8.55 years, mean disease duration of 12.79 ± 8.76 years. 74.8% had positive anti-CCP. 41.4% of the patients were in remission (DAS28 ESR), in current treatment with methotrexate 61.9%, leflunomide 54%, biological therapy 18%, 10.1% were in current treatment with glucocorticoids, with a mean dose 6.34 ± 2.62 mg/day of prednisone. There were 7,1% of current smokers and 2,1% of past smokers. Mean age at menarche was 13.84 ± 1.87 years, menopause 43.37 ± 6.4 years, and gestations were 3.21 ± 2.07. 30.9% of patients presented OP, and 51.8% osteopenia. 9.4% fragility fractures. When analyzing the epidemiological, clinical, and gynecological characteristics of RA with the presence or absence of OP, a significant association was found with older age (p: 0.01) and the presence of obesity (p: 0.01).

Conclusion: The presence of OP in this cohort of patients with RA is similar to that described in other series, and presents a significant relationship with older age and the presence of obesity..

Disclosure of Interest: None declared

Keywords: osteoporosis, Rheumatoid arthritis

RHEUMATOLOGY EDUCATION

PANLAR2023-1192

DESIGN OF A PRIMER FOR PATIENTS WITH RHEUMATOID ARTHRITIS: A STRATEGY TO RAISE AWARENESS AND EDUCATE THE POPULATION

Fernando Rodríguez-Florido*[1], Liliana Realpe-García[2], Zohelia Castaño-Sierra[3], Gabriel Santiago Rodríguez-Vargas[4], Adriana Rojas-Villarraga[5], and Pedro Santos-Moreno[4]. *[1]Patients education, BIOMAB - Center for Rheumatoid Arthritis, B, [2]Expert Patient, UniversitAR, Bo, [3]Expert Patient, UniversitAR, [4]Scientific direction, BIOMAB - Center for Rheumatoid Arthritis, [5]Research Institute, Fundación Universitaria de Ciencias de la Salud FUCS, Bogotá, Colombia.*

Objectives: In 2018, the UniversitAR multi-component educational program received government support for the training and certification of expert patients in Rheumatoid Arthritis (RA). This experience allowed, in addition to the design of educational content, the creation of complementary material so that all patients with this diagnosis can learn about fundamental aspects of their disease.

The objective of this project was to design a primer for patients with RA, which helps them understand the disease, the importance of long-term treatment and create therapeutic adherence.

Methods: A selection of 8 expert patients certified by the UniversitAR program was made to create the editorial committee responsible for writing the primer. Then, a selection of the thematic contents with the greatest impact on their educational process was made and the writing of the initial manuscript (done by patients for patients) began. Afterwards, a first revision of the manuscript was made and some contents were adjusted according to the clinimetry standards for international rheumatology. Finally, the primer was submitted for review by the interdisciplinary scientific team to create the final version.

Results: In December 2022, an event for RA patients was held and the primer was launched. The contents of this document summarize several of the concerns that most patients have in therapy and educate regarding several of the factors that lead to the success of a treatment (Figure 1). In 2023, the delivery of this primer to all patients will begin so that they can have a source of consultation and information.

Conclusion: The diversified dissemination of educational content helps patients have reliable, accurate and oriented information to improve their participation with medical teams to achieve therapeutic objectives together.

We thank the Ministry of Science, Technology and Innovation MINCIENCIAS for allowing us to design this primer and for being able to train our patients. We also thank the expert patients in RA who were fundamental part of the design of the contents of this primer.

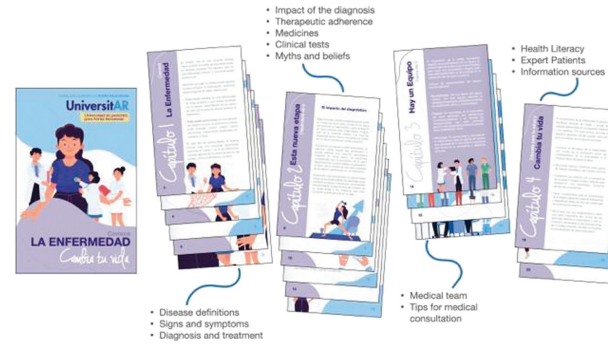

Figure 1: Thematic contents of the primer for patients with rheumatoid arthritis

Disclosure of Interest: None declared

Keywords: Patient education, Rheumatoid arthritis

PANLAR2023-1128

DEVELOPMENT OF A WEB PLATFORM FOR THE EDUCATION OF PATIENTS WITH RHEUMATOID ARTHRITIS

Gabriel Santiago Rodríguez-Vargas*[1], Fernando Rodríguez-Florido[2], Noralma Pinto-Flórez[3], Liliana Realpe-García[3], Adriana Rojas-Villarraga[1], and Pedro Santos-Moreno[4]. *[1]Research Institute, Fundación Universitaria de Ciencias de la Salud FUCS, [2]Patients Education, BIOMAB - Center for Rheumatoid Arthritis, [3]Expert Patient, UniversitAR, [4]Scientific Direction, BIOMAB - Center for Rheumatoid Arthritis, Bogotá, Colombia..*

Objectives: UniversitAR is a multi-component educational program for patients with rheumatic diseases. In 2018, the program for patients diagnosed with Rheumatoid Arthritis (RA) was launched. This program included topics such as: clinimetry, comprehensive treatment of the disease, healthy lifestyles, and the enhancement of personal and interaction skills. Education in patients with RA is of crucial importance to obtain better outcomes.

The aim of this project was to design a digital education platform, with reach for patients in any country in Latin America and the Caribbean.

Methods: A review and digital adaptation of the 3 educational levels of UniversitAR (Level 1: Basic Knowledge of the Disease Program, Level 2: Patient Empowerment Program for Effective Self-Management of the Disease and Level 3: Expert Patient Program) was made, in order to update content, reduce the total training time and add evaluation and measurement criteria for each educational level. A total of 104 educational sessions were reviewed and adapted, as well as the measurements included in the training process in factors such as: the level of disease activity, autonomy and independence, quality of life and satisfaction with the educational program. It was considered viable to maintain the 3 levels of education to respect the criteria of social inclusion that is a fundamental principle of UniversitAR.

Results: The multicomponent educational program was reconstructed, reducing the educational program from 104 to 84 educational sessions and minimizing the academic intervention times in each session. The total estimated training time for the patient went from 22 months to be carried out in a period between 8 months and 1 year, considering that the patient is the one who decides the number of sessions to observe per day. Each level includes a process of measurements in clinimetry, disease activity, quality of life, and empowerment (See Figure 1).

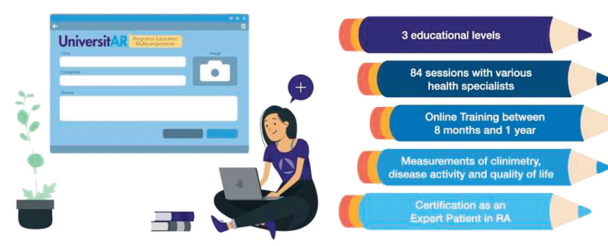

Figure 1. Description of the multi-component educational program web platform

In December 2022, an event for RA patients was held and a demo of the platform was released. Its official launch will be in the first quarter of 2023 and the training of 600 patients is expected this year.

Conclusion: It is important to offer educational strategies that are easily accessible to the population, since this breaks down barriers to access such as: the patient's geographic location with respect to their place of training, mobility limitations, and out-of-pocket expenses incurred to attend to training sessions.

Disclosure of Interest: G. S. Rodríguez-Vargas: None Declared, F. Rodríguez-Florido: None Declared, N. Pinto-Flórez: None Declared, L. Realpe-García: None Declared, A. Rojas-Villarraga: None Declared, P. Santos-Moreno Grant / Research support with: Abbvie, Abbott, Biopas-UCB, Bristol, Janssen, Pfizer, Roche, Sanofi, Speakers Bureau with: Abbvie, Abbott, Biopas-UCB, Bristol, Janssen, Pfizer, Roche, Sanofi

Keywords: Education, Patient, rheumatology

PANLAR2023-1352

SEXUAL DYSFUNCTION IN PREMENOPAUSAL WOMEN WITH PRIMARY SJOGREN'S SYNDROME.

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Objectives: To evaluate the frequency of sexual dysfunction (SD) in premenopausal patients with primary Sjögren's Syndrome (pSS) and the relationship with anxiety and depression in those patients.

Methods: Observational, analytical, multicenter, cross-sectional study with longitudinal data collection. Premenopausal patients diagnosed with pSS according to the 2010 ACR/EULAR criteria were included. Patients with another autoimmune rheumatic disease, endometriosis, congenital genital anomalies, genital area lesions, pelvic tumors, radiotherapy, chemotherapy and being sexually inactive for the last 4 weeks were excluded. We used self-reported questionnaires: Female Sexual Function Index (FSFI): the higher the score, the better sexual functionality (score less than or equal to 26.55 indicates female sexual dysfunction), Brief questionnaire to assess the Profile of Female Sexual Function (BPFSF). Anxiety and depression were evaluated using Anxiety and Depression Scale questionnaire (HADS-A y HADS-D). Continuous variables were reported as mean and standard deviation or median and interquartile range, depending on their distribution. Categorical variables were reported as percentage. A multiple linear regression model was performed, being sexual dysfunction the dependent variable.

Results: 38 patients with a median age of 38 and a disease duration of 5 years were included. 73.68% had a stable partner. 68.42% were fairly satisfied with their body image. 36.84% took medication that could affect sexual functionality. The mean of the FSFI was 19.94 ± 8, with the presence of SD in 76.32%. According to the HADS-A and HADS-D, 26.32% presented relevant anxiety symptoms and 13.16% depression, respectively. The BPFS revealed that 55.26% had low sexual desire. The ESSPRI yielded a mean of 3.27 ± 2. The median of the ESSDAI was 0 (IQR: 0-1). In the univariate analysis the following variables were significantly associated with SD: the use of medications that alter sexual function (β coefficient: -7.09. 95% CI: -1.59 to -12.61), stable partner (β coefficient:7.96 IC:95% 1.95 A 13.96) and BPFSF (β coefficient:0.54 IC:95% 0.25 a 0.83). In the multivariate analysis, a significant and independent association of the FSFI was observed with the BPFSF (β coefficient 0.62 IC95%: 0.36-0.88) and with having a stable partner vs those who did not (β coefficient: 5.31 IC 95% 0.32-10.30)

Conclusion: SD is frequent in premenopausal women with pSS. The results support the relevance of addressing this aspect for the proper management of patients.

Reference 1: Meyer-Bahlburg HF, Dolezal C. The Female Sexual Function Index: A methodological critique and suggestions for improvement. J Sex Marital Ther 2007; 33(3): 217–224.

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Disclosure of Interest: None declared

Keywords: Primary Sjogren's Syndrome., Sexual Dysfunction

PANLAR2023-1297

INFLUENCE OF A MULTICOMPONENT EDUCATIONAL PROGRAM ON PATIENT REPORTED OUTCOMES MEASUREMENTS IN A GROUP OF PATIENTS WITH RHEUMATOID ARTHRITIS

Noralma Pinto-Flórez[1], Zohelia Castaño-Sierra[1], Fernando Rodríguez-Florido[2], on behalf of q Gabriel Santiago Rodríguez-Vargas*[3], Jaime Andrés Rubio-Rubio[4], Adriana Rojas-Villarraga[4], and Pedro Santos-Moreno[3]. *[1]Expert Patient, UniversitAR, [2]Patients Education, [3]Scientific Direction, BIOMAB - Center for Rheumatoid Arthritis, [4]Research Institute, Fundación Universitaria de Ciencias de la Salud FUCS, Bogotá, Colombia.*

Objectives: Educational strategies in patients with rheumatoid arthritis (RA) are a fundamental tool for the objective measurement of clinimetry by patients (Patient Reported Outcomes Measurements- PROMs).The objective of this study is to compare measurement of clinimetry when performed by a medical group (MG) with PROMs in an educational context.

Methods: Cross-sectional study. A group of adult patients with RA who participated in a multicomponent RA education program (EMRA Figure 1) and another who did not participate (NEMRA) were included. The group of EMRA and NEMRA patients performed the PROMs. A MG (blind to the type of patient group) performed Clinimetry measurements with a difference of 1 week. Clinical, sociodemographic, and clinimetry variables were included in the RedCap® platform. The MG and the groups of patients evaluated the MDHAQ, RAPID3, PAS, EQ5 and Fatigue scales. A comparison of the medians of the variables evaluated by PROMs and by the MG (Wilcoxon for paired data) was done.

Results: 91 women were included. The median duration of the disease was 10.9 years (12.1). The EMRA group had a higher proportion of education above secondary school (p = 0.013). In the EMRA group, there were no significant differences between the clinimetry evaluated by the MG and the PROMs. In the NEMRA group, significant differences were found in most variables (Table).

Conclusion: PROMs measurements have a value comparable to the clinimetry performed by the MG in those patients who are under an educational program with emphasis on self-management of their disease. It can be valuable to have an objective measurement made the RA patient that can be useful at the time of the consultation, saving time in its development and facilitating the adoption of therapeutic behaviors. It is suggested that for a good development of PROMs, patients have prior educational training so that these measurements are similar to those performed by the MG.

Disclosure of Interest: N. Pinto-Flórez: None Declared, Z. Castaño-Sierra: None Declared, F. Rodríguez-Florido: None Declared, G. S. Rodríguez-Vargas: None Declared, J. A. Rubio-Rubio: None Declared, A. Rojas-Villarraga: None Declared, P. Santos-Moreno Grant / Research support with: Abbvie, Abbott,

TABLE. Comparison of clinimetry and PROMs according to the two groups. a Median (Interquartile range) b Wilcoxon test for paired samples.

	EMRA Group n = 28			NEMRA Group n = 63		
Variable a	PROMs	MG	*p* value b	PROMs	MG	*p* value b
Fatigue	4.1 (4)	4 (5.8)	0.778	5.3 (6.0)	5 (8)	***0.021***
MDHAQ	1.5 (2.5)	1.7 (2.7)	0.329	2.3 (3.0)	3 (2.6)	***0.018***
RAPID3	12.8 (7.3)	11.8 (7.6)	0.927	15.7 (7.0)	14.7 (8.7)	0.251
PAS	4.2 (2.4)	3.9 (2.5)	0.927	5.2 (2.4)	4.8 (2.8)	0.259
EQ-5D-3 L TTO score	0.695 (0.250)	0.812 (0.198)	0.151	0.640 (0.460)	0.710 (0.267)	***0.038***
EQ-5D-3 L VAS score	0.635 (0.195)	0.722 (0.153)	0.130	0.590 (0.270)	0.645 (0.298)	***0.027***

Figure 1: Description of the multicomponent educational program

Biopas-UCB, Bristol, Janssen, Pfizer, Roche, Sanofi, Speakers Bureau with: Abbvie, Abbott, Biopas-UCB, Bristol, Janssen, Pfizer, Roche, Sanofi

Keywords: Patient education, Patient Reported Outcome, Self-perception of health

PANLAR2023-1599

EMPOWERING HISPANIC/ LATIN(A/O) COMMUNITIES IN MANAGING RHEUMATOID ARTHRITIS: THE ROLE OF PATIENT ADVISORS AND CULTURALLY SENSITIVE EDUCATION

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Objectives: Rheumatoid arthritis (RA) is a chronic autoimmune disease that disproportionately affects Hispanic/Latin(a/o) individuals. The aim of this study was to assess the feasibility and efficacy of culturally appropriate Spanish language-first patient education for RA.

Methods: Our team used social listening, patient advisor recruitment, and patient advisor meetings to identify the educational needs of Hispanic/Latin(a/o) RA patients. Our patient advisors were eight Hispanic/Latin(a/o) patients who had been diagnosed with RA between 1 and 20 years earlier. Over a 12-month period, these participants regularly attended and actively participated in weekly online conference calls moderated in Spanish.

Results: Analysis of meeting notes identified a wide range of educational information needs, including treatment literacy, managing symptoms, and understanding the roles of nutrition and exercise in managing RA. Patient advisors also frequently expressed a strong need for support groups and emotional support in Spanish, as well as the need for advocacy for translation services when necessary. We developed five educational modules delivered online in mobile phone-friendly formats that were culturally appropriate and tailored to the educational needs identified by the patient advisors.

Conclusion: The results of this study are incredibly encouraging and demonstrate a clear need for more programs to address the specific needs of Hispanic/Latin(a/o) individuals living with RA. This project underscores the importance of involving patient advisors and utilizing culturally sensitive education in addressing health disparities among Hispanic/Latin(a/o) communities living with RA.

Disclosure of Interest: None declared

Keywords: Health equity, Health literacy

TABLE 1.. Major Educational Needs Identified by Hispanic Rheumatoid Arthritis Patient Advisory Board

Educational need/issue (n = 182)*	Mentions (number, %)
Treatment with medication	44 (24.2)
Support groups or emotional support	42 (23.1)
Spanish-language support group	10 (5.5)*
Managing symptoms	22 (12.1)
Health system issues/insurance	21 (11.5)
Understanding disease (eg, causes, remission vs cure)	17 (9.3)
Healthy diet	14 (7.7)
Exercise	12 (6.6)
Finding Spanish-speaking physician	10 (5.5)

"Issues that were mentioned 10 or more times were included in this analysis. Total % >105% because mentions of need for Spanish-language support groups are also counted in overall mentions of support groups and emotional support

PANLAR2023-1557

RHEUMATOLOGIST ADHERENCE TO VACCINE RECOMMENDATION IN PATIENTS WITH IMMUNE-MEDIATED INFLAMMATORY DISEASES

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Objectives: Backgroud: Patients with immune-mediated inflammatory diseases (IMID), have an increased risk of presenting infections, this arises from immunosuppression related to the disease and its treatments. Vaccination in patients with autoimmune diseases is highly recommended by various clinical practice guidelines(1).

Studies in Latin America show low rates of adherence, both in patients vaccine application and doctor's recommendations. One study shows that the lack of vaccination in 43% of their patients was due to their rheumatologist not recommending it (2). This is an eye opener on the key role physicians play in the overall outcome.

Objective: To determine the adherence rate rheumatologists have, when it comes to recommending their patients vaccinations, suggested by clinical practice guidelines.

Methods: A descriptive study was performed, with previous authorization by the research department of the Colombian rheumatology association (ASOREUMA). A survey was sent via email to all its members asking about general knowledge about the subject and percentages on recommendations in their daily practice.

Results: The survey was sent to 214 rheumatologist members of ASOREUMA, 34 (16%) of whom responded. In clinical practice there is a universal knowledge on the vaccination requirements for patients with IMID, nevertheless just 38.2% of clinicians tell patients to vaccinate against influenza of the 80%-100% of patients they see. For pneumococcus its 26.5%, hepatitis B 20.6%, human papilloma virus 8.8%, herpes zoster 2.9%. When it comes to SARS CoV2 vaccines it´s by far the most recommended with 79.4%, and most physicians consider its mechanism of action before prescribing it.

In table 1 we are summarizing the primary results.

TABLE 1.

	SARS CoV-2	Influenza	Pneumococcus	Herpes Zoster	Hepatitis B	Human papilloma virus
Recommended to 81 to 100% of patients	79,4%	38,2%	26,5%	2,9%	20,6%	8,8%
Recommended to 61 a 80% of patients	14,7%	29,4%	35,3%	17,6%	29,4%	20,6%
Recommended to 41 a 60% of patients	0%	26,5%	23,5%	11,8%	5,9%	11,8%
Recommended to 21 a 40% of patients	0%	2,9%	8,8%	14,7%	17,6%	11,8%
Recommended to 0 a 20% of patients	5,9%	2,9%	5,9%	52,9%	26,5%	47,1%

Conclusion: Despite the fact that rheumatologists are widely aware of the indications for vaccination in patients with IMID, these recommendations are not transmitted to all patients, due to the limited care time for each patient; in addition to the fact that the vast majority consider that the health system does not allow quick and timely access to these services.

Reference 1: Furer V, Rondaan C, Heijstek MW, Agmon-Levin N, van Assen S, Bijl M, *et al*. 2019 update of EULAR recommendations for vaccination in adult patients with autoimmune inflammatory rheumatic diseases. Ann Rheum Dis. 2020 Jan;79(1):39-52.

Reference 2: Tobar-Marcillo M, Guerrero-Solís C, Pool-Valda GO, Irazoque-Palazuelos F, Muñoz-López S. Vaccination against influenza and pneumococcus in patients with rheumatoid arthritis. Reumatol Clin (Engl Ed). 2022 May 12: S2173-5743(22)00093-4.

Disclosure of Interest: None declared

Keywords: Immune-Mediated Inflammatory Diseases, Vaccination

PANLAR2023-1598

SUPPORT GROUP NEEDS IN HISPANIC/ LATINO COMMUNITIES LIVING WITH RHEUMATOID ARTHRITIS: A PATIENT-CENTERED STUDY

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Objectives: Emotional support and social support are important components of Rheumatoid Arthritis (RA) management. The aim of this study was to assess the support group needs of Hispanic/Latin(a/o) communities living with RA, and to evaluate the feasibility of culturally appropriate support group interventions.

Methods: Our team used social listening, patient advisor recruitment, and patient advisor meetings to identify the support group needs of Hispanic/Latin(a/o) RA patients. Our patient advisors were eight Hispanic/Latin(a/o) patients who had been diagnosed with RA between 1 and 20 years earlier. Over a 12-month period, these participants regularly attended and actively participated in weekly online conference calls moderated in Spanish.

Results: Our analysis found that emotional and social support were highly valued by Hispanic/Latin(a/o) RA patients, with many participants expressing a strong need for support groups in Spanish. Participants reported that their involvement in the project improved their understanding of RA and developed their skills as patient leaders and advocates. They also reported that participation provided emotional support, improving their quality of lives, and gave them increased confidence when communicating about RA with both their health care teams and their communities. A patient education module created with patient advisors input on the topic of self-care through diet, exercise, and social support was effective in educating others Spanish-speaking patients (78 of 348 [25%] had improved knowledge; $p < .001$).

Conclusion: This study highlights the importance of culturally appropriate support group interventions and education for improving emotional and social support among Hispanic/Latin(a/o) communities living with RA. Our results demonstrate the potential of support groups to improve RA management and reduce health disparities among these communities.

Disclosure of Interest: None declared

Keywords: Health equity, Health literacy

SPONDYLOARTHRITIS

PANLAR2023-1329

SARCOPENIA IN SPONDYLOARTHRITIS. ULTRASOUND EVALUATION

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Objectives: Patients with Spondyloarthritis have a prevalence of up to 25.7% of sarcopenia. The available imaging techniques for the detection of low muscle quantity and quality are: dual-energy X-ray absorptiometry (DXA), bioelectrical impedance analysis (BIA), and recently muscular ultrasound (US).

This study aimed to evaluate the prevalence of sarcopenia in Spondyloarthritis and to determine which of the three ultrasonographic predictive models correlates best with BIA and DXA in our population.

Methods: Observational, cross-sectional study. We included 42 patients with spondyloarthritis (according to ASAS criteria for ankylosing spondylitis or CASPAR criteria for psoriatic arthritis). Appendicular skeletal muscle mass (ASMM) was evaluated by DXA and predicted by BIA and US. We performed a US examination to measure muscle thickness (MT) at seven sites. Pearson´s correlation coefficient was calculated to evaluate the correlation of the ultrasonographic predictive models with DXA and BIA. Finally, a ROC curve analysis was performed to determine the area under the curve of the models.

Results: We included 42 patients, composed mainly of men (24/42, 57.1%), with ankylosing spondylitis (AS) in 35 (83.3%). The prevalence of sarcopenia was about 33%. The ultrasound prediction models had a moderate to strong correlation with DXA and BIA (0.80, 0.87, 0.53 and 0.88, 0.74, 0.66 for Abe-2018, Barbosa-2021, and Tang-2022). Nevertheless, in the ROC curve, the ABE-2018 model expresses a better diagnostic performance (AUC 0.80 $p = 0.002$).

Conclusion: Results indicated a low ASMM in 30% of the patients with Spondyloarthritis (sarcopenia 24.4%, severe sarcopenia 9.8%). This study supports the use of ultrasound and shows a good correlation with DXA and BIA for ASMM evaluation in Spondyloarthritis, particularly with the Abe-2018 predictive model.

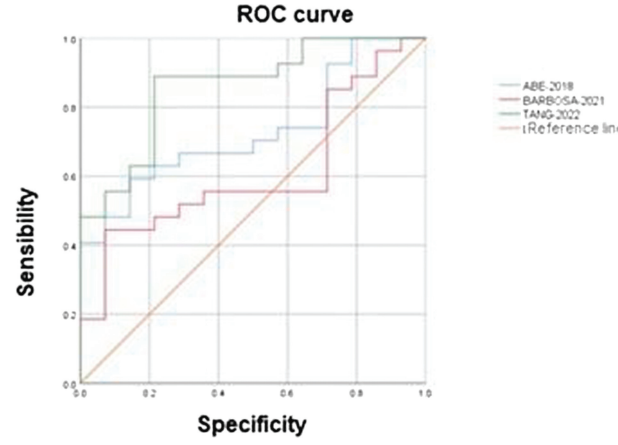
Disclosure of Interest: None declared

Keywords: Sarcopenia, Spondyloarthritis, Ultrasound

TABLE:.

Variable	Normal ASMM N (%)	Low ASMM N (%)	*p value
Men	14 (58.3)	10 (41.6)	.22
AS	21 (60)	14 (40)	.19
Age	48.85 ± 12.67	49.92 ± 17.38	.82
HLA-B27	16 (66.7)	9 (90,0)	.13
Arthritis	8(66.6)	4(33.3)	.93
Enthesitis	6 (75)	2 (25)	.60
Low grip strength	8(30.8)	4 (33.3)	.87
Gait speed 6 m < 1 m/s	16 (61.5)	10 (83.3)	.16
Ultrasound†‡			
Quadriceps	3.81 ± 0.52	3.47 ± .046	.00
Tibialis anterior	4.67 ± 0.45	3.97 ± 0.46	.00
Predictive models US†*			
ABE 2018	7.36 ± 1.02	6.58 ± 0.67	.015
BARBOSA 2021	7.91 ± 0.95	7.56 ± 0.92	.268
TANG 2021	8.72 ± 0.60	7.72 ± 0.63	.000

AS, Ankylosing spondylitis;
† = Mean, standard deviation; ‡ = Presented in cm; * = Presented in kg/m^2 , IQR = Interquartile range



PANLAR2023-1303

LONG-TERM SAFETY OF IXEKIZUMAB IN ADULT PATIENTS WITH PSORIASIS, PSORIATIC ARTHRITIS, AND AXIAL SPONDYLOARTHRITIS

Atul Deodhar[1], Andrew Blauvelt[2], Sergio Schwartzman[3], Carlo Salvarani[4], Meghan Feely[5,6], Andris Kronbergs[5], on behalf of Pso, PsA, & axSpA 2022 Safety Update Mark Lebwohl[6], Proton Rahman[7], Helena Marzo-Ortega[8], and Camila de Lima Tostes*[9]. *[1]Oregon Health & Science University, [2]Oregon Medical Research Center, Portland, [3]72nd Street Medical Associates, Scarsdale, United States, [4]SOC Reumatologia, Azienda USL-IRCCS, Reggio Emilia, Italy, [5]Eli Lilly and Company, Indianapolis, [6]Mount Sinai Hospital, New York, United States, [7]Memorial University of Newfoundland, St. John's, Canada, [8]The University of Leeds, Leeds Institute for Rheumatic and Musculoskeletal Medicine, NIHR Leeds Biomedical Research Centre, Leeds Teaching Hospitals Trust, Leeds, United Kingdom, [9]Eli Lilly and Company, Sao Paulo, Brazil.*

Objectives: We report long-term, end-of-study-program, safety outcomes in adult patients with psoriasis (PsO), psoriatic arthritis (PsA) and axial spondyloarthritis (axSpA) who received at least one dose of IXE over 5 years (PsO) or 3 years (PsA and axSpA).

Methods: An integrated safety analysis consisting of data from 25 randomised clinical trials (RCTs; 17 PsO, 4 PsA, 4 axSpA) was used to examine long-term safety of IXE. Rates of treatment-emergent adverse events (TEAEs), serious AEs (SAEs) and AEs of special interest were analyzed for all pooled studies by years of therapy and overall through March 2022, and reported as exposure-adjusted incidence rates (IRs) per 100 patient-years (PY) at successive year intervals. Additional safety outcomes included selected safety topics of interest (among others).

Results: A total of 6892 patients with PsO, 1401 patients with PsA, and 932 patients with axSpA, with a cumulative IXE exposure of 18025.7 PY for PsO, 2247.7 PY for PsA, and 2097.7 PY for axSpA were included in this analysis. The IRs per 100 PY for any TEAE were as follows; patients with PsO = 32.5, PsA = 50.3, axSpA = 38.0. The most commonly reported TEAEs were nasopharyngitis (PsO, IR = 8.8; PsA, IR = 9.0; axSpA IR = 8.4) and upper respiratory tract infection (PsO, IR = 6.2; PsA, IR = 8.3; axSpA IR = 5.8). Serious AEs were reported by 969 patients with PsO (IR = 5.4), 134 patients with PsA (IR = 6), and 101 patients with axSpA (IR = 4.8). Forty-five deaths were reported; (PsO = 36 [IR = 0.2]; PsA = 6 [IR = 0.3]; axSpA = 3 [IR = 0.1]). The IRs per 100 PY of discontinuation from the study drug due to AE were as follows: PsO, 2.9; PsA, 5.1; axSpA, 3.1. IRs of injection site reactions were: PsO, 5.9; PsA, 11.6; axSpA, 7.4. IRs of allergic reactions were: PsO, 5.6; PsA, 4.5; axSpA, 4.2. IRs of serious infections were low (PsO, IR = 1.3; PsA, IR = 1.2; axSpA, IR = 1.1). IRs of *Candida* were low across all indications (PsO, 1.9; PsA, 2.0; axSpA, 1.2), as were IRs of opportunistic infections (PsO, 1.8; PsA, 1.8; axSpA, 1.3). IRs were also low across all indications for depression, major adverse cerebro-cardiovascular events and malignancies (all IRs ≤1.6). Cases of inflammatory bowel disease (IBD) were uncommon (IRs ≤0.8 across indications).

Conclusion: In this updated analysis with 18025.7 PY for PsO, 2247.7 PY for PsA, and 2097.7 PY for axSpA, IXE maintained a long-term safety profile up to 5 years, consistent with previous reports.

Disclosure of Interest: A. Deodhar Consultant with: A. Deodhar has served as a consultant and/or on the advisory board for: AbbVie, Amgen, Aurinia, Bristol Myers Squibb, Celgene, Eli Lilly and Company, GlaxoSmithKline, Janssen, MoonLake, Novartis, Pfizer, and UCB Pharma; and has received research grants from: AbbVie, Bristol Myers Squibb, Celgene, Eli Lilly and Company, GlaxoSmithKline, Janssen, Novartis, Pfizer, and UCB Pharma, A. Blauvelt Consultant with: A. Blauvelt has received consultant and/or speaker fees from: Eli Lilly and Company; discloses payments (investigator) made to: Oregon Medical Research Center; has received grants or contracts (investigator) paid to Oregon Medical Research Center from: AbbVie, Acelyrin, Amgen, Arcutis, Athenex, Boehringer Ingelheim, Bristol Myers Squibb, Dermavant, Evelo Biosciences, Galderma, Incyte Corporation, Janssen, LEO Pharma, Merck, Novartis, Pfizer, Regeneron, Sun Pharma, and UCB Pharma; has received honoraria as a consultant for: AbbVie, Abcentra, Affibody, Aligos Therapeutics, Almirall, Alumis, Amgen, AnaptysBio, Arcutis, Arena Pharmaceuticals, ASLAN Pharmaceuticals, Athenex, Boehringer Ingelheim, Bristol Myers Squibb, Cara Therapeutics, Dermavant, EcoR1, Escient Pharmaceuticals, Evelo Biosciences, Evommune, FortéBio , Galderma, HighlightII Pharma, Incyte Corporation, Janssen, Landos Biopharma, LEO Pharma, Merck, Novartis, Pfizer, RAPT Therapeutics, Regeneron, Sanofi Genzyme, Spherix Global Insights, Sun Pharma, TLL Pharmaceutical, TrialSpark, UCB Pharma, Vibliome Therapeutics, and Xencor; and has received payment as a speaker for: AbbVie and UCB Pharma, S. Schwartzman Grant / Research support with: S. Schwartzman has received grants/contracts from: Eli Lilly and Company; serves on: the National Psoriasis Foundation Medical Board; and is part of the scientific advisory board at: Myriad Genetics; and is a consultant for: AbbVie, Eli Lilly and Company, Janssen, Jubilant Pharma, Myriad Genetics, Novartis, Regeneron, Sanofi, Stelexis Therapeutics, Teijin Pharma, and UCB Pharma, C. Salvarani Consultant with: C. Salvarani has served as a consultant for: AbbVie, Eli Lilly and Company, and Roche; and has received grant/research support from: Roche, M. Feely Grant / Research support with: M. Feely has participated on a data safety monitoring or advisory board for: Eli Lilly and Company; is a clinical instructor in Dermatology at: Mount Sinai Hospital; has previously been employed with: MC Medical Group; has received reimbursement of fees from: DREAM USA South Beach Symposium and Eli Lilly and Company; is a current member of: AAD Investment Committee, ASDS Social Media Ambassador Program, and Prevention Medical Review Board; is a former member of: WDS Finance and Investment Committee, WDS Fundraising and Philanthropic Activities Committee, and WDS Practice Advisory Committee; and was formerly: AAD Media Expert Team member and NPF Social Ambassador, A. Kronbergs Employee with: A. Kronbergs is an employee and shareholder of: Eli Lilly and Company, M. Lebwohl Grant / Research support with: M. Lebwohl has received grants/contracts from: AbbVie, Amgen, Arcutis, Avotres, Boehringer Ingelheim, Cara Therapeutics, Dermavant, Eli Lilly and Company, Incyte Corporation, Inozyme Pharma, Janssen, Novartis, Ortho Dermatologics, Regeneron, and UCB Pharma; has received honoraria as a consultant for: AnaptysBio, Arcutis, Arena Pharmaceuticals, Aristea Therapeutics, Avotres, BiomX Israel, Boehringer Ingelheim, Brickell Biotech, Castle Biosciences, CorEvitas, Dermavant, Evommune, FIDE, FortéBio, Foundation for Research and Education in dermatology, Hexima, Meiji Seika Pharma, Mindera, NSCM, New York College of Podiatric Medicine, Pfizer, Seanergy Dermatology, Sun Pharma, Verrica Pharmaceuticals, and Vial, P. Rahman Grant / Research support with: P. Rahman has received grants/contracts from: Janssen and Novartis; and has received honoraria as a consultant for: AbbVie, Eli Lilly and Company, Janssen, Novartis, and Pfizer, H. Marzo-Ortega Grant / Research support with: H. Marzo-Ortega has received grants/contracts from: Janssen, Novartis, and UCB Pharma; has received honoraria as a consultant for: AbbVie, Eli Lilly and Company, Janssen, MoonLake, Novartis, Pfizer, and UCB Pharma; has received payment or honoraria for lectures, presentations, speakers' bureaus, manuscript writing, or educational events from: AbbVie, Biogen, Eli Lilly and Company, Janssen, Novartis, Pfizer, and UCB Pharma; has received support for attending meetings and/or travel support from: UCB Pharma; has participated on a data safety monitoring board or advisory board for: Pfizer; has had a leadership or fiduciary role for other boards and/or been part of the society (paid or unpaid) for: the Executive Committee Assessment of Spondyloarthritis International Society; and the Medical Advisory Board of UK National Ankylosing Spondylitis Society, and has been: a Chair of the British Society for Spondyloarthritis, C. de Lima Tostes Employee with: C. De Lima Tostes is an employee and shareholder of: Eli Lilly and Company

Keywords: Axial Spondyloarthritis, Ixekizumab, Psoriasis

PANLAR2023-1300

HLA-B27 POSITIVITY IN A LARGE MISCEGENATED POPULATION OF 5,389,143 HEALTHY BLOOD MARROW DONORS IN BRAZIL

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Objectives: The prevalence of HLA-B27 gene positivity in healthy Caucasian communities varies between 8-14%. However, there is a lack of information in countries with a high rate of miscegenation, such as Brazil. This study aims to

stimate the prevalence of HLA-B27 positivity in the Brazilian general population using a large national registry.

Methods: This is a cross-sectional ecological study using the Brazilian Registry of Volunteer Bone Marrow Donors (REDOME) database on HLA-B27 allelic frequency and proportion of positives from healthy donors (18-60 years old). Data were analyzed according to race (by self-reported skin color, according to the predetermined five terms used by the Brazilian Institute of Geography and Statistics [IBGE]), and geographic region of residence.

Results: From 1994 to 2022, a total of 5,389,143 healthy bone marrow donors were included. The overall positivity for HLA-B27 was 4.35% (CI 95% 4.32-4.37%). There was a difference according to race (table 1): 4.85% in Whites; 2.92% in Blacks; 3.76% in Pardos (Browns i.e. miscegenated between blacks and whites); 3.95% in Amarelos (Yellows i.e. Asian Brazilians, predominantly of Japanese descent); and 3.18% in Indigenous, $p < 0.0001$. There was also a difference regarding the geographic region as shown in figure 1 (North: 3.62%; Northeast: 3.63%; Southeast: 4.29%; Midwest: 4.5% and 5.25% in South, $p < 0.0001$). The homozygosity rate for the HLA-B27 was 1.32% of all the positives and only 0.06% in the general population.

Conclusion: Our findings provide the first Brazilian national prevalence for HLA-B27: 4.35%, with differences between races, similar to previously published in another miscegenated population [1]. There is a positivity gradient from North/Northeast (Pardos/Brown predominant population) to South (White predominant population), suggesting that the genetic background related colonization and internal migratory flows, could explain our findings.

Reference 1: 1 - Reveille JD, Hirsch R, Dillon CF, Carroll MD, Weisman MH. The prevalence of HLA-B27 in the US: data from the US National Health and Nutrition Examination Survey, 2009. Arthritis Rheum. 2012;64(5):1407-11.

Disclosure of Interest: None declared

Keywords: Ankylosing spondylitis, Epidemiology, HLA-B27

TABLE 1. HLA-B27 prevalence of positivity, according to races (defined by self-reported skin color) in Brazil, according to the REDOME database.

Race	HLA-B27 positivity % (95%CI)
Whites	4.85 (4.81 – 4.88)
Blacks	2.92 (2.85 – 3.00)
Pardos (Browns)	3.76 (3.71 – 3.80)
Amarelos (Yellows)	3.95 (3.82 – 4.08)
Indigenous	3.18 (2.85 – 3.52)

PANLAR2023-1073

FIBROMYALGIA AS A MARKER OF "NON-RESPONDER" STATUS IN PATIENTS WITH ANKYLOSING SPONDYLITIS

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Objectives: Comorbidity is one of the leading problems of modern rheumatology, as it significantly impairs diagnosis and treatment. Patients with ankylosing spondylitis (AS) have a wide range of comorbid conditions that can affect the course of the underlying disease and the effectiveness of its treatment [1, 2]. One of the most common comorbid conditions in patients with AS is fibromyalgia (FM) [2].

Our study aimed to assess concomitant FM as a marker of "non-responder" status.

Methods: We examined 84 patients with AS according to modified New York criteria (13 women and 71 men) with mean age 43.9 ± 11.2 years. The diagnosis of FM was done according to the 2010 mACR criteria . Efficacy of the treatment was assessed by ASAS 20 and 40 criteria. The study was conducted in compliance with bioethical standards. All data were analyzed using IBM Statistics SPSS 23 software.

Results: Concomitant FM was diagnosed in 27 (32.1%) AS patients. According to concomitant FM, all patients were divided into two groups: the 1st group included 57 patients with AS without FM, the 2nd - 27 patients with AS and FM. The groups were representative by gender and age. All patients received standard therapy. The duration of the study was 12 weeks.

After 12 weeks, 21 patients (36.8%) with AS without FM achieved ASAS 20 criteria and six patients (10.5%) - ASAS 40; in the group with FM, only 4 patients (14.8%) were responders according to ASAS 20 and none achieved ASAS 40. The proportion of non-respondents in both groups was 63.2% and 85.2%, respectively.

We calculated the risk of "non-responder" status in patients with FM: the presence of FM in patients with AS decrease the chances of achieving the target - ASAS 20 criteria after 12 weeks of treatment (OR = 0.29; 95% CI 0.091 - 0.98, $p < 0.05$).

Conclusion: FM in patients with AS is a significant risk factor for "non-responder" status according ASAS20 criteria.

Reference 1: Nikiphorou, E., Ramiro, S., van der Heijde, D., Norton, S., Moltó, A., Dougados, M., van den Bosch, F., Landewé, R., & Assessment of SpondyloArthritis International Society Comorbidities in Spondyloarthritis Study Task Force (2018). Association of Comorbidities in Spondyloarthritis With Poor Function, Work Disability, and Quality of Life: Results From the Assessment of SpondyloArthritis International Society Comorbidities in Spondyloarthritis Study. *Arthritis care & research*, *70*(8), 1257–1262. https://doi.org/10.1002/acr.23468

Reference 2: Bello, N., Etcheto, A., Béal, C., Dougados, M., & Moltó, A. (2016). Evaluation of the impact of fibromyalgia in disease activity and treatment effect in spondyloarthritis. Arthritis research & therapy, 18(1), 1-7.

Disclosure of Interest: None declared

Keywords: Ankylosing Spondylitis, Fibromyalgia, Non-Responder

PANLAR2023-1436

COGNITIVE DYSFUNCTION IN PATIENTS WITH ANKYLOSING SPONDYLITIS: ASSOCIATION WITH NEUROPATHIC PAIN

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Objectives: Ankylosing spondylitis (AS) is a common chronic inflammatory disease. Chronic back pain is the main feature of the AS. Pain in ankylosing spondylitis can involve both nociceptive and neuropathic mechanisms [1]. Recent studies have shown that the rheumatic diseases affect the cognitive functions of patients [2]. In turn, neuropathic pain (NP) can cause and maintain cognitive impairment. The aim of this study was to determine the prevalence of cognitive dysfunction in patients with AS and evaluate its association with NP.

Methods: The study involved 142 patients (men – 79%) with AS according to the Modified New York diagnostic criteria (1984). The NP was assessed by the Leeds Assessment of Neuropathic Symptoms and Signs (LANSS) and The Douleur Neuropathique 4 (DN4). Cognitive function was assessed by the MMSE

(Mini Mental State Examination). Statistical analyses were performed in MS Excel and SPSS22 (©SPSS Inc.). Descriptive statistics were performed with mean and standard deviation (M ± SD).

Results: The mean age for the patients was 41.9 ± 9.7 years, disease duration was 9.6 ± 6.4 years. According to the ASDAS and BASDAI patients had high disease activity (3.5 ± 0.8 and 5.5 ± 1.7 respectively. NP assessed by the LANSS and DN4 was found in 48 patients (33.8%). The mean values of LANSS were 14.4 ± 2.4 and DN4 was 5.4 ± 1.4.

The mean MMSE values in AS patients was 27.5 ± 1.77. We also compared groups of patients with NP and without NP. In the group without NP, the mean value was 28.1 ± 1.64, and in patients with NP, the mean value was 26.3 ± 1.39 points ($p < 0,01$). Quantitative characteristics of cognitive function in patients with AS regarding the presence of NP are shown in Table.

We found close negative correlation between MMSE with LANNS ($r = -0.503$; $p \leq 0,01$) and DN4 ($r = -0.505$; $p \leq 0.01$). It was revealed that NP associated with a higher risk of cognitive impairment [OR (95% CI) = 9.7 (4.1-23.1), $p < 0.0001$].

Conclusion: The prevalence of NP in patients with AS is 33.8%. NP can be considered as a risk factor for cognitive dysfunction in patients with AS.

TABLE. : Cognitive function (MMSE) in patients with AS regarding the presence of NP.

Cognitive impairment (MMSE points)	Patients with AS without NP (n = 94)	Patients with AS with NP (n = 48)
MMSE (mean ± SD)	28.1 ± 1.64	26.3 ± 1.39
None 30-29 pts., n (%)	46 (48.9 %)	1 (2.1 %)
Mild 28 pts., n (%)	16 (17.0 %)	8 (16.7 %)
Moderate 27-25 pts., n (%)	32 (34.1 %)	34 (70.8 %)
Severe, ≤24 pts., n (%)	0	5 (10.4 %)

Reference 1: Zhou, L., Li, T., Wu, X. et al. Assessment of Neuropathic Pain in Ankylosing Spondylitis: Prevalence and Characteristics. Pain Ther 10, 1467–1479 (2021). https://doi.org/10.1007/s40122-021-00310-8

Reference 2: Oláh, C., Schwartz, N., Denton, C. et al. Cognitive dysfunction in autoimmune rheumatic diseases. Arthritis Res Ther 22, 78 (2020). https://doi.org/10.1186/s13075-020-02180-5

Disclosure of Interest: None declared

Keywords: Ankilosing spondylitis, Cognitive dysfunction, Pain

PANLAR2023-1482

THE PREVALENCE OF ALEXITHYMIA IN ANKYLOSING SPONDYLITIS PATIENTS AND ITS RELATIONSHIP WITH FUNCTIONAL DISABILITY

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Objectives: Ankylosing spondylitis (AS) is a chronic inflammatory disease that can cause significant functional impairment, affecting the sacroiliac joints and axial skeleton. The primary manifestation of AS is chronic pain, which triggers physical and psychological disorders, such as alexithymia (AL), which manifests itself as a "lack of awareness of emotions and feelings". The prevalence of AL in patients with AS and its impact on functional ability is poorly understood, and the literature data are contradictory.

Our study aimed to determine the prevalence of AL in AS patients and its relationship with functional disability.

Methods: We examined 77 patients with AS according to the modified New York criteria (Linden S. V et al., 1984). TAS-20 (Taylor G.J. et al., 1992) was used to detect AL. Functional ability was assessed by the BASFI index(Calin et al, 1994).

Results: 77 patients (51/66% men) included in the study. The mean age of the patients (M ± SD) was 41.6 ± 9.14 years. AL was detected in 15 (19,5%) patients, borderline value (51 ≤ TAS-20 ≤ 61) - in 22 (28,6%) patients and without AL 40 patients (52,9%).

According to the BASFI, 80% of the examined AS patients had a functional disability (index BASFI≥4). Proportions of persons with a functional disability according to BASFI in AS patients with AL, "borderline" and without AL were without significant difference (93.3%; 81.8% and 77.5%, respectively), but AS patients with AL showed a tendency to have poorer functional ability than AS patients without AL ($0.05 < p < 0.1$). In the group with AS+AL mean score (M ± SD) of BASFI was 6.32 ± 1.1, in "borderline" group - 5.43 ± 2.3 and in the group with AS without AL - 5.30 ± 2.07. Also, we have found the correlation between AL and functional disability in AS patients ($r = 0.193$, $p < 0.05$). AL is associated with greater functional disability.

Conclusion: AL is quite common in patients with AS (19.5%). Our results indicate a high level of functional disability in all AS patients: with AL, "borderline", and without AL. AL is associated with functional disability in patients with AS. Additional research is needed to clarify the clinical significance of AL in AS patients.

Reference 1: Di Tella, M., & Castelli, L. (2016). Alexithymia in Chronic Pain Disorders. Current rheumatology reports, 18(7), 41. https://doi.org/10.1007/s11926-016-0592-x

Reference 2: Karabıçak, D., Doğruöz Karatekin, B., & İçağasıoğlu, A. (2021). Alexithymia in ankylosing spondylitis. Turkish journal of physical medicine and rehabilitation, 67(3), 344–350. https://doi.org/10.5606/tftrd.2021.6415

Disclosure of Interest: None declared

Keywords: Alexithymia, Ankylosing spondylitis, Functional disability

PANLAR2023-1589

THE DIFFERENTIAL CHARACTERISTICS OF SPONDYLOARTHRITIS PATIENTS WHO CANNOT BE CLASSIFIED ACCORDING TO ASAS

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Objectives: The aims of our study were to describe the patients diagnosed with Spondyloarthritis (SpA) by a rheumatologist but who did not meet ASAS classification criteria and compare them to patients who fulfilled ASAS classification criteria.

Methods: A longitudinal, observational, and analytic study was conducted on a cohort of Colombian SpA patients. Patients were evaluated in two SpA clinic from Colombia. All patients were classified according to ASAS at the time of inclusion or re-classified at the time of the analysis.

Results: We enrolled 473 SpA patients; of them, 437 (92.39%) fulfilled ASAS classification criteria, and 37 (7.6%) had a diagnosis by rheumatologists but did not fulfil this classification criteria for either axial or peripheral SpA. Patients who did not fulfill ASAS classification had a lower frequency of enthesitis (36.1% vs. 79.2%, $p = 0.00$), dactylitis (5.6% vs. 19%, $p = 0.04$), arthritis (30.6 vs. 71.6%, $p < 0.01$), and lower frequency of history of infections preceding SpA onset (2.8% vs. 27.9%, $p = 0.01$) than patients classified by ASAS, respectively. There were no differences in the frequency of uveitis, psoriasis, inflammatory spinal pain, or familiar history of SpA ($p = 0.3$). The frequency of SpA with axial symptoms at the onset of the disease was higher in patients unclassified by ASAS (Table).

Non-ASAS SpA patients had a higher frequency of HLA-B15 (25% vs. 11.8%, $p = 0.01$), and lower frequency of HLA-B27 (16.7% vs. 48.2%, $p = 0.01$) than ASAS SpA patients, respectively (Figure 1).

Conclusion: Most patients diagnosed as SpA by rheumatologists in this cohort fulfilled ASAS classification criteria, only 7% did not fulfil the criteria. Of these patients, the demographic characteristics, disease activity and functional compromise were comparable to patients classified by ASAS. Interestingly, the frequency of HLA-B15 was high in both groups, but it was significantly higher in unclassified individuals. These results highlight the significance of HLA alleles other than HLA-B27 and their potential diagnostic value for SpA in LatinAmerica.

Disclosure of Interest: None declared

Keywords: Spondyloarhtritis

TABLE. :

		Not fulfilling ASAS criteria	Fulfilling ASAS criteria	*p* value
	Total	36 (%)	437 (%)	
	Female	11 (30.6)	154 (35.2)	0.5
	Age at symptoms onset	28 (24.8 - 38.0)	27 (21.0 - 35.7)	0.2
ASAS classification	Axial		257 (58.8)	
	Peripheral		180 (41.2)	
Disease onset	Axial	20 (57.1)	155 (35.5)	0.02
	Peripheral	9 (25.7)	164 (37.5)	0.02
	Mixed	6 (17.1)	118 (27.0)	0.02
	BASFI	6.05 (3.3 - 7.9)	5.1 (3.2 - 6.9)	0.2
	BASDAI	6.2 (3.9 - 8.2)	5.6 (3.4 - 7.4)	0.3
	PCR	0.335 (0.1 - 1.6)	0.53 (0.2 - 5.1)	0.1

PANLAR 2023 - Abstract Submission

SPONDYLOARTHRITIS

PANLAR2023-1325

SAFETY AND EFFICACY OF IXEKIZUMAB TREATMENT IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS: 3-YEAR RESULTS FROM THE COAST PROGRAMME

Atul Deodhar[1], Denis Poddubnyy[2], Proton Rahman[3], Rebecca Bolce[4], Soyi Liu-Leage[4], Andris Kronbergs[4], on behalf of Pso, PsA, & axSpA 2022 Safety Update Caroline Johnson[4], Ann Leung[5], Désirée van der Heijde[6], and Camila de Lima Tostes*[7]. *[1]Oregon Health & Science University, Portland, United States, [2]Charite Universitätsmedizin Berlin, Germany and German Rheumatism Research Centre, Berlin, Germany, [3]Memorial University of Newfoundland, St. John's, Canada, [4]Eli Lilly and Company, Indianapolis, [5]Syneos Health, Morrisville, United States, [6]Leiden University Medical Center, Leiden, Netherlands, [7]Eli Lilly and Company, Sao Paulo, Brazil.*

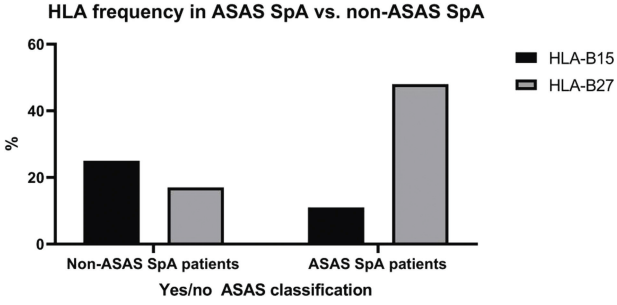
Objectives: Ixekizumab (IXE) has demonstrated efficacy at week (wk) 16 which was maintained through 2 years (yrs) and was associated with a consistent safety profile in patients (pts) with r- and nr-axSpA, who are bDMARD-naïve and TNFi-experienced.

To report safety and efficacy from the COAST programme at 3 yrs: 1 yr of the originating studies (COAST-V/W/X) and 2 yrs of COAST-Y.

Methods: COAST-Y (NCT03129100) is the phase 3, long-term extension study of the 3 originating studies COAST-V/W/X. Pts continued with the dose received at the end of the originating trial at week (wk) 52: either with 80 mg IXE every 4 wks (Q4W) or every 2 wks (Q2W). Pts assigned to adalimumab (ADA) or placebo (PBO) were re-randomised to IXE Q4W or Q2W at wk 16 in COAST-V and -W. Pts who received PBO for 52 wks in COAST-X were switched to IXE Q4W to continue in COAST-Y. Starting at wk 116 (wk 64 of COAST-Y), pts receiving IXE Q4W could have their dose escalated to Q2W based on investigator's opinion. This analysis focused on pts receiving ≥1 dose of IXE Q4W, observed data while on IXE Q2W dose escalation are excluded. Continuous data are summarised as observed. Safety data while on IXE were analysed for pts who received ≥1 dose of IXE; observed data while on PBO or ADA are excluded.

Results: A total of 932 pts received ≥1 dose of IXE, 414 received ≥1 dose of IXE Q4W, and 562/932 (60%) pts completed 3 yrs of follow-up (PBO → IXE Q4W, 63/119 (53%); ADA → IXE Q4W, 29/44 (66%); and IXE Q4W → IXE Q4W, 114/251(45%)). Through 3 yrs, the most frequently reported treatment-emergent adverse events were infections [incidence rate (IR) 25.7/100 patient years (PY)] and injection site reactions [IR 7.4/100 PY]; the majority of which were mild/moderate in severity. Serious adverse events were reported at an IR of 4.8/100 PY, of which osteoarthritis was the most frequent at 0.4/100 PY. A total of 3 deaths were reported among all pts who received ≥1 dose of IXE [IR 0.1/100 PY]. For all patients, baseline disease activity (Ankylosing Spondylitis Disease Activity Score; ASDAS) was high. A similar improvement in disease activity through 3 yrs was confirmed across additional efficacy endpoints.

Conclusion: This analysis in COAST-Y demonstrated that the safety profile is consistent with the established safety profile, with no new safety signals observed. Patients on IXE Q4W had sustained improvement through 3 years.



Disclosure of Interest: A. Deodhar Grant / Research support with: A. Deodhar has received research grants from: AbbVie, Bristol Myers Squibb, Celgene, Eli Lilly and Company, GlaxoSmithKline, Janssen, Novartis, Pfizer, and UCB Pharma, Consultant with: A. Deodhar has served as a consultant and/or on the advisory board for: AbbVie, Amgen, Aurinia, Bristol Myers Squibb, Celgene, Eli Lilly and Company, GlaxoSmithKline, Janssen, MoonLake, Novartis, Pfizer, and UCB Pharma, D. Poddubnyy Grant / Research support with: D. Poddubnyy has served as a speaker and/or consultant for: AbbVie, BIOCAD, Bristol Myers Squibb, Eli Lilly and Company, Gilead Sciences, GlaxoSmithKline, Janssen, Merck Sharp & Dohme, Novartis, Pfizer, Samsung Bioepis, and UCB Pharma; and has received grant and/or research support from: AbbVie, Eli Lilly and Company, Merck Sharp & Dohme, Novartis, and Pfizer, P. Rahman Grant / Research support with: P. Rahman has received grants/contracts from: Janssen and Novartis; and has received honoraria as a consultant for: AbbVie, Eli Lilly and Company, Janssen, Novartis, and Pfizer, R. Bolce Employee with: R. Bolce is an employee and shareholder of: Eli Lilly and Company, S. Liu-Leage Employee with: S. Liu-Leage is an employee and shareholder of: Eli Lilly and Company, A. Kronbergs Employee with: A. Kronbergs is an employee and shareholder of: Eli Lilly and Company, C. Johnson Employee with: C. Johnson is an employee and shareholder of: Eli Lilly and Company, A. Leung Employee with: A. Leung is an employee of: Syneos Health; and a contractor for: Eli Lilly and Company, D. van der Heijde Consultant with: D. van der Heijde has served as a consultant for: AbbVie, Bayer Pharmaceuticals, Bristol Myers Squibb, Cyxone, Eisai, Eli Lilly and Company, Galapagos NV, Gilead Sciences, GlaxoSmithKline, Janssen, Novartis, Pfizer, and UCB Pharma; and is the director of: Imaging Rheumatology BV, C. de Lima Tostes Employee with: C. de Lima Tostes is an employee and shareholder of: Eli Lilly and Company

Keywords: Axial spondyloarthritis, Ixekizumab, Psoriatic arthritis

PANLAR2023-1576

GENDER DIFFERENCES IN PRESENTATION, CLASSIFICATION, AND DISEASE ACTIVITY OF SPONDYLOARTHRITIS

Marta Juliana Mantilla*[1], Ana Maria Santos[1], Gustavo Rodríguez-Salas[1], Igor Rueda-Cardenas[1], Juan Camilo Santacruz[1], Juan Camilo Rueda[1], Mario Humberto Cardiel[2], Cesar Pacheco-Tena[3], John Londono[1], and Spondyloarthritis Study Group (GESPA). *[1]Spondyloarthritis Study Group, La Sabana University - Military Central Hospital, Bogotá, Colombia, [2]Centro de investigación, Clinica de Morelia, Morelia, [3]Facultad de Medicina y Ciencias Biomédicas, Universidad autonoma de Chihuahua, Chihuahua, México.*

Objectives: Few studies have explored the male and female spondyloarthritis (SpA) features in Latin American population. The aim of this study was to examine the clinical presentation, disease characteristics of male and female SpA patients.

Methods: We used a cohort of Colombian SpA patients from 1990 to the current day. Patients were classified according to the Assessment of SpondyloArthritis International Society (ASAS) classification criteria.

Results: In this study, 469 SpA patients from a Colombian SpA cohort were included. There were 164 (34.9%) females and 305 (65.1%) males in total. Nr-AxSpA was more prevalent among females (20.6%) than males (13.3%), p = 0.01. In all groups the frequency of HLA-B15 was comparable (15.9% vs. 11.2%, p = 0.1). And the prevalence of HLA-B27 was higher in men than in women (52.4% vs. 33.3%, p < 0.01). The symptoms at disease onset were similarly distributed in both sexes (table 1). Enthesopathy was more prevalent among women than men (82.4% vs. 72.4%, p = 0.02) (table 1). In males, disease onset was more acute (40.7% vs. 27.3%, p = 0.04). Age at beginning of the disease was 32 (24.5 – 41.1) years for females and 24.89 (20.5 – 31.7) years for males (p < 0.01). The time to diagnosis (in months) was 39 (11.5 – 126) for females and 13 (3 – 71) for males (P < 0.01). Women had more functional impairment measured by BASFI, disease activity measured by BASDAI, and self-reported illness activity than men, although men had a higher C-reactive protein (CRP) (p < 0.01) (table 1).

Conclusion: Nr-AxSpA is more frequent in women than in men, although radiographic disease is more prominent in men. The prevalence of HLA-B27 is higher in men with SpA. Males are older at the onset of the disease and are diagnosed sooner than females. Females had more disease activity as measured by BASDAI and functional impairment as measured by BASFI, whereas males have lower CRP levels.

Disclosure of Interest: None declared

Keywords: ASAS, Spondyloarhtritis

TABLE 1:.

		Female	Male	*p* value
	Total	164	305	
	HLA-B27	50 (33.1%)	140 (52.4%)	0.12
	HLA-B15	24 (15.9%)	30 (11.2%)	0.12
	Axial	101 (61.2%)	156 (50.6%)	0.27
	Peripheral	53 (32.1%)	127 (41.2%)	0.73
SpA Classification	Not classified	11 (6.7%)	15 (8.1%)	0.71
	r-AxSpA	67 (40.6%)	115 (37.3%)	0.01
	nr-AxSpA	34 (20.6%)	41 (13.3%)	0.01
	Arthritis	39 (23.6%)	102 (33.2%)	0.03
	Enthesopathy	10 (6.1%)	16 (5.2%)	0.70
Symptoms at disease onset	Lumbar pain	69 (41.8%)	112 (36.5%)	0.26
	Buttock pain	6 (3.6%)	6 (2.0%)	0.27
	Various initial symptoms	38 (23.0%)	67 (21.8%)	0.76
	CRP	0.3 (0.1 - 1.2)	0.7 (0.3 – 6.0)	<0.01
	BASFI	5.7 (3.8 - 7.2)	5 (2.7 - 6.8)	0.01
	BASDAI	6.2 (4.6 - 7.8)	5.2 (3.1 - 7.2)	0.00

PANLAR2023-1585

HOW SPONDYLOARTHRITIS PROFILE HAS EVOLVED OVERTIME

Gustavo José Rodríguez Salas[1], Marta Juliana Mantilla*[1], Ana Maria Santos[1], Igor Rueda-Cardenas[1], Juan Camilo Santacruz[1], Juan Camilo Rueda[1], Mario Humberto Cardiel[2], Cesar Pacheco-Tena[3], John Londono[1], and Spondyloarthritis study group. *[1]Spondyloarthritis Study Group, La Sabana University - Military Central Hospital, Bogotá, Colombia, [2]Centro de investigación, Clinica de Morelia, Morelia, [3]Facultad de Medicina y Ciencias Biomédicas, Universidad Autónoma de Chihuahua, Chihuahua, Mexico.*

Objectives: The aim of our study was to evaluate the changes overtime in spondyloarthritis (SpA) profile in patients with Spondyloarthritis (SpA) from a Colombian cohort.

Methods: Data from 471 patients recruited in a prospective Colombian cohort of Spondyloarthritis patients (diagnosed according to rheumatologist), with registries from 90' to the date was analyzed. Three time periods were stablished for the analysis (table 1).

Results: 471 patients were included in the study, period 1 (n = 158), period 2 (n = 150) and period 3 (n = 163). Time to diagnosis was shorter in period 1 than 3 (table). The frequency of r-AxSpA diagnosis was proportionally higher in period 1 (47.5%), than period 2 (38.2%), and 3 (31.3%), p = 0.01. On the other hand, the frequency of nr-AxSpA diagnosis was lower in period 1 (9.5%) than in period 2 (15.1%), and 3 (22.1%) (Figure 1). The presence of dactylitis at physical examination was most common in the first period (10.8%) than the last two periods (3.3% and 3.7%), p < 0.01. There were no statistically significant differences in HLA frequency across the three periods. There was higher physical limitation in the first period than in the last two period (view Table 1). The history of psoriasis in SpA patients was higher in period 1 (7.6%) than in period 2 (2.6%), and 3 (2.5%), p = 0.04. Infections preceding SpA symptoms onset were most frequent in period 1 (32.9%) than in period 2 (29.6%) and 3 (16.6%), p < 0.01.

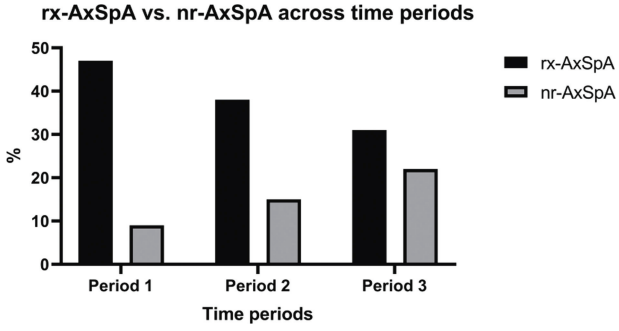
Conclusion: The profile of patients with SpA has evolved over time in Colombia. While the frequency of peripheral SpA has remained unchanged over time, the incidence of non-radiographic axial forms has increased over time. Furthermore, functional limitation in SpA, infections preceding symptoms, and dactylitis are less common than 20 years ago. These results highlight the impact of advances in rheumatology and the awareness of the medical community about this disease in Colombia, allowing an earlier diagnosis or the diagnosis of less evident forms of SpA.

Disclosure of Interest: None declared

Keywords: Spondyloarthritis

TABLE 1. .

Variable	< November 11, 2003	November 11, 2003 – October 26, 2010	> October 26, 2010	*p* value
Total	158	150	163	
Female	57 (36.1%)	47 (30.9%)	59 (36.2%)	0.5
Time to diagnosis (months)	12 (3 – 40.5)	18 (3.0 – 62.0)	49.5 (9.75 – 122)	0.00
ASAS axial	91 (57.6%)	82 (53.9%)	85 (52.1%)	0.4
ASAS peripheral	60 (38%)	60 (39.5%)	61 (37.4%)	0.4
HLA-B27	59 (42.4%)	60 (44.8%)	68 (48.6%)	0.22
lateral flexion test	10 (3.0 - 19.75)	15 (10.38 – 19.0)	14 (10.0 – 17.0)	0.01
Thoracic expansion <2.5 cm	28 (17.7%)	15 (10.5%)	16 (9.9%)	0.02
Schober test <5 cm	103 (71.0%)	90 (62.1%)	85 (53.1%)	0.01



PANLAR2023-1505

TAPERING BIOLOGICAL THERAPIES IN AXIAL SPONDYLOARTHRITIS, SANTO DOMINGO, DOMINICAN REPUBLIC

Lucia Perez Rodriguez*[1], Rodamin Alvarez Santana[1], Diana Garcia[1], Teresandris Polanco Mora[1], Lory Concepcion[1], Ismely Paulino Izquierdo[1], Ingrit Mercedes Nuñez[1], Edral Rodriguez[1], Tirso Valdez Lorie[1], Rafael Alba Feriz[1], and Roberto Muñoz Louis[1]. *[1]Rheumatology, Hospital Padre Billini, Santo Domingo, Dominican Republic.*

Objectives: To evaluate the response to the tapering of the dose of biological therapy in patients with spondyloarthritis.

Methods: Historical, longitudinal, descriptive, observational study. The clinical records of the database of the Rheumatology Service of the Padre Billini Teaching Hospital were reviewed from January 2015 to December 2022. Inclusion criteria: > 18 years, diagnosis of Axial Spondylo Arthritis according to the ASAS classification criteria, sustained remission (≥ 6 months) with bDMARD, at least 3 consultations per year. Exclusion criteria: use of prednisone, diagnosis of fibromyalgia. ASDAS scale, measured in 3 times (T0 = 0 month, T1 = 3 months, T2 = 6 months), this stratifies the activity of the disease in: Inactive (≤1.3), Low activity (1.3- < 2.1), High Activity (2.1- ≤ 3.5), Very Activity (>3.5). The results were analyzed with the Pearson correlation coefficient (rp) (p < 0.05), with SPSS23.

Results: 23 patients met inclusion criteria. Men 56.5% (13), mean age 44 ± 15.5 years, mean duration of diagnosis 9.39 ± 7.4 years, Hypertension 26% (6), Diabetes mellitus 8.6% (2), obesity 13% (3), Adalimumab (ADA) 52.1 % (12), Golimumab (GOL) 34.7% (8), Etanercept (ETN) 13% (3). **ADA 40 mg every 15 days T0:** ASDAS: Remission 100% (12), (p < 0.05), **ADA 40 mg every 21 days T1:** ASDAS: Remission 66.6% (8), Low Activity 33.3% (4), (p < 0.05), **ADA 40 mg every 21 days T2:** ASDAS: Remission 83.3% (10), Low Activity 8.3% (1), High Activity 8.3% (1), (p > 0.05). **GOL 50 mg every 30 days T0:** ASDAS: Remission: 100% (8), (p < 0.05), **GOL 50 mg every 45 days T1/T2:** ASDAS: Remission: 87.5% (7), Low Activity 13.5% (1), (p < 0.05). **ETN 50 mg every 7 days T0:** ASDAS: 100% remission (2), (p < 0.05), **ETN 50 mg every 15 days T1/T2:** ASDAS: 100% remission (2), (p < 0.05). **ETN 50 mg every 7 days T0:** ASDAS: 100% remission (1) (p < 0.05), **ETN 50 mg every 21 days T1:** ASDAS: 100% remission (1) (p < 0.05). **ETN 50 mg every 21 days T2:** ASDAS: Low activity 100% (1), (p < 0.05).

Conclusion: This study demonstrated that the vast majority of patients maintained sustained remission in the different biological therapy optimization schemes. Of the 4 using ADA 40 mg every 21 days who in the evaluation at 3 had increased disease activity from remission to low activity, at sixth month 3 had returned to the state of remission.

Reference 1: Webers, C., Nikiphorou, E., Boonen, A., & Ramiro, S. (2023). Tapering or discontinuation of biological disease-modifying antirheumatic drugs in axial spondyloarthritis: A review of the literature and discussion on current practice. Joint Bone Spine, 90(1), 105482. doi:10.1016/j.jbspin.2022.105482

Disclosure of Interest: None declared

Keywords: Axial spondyloarthritis, Biological therapies

PANLAR2023-1504

TAPERING BIOLOGICAL THERAPIES IN PSORIATIC ARTHRITIS, SANTO DOMINGO, DOMINICAN REPUBLIC

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Objectives: To evaluate the response to the tapering of the dose of biological therapy in patients with Psoriatic Arthritis.

Methods: Historical, longitudinal, descriptive, observational study. The clinical records of the database of the Rheumatology Service of the Padre Billini Teaching Hospital were reviewed from January 2015 to December 2022. Inclusion criteria: > 18 years, diagnosis of rheumatoid arthritis according to the CASPAR 2006 classification criteria, sustained remission (≥ 6 months) with bDMARD, at least 3 consultations per year. Exclusion criteria: use of prednisone, diagnosis of fibromyalgia. Measured scales: DAPSA28, measured at 3 times

(T0 = 0 month, T1 = 3 months, T2 = 6 months), this stratifies disease activity into: Remission (≤4), Low activity (>4- ≤ 14), Moderate Activity (>14- ≤ 28), High Activity (>28). The results were analyzed with the Pearson correlation coefficient (rp) ($p < 0.05$), with SPSS23.

Results: 8 patients met inclusion criteria. Women 50% (4), mean age 57.3 ± 7.9 years, mean duration of diagnosis 10.6 ± 4.5 years, HBP 25% (2), obesity 12.5% (1), Methotrexate (MTX) 37.5% (3), Adalimumab (ADA) 75% (6), Golimumab (GOL) 25% (2). **ADA 40 mg every 15 days T0:** DAPSA28: 100% remission (2), ($p < 0.05$), **ADA 40 mg every 21 days T1/T2:** DAPSA28: 100% remission (2), ($p < 0.05$). **ADA 40 mg every 15 days T0:** DAPSA28: 100% remission (4), ($p < 0.05$), **ADA 40 mg every 30 days T1:** DAPSA28: 100% remission (4), ($p < 0.05$), **ADA 40 mg every 30 days T2:** DAPSA28: Remission 75% (3), Moderate Activity 25% (1) ($p > 0.5$). **GOL 50 mg every 30 days T0:** DAPSA28: 100% remission (2) ($p < 0.05$), **GOL 50 mg every 45 days T1/T2:** DAPSA28: 100% remission (2) ($p < 0.05$).

Conclusion: This study demonstrated that the vast majority of patients maintained sustained remission in the different biological therapy optimization schemes at 6 months.

Reference 1: Michielsens, C. A., Den Broeder, N., Mulder, M. L., Van den Hoogen, F. H., Verhoef, L. M., & Den Broeder, A. A. (2021). Tumour necrosis factor inhibitor dose adaptation in psoriatic arthritis and axial spondyloarthritis (tapas): A retrospective cohort study. Rheumatology, 61(6), 2307-2315. doi:10.1093/rheumatology/keab741

Disclosure of Interest: None declared

Keywords: Biological Therapies, Psoriasic Arthritis, Spondyloarthritis

SPONDYLOARTHROPATIES AND OTHER INFLAMMATORY ARTHROPATIES

PANLAR2023-1391

RETENTION RATE, PERSISTENCE AND EFFICACY OF GOLIMUMAB IN PATIENTS WITH RHEUMATOID ARTHRITIS, PSORIATIC ARTHRITIS AND AXIAL SPONDYLOARTHRITIS WITH PREVIOUS FAILURE TO OTHER TNFA INHIBITORS

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Objectives: To evaluate the survival, persistence and efficacy of golimumab (GLM) in patients with rheumatoid arthritis (RA), psoriatic arthritis (PsA) and axial spondyloarthritis (axSpA) patients who had previously failed other TNF-i and compared them with those without previous experience with this type of drugs.

Methods: Longitudinal, observational study. Consecutive patients ≥18 years of age with RA, axSpA and PsA who had started treatment with GLM according to medical indication in each center were included. Data were obtained by review of medical records. Patients were followed up until the discontinuation of the GLM, loss to follow-up, or completion of the study (May 2022). The following groups were defined according to the treatments received before the start of GLM: (a) naive, who had not received any DMARDs; (b) failure to DMARDs-conventionals; (c) failure to at least one iTNF; (d) failure to only b-DMARDs other than iTNF or targeted synthetics.

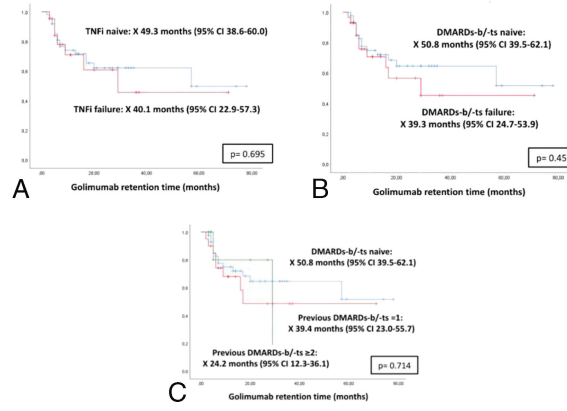
Results: A total of 236 patients were included, 152 (64.4%) with RA, 48 (20.3%) with axSpA, and 36 (15.3%) with PsA. A total of 13 (5.5%), 134 (56.8%), 69 (29.2%), and 20 (8.5%) patients were categorized into groups a, b, c, and d, respectively; 21 (8.9%) of group c had received other b/ts-DMARDs in addition to iTNF. All patients in group "a" had axSpA and had failed treatment with NSAIDs. Within groups "c and d", the majority (65.2% and 95%) had failed a single b/ts-DMARDs.

During follow-up (506.6 pte/year), 71 patients discontinued GLM, the majority (63.4%) due to lack of response to treatment. The mean overall retention was 47.8 months (95% CI 38.4-57.3) (Fig.1A). In multivariate analysis, prior use of TNF-i was not significantly associated with lower GLM retention (OR 1.7, 95%CI 0.6-5.2). Overall GLM persistence was 79% and 68% at 12 and 24 months, respectively. In group "c", persistence was 76% and 67%, respectively ($p = 0.410$).

Later, groups "a and b" were compared with "c and d". The latter had numerically lower retention (Fig 1B), and it was lower the higher the number of previous treatments(Fig 1C). In the multivariate analysis, having received at least one b/ts-DMARDs was significantly associated with lower survival (OR 0.54, 95% CI 0.31-0.95), while having health insurance had the opposite effect (OR 2.4, 95%CI 1.9-5.3)

Conclusion: In this cohort, patients who had failed to TNF-i had numerically lower retention and persistence of treatment with GLM. Globally, having previously received b/ts-DMARDs and not having health insurance was associated with lower retention.

Figure 1. Effect of TNF-i failure, DMARDs-b/-ts and the number of them on golimumab retention



Disclosure of Interest: None declared

Keywords: Rheumatoid arthritis, Spondyloarthritis, TNF-Alpha inhibitors

PANLAR2023-1355

REAL-WORLD EFFECTIVENESS AND SAFETY OF SECUKINUMAB IN AXIAL SPONDYLOARTHRITIS AND PSORIATIC ARTHRITIS

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Objectives: To evaluate the long-term effectiveness and safety of SEC in patients with axSpA and PsA in an actual clinical setting.

Methods: We designed a single center historical and longitudinal observational study including patients diagnosed of axSpA with ASAS classification and PsA fulfilling the CASPAR classification. Between 2016 and 2022, a total of 90 patients were included in the study treated with SEC in the rheumatology service of the *Hospital Universitario de Navarra*. All patients included started SEC treatment at least 1 year before the data extraction. For axSpA C-reactive protein (CRP), the Ankylosing Spondylitis Disease Activity Score (ASDAS), patient's visual analog scale (VAS) and the neutrophil–lymphocyte ratio (NLR)1 were analyzed. In the PsA VAS, CRP and NLR were assessed. The variables were analyzed at baseline, 12 and 24 months. Safety was evaluated by analyzing intercurrent complications that required discontinuation.

Results: We included a total of 90 patients (46 axSpA and 44 PsA), 50% of them were female. The mean age at diagnosis was 44.5 years (SD 11.1) while the mean age at SEC initiation was 51.6 (SD 11.4). The median time from diagnosis to onset of SEC was 5 years (IQR 2-11). Eighty-three patients were treated

with one or more biologic drugs prior to SEC, median 2 (IQR 0-5). The mean CRP before starting SEC was 9 mg/L (SD 17.6), VAS 7 (SD 2) and NLR 1.9 (SD 1). A statistically significant improvement was observed in both pathologies in CRP at 24 months (p 0.049). VAS presented a statically significant improvement at 12 and 24 months of treatment (p 0.008 and 0.012, respectively). There were no statistically significant differences in NRL. In axSpA, 26% of them showed clinical improvement on ASDAS. None of the baseline characteristics included showed significant association with SEC performance. No patient experienced serious adverse reactions, infections or malignancies.

Conclusion: In our cohort, SEC showed to be effective in axSpa and PsA patients, displaying statistically significant improvements in VAS and CRP on both at 24 months. SEC safety profile was consistent with the well-established safety profile of this drug.

Reference: Merola Joseph, Mclnnes Iain et al. Effect of Secukinumab on Traditional Cardiovascular Risk Factors and Inflammatory Biomarkers: Post Hoc Analyses of Pooled Data Across Three Indications. Rheumatology and Therapy volume 9, pages 935–955 (2022)

Disclosure of Interest: None Declared

Keywords: Effectiveness, Psoriasic Arthritis, Spondyloarthritis

TABLE 1. Baseline Characteristics

	AxSpA(46)	PsA(44)	Total (90)
Hypertension	10 (21.7%)	15 (34.1%)	25 (27.8%)
Dyslipidaemia	16 (34.8%)	20(46.5%)	36 (40.4%)
CRP			
12 months	-4.7 (SD 13.3)	-4.6 (SD 17.6)	-4.6 (SD 15.2)
24 months	1.6 (SD 7.9)	-8.4 (SD 21.4)	-2.8 (SD 15.9)

TABLE 1. *(Continued)*

VAS			
12 months	-3.2 (SD 2.5)	-0.6 (SD 3.4)	-2.1 (SD 3.1)
24 months	-6.6 (SD 2.3)	-2.6 (SD 1.5)	-4.6 (SD 2.8)

PANLAR2023-1450

REAL-WORLD EFFECTIVENESS AND SAFETY OF SECUKINUMAB IN AXIAL SPONDYLOARTHRITIS

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Objectives: To evaluate the long-term effectiveness and safety of secukinumab (SEC) in patients with axSpA in an actual clinical setting.

Methods: We designed a historical longitudinal observational study including patients diagnosed of axSpA fulfilling the ASAS classification. A total of 46 patients were included in the study treated with SEC between 2016 and 2022 in the rheumatology service of the *Hospital Universitario de Navarra* a single center.

The efficacy variables analyzed were C-reactive protein (CRP), the Ankylosing Spondylitis Disease Activity Score (ASDAS) scale, the patient's visual analog scale (VAS) and the neutrophil–lymphocyte ratio (NLR) at baseline, 12 and 24 months. Individual baseline characteristics and their probable correlation with drug efficacy and safety were evaluated.

Results: We included 46 patients 23 (50%) were female(Table 1). The median number of previous biologics was 1.6 (IQR 1-2).

The 1 and 2-year retention rates for SEC was 83% and 69% respectively.

The mean CRP before starting SEC was 8.4 mg/L (SD 15.8) , VAS 7.5 (SD 2) and NLR 2 (SD 1.2).

Statistically significant improvement was observed in CRP at 24 months (p 0.049) but not at 12 months (Table 1). Also, VAS presented a statically significant improvement at 12 and 24 months (p 0.008 and 0.012, respectively). There were no statistically significant differences in NLR in any group. Regarding ASDAS in the AxSpA group, 2 patients (4,34%) showed great improvement (>3.1), 12 patients (26%) clinical improvement. None of our patients experienced serious adverse reactions, infections, or malignancies during the use of SEC.

Conclusion: SEC showed a very good retention rate in a population previously exposed to several biological therapies. In our cohort, SEC showed to be effective in axSpa and PsA patients, displaying statistically significant improvements in VAS at 12 and 24 months and in CRP at 24 months. SEC safety profile in our cohort was consistent with the well-established safety profile of this drug.

Disclosure of Interest: None declared

Keywords: Effectiveness, Safety, Spondyloarthritis

TABLE 1. . Baseline characteristics

	AxSpA (n = 46)
Female	23 (51.1%)
Hypertension	10 (21.7%)
Dyslipidaemia	16 (34.8%)
Number of previous biologics, median (IQR)	1 (1-2)
Glucocorticoids	8 (18.2%)
CRP	
- 12 months	-4.7 (SD 13.3)
- 24 months	1.6 (SD 7.9)
VAS	
- 12 months	-3.2 (SD 2.5)
- 24 months	-6.6 (SD 2.3)
NLR	
- 12 months	-0.0 (SD 0.8)
- 24 months	-0.2 (SD 1.6)

PANLAR2023-1218

SECUKINUMAB SURVIVAL AND SAFETY BASED ON DEMOGRAPHIC CHARACTERISTICS IN SPONDYLOARTHRITIS AND PSORIASIC ARTHRITIS IN A REAL CLINICAL SETTING.

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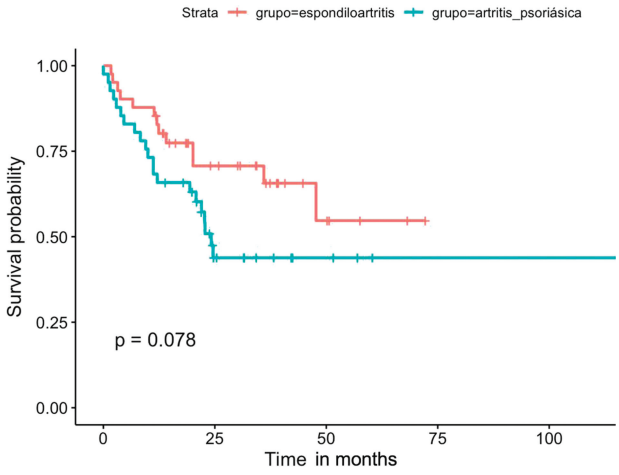
Objectives: We aimed to evaluate the drug retention rate, causes for treatment discontinuation and factors associated with SCK persistence in patients with AxSpA and PsA in a real clinical setting.

Methods: A historical cohort study was carried out including patients diagnosed of axSpA fulfilling the ASAS classification criteria and PsA fulfilling the CASPAR classification criteria. A total of 90 patients were included in the study treated with SCK between 2016 and 2022 in the rheumatology service of the *Hospital Universitario de Navarra*. All patients included started SCK at least 12 months before the data extraction.

Drug survival in months was analyzed by Kaplan-Meier curves while predictive factors of discontinuation were evaluated using a Cox regression analysis. The reason for discontinuation was also collected.

TABLE 1. :

	AxSpA (n = 46)	PsA (n = 44)	Total (n = 90)
Female	23 (51.1%)	22 (51.2%)	45(50.0%)
Hypertension	10 (21.7%)	15 (34.1%)	25 (27.8%)
Dyslipidaemia	16 (34.8%)	20(46.5%)	36 (40.4%)
Diabetes mellitus	5 (10.9%)	7 (15.9%)	12 (13.3%)
Body Mass Index	27.7 (SD5.1)	29 (SD7.2)	28.4 (SD6.4)
Tobacco use	17 (37.8%)	15 (34.1%)	32 (36.0%)
Alcohol use	2 (4.4%)	0 (0.0%)	2 (2.2%)
Cardiovascular disease	8 (17.4%)	5 (11.6%)	13 (14.6%)
Depression	5 (10.9%)	1 (2.3%)	6 (6.7%)
Number of previous biologics, median (IQR)	1 (1-2)	2 (1-3)	2(1-2)
Glucocorticoids	8 (18.2%)	21 (47.7%)	29 (33.0%)



Results: We included 90 patients (46 AxSpA and 44 PsA)(Table 1).

Eighty-three (92.2%) patients were treated with one or more biologics prior to SCK, median number of previous biologics was 2 (IQR 0-5). The average treatment duration was 31.8 months (SD 75.1). The 1 and 2-year retention rates for SCK in the AxSpA group was 83% and 71%, respectively, while for the PsA group it was 69% and 52%, respectively (Fig 1).

The factors associated with lower risk of discontinuation were higher IMC ($p = 0.025$) and diabetes ($p = 0.04$). None of the other clinical variables evaluated had a statistically significant association with a lower or higher risk of discontinuation or discontinuation. No patient presented infections that required discontinuation of the drug.

Conclusion: SCK showed a very high retention rate in a population that had been previously exposed to several biological therapies, both in the AxSpa and PsA groups. According to previous reports[1], cardiometabolic comorbidities such as obesity and diabetes appear to be associated with better SCK survival and therefore this drug could be an optimal therapy for patients with cardiometabolic risk factors.

Reference: Sara Alonso, Ignacio Villa, Sabela Fernández, José L. Martín, et al. Multicenter Study of Secukinumab Survival and Safety in Spondyloarthritis and Psoriatic Arthritis: SEcukinumab in Cantabria and ASTURias Study. Front Med (Lausanne). 2021; 8: 679009.

Disclosure of Interest: None Declared

Keywords: Safety, Secukinumab, Survival

PANLAR2023-1190

DISEASE ACTIVITY PSORIATIC ARTHRITIS SCORE IS CORRELATED WITH CHANGES IN THE LEFT VENTRICULAR FRACTIONAL SHORTENING

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Objectives: To relate fractional shortening (FS) with Disease Activity of Psoriatic Arthritis (DAPSA) score in patients with psoriatic arthritis.

Methods: Cross-sectional study. We recruited PsA patients from a general third-level care hospital. Patients included in the cohort were 30–75 years of age, fulfilling the 2006 Classification Criteria for Psoriatic Arthritis. Transthoracic echocardiograms were performed in all patients following the current guidelines by a certified cardiologist. Normality was assessed by the Kolmogorov-Smirnov test and correlations by Pearson's and Spearman's tests, accordingly. A value of $p < 0.05$ was considered significant.

Results: 28 patients were included in this study; 50% were women and the average age was 55 years (±9.6), the most common comorbidity was diabetes mellitus (75%) and the mean DAPSA Score was 12.59 (6.86-20.33). Demographic characteristics and Echocardiographic findings are shown in Table 1. After the analysis of the correlation between echocardiographic findings and the DAPSA Score, we found a negative correlation between the DAPSA score and left ventricular fractional shortening ($r_s = -0.539$, $p = 0.003$).

Conclusion: Higher inflammation leads to a deterioration in the left ventricular function determined by the fractional shortening, which can be measured using the DAPSA score that is a feasible and safe tool that can be used by general physicians and can lead to an early diagnosis and management of this change in the ventricular function and may improve their prognosis and quality of life.

Disclosure of Interest: None declared

Keywords: Cardiovascular disease, Heart, Psoriatic arthritis

TABLE 1. Demographic characteristics and Echocardiographic findings.

	PsA Patients (N = 28)	*p* value
Women, n (%)	14 (50.0%)	-
Men, n (%)	14 (50.0%)	-
Age, years Mean (SD±)	55 (±9.6)	0.890 NS
Diabetes Mellitus, n (%)	21 (75.0%)	0.457 NS
Dyslipidemia, n (%)	15 (53.6%)	0.670 NS
Hypertension, n (%)	15 (53.3%)	0.093 NS
BMI, Kg/m^2 Mean (SD±)	32.2 Kg/m^2 (±5.4)	0.527 NS
SBP, mmHg Median (iQR)	120 mmHg (118.5-138.75)	0.545 NS
LV Mass Index, gr/m^2 Median (iQR)	77.78 gr/m^2 (58.89-87.91)	0.088 NS
Fractional Shortening, % Median (iQR)	31.50% (17.75-38.5)	**0.003**
Global Longitudinal Strain Mean (SD±)	-20.29 (±3.67)	0.427 **NS**
Left ventricular ejection fraction, % Mean (SD±)	61.64% (±6.67)	0.084 NS
LA Volume index, ml/m^2 Median (iQR)	25.45 ml/m^2 (21.24-28.18)	0.634 NS
TAPSE Median (iQR)	2.3 (2.1-19.5)	0.402 NS

PsA, Psoriatic arthritis; BMI, Body mass index; SBP, systolic blood pressure; LV, Left ventricle; LA, Left atrium; TAPSE, Tricuspid Annular Plane Systolic Excursion; SD, Standard deviation; IQR, Interquartile range; NS, Non-significant.

PANLAR2023-1075

SERUM CHEMERIN IN A COHORT OF PATIENTS WITH OSTEOARTHRITIS FROM A HOSPITAL IN SOUTH AMERICA

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Objectives: The main objective of this study was to determine if the serum chemerin concentrations of a group of patients with primary OA are higher when compared with healthy control individuals; and additionally, to determine the relationship between the presence of obesity/overweight with the severity of the disease measured by a radiological scale.

Methods: An analytical cross-sectional study was carried out where serum chemerin levels were quantified by enzyme-linked immunosorbent assay (ELISA) in patients with primary OA of the hip, knee, and hand fulfilling criteria of the American College of Rheumathology (ACR) and healthy controls. Radiological studies of patients and controls were analyzed to determine the severity of joint involvement by applying the Kellgren and Lawrence (KL) classification system. The statistical significance of the difference in serum chemerin values between the two groups was verified and the correlation between the variables of body mass index (BMI) with radiological severity, number of joint regions and serum chemerin levels was analyzed.

Results: During the year 2018, serum samples and X-ray films of the involved joints were collected from 40 patients with primary OA who met the inclusion criteria, as well as serum samples from 20 healthy controls. The average concentration of chemerin was higher in the group of patients with OA compared to the control group, being 442 ng/ml and 189.74 ng/ml respectively ($p < 2.2 \times 10-16$). No significant associations were found between the different degrees of severity

of the disease measured by the KL radiological scale, as well as with the number of affected joint regions and the BMI.

Conclusion: In a group of patients with primary OA of the hand, knee, or hip, chemerin values were higher than those found in healthy controls, with no significant association with the severity of the disease established radiologically by the K/L scale, the number of joint regions compromised and BMI.

Disclosure of Interest: None declared

Keywords: Arthrosis, Epidemiology, Rheumatic diseases

PANLAR2023-1587

SPECTRUM OF SPONDYLOARTHRITIS (SPA) IN COLOMBIAN PATIENTS: AXIAL VS PERIPHERAL SPA

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Objectives: To differentiate the clinical, biochemical, and imaging characteristics of one Colombian cohort of patients with radiographic and non-radiographic axial spondyloarthritis.

Methods: Patients with axial spondyloarthritis were consecutively recruited at a reference institution in Colombia from 2002 to 2015. A structured survey was conducted at the time of diagnosis of the disease, which included sociodemographic, clinical, biochemical, and imaging variables. The presence of sacroilitis was evaluated by a local radiologist. Patients and disease characteristics were comparedbetween nr-axSpA and r-axSpA

Results: A total of 258 patients with axial Spa were recruited between 2002 and 2015, of whom 69.6% (185 patients) were radiographic axial and the remaining 30.4% (73 patients) were non-radiographic axial. When comparing the two groups (radiographic vs. non-radiographic axial), no differences were observated in terms of sex, age of onset, disease duration , initial symptom, number of swollen joints, duration of morning stiffness, number of painful entheses. Compared with r-axSpA, patients with nr-axSpA had greater presence of HLA-B15 (p = 0,04), presence of inflammatory spinal pain (p = 0,01), history of relatives with spondyloarthritis (p = 0,03), longer duration of enthesitis (p=,001), low back pain (p = 0,007) and gluteal pain (p = 0,003) in the first episode, and greater chest expansion (p = 0,001) and distance in the Schober test (p < 0,001) in non-radiographic axial versus radiographic axial patients.

Conclusion: Colombian patients with non-radiographic axial spondyloarthritis have higher presence of HLA-B15, higher frequency of inflammatory spinal pain, family history of spondyloarthritis, low back pain, and gluteal pain during the first episode of the disease, greater chest expansion and distance on the Schober test than patients with radiographic axial spondyloarthritis.

Disclosure of Interest: None declared

Keywords: Cohort, Colombia, Spondyloarthritis

TABLE 1. Characteristics of Colombian's patients with SpA (n = 258)

	Radiographic SpA (%) n = 185	Non radiographic SpA (%) n = 73	*p*-value
Sex			
Man	117 (63)	39 (53)	0.18
Initial symptom duration in months:			
Enthesitis			
Median	2 [0,3 – 6.0]	3 [0,3 – 9.0]	**0.001**
Lumbar pain:	5 [3 – 12]	6 [3 – 12]	**0.007**
Median	1 [0 – 4]	2 [0 – 6]	**0.003**
Buttock pain:			
Median			
Inflammatory back pain	127 (70)	62 (82)	**0.01**
Chest expansion	3.8 [SD ± 1.34]	4.5 [SD ± 1.54]	**0.001**
Mean			
Schober test	3.9 [SD ± 2.4]	6.9 [SD ± 5.58]	**<0.001**
Mean			
HLA			
B27	94 (51)	38 (51)	0.98
B15	9 (5)	9 (12)	**0.04**

PANLAR2023-1591

SPECTRUM OF SPONDYLOARTHRITIS IN COLOMBIAN PATIENTS: AXIAL VS PERIPHERAL SPONDYLOARTHRITIS

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Objectives: To assess the predominant subtype of SpA (axial and peripheral) in a Colombian cohort and the clinical, biochemical, and imaging differences between these in patients diagnosed with spondyloarthritis at a reference institution in Bogotá DC.

Methods: Patients with a diagnosis of spondyloarthritis were chosen according to the assessment carried out by four expert rheumatologists at a reference institution in Bogotá DC, Colombia between 2002 and 2015. A survey was conducted at the time of diagnosis and included clinical, biochemical and imaging characteristics. These variables were compared between axial patients and peripheral patients.

Results: 473 patients were recruited between 2002 and 2015, with 65.1% men, 83.7% being of mixed race, a mean age of onset of the disease of 29.5 years, and a median delay in the diagnosis of the disease of 24 months.According to the ASAS classification, there were 189 axial patients and 223 peripheral patients; there were no differences between the age of onset of symptoms, sex, race, or duration of the first symptom between both groups. The axial patients had the longest delay in diagnosis (p = 0.03); more low back pain and less arthritis as initial symptoms (p = 0.001); a higher frequency of insidious onset of arthritis (P = 0.001); greater pain in the spine, stiffness, and inflammatory characteristics of pain (p = 0.001). Patients with axSpA presented with more enthesitis (P = 0.03), less arthritis (p = 0.02), limited chest expansion (p = 0.03), and sacroiliitis on physical examination (p = 0.001).Patients with pSpA have a lower frequency of HLA-B27 (p = 0.001) but a higher frequency of other HLA alleles (p = 0.01), such as HLA-B15 (p = 0.001), with a higher ESR (p = 0.03).

Conclusion: Colombian patients with SpA are predominantly young men, with pSpA being the most frequent. AxSpA patients present a longer delay in diagnosis, more low back pain and less arthritis as initial symptoms, greater pain and stiffness of the spine compared to patients with pSpA spondyloarthritis, but the latter present more frequently HLA-B15 allele, a higher frequency of previous infection and higher ESR than patients with axSpA.

Disclosure of Interest: None declared

Keywords: None

PANLAR2023-1362

EFFICACY AND SAFETY OF SECUKINUMAB IN PATIENTS WITH PSORIATIC ARTHRITIS IN ROUTINE CLINICAL PRACTICE

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Objectives: To describe the efficacy and safety of SEC treatment in clinical practice in patients with PsA.

Methods: We conducted a historical descriptive analysis of patients diagnosed with PsA according to the CASPAR criteria. For this purpose, data were collected from the medical records of 34 patients treated with SEC between 2016 and 2022 in the rheumatology department of the *Hospital Universitario de Navarra*. To assess efficacy, visual pain scale (VAS), C-reactive protein (CRP) and neutrophil-to-lymphocyte ratio (NLR) were evaluated at baseline, 12 and 24 months. Safety was assessed by analysing intercurrent infections or malignancies that would have led to discontinuation of the drug. Statistical analysis was performed with STATA 15.

Results: Forty-four patients with PsA were included, 22 (51.2%) were female. The median age at diagnosis was 46.1 years (SD 10.4) and the median age at initiation of ESA was 53.4 years (SD 9.9). The median time from diagnosis to

onset of SEC was 7 years (IQR 6-1). In the cohort analysed 31 (70.5%) patients had prior treatment with methotrexate (MTX) and 21 (47.7%) received initial treatment with glucocorticoids (table). The mean number of anti-TNF prior to ESA was 2.1 (SD 1.3). At baseline, 34 patients (77.3%) were on SEC at a dose of 150 mg and 10 patients (22.7%) at a dose of 300 mg every 4 weeks. Statistically significant improvement was observed in VAS at 12 and 24 months (0.6 and SD3.4 with p 0.008 and 2.6 t SD1.5 with p 0-012, respectively) and CRP at 24 months (8.4 and SD 21.4 with p 0.049). No significant association was observed with NRL. There were no statistically significant differences in VAS and CRP improvement when compared to the baseline population characteristics. No patients had infections or malignancies requiring discontinuation of the drug. No association was detected between drug discontinuation and the development of metabolic syndrome.

Conclusion: In our cohort, SEC showed statistically significant improvement in VAS at 12 and 24 months and CRP at 24 months. SEC appears to be a safe drug as none of our patients experienced serious adverse reactions, infections or malignancies during its use.

Disclosure of Interest: None declared

Keywords: Efficacy, Psoriasic arthritis, Safety

TABLE. : Some of the baseline characteristics

Hypertension	15 (34.1%)
Dyslipidaemia	20 (46.5%)
Diabetes mellitus	7 (15.9%)
Body Mass Index	29 (SD7.2)
Cardiovascular disease	5 (11.6%)
Onychopathy	11 (25%)
Palmoplantar pustulosis	5 (11.4%)
Number of previous biologics, median (IQR)	2 (1-3)

PANLAR2023-1561

QUALITY OF LIFE OF PATIENTS WITH PSORIATIC ARTHRITIS AT ATERTIARY MEDICAL CENTER

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Objectives: Psoriatic arthritis (PsA) is a chronic inflammatory disease which affects 0,05 to 0,25% of the total population. It can be painful, with aesthetic impairment and functional limitation, impacting on the quality of life (QoL) of these patients. This study aims to analyze QoL and demographics of patients with PsA at a tertiary medical center.

Methods: This is an observational historical study that aims to assess the QoL of PsA patients registered at a tertiary medical center, included according to the Moll and Wright and CASPAR diagnostic criteria. The instruments utilized were the Ankylosing Spondilitis Quality of Life (ASQoL) score, the Dermatology Life Quality Index (DLQI) and the Psoriasis Area and Severity Index (PASI), all validated in multiple countries and adequate for the purposes of this study.

Results: In total, 58 patients were included, 30 were men (51.8%) and 28 women. The mean age was 48,2 years.

The average ASQoL score was 7.03, showcasing 53.3% of patients with a score in-between 0-7, thus indicating minimum impairment in QoL. Whilst 43.1% had a ≥ 8 score, exhibiting significant impairment in QoL. 3.4% of the patients had no available data. The average DLQI score was 4,09, showing 55,2% of patients having no impact on QoL regarding the dermatological aspect of PsA; 17,2% presents small effect in their QoL; 6,9% presents moderate effect; 8,5% presents very large effect; 5,1% shows extreme negative effect; 6,9% had no available data. The average PASI score was 4,83, with 51% of patients indicating minimal disease (1-4 score), 13,8% having no skin lesions at all (zero score), 11,9% presenting with moderate activity (5-10 score), and a 10,2% minority having severe disease activity (>10 score).

Conclusion: In this series of patients with PsA, female gender, age > 45 years and higher PASI scores were associated with impaired quality of life.

Reference 1: Doward LC, Spoorenberg A, Cook SA, et al. Development of the ASQoL: a quality of life instrument specific to ankylosing spondylitis. Ann Rheum Dis. 2003;62(1):20-26.

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Disclosure of Interest: None declared

Keywords: Psoriatic arthritis, Quality of life, Rheumatic diseases

PANLAR2023-1508

THERAPEUTIC POTENTIAL OF EXOSOMES FROM MESENCHYMAL STEM/STROMAL CELLS IN OSTEOARTHRITIS

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Objectives: Osteoarthritis is a degenerative joint disease affecting more than 600 million people worldwide. Due to its high prevalence, the impact on the patient's quality of life and its socio-economic burden represents a public health problem and a great challenge for health systems. Current treatment options are insufficient to prevent pain and functional limitation, slow disease progression, and repair structural damage. Nevertheless, advances in Regenerative Medicine bring promising option treatment to OA. We will discuss an innovative component: the exosome derived from stromal mesenchymal cells.

Methods: In this presentation, we share state of the art and perspectives of therapy with exosomes focused on the treatment of OA.

Results: "Exosomes" is the term used to describe nanovesicles of endosomal origin that cells secrete to the outside. They play a key role **in signalling and** cell communication and participate in numerous **physiological and molecular processes**. Their structure **consist** of a lipid bilayer of more or less spherical shape, containing a variety of molecules such as proteins, lipids, RNA, miRNA and DNA. They are produced inside the cell, secreted to the outside, and, thanks to the receptors on its surface, transported to the target cell. The content and markers of these extracellular nanovesicles, and therefore their therapeutic potential, depending on the cell that produces them. Of great interest in the treatment of degenerative and inflammatory diseases is the exosome of stromal mesenchymal cells.

These cells are found in most human tissues, the most commonly used being adipose tissue, umbilical cord and bone marrow. Thanks to their self-replicating capacity, the isolated cells divide until they reach maturity and secrete the exosomes into the culture medium. Because of the impact, it could have as a treatment option for OA, several publications are dedicated to describing the broad qualities of the exosome by which it manages to act on damaged joints. Since this nanovesicle is not a single molecule but a set of elements, the mechanisms are diverse and can be summarised in cell signalling, immunoregulatory, anti-inflammatory and regenerative capacity.

Conclusion: Current knowledge allows us to predict a future where the mesenchymal cell exosome becomes a key element in Regenerative Medicine focused on treating OA. Effective therapy in the immunoregulation of disease, repair of compromised tissues and inflammation in OA.

Disclosure of Interest: None declared

Keywords: Arthrosis, exosomes, Mesenchymal stem cells

PANLAR2023-1354

THE IMPACT OF GLUCOCORTICOID RECEPTOR AND THE ACTIVATION PATHWAY POLYMORPHISMS IN THE OUTCOMES OF PATIENTS WITH TAKAYASU ARTERITIS.

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Objectives: To evaluate the influence of single nucleotide polymorphisms (SNP) of the *HSD11B1* and *NR3C1* gene on therapy efficacy and toxicity of glucocorticoids (GC) in Takayasu arteritis (TAK).

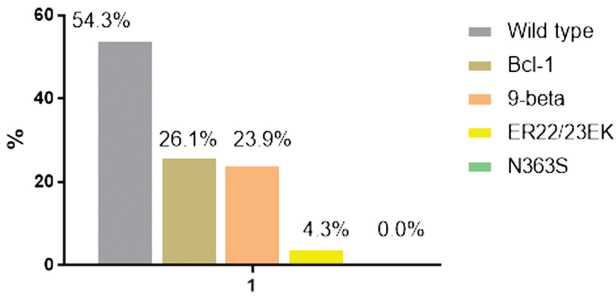
Methods: The study included patients who met the 1990 classification criteria of the American College of Rheumatology for TAK. Study participants underwent a

thorough clinical assessment and data from the medical records were reviewed. Information about sustained remission, adverse events to GC, arterial ischemic events, vascular procedures and need for biological therapy. Blood samples were collected for DNA extraction and genotyping. The SNP of interest genotyped by the Sanger technique were: rs11119328 of the *HSD11B1* gene, and the SNP rs6189, Bcl1 (rs41423247), ER22/23EK (rs6189 and rs6190) and N363S (rs6198) of the *NR3C1* gene.

Results: Forty-six TAK patients were evaluated, all of them were female and had mean age of 44.4 ± 14.8 years at study. The median time since TAK diagnosis was 14.0 months (6.0-22.3). Nearly 60% of patients experienced sustained remission during the follow up. However, despite this, a significant number of patients with TAK needed biologic therapy due to refractory or recurrent disease, presented ischemic arterial events or underwent vascular surgical procedures. In our cohort, TAK patients presented a high frequency of arterial hypertension (87.0%) and use of statins (71.7%). Diabetes mellitus, weight gain and osteoporosis were observed respectively in 23.9%, 10.9% and 18.8%.

The distribution of *NR3C1* gene SNP in TAK patients is shown in Image 1. TAK patients carrying the rs11119328 SNP of the *HSD11B1* gene have a lower frequency and lower chance of developing adverse events related to GC use, while carriers of the 9β SNP of the *NR3C1* gene showed a higher frequency and higher risk of developing ischemic arterial events, but no associations were found with adverse events. Carriers of the Bcl-1 SNP did not present differences regarding the parameters evaluated in the study. The frequency of the ER22/23EK SNP of the *NR3C1* gene was too low to and it was not possible to perform analyzes related to that SNP. None of the TAK patients were carries of the N363S SNP of the *NR3C1* gene.

Conclusion: In TAK, the carriage of rs11119328 SNP of the *HSD11B1* gene was associated with a lower frequency of adverse events due to GC use, while the 9β SNP of the *NR3C1* gene showed a higher frequency and higher risk of developing arterial ischemic.



Disclosure of Interest: None declared

Keywords: Glucocorticoid, Polymorphism, Takayasu arteritis

VASCULITIS

PANLAR2023-1469

DIFFERENCES IN THE DISTRIBUTION OF EFFECTOR CD4+ T CELLS SUBSETS IN THE PERIPHERAL BLOOD AND IN THE AORTA FROM PATIENTS WITH TAKAYASU ARTERITIS

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Objectives: To evaluate effector CD4$^+$ T cells (i.e., Th1, Th2 and Th17) in the peripheral blood and in the aortic wall from patients with Takayasu arteritis (TAK). Moreover, this study aims to compare effector CD4$^+$ T cells between active disease, remission, and healthy controls (HC), as well as the impact of therapy on effector CD4$^+$ T cells subsets in the peripheral blood.

Methods: We performed a cross-sectional study including 30 TAK patients and 30 HC. Disease activity was defined by the 2010 Indian Takayasu Activity Score (ITAS2010). The absolute number and percentage of CD3$^+$ T cells, CD3$^+$CD4$^-$ T cells, CD4$^+$ T cells, and Th1 (CD3$^+$CD4$^+$CXCR3$^+$CCR5$^+$), Th2 (CD3$^+$CD4$^+$CCR4$^+$CD294$^+$), and Th17 (CD3$^+$CD4$^+$CD161$^+$CCR6$^+$) cells were evaluated in peripheral blood by flow cytometry. The expression of CD4, CD8, Tbet, GATA-3, and RORγT, were analyzed in the aorta from 6 TAK patients by immunohistochemistry.

Results: TAK patients presented lower number of CD3$^+$ T cells and CD4$^+$ T cells ($p = 0.031$ and $p = 0.039$, respectively) and an increase in the proportion of Th17 cells ($p = 0.001$) when compared to HC. Patients with active disease and those in remission had a higher proportion of Th17 cells than HC ($p = 0.016$ and $p = 0.004$, respectively). Therapy for TAK did not result in significant differences in relation to T cells and CD4$^+$ effector T cells subpopulations in the peripheral blood. An inverse correlation was observed between disease duration and the number and percentage of Th2 cells (rho = -0.610; $p < 0.0001$ and rho = -0.463; $p = 0.010$, respectively) and Th17 cells (rho = -0.365; $p = 0.047$ and rho = -0.568; $p = 0.001$, respectively). In the aorta, the expression of CD8 was higher than CD4 expression, whereas the transcription factors were expressed in order of frequency: GATA-3, Tbet and RORγT.

Conclusion: TAK patients presented alterations of effector T cells in the peripheral blood, including a reduction in CD4$^+$ T cells with a predominance in the proportion of Th17 cells compared to HC. Therapy for AT had no impact on effector CD4$^+$ T cells in the peripheral blood. Disease duration was inversely correlated with Th2 and Th17 cells. CD8 prevail over CD4 in the aorta, whereas the CD4$^+$ T cells effector response was observed in the aorta in this order of frequency: Th2, Th1 and Th17.

Disclosure of Interest: None declared

Keywords: Adaptive immune response, T cells, Takayasu arteritis

PANLAR2023-1516

OUTCOMES OF SARS-COV-2 INFECTION IN PATIENTS WITH ANCA ASSOCIATED VASCULITIS. DATA FROM THE NATIONAL SAR-COVID REGISTRY

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Objectives: To describe the clinical characteristics and outcomes of SARS-CoV-2 infection in patients with systemic vasculitis.

Methods: Observational, multicenter, cross-sectional analytical study in patients 18 or older diagnosed with systemic vasculitis with confirmed SARS-CoV-2 infection (RT-PCR or serology) included in the SAR-COVID registry. Patients were evaluated from July 2020 to February 2022. Patients diagnosed with ANCA-associated vasculitis (AAV), other systemic vasculitides (Giant cell arteritis, Takayasu), and a control group of patients with other rheumatological diseases matched by age, sex, comorbidities, and date of SARS-CoV-2 infection. The survival curve of the groups was studied by Kaplan-Meier and compared through the Log-Rank Test. A Cox regression model will be performed to adjust survival for different variables (sex, age, treatments for underlying disease, treatments for viral infection, smoking, obesity, d-dimer level, and disease activity).

Results: A total of 282 out of 2694 patients in the SAR-COVID registry were included, 57.4% women with a mean age of 55.7 years (SD 14.1). Fifty-four patients in the AAV group, 32 in the other vasculitis group, and 196 controls were studied. Hospitalization was required in 53.7% of the AAV group, 37.5% in other vasculitides, and 26.2% in the control group. 5.6% of patients in the control group presented acute respiratory distress syndrome (ARDS), 15.6% in the other vasculitis group, and 22.2% in the AAV group ($p < 0.001$).

Complete recovery was observed in 82.3% of patients in the control group, 75% in the other vasculitis group, and 63% in the AAV group. We observed that

5.7% of the patients in the control group died from COVID-19, 9.4% from other vasculitides, and 27.8% in the AAV group ($p < 0.001$). We found a lower survival in the AAV group compared to the control group ($p < 0.005$). In the multivariate Cox regression model, older age (HR:1.05 IC95% 1.01-1.09 p = 0.01), BMI > 40 (HR:13.2 IC95% 2.1-83.2 p = 0.01), and high activity of the underlying disease (HR:16 95% CI 3.7-69.4 $p < 0.005$) were associated with lower survival.

Conclusion: In conclusion, patients diagnosed with AAV presented a worse disease course during SARS-CoV-2 infection with a more frequent requirement for invasive mechanical ventilation. Likewise, these patients showed lower survival compared to patients with other autoimmune diseases.

Disclosure of Interest: A. Brigante Grant / Research support with: SAR-COVID is a multi- sponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., C. A. Isnardi Grant / Research support with: SAR-COVID is a multisponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., D. Emili Grant / Research support with: SAR-COVID is a multisponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. 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D´Angelo Grant / Research support with: SAR-COVID is a multisponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., I. Petkovic Grant / Research support with: SAR-COVID is a multisponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., C. Pisoni Grant / Research support with: SAR-COVID is a multisponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. 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Haye Salinas Grant / Research support with: SAR-COVID is a multisponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., D. Pereira Grant / Research support with: SAR-COVID is a multisponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., G. Berbotto Grant / Research support with: SAR-COVID is a multisponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. 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Reyes Torres Grant / Research support with: SAR-COVID is a multisponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., P. Alba Grant / Research support with: SAR-COVID is a multisponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., E. Velozo Grant / Research support with: SAR-COVID is a multisponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. 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Cogo Grant / Research support with: SAR-COVID is a multisponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., R. Nieto Grant / Research support with: SAR-COVID is a multisponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. They do not have access to the information collected in the database., C. Asnal Grant / Research support with: SAR-COVID is a multisponsor registry, where Pfizer, Abbvie, and Elea Phoenix provided unrestricted grants. None of them participated or infuenced the development of the project, data collection, analysis, interpretation, or writing the report. 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Keywords: ANCA, Real-world evidence,Vasculitis

PANLAR2023-1198

ASSOCIATION BETWEEN OSTEOPROTEGERIN AND RANKLSINGLE NUCLEOTIDE POLYMORPHISMS AND DESTRUCTIVE RHINOSINUSITIS IN PATIENTS WITH GRANULOMATOSIS WITH POLYANGIIITIS

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Objectives: Chronic invasive rhinosinusitis with bone damage is a common cause of functional and social impairment in patients with granulomatosis with polyangiitis (GPA). However, currently, there is no clinical or laboratory evidence to predict bone damage.

Methods: This case-control study included 90 patients with GPA and 270 healthy controls (HCs). The patients were divided according to the presence of tomographic bone damage. The frequencies of RANKL and osteoprotegerin single nucleotide polymorphisms (SNPs), analyzed by polymerase chain reaction, were compared between patients and HCs and between patients with and without bone damage. Clinical, therapeutic, and laboratory data were analyzed.

Results: Bone erosion was observed in 55.5% of patients. No difference was found in the frequency of SNPs between the patients with GPA and the HCs. When comparing patients with GPA according to the presence or absence of bone damage, a difference was found in the frequencies of osteoprotegerin G1181C (rs2073618) and RANKL A290G (rs2277438). Multivariate analysis showed that the CC genotype of osteoprotegerin 1181 was independently associated with bone erosion (odds ratio, OR = 3.95,CI95% = 1.20-13.00,p = 0.02), as was the presence of the G allele in RANKL 290 (OR = 6.13, CI95% = 1.95-19.26,p = 0.002) and longer disease duration (OR = 1.08,CI95% = 1,01-1.15,p = 0.04).

Conclusion: SNPs in osteoprotegerin G1181C and RANKL A290G may play a role in the development of destructive rhinosinusitis in patients with GPA. Genetic assessment may be useful for identifying high-risk individuals. This observational study serves as a basis for the development of larger studies aimed at better understanding this association and clinical trials using RANKL/osteoprotegerin as therapeutic targets.

TABLE 1. Demographic and clinical data of patients with granulomatosis with polyangiitis and individuals in the control group

	GPA (n = 90)	Heathy controls (n = 270)
Female	59 (65.5)	177 (65.5)
White ethnicity	70 (77.8)	210 (77.8)
Age (years)	52.0 (43.7-62.0)	69.0 (68.0-70.0)
Age at diagnosis (years)	43.5 (36-53)	-
Disease duration (years)	7.0 (1.7-13.2)	-
Positive ANCA	78 (86.7)	-
Localized GPA	25 (27.7)	
Bone erosion	50 (55.5)	
Renal involvement	45 (50.0)	

Data are expressed as the median (25^{th} - 75^{th}) or frequency (%).
ANCA: anti-neutrophil cytoplasmic antibody; GPA: granulomatosis with polyangiitis.

Disclosure of Interest: None declared

Keywords: Destructive Rhinosinusitis, Granulomatosis with polyangiitis, Vasculitis

PANLAR2023-1159

RISK FACTORS FOR UNFAVORABLE OUTCOMES IN PATIENTS WITH HENOCH - SCHÖNLEIN PURPURA NEPHRITIS

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Objectives: Henoch - Schönlein purpura (HSP) is an immuno-mediated small-vessel vasculitis that manifests as non—thrombocytopenic purpura, arthritis or arthralgia, abdominal pain and/or kidney involvement. HSP nephritis (HSPN) can present asmicro- or macroscopic hematuria, proteinuria, nephrotic or nephritic syndrome, as well as acute renal failure. The aim of the study is to identify risk factors associated with unfavorable outcomes in patients with HSPN.

Methods: This historical study enrolled 68 patients (pts) with HSPN. Renal and extra-renal symptoms were analyzed. The patients were subdivided into 5 classes according to the renal manifestation at disease onset: 1) micro- or macroscopic hematuria; 2) mild proteinuria (<1 g/L) ± hematuria; 3) acute nephritic syndrome, defined as moderate proteinuria, hematuria, increased serum creatinine and/or hypertension; 4) nephrotic syndrome; 5) mixed nephritic-nephrotic syndrome.

Results: 68 pts (41 male and 27 female) with HSPN were diagnosed by kidney biopsy. Age of onset was between 18 and 66 years (mean 37,28 ± 9,34). Duration of follow-up was between 2 and 28 years. 29 pts had histories of infection preceding presentation. At onset, all patients had palpable purpura and urinary abnormalities (only hematuria - in 16,18 %; mild proteinuria ± hematuria – in 44,12 %; moderate or severe proteinuria and hematuria – in 39,70 %). Arthralgias were present in 72,06 %, gastrointestinal involvement – in 47,05 %. Renal function was impaired in 26,47 % and 51,47 % were hypertensive. Mesangial hypercellularity lesions were found in 97,06 %, endocapillary proliferation – in 20,58 %, segmental sclerosis – in 32,35 %, tubular atrophy/interstitial fibrosis – in 38,23 %. During follow-up classical extra-renal organ diseases were seen in 55,88 % of patients, and hematuria and/or proteinuria – in 77,94 %. At final review, 26,47 % had progression of renal failure. Risk factors for renal failure were moderate or severe proteinuria during follow-up ($p < 0,001$), renal impairment at presentation ($p < 0,001$), hypertension at presentation and during follow up ($p < 0,05$), crescents, interstitial fibrosis and tubular atrophy ($p < 0,001$). No significant difference in renal outcome was observed between patients who had relapses in extra-renal organs versus those who did not.

Conclusion: Our results indicated that lower GFR, nephrotic syndrome, nephritic-nephrotic syndrome and crescentic nephritis were risk factors for unfavorable outcomes.

Disclosure of Interest: None declared

Keywords: Outcome, Risk factors, Vasculitis

PANLAR2023-1492

TRANSLATION AND VALIDATION OF THE MUCOCUTANEOUS INDEX OF BEHÇET'S DISEASES FOR THE BRAZILIAN PORTUGUESE LANGUAGE

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Objectives: This study aims to translate and validate the Mucocutaneous Index MI for Behçet's disease (BD) for the Brazilian Portuguese language and to evaluate the intra-rater reliability of this tool.

Methods: This was a cross-sectional and monocenter study. Inclusion criteria were age ≥ 18 years and fulfillment of the International Study Group (ISG) criteria for BD. The MI was translated according to the guidelines described by Beaton et al. BD patients answered the self-reported questionnaire and then were evaluated by the investigators. For intra-observer variability assessment, the MI was applied before and after the medical appointment. To analyze the convergent validity of the MI, disease activity was evaluated by the Brazilian version of the Behçet's Disease Current Activity Form (BR-BDCAF) and by the Physician- and Patient Global Assessment Scores by the visual analogic scale (VAS).

Results: Ninety-one BD patients were included. Oral and genital ulcers were the most frequent manifestations. Twenty-one of 45 BD patients (49.5%) scored the MI, with at least one mucocutaneous manifestation. The magnitude of pain and MI scores for oral ulcers, genital ulcers, and erythema nodosum were similar (53.3 ± 27.9 vs. 57.1 ± 22.6 vs. 38.2 ± 25.6; $p = 0.185$) and [5.1 (3.0-7.1) vs. 5.3 (3.8-6.2) vs. 3.5 (2.5-6.0); $p = 0.241$], respectively. The MI was highly reproducible when applied before and after the medical appointment by the same patient (intraclass correlation coefficient = 0.997; 95% confidence interval: 0.991-0.999). There was a positive correlation between the MI and prednisone daily dose (rho: 0.788; p = 0.020), BR-BDCAF score (rho: 0.615; p < 0.0001) and physician's VAS for disease activity (rho: 0.448; p = 0.002). There was an inverse correlation between the MI and physician's VAS for health status (rho: -0.483; p = 0.001). The Kappa index between the MI and the BR-BDCAF was 0.803 ($p = 0.004$) for patients scoring at least one item of each. There was no impact of colchicine, immunosuppressants or immunobiological use on the MI.

Conclusion: The Brazilian version of the MI is reliable and reproduceable to evaluate mucocutaneous disease activity in BD patients as it reflects scores observed at BR-BDCAF and VAS for health status and disease activity, and daily prednisone dose. Therefore, it may be another tool to assess disease activity of BD patients in studies and clinical practice.

Disclosure of Interest: None declared

Keywords: Behçet´s disease, Mucocutaneous

TABLE. :

PANLAR2023-1543

CLINICAL-EPIDEMIOLOGICAL CHARACTERIZATION OF PATIENTS DIAGNOSED WITH PRIMARY SYSTEMIC VASCULITIS

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Objectives: To clinically and epidemiolocally characterize patients diagnosed with primary systemic vasculitis according to the affected vessel.

Methods: A longitudinal, historical and observational study was carried out that included patients diagnosed with primary systemic vasculitis; there were 103 patients, f 70 of whom metthe Chapel Hill 2021 criteria. These patients were seeing between January 2000 and July 2022 and were treated at the Hermanos Aimejeiras Hospital. Sociodemographic and clinical variables were inclued. The results are shown in percentage, summarized as mean and standard deviaton (SD).

Results: The mean age was 48.5 years, 60% female, with no differences between the types of vasculitis in terms of sociodemographic characteristics. Small vessel vasculitis predominated in 45.7% and associated with ANCA, followed by large vessels and variable vessels in 20 % each and medium size vessels in 14.3%, Weight loss, arthritis, peripheral nervous system damage and skin were associated with medium size-vessel vasculitis, while visual involvement was associated with small vessel vasculitis(26.8%), 18 of the patients had an ANCA-associated vasculitis; kidney damage was also more frequent in this type of vasculitis.

Conclusion: Patients with ANCA-associated vasculitis have greater renal and 419ulmonary involvement.

Disclosure of Interest: None declared

Keywords: None