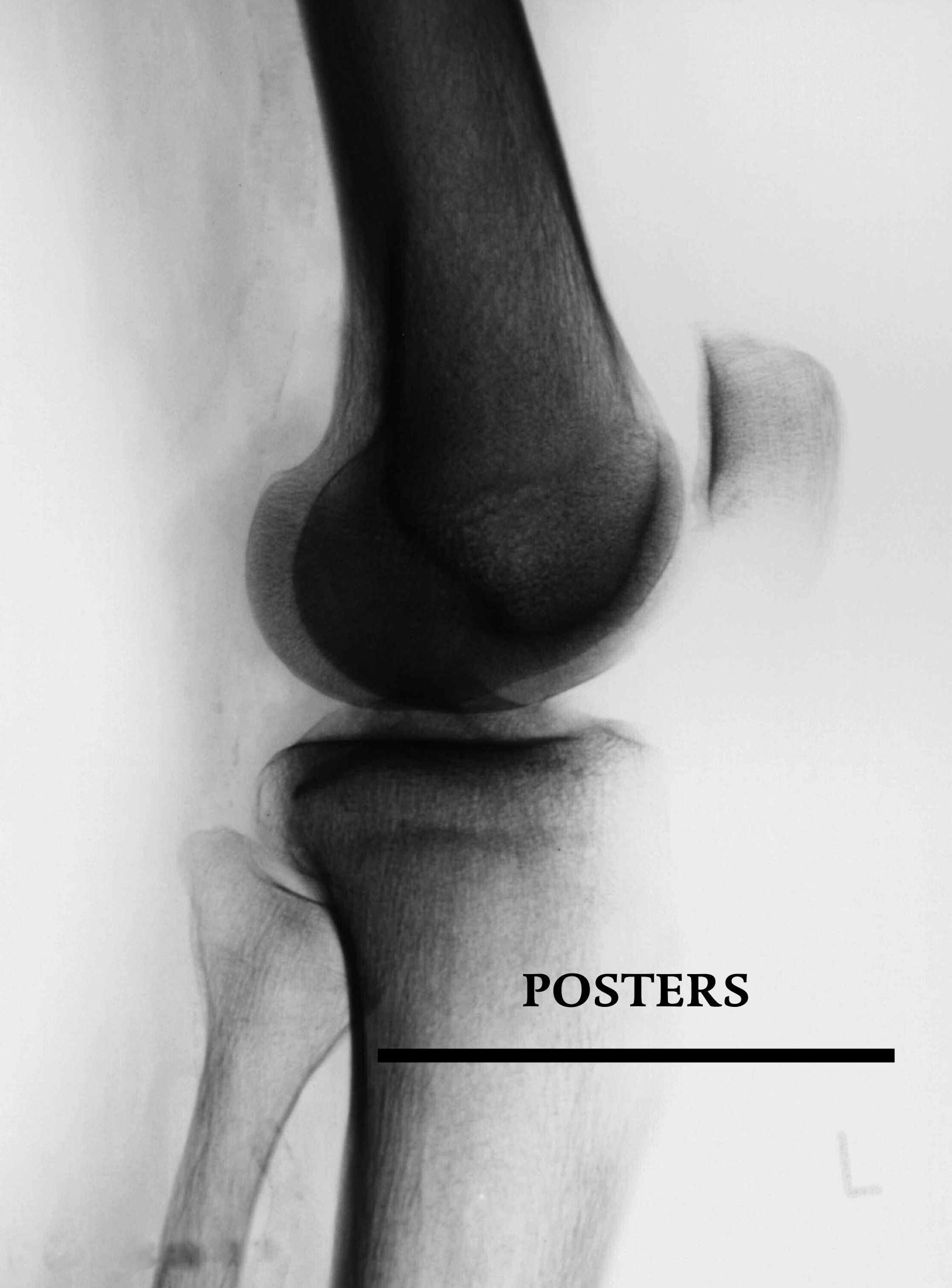

POSTERS

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P3 – INTEGRATED LONGITUDINAL ANALYSIS INCREASES PRECISION AND REDUCES BIAS: A COMPARATIVE 5-YEAR ANALYSIS IN THE DESIR COHORT

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Background: Evaluation of imaging is important in spondyloarthritis (SpA) research, but loss to follow up often jeopardizes interpretation of the evaluation. The Interpretation may further be challenged by the fact that often different readers have contributed to scores, in multiple read 'waves'. A common approach is to evaluate patients (pts) with complete follow up (completers analysis), and aggregate scores of individual readers (eg. agreement ≥ 2 out of 3 readers). These approaches are not assumption-free, may cause non-random data loss, and may as such provide spurious estimates and loss of external validity.

Objectives: We aimed to investigate if the use of all data in an assumption-free manner (a so called 'integrated analysis') affects the precision of estimates for imaging outcomes in pts with axial SpA (axSpA), with completers analysis as reference standard.

Methods: Pts from the DESIR cohort fulfilling the ASAS axSpA criteria were included. Radiographs and MRIs of the SIJ and spine were obtained at baseline (BL), 1, 2 and 5 years. Each film was scored by 2 or 3 readers in

TABLE I. CHANGE PER YEAR IN THE PERCENTAGE OF POSITIVE CASES FOR BINARY IMAGING OUTCOMES OVER 5-YEARS OF FOLLOW-UP, ACCORDING TO 3 DIFFERENT ANALYTICAL METHODS, IN EARLY axSpA PATIENTS FULFILLING THE ASAS axSpA CRITERIA FROM THE DESIR-COHORT

	Integrated analysis	Completers analysis with individual readers scores	Completers analysis with combined scores for readers
Imaging outcomes	**% change per year (95% CI) (N=399-411)**	**% change per year (95% CI) (N=342-364)**	**% change per year (95% CI) (N=338-364)**
SACROILIAC JOINTS			
Sacroiliitis on MRI-SIJ (ASAS criteria)	**-7.4 (-11.7; -3.1)**	**-5.4 (-8.9; -1.9)**	**-3.1 (-5.1; -1.2)**
≥ 3 fatty lesions on MRI-SIJ	**4.7 (2.7; 6.7)**	**3.3 (1.7; 4.9)**	**2.1 (1.1; 3.0)**
mNY on X-SIJ (positive/negative)	**1.1 (0.7; 1.5)**	**0.9 (0.5; 1.3)**	**1.2 (0.5; 1.8)**
SPINE			
BME: ≥ 3 lesions on MRI-Spine (ASAS criteria)	-0.8 (-2.3; 0.7)	-0.4 (-1.4; 0.5)	-0.1 (-1.2; 1.0)
≥ 5 fatty lesions on MRI-Spine	-0.2 (-0.9; 0.4)	-0.1 (-0.5; 0.2)	-
≥ 1 syndesmophyte on X-Spine	**0.8 (0.5; 1.2)**	**0.5 (0.2; 0.8)**	**0.5 (0.1; 0.9)**

BME – bone marrow edema; CI – confidence interval; N – number

3 'reading-waves' (wave 1: BL only; wave 2: BL, 1, 2 years; wave 3: BL, 2, 5 years). Each outcome was analyzed in two ways: i. according to a 'combination algorithm' ('2 out of 3' for binary and mean of 3 readers for continuous variables); and ii. per individual reader. The change of each outcome was analyzed by generalized estimating equations (GEE)) with 'time' as explanatory variable. Three analytical approaches were pursued: i) 'integrated-analysis' (including all pts with ≥1 score from ≥1 reader from all waves); ii) completers--only analysis (including only pts with complete 5-year follow-up, using scores from individual readers from wave 3); iii) aggregated completers analysis using a combination algorithm (the same as ii but using combined scores).

Results: In total, 413 pts were included (mean (SD) symptom duration: 1.6 (0.9) years) and 366 completed the 5-year follow up. An analysis with all data from different readers and 'waves' ('integrated analysis') was more inclusive, but did not result in a meaningful loss of precision (width of 95%CIs) of the change-estimates as compared to both completers analyses (table). In fact, for low-incident outcomes (e.g. % of mNY-positive over 5-years), a similar incidence was 'captured', with more precision, by the 'integrated analysis' compared to the completers analysis with combined scores (% change/year (95% CI): 1.1 (0.7; 1.5) vs 1.2 (0.5; 1.8), respectively). The same results were seen using continuous outcomes.

Conclusions: An efficient and entirely assumption-free usage of all data from different readers and 'read-waves' does not compromise precision of the estimates of change in imaging parameters, and may yield increased statistical power for detecting changes with low incidence. In addition, integrated analysis may protect against attrition bias and avoid bias by 'convenient choices'.

P4 – WHICH IMAGING OUTCOMES FOR AxSpA ARE MOST SENSITIVE TO CHANGE? A 5-YEAR ANALYSIS OF THE DESIR COHORT

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Background: Several imaging outcomes have become available to assess inflammation and structural damage over time in patients with axial spondyloarthris (axSpA). However, no formal comparison of their sensitivity to change has been made in the early phases of the disease.

Objectives: We aimed to compare the sensitivity to change of different MRI and radiographic scoring methods in patients with early axSpA.

Methods: Patients from the DESIR cohort fulfilling the ASAS axSpA criteria were included. Radiographs and MRI of the sacroiliac joints and spine were obtained at baseline, 1 year, 2 years and 5 years. Each film was scored by 2 or 3 readers in 3 'reading-waves' (wave 1: baseline; wave 2: baseline, 1 year, 2 years; wave 3: baseline, 2 years, 5 years). Outcomes measuring inflammation and structural damage both on MRI and radiographs in the spine and SIJ were assessed (Table). The analysis of change captured over time was performed using generalized estimating equations (GEE) longitudinal models separately for each outcome, taking into account data from all readers and waves ('integrated analysis'). To allow comparisons across outcomes, these were standardized (difference between the individual score and the mean of all scores divided by the standard deviation, per reader, wave and time-point) before running the models. The higher the standardized coefficient the more change in inflammation/damage is captured.

Results: In total, 345 patients were included (mean (SD) symptom duration: 1.6 (0.9) years; 53% males; 89% HLA-B27 positive). Inflammation on MRI-SIJ (according to both the ASAS definition of sacroiliitis and the continuous SPARCC score) was more sensitive to change as compared to inflammation on the spine that remained essentially unchanged regardless of the outcome (table). Structural damage on the SIJ was found to increase over time, but with a higher standardized yearly rate of change on MRI-SIJ (range: 0.015-0.274) as compared to X-SIJ (range: 0.043-

TABLE I. STANDARDIZED RATE OF CHANGE OF IMAGING OUTCOMES OVER 5 YEARS OF FOLLOW-UP IN EARLY axSpA PATIENTS FROM THE DESIR-COHORT WHO FULFIL THE ASAS axSpA CLASSIFICATION CRITERIA

Imaging outcomes	Baseline score* (N=313-344)	Standardized rate of change/year¥
SACROILIAC JOINTS		
Inflammatory lesions (MRI-SIJ)		
Sacroiliitis (ASAS criteria)	134 (39.2%)	-0.278
SPARCC SIJ score (0-72)	4.7 (7.9)	-0.441
Structural lesions (MRI-SIJ)		
≥ 5 fatty lesion and / or erosions	66 (19.5%)	0.238††
≥ 3 erosions	60 (17.7%)	0.015
≥ 3 fatty lesions	56 (16.5%)	0.274
Number of fatty lesions and/or erosions (0-80)	2.9 (4.9)	0.111
Number of erosions (0-40)	1.3 (2.2)	0.030
Number of fatty lesions (0-40)	1.5 (3.5)	0.140
Total structural lesions¥ (0-144)	3.4 (5.9)	0.115
Total structural lesions without sclerosis (0-104)	3.2 (5.8)	0.124
Structural lesions (X-SIJ)		
mNY dichotomous	73 (21.2%)	0.044
mNY 1-grade change	NA	0.126
mNY 1-grade change and value ≥ 2	NA	0.119
mNY continuous grade (0-8)	1.7 (1.8)	0.043
SPINE		
Inflammatory lesions (MRI-Spine)		
BME: ≥ 3 lesions	32 (9.4%)	-0.032
BME: ≥ 5 lesions	19 (5.6%)	-0.030
SPARCC Spine score (0-414)	2.6 (7.7)	-0.050
Berlin Spine score (0-69)	0.9 (2.7)	-0.055
Structural lesions (MRI-Spine)		
≥ 5 fatty lesions	5 (1.6%)	-0.013
Total structural lesions† (0-322)	0.4 (1.0)	0.016
Number of fatty lesions (0-92)	0.3 (0.8)	0.008
Number of corner erosions (0-92)	0.1 (0.2)	0.012
Number of corner bone spurs (0-92)	0.1 (0.3)	0.027
Structural lesions (X-Spine)		
≥ 1 syndesmophyte	19 (5.5%)	0.037
mSASSS score (0-72)	0.3 (1.3)	0.043

* Agreement of ≥ 2 out of 3 readers for binary variables and mean (SD) of 3 readers for continuous variables from wave 3; ¥ fatty lesions, erosions, sclerosis, partial ankylosis, total ankylosis; †fatty lesions, erosions, bone spurs, ankylosis; NA, not applicable.

-0.126). Notably, ≥3 Fatty lesions on MRI-SIJ was the structural outcome in the SIJ with highest sensitive to change (0.274), while ≥3 erosions was the least sensitive (0.015). Spine structural damage slowly progressed over time but, in contrast to SIJ, radiographic outcomes (i.e. ≥ 1 syndesmophytes and mSASSS) were more sensitive to change than MRI structural outcomes.

Conclusion: Our data adds to the body of evidence showing that structural damage assessed in pelvic radiographs only has low sensitivity to change. MRI-SIJ is a promising alternative (especially fatty lesions) capturing more structural changes. In contrast, in detecting structural change in early axSpA radiographic outcomes outperform MRI outcomes.

P9 – ANTIBODY PROFILE AND SYSTEMIC SCLEROSIS CLINICAL FEATURES – MYTH OR REALITY?

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Background: Antinuclear antibodies(ANA) occur in 80-98% of systemic sclerosis(SSc) patients (pts), with different specificities. Anticentromere antibody(ACA), antitopoisomerase I(anti-Scl70) and anti-RNA polymerase III are the commonest and are included in the new SSc ACR/EULAR classification criteria. According to literature, ANA specificities are associated with clinical features of the disease.

Objectives: Evaluate the relationship between antibody profile and clinical manifestations in a cohort of SSc pts.

Methods: We conducted a retrospective analysis of SSc pts followed in our department. Demographic data, disease duration, ANA specificities and clinical manifestations were collected. Mann-Whitney U test and Chi-square were used for comparisons between pts who tested positive or negative for different ANA specificities.

Results: In total, 117 pts were included, 91.5% female with mean age of 60.7±15.2 years and mean disease duration of 11.9±10.7 years. Seventy-five pts (64.1%) had limited cutaneous SSc(lcSSC), 26(22.2%) diffuse cutaneous SSc(dcSSc), 8(6.8%) very early diagnosis SSc, 7(6%) overlap syndromes and 1(0.9%) SSc sine scleroderma. Most (92.3%) were ANA positive, with 53.8% having ACA, 26.5% anti-Scl70, 3.4% anti-U3 RNP, 2.6% anti-U1 RNP, 1.7% anti-PM/Scl and 0.9% anti-RNA polymerase III and 0.9% anti-Th/To.

Positivity for ACA was significantly associated with female gender (OR: 1.18 95%CI 1.04-1.34) and lcSSc phenotype (OR: 9.43 95%CI 3.86-23.03). ACA was also associated with older age at disease onset (p=0.008). Vascular involvement, defined by current/previous digital ulcers and/or telangiectasias, was also more prevalent in this group (OR: 5.59 95%CI 2.47-12.66). Pulmonary arterial hypertension (group 1 ERS/ECS 2013 classification) was present in 6.3% of pts with ACA. Oesophageal involvement was the second commonest manifestation and occurred in 57.1% of pts with ACA, although this association was not statistically significant. ACA seemed to have a protective effect for interstitial lung disease (ILD) (OR: 0.027

TABLE I, CLINICAL FEATURES ACCORDING TO AUTO-ANTIBODY POSITIVITY

Antibody	ACA (n=63)	Anti-Scl70 (n=31)	AntiU3-RNP (n=4)	AntiU1-RNP (n=3)	Anti-PM/Scl (n=2)	Anti-RNA pol 3 (n=1)	Anti-Th/To (n=1)
Onset age mean+-SD (years)	57.1±12.9	52±20.3	49.4±9.2	48.7±10.4	42.5±14.8	46	26
Female	98.4%	90.3%	75%	66.7%	50%	0%	100%
lcSSc	85.7%	38.7%	25%	0%	50%	100%	100%
dcSSc	0%	54.8%	75%	33.3%	0%	0%	0%
Overlap	1.6%	6.4%	0%	66.7%	50%	0%	0%
Vascular involvement	79.4%	51.6%	25%	33.3%	0%	0%	100%
PAH	6.3%	3.2%	0%	0%	0%	0%	0%
Lung involvement	1.6%	45.2%	25%	0%	50%	0%	0%
Cardiac involvement	0%	3.2%	0%	0%	0%	0%	0%
Oesophageal involvement	57.1%	45.2%	0%	0%	0%	100%	0
Faecal incontinence	4.8%	0%	25%	0%	0%	0%	0%
Renal involvement	0%	0%	25%	0%	0%	0%	0%
MS involvement	12.7%	12.9%	25%	66.7%	50%	0%	0%

Legend: ACA – anticentromere antibody; anti-Scl70 – antitopoisomerase I; lcSSc – limited cutaneous systemic sclerosis; dcSSc – diffuse cutaneous systemic sclerosis; PAH – pulmonary arterial hypertension; GI – gastro-intestinal; MS – muscle-skeletal

95%CI 0.004-0.213).

Anti-Scl70 positivity was associated with dcSSc phenotype (OR: 9.29 95%CI 3.26-26.5) and ILD (OR: 10.39 95%CI 3.86-27.92).

From the 4 pts with anti-U3 RNP, 3 had dcSSC subtype. The only patient with renal manifestations was anti-U3 RNP positive and had rapidly progressive cutaneous involvement.

Anti-U1 RNP was associated with muscle-skeletal manifestations (OR: 10.7 95%CI 0.92-20.44) and with overlap syndromes (OR: 15.2 95%CI 4.7-29.1).

Pts with anti-Th/To and anti-RNA-polymerase III had lcSSc subtype. Vascular manifestations, oesophageal involvement and calcinosis cutis were the main manifestations, respectively.

Table 1 shows detailed clinical manifestations and antibody profile.

Conclusions: In our cohort, ACA and anti-Scl70 were the commonest antibodies and were associated with lcSSC and dsSSc phenotype, respectively. ACA positivity conferred a higher risk of vascular disease and had a protective effect for ILD, while anti- Scl70 was associated with ILD.

Pts with anti-U1 RNP and anti-PM/Scl had mainly muscle-skeletal manifestations.

This study confirms an association between immunological profile and clinical manifestations, reinforcing the importance of antibody profile and raising awareness for possible disease complications. Larger national studies would be desirable, specially for a better understanding of major organ involvement associated with least common antibodies.

P10 – O PARADIGMA DAS NEUROPATIAS PERIFÉRICAS NAS DOENÇAS REUMÁTICAS SISTÉMICAS – DOIS ANOS EM REVISTA

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Introdução: A neuropatia periférica (NP) está descrita em várias doenças reumáticas sistémicas (DRS), podendo ser causada por vasculite, compressão ou toxicidade farmacológica. A síndrome de Sjögren (SS) é a DRS com maior prevalência de NP.

Objetivos: Partilhar a experiência do nosso centro no diagnóstico e tratamento da NP nas DRS nos últimos 2 anos.

Material e métodos: Incluímos doentes internados no serviço de Reumatologia ou observados por esta especialidade durante o internamento noutros serviços por NP em contexto de DRS, em 2016 e 2017. Foram excluídos os que apresentavam apenas neuropatia por compressão ou toxicidade farmacológica.

Foram colhidos dados demográficos e clínicos, incluindo DRS subjacente e respetiva duração, relação temporal entre o diagnóstico da doença e da NP, o tipo de NP, o tratamento instituído e a resposta obtida.

Resultados: Foram identificados 9 doentes, 2 homens e 7 mulheres, com idade média 67,4 ± 7,4 anos. Dois tinham diagnóstico de SS e 7 de vasculite de pequenos vasos (1 poliangeíte microscópica, 2 granulomatose com poliangeíte e 4 granulomatose eosinofílica com poliangeíte).

Nos doentes com SS, a DRS foi identificada no decorrer da investigação etiológica da NP (em média 90,5 meses depois), enquanto nos restantes a NP foi parte do quadro inicial, à exceção de 1 em que se manifestou 6 meses após o diagnóstico de vasculite.

O eletromiograma (EMG) inicial demonstrou uma mononeuropatia múltipla (MM) nos doentes com vasculite e polineuropatia (PNP) sensitiva e sensitivo-motora nos doentes com SS.

Todos os doentes foram medicados com prednisolona (PDN;1mg/kg/dia), na sua maioria em associação com outros fármacos, incluindo ciclofosfamida (CYC), rituximab (RTX) ou imunoglobulina humana endovenosa (IVIG). Em 8 dos 9 doentes verificou-se uma melhoria sintomática, corroborada em EMG, quando disponível. Duas das doentes medicadas com CYC apresentaram eventos adversos graves, uma com neutropenia febril e outra com sépsis de ponto de partida abdominal, tendo ambas falecido. O tipo de NP, bem como o tratamento instituído e a resposta obtida en-

TABELA I. RESUMO DAS CARACTERÍSTICAS DOS DOENTES COM DIAGNÓSTICO DE NEUROPATIA PERIFÉRICA

Sexo/Idade	Diagnóstico	Tipo de neuropatia	Terapêutica instituída	Resposta
F/71	Poliangeíte microscópica	Mononeuropatia múltipla	PDN 1mg/kg/dia + 1 ciclo RTX sem melhoria; posteriormente CYC	Melhoria subjetiva com 2 meses de CYC (sem EMG de controlo)
F/69	Granulomatose com poliangeíte	Mononeuropatia múltipla	Pulsos metilprednisolona 1g/dia (3 dias), seguido de PDN 1mg/kg/dia + 1 ciclo RTX + IVIG mensal	Melhoria subjetiva com 1mês de IVIG, mantida aos 3 meses (sem EMG de controlo)
F/69	Granulomatose eosinofílica com poliangeíte	Mononeuropatia múltipla	PDN 1mg/kg/dia	Sintomaticamente estável com 5 meses de PDN, confirmada em EMG
F/59	Granulomatose eosinofílica com poliangeíte	Mononeuropatia múltipla	PDN 1mg/kg/dia + CYC mensal, 6 meses; posterior manutenção com AZA	Melhoria subjetiva após indução, confirmada em EMG, e estável aos 6 meses de manutenção
F/67	Granulomatose eosinofílica com poliangeíte	Mononeuropatia múltipla	PDN 1mg/kg/dia + IVIG mensal, 6 meses; 6 meses depois com agravamento, seguido de mais 3 meses IVIG e manutenção com AZA	Melhoria subjetiva após 6 meses de IVIG, confirmada em EMG, e estável aos 6 meses de AZA
F/73	Granulomatose eosinofílica com poliangeíte	Mononeuropatia múltipla	PDN 1mg/kg/dia + IVIG mensal, 2 anos; posteriormente 1 ciclo RTX*	Melhoria subjetiva com 18 meses de IVIG, mantida após 2 ciclos de RTX (sem EMG de controlo)
M/53	Granulomatose com poliangeíte	Mononeuropatia múltipla	Pulsos metilprednisolona 1g/dia (3 dias), seguido de PDN 1mg/kg/dia + CYC mensal	Melhoria subjetiva com 3 meses de CYC (sem EMG de controlo)
F/68	Síndrome de Sjögren	Polineuropatia sensitiva distal, simétrica, dos membros superiores e inferiores	PDN 1mg/kg/dia + CYC mensal, 6 meses; depois trimestral	Melhoria subjetiva aos 6 meses de CYC, mantida nos 6 meses subsequentes (sem EMG de controlo)
M/78	Síndrome de Sjögren	Polineuropatia sensitivo-motora, distal, assimétrica, de predomínio crural	PDN 1mg/kg/dia + CYC mensal, 6 meses#; retomou depois CYC trimestral, 2 anos	Melhoria subjetiva com 3 anos de CYC, em remissão sem terapêutica nos últimos 12 meses (sem EMG de controlo)

Legenda: PDN – prednisolona; RTX – rituximab; CYC – ciclofosfamida; AZA – azatioprina; IVIG – imunoglobulina endovenosa; EMG – eletromiograma

*iniciou RTX pelo envolvimento ocular da DRS; #tentativa de manutenção com AZA que o doente suspendeu por reação cutânea e trombocitopenia

contram-se apresentados na Tabela 1.

Discussão/Conclusões: A NP está descrita em várias DRS, podendo ser a primeira/única manifestação da doença. A MM é a apresentação mais comum (35--65%), seguida da PNP simétrica, distal.

Uma história clínica cuidada é essencial, sobretudo no que diz respeito a outras comorbilidades, e terapêuticas em curso. O EMG permite confirmar a presença de NP e avaliar a sua gravidade; a biópsia de nervo deve ser feita em caso de dúvida diagnóstica.

Em 7 dos 9 doentes apresentados a NP fez parte da clínica inicial, embora em alguns o diagnóstico da DRS tenha sido feito meses/anos após a NP. Deste modo, a valorização das queixas de parestesias, dor neuropática ou fraqueza muscular referidas pelos doentes é essencial.

A PDN foi prescrita a todos os doentes, na maioria dos casos em associação com outras terapêuticas de indução, nomeadamente CYC, RTX ou IVIG. A azatioprina foi usada como terapêutica de manutenção em 2 doentes. A escolha do fármaco teve por base as características da doença e do doente, nomeadamente o contexto infecioso (IVIG foi usada em doentes colonizados por microrganismos multirresistentes). Os doentes medicados com CYC ou IVIG obtiveram uma melhoria clinica e, quando disponível, em EMG. Os doentes sob RTX têm à data pouco tempo de "follow-up" para se poder tirar conclusões de eficácia, embora este fármaco seja considerado uma alternativa no tratamento das vasculites anticorpo anti-citoplasma do neutrófilo positivo, com a mesma eficácia que a CYC.

P11 – NAILFOLD CAPILLAROSCOPY IN SYSTEMIC SCLEROSIS – SIX YEARS IN REVIEW

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Background: Microvascular dysfunction is a dynamic process that plays a central role in systemic sclerosis' (SSc) pathogenesis.

Nailfold capillaroscopy (NCP) is a rapid, non-invasive exam that can illustrate the early capillary changes in SSc and monitor their evolution. It is an extremely useful tool in daily clinical practice and that has been recognized in 2013ACR/EULAR classification criteria for SSc.

Objetives: To evaluate the prevalence and the evolution of NCP scleroderma pattern in SSc patients and analyse possible associations with their disease-phenotype.

Methods: NCP of all SSc patients followed in our centre were reviewed and clinical and demographic features were collected.

A descriptive analysis was performed and nonparametric tests were used to compare patients with and without specific SSc pattern.

Results: In total, 70 out of 117 SSc patients had at least 1 NCP available during the last 6 years. Most of these patients (62.9%) had limited cutaneous SSc, 21.4% diffuse cutaneous SSc, 11.4% very early diagnosis SSc and 4.3% overlap syndromes; mean disease duration was 10.7 ± 9.6 years.

At the moment of the NCP first evaluation, 46 patients (39.4%) had a scleroderma pattern, 12 (10.3%) had non-specific (NS) NCP abnormalities and 12 (10.3%) had a normal NCP. During the 6 years follow-up, NCP changed in 5 patients (7.1%) as illustrated in figure 1. However, none of these patients had concomitant development/worsening of other clinical manifestations.

TABLE I. COMPARISON BETWEEN PATIENTS WITH AND WITHOUT SCLERODERMA PATTERN

	Non-scleroderma pattern		Scleroderma pattern				p-value
NCP results	Normal (n=10)	Non-specific abnormalities (n=11)	Early (n=13)	Active (n=21)	Active/Late (n=3)	Late (n=12)	
Female	100%	72.7%	100%	85.7%	66.7%	91.7%	0.623
Age	55.3 ± 16.2	66.7 ± 5.7	58.2 ± 20.7	53.8 ± 15.8	44.9 ± 18.2	64.9 ± 9.3	0.219
Disease duration (years)	9.4 ± 6.6	8.3 ± 4.4	7.6 ± 6	10.2 ± 7.1	4.2 ± 0.6	19.6 ± 16.6	0.947
Diffuse cutaneous dissease	10%	27.3%	7.7%	14.3%	33.3%	33.3%	0.689
Digital ulcers	10%	0%	30.8%	28.6%	33.3%	33.3%	**0.021**
Pulmonary arterial hypertension	0%	0%	0%	0%	0%	0%	NA
Lung involvement (ILD)	10%	18.2%	7.7%	9.5%	33.3%	25%	0.948
Oesophageal involvement	40%	45.4%	46.2%	71.4%	66.7%	50%	0.148
ANAs +	80%	90.9%	100%	90.5%	100%	100%	0.143
ACA +	50%	45.4%	69.2%	57.1%	0%	58.3%	0.557
Scl 70 +	20%	27.3%	15.4%	19%	33.3%	33.3%	0.971

Legend – NCP: nailfold capillaroscopy; ILD: interstitial lung disease; ANAs: antinuclear antibodies; ACA: anticentromere antibody; Scl 70: antitopoisomerase I

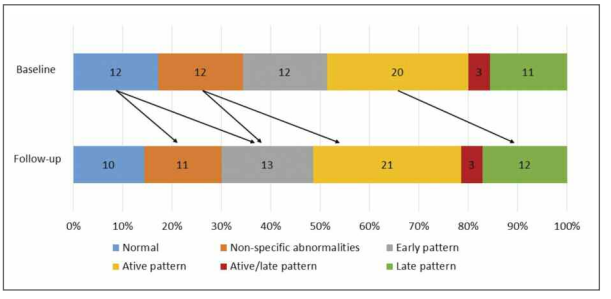

FIGURE 1. Progression of naifold capillaroscopy alterations during follow-up

At the end of the follow-up period, 49 patients (70%) had a NCP with a scleroderma pattern. From these, 13 (26.5%) had an early pattern, with one of them having a previous normal NCP and other a NS NCP; the mean time of progression was 11 and 34 months, respectively. The active pattern was present in 21 patients (42.8%), with 1 of them having a previous NS NCP 10 months before, and the late pattern was described in 12 patients (24.5%), with only one of them having a previous early pattern 20 months before (this patient had a diffuse cutaneous SSc subtype). Three patients had abnormalities that could be framed into an active/late pattern.

When comparing patients with and without scleroderma specific patterns (table 1), the presence of scleroderma pattern was associated with the presence of current/previous digital ulcers (OR 1.49 95%CI 1.17--1.92). However, this difference was not confirmed between the different scleroderma patterns.

Regarding, major organ involvement, although there were no statistical differences between both groups, patients with scleroderma pattern had a higher prevalence of oesophageal involvement.

Conclusions: This study demonstrates how NCP can be useful in illustrating the dynamic vascular damage that occurs in SSc.

In our data, a NCP scleroderma pattern was significantly associated with a higher number of digital ulcers and these patients had a higher percentage of oesophageal involvement.

In daily clinical practice, NCP is useful not only for corroborating the diagnosis of SSc, but also for monitoring endothelial injury with consequent potential macrovascular/systemic damage. Although our sample is too small to demonstrate possible associations between specific NCP alterations and internal organ involvement, some studies have already identify NCP patterns as predictive factors for severe organ damage.

P12 – INFLAMMATION ON MRI OF SPINE AND SACROILIIN AXIAL SPONDYLOARTHRITIS: THE 5 YEARS DATA OF THE DESIR COHORT

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Background: The effect of local inflammation on structural damage in patients (pts) with axial spondyloarthritis is not well known.
Objectives: We aimed to test the possible effect of inflammation on structural damage both assessed by MRI and at the level of the spine and the SIJ.
Methods: Pts with recent onset (≤3 years) axSpA (according to the treating rheumatologist) from the DESIR cohort were included. MRI of the SIJ (MRI-SIJ) and spine (MRI-spine) were obtained at baseline (BL), 2 and 5 years and scored by 3 trained central readers unaware of the chronology. Bone Marrow Edema (BME) at MRI-SIJ was assessed according to ASAS definition and at the MRI-spine by the presence of ≥ 3 lesions. Structural damage in the SIJ (MRI-SIJ-STR) and in the spine (MRI-spine-STR) was defined by ≥ 3 fatty lesions. The % of structural net progression (number of 'progressors' minus the number of 'regressors' divided by the total number of pts) was assessed in subgroups according to CRP and BME status at BL. The effect of BME on MRI-SIJ on MRI-SIJ-STR and of BME on MRI-spine on MRI-spine-STR was evaluated using two types of binomial generalized estimating equations (GEE) models: i. effect at BL on 5 years incorporating measurements from all readers (GEE adjusted for reader); ii. effect of BME over 5 years (longitudinal time-lagged models with auto-regression). The final models were adjusted for variables proved to confound the association of interest (variables tested: age, gender, HLA-B27, smoking status, CRP, BASDAI, ASDAS, treatment with NSAIDs and TNFi).

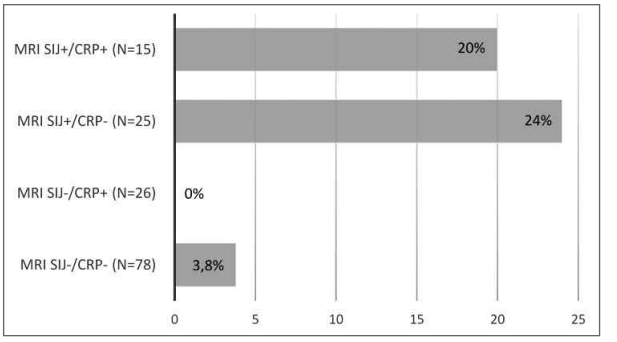

FIGURE 1. Net progression from MRI-SU-STR negative to MRI-SIJ-STR positive (≥3 fatty lesions) according to baseline objective inflammatory markers

Results: In total, 151 and 145 pts had complete 5-year MRI-SIJ and MRI-spine data available from 3 readers, respectively. Of the 151 pts with complete MRI-SIJ data, the net % pts who switched from MRI-SIJ-STR negative to positive ranged from 3.8% to 24% according to the presence of objective signs of inflammation at BL (Figure 1). Low number of pts did not allow for similar analysis in the spine. In the multivariable analysis, both the presence of BME at MRI-SIJ (OR=4.2 [95% CI: 2.4-7.3]), and BME at MRI-spine (OR=8.9 [95% CI: 2.1-38.7]) at baseline were highly predictive of MRI-SIJ and MRI-spine structural progression respectively 5 years later, adjusting for CRP (only factor found to confound the association of interest). Similar positive associations were found in the longitudinal models testing the effect of BME on MRI-SIJ-STR and

TABLE I. EFFECT OF INFLAMMATION ON MRI (ASAS DEFINITION OF SACROILIITIS AND BME IN THE SPINE) ON BINARY MRI STRUCTURAL OUTCOMES

	≥ 3 fatty lesions on MRI-SIJ	≥ 3 fatty lesions on MRI-Spine
Effect of BMI on:	OR (95% CI) (N=144-197)	OR (95% CI) (N=145-197)
By GEE adjusted for reader	**4.2 (2.4; 7.3)***	**8.9 (2.1; 38.7)***
By longitudinal GEE adjusted for reader and repeated measurements	**5.1 (2.7; 9.6)£**	**15.6 (4.8; 50.3)£**

* Adjusted for CRP at baseline; £ adjusted for time-varying lagged ASDAS-CRP.

MRI-spine-STR over 5 years (table).
Conclusion: Our results show that local inflammation is strongly associated with the development of structural damage over 5 years both in the SIJ and spine in early axSpA and that this effect is independent of systemic inflammation.

P19 – RENAL AND OVERALL SURVIVAL ANALYSIS IN A COHORT OF PATIENTS WITH LUPUS NEPHRITIS WITH UP TO 40 YEARS OF FOLLOW UP

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Background: Although the prognosis has improved in the last decades, Lupus patients still have a 3-fold increase in mortality, compared with the general population[1]. Lupus nephritis (LN) is one of the most severe manifestations of this complex systemic disease, occurring in up to 60% of patients.
Objectives: 1) To obtain the overall and renal survival curves for a LN cohort; 2) To investigate factors affecting survival; 3) To identify the causes of death in this cohort.
Methods: Single-centre retrospective observational study, including all patients with biopsy-proven LN, followed at our Rheumatology department from 1975 to 2017. Individual clinical files were reviewed to obtain demographic, clinical, laboratory and pathological data. We also recorded data on treatment with corticosteroids, immunosuppressants and antimalarials. We analysed overall survival and renal survival through the Kaplan-Meier method. COX regression analyses were conducted to investigate possible predictors of shorter survival. Significance level was defined at 0.05.
Results: 209 patients were included (90% females), with diverse ethnic background – 44% Caucasian, 33% Afro-Caribbean and 23% Asian. There were 38 deaths during the time of follow-up. Cumulative survival at 5,

TABLE I. FINAL MODELS FOR PREDICTORS OF SHORTER SURVIVAL

Multivariable COX regression		HR [95%CI]	p
Overall survival	ESRD	3.002 [1.461-6.171]	0.003
	No antimalarials	2.942 [1.430-6.052]	0.003
	Ethnicity (Afro-Caribbean)	2.656 [1.250-5.642]	0.011
	Age at LN diagnosis	1.039 [1.012-1.067]	0.004
Renal survival	Histological class (III, IV or VI)	4.424 [1.542-12.695]	0.006
	Ethnicity (Afro-Caribbean)	3.727 [1.691-8.218]	0.001
	No antimalarials	2.482 [1.237-4.982]	0.011

HR: hazard ratio; ESRD: end-stage renal disease; LN: Lupus nephritis.

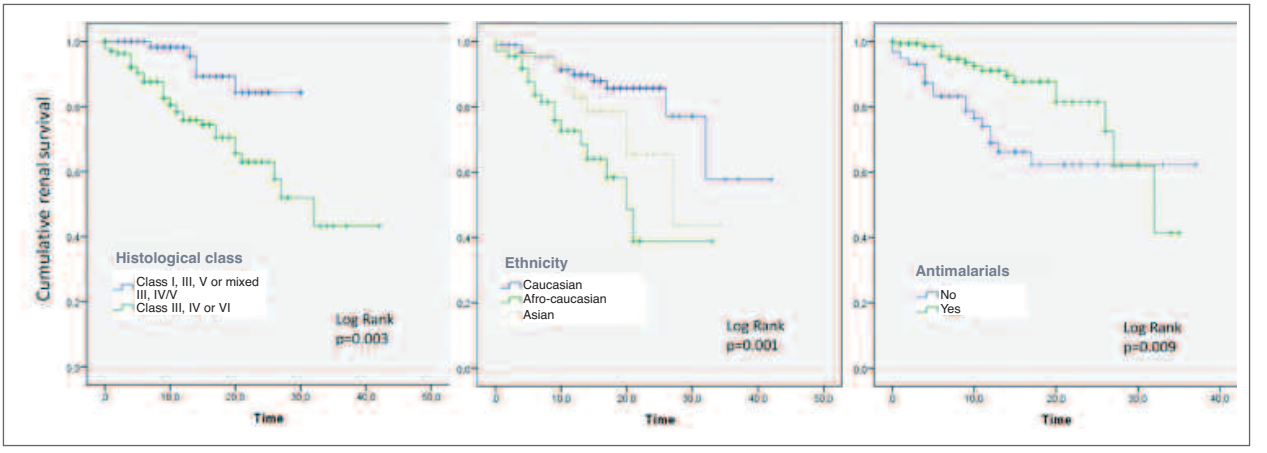

FIGURE 1. Final models for predictors of shorter survival

10, 15 and 20 years after the diagnosis of LN was 92%, 86%, 81% and 76%, respectively. Main causes of death were infection (29%), malignancy (21%) and cardiovascular (21%). Regarding progression to end-stage renal disease (ESRD), which occurred in 40 patients, cumulative renal survival at 5, 10, 15 and 20 years was 94%, 86%, 79% and 72%, respectively. Table 1 shows the predictors of shorter survival identified for this cohort. Image 1 represents the Kaplan-Meier curves according to the factors affecting renal survival.

Conclusions: Cumulative survival rates and causes of death for this cohort are comparable with other cohorts of LN[2]. ESRD confers the higher risk for death; African or Caribbean ethnicities and not taking antimalarials predict shorter overall and renal survival among these patients.

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P21 – ARTRITE REUMATÓIDE VS POLIMIALGIA REUMÁTICA – COMPARAÇÃO DAS ALTERAÇÕES ECOGRÁFICAS EM DOENTES COM OMALGIA BILATERAL DE NOVO

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Introdução: O ombro doloroso é uma das condições mais comuns em Reumatologia, sendo responsável por um grande número de referenciações de consulta. A omalgia pode ter uma origem periarticular ou articular e pode estar presente numa grande variedade de doenças inflamatórias como a Polimialgia Reumática (PMR), Artrite Reumatoide (AR) e patologia degenerativa.

Dor e rigidez da cintura escapular com afetação dos ombros bilateralmente é uma das principais características da PMR. Diferentes estudos de imagem demostraram a existência de bursite subacromio-subdeltoidea (SAD) em associação com sinovite da glenoumeral (GU) e tenossinovite da cabeça longa do bicipite (LB) em doentes com PMR. No entanto, estes achados podem também estar presentes em doentes com AR, nomeadamente no idoso e não devem ser usados para diferenciar estas duas patologias. Alguns doentes com PMR e AR podem apresentar queixas de ombro doloroso bilateral durante flares. Os estudos de ecografia nestas situações são escassos.

O Objetivo do estudo foi avaliar retrospectivamente os achados ecográficos das estruturas anatómicas afetadas aquando de um novo episódio de ombro doloroso bilateral, em doentes com PMR e AR e comparar os achados entre estes dois grupos de doentes.

Métodos: Foram avaliados retrospectivamente os relatórios de ecografia de doentes com o diagnóstico clínico de AR e PMR com omalgia bilateral, de novo, num serviço de Reumatologia entre 2013 e 2016. Foram recolhidos os seguintes achados numa avaliação dicotómica (presença /ausência): Bursite SAD; Tenossinovite LB; Sinovite GU; Tendinopatia ou ruptura parcial/total da coifa dos rotadores. As variáveis dicotómicas foram descritas em percentagens e foram comparadas pelo teste qui-quadrado de Pearson.

Resultados: Foram incluídos 17 doentes com PMR e 17 doentes com AR. Bursite SAD e tenossinovite da longa porção do bicipite unilateral foram mais frequentes em doentes com AR quando comparados com doentes com PMR ($p>0,05$). Nenhum doente apresentou sinovite gleno-umeral bilateral. Apenas três apresentaram sinovite gleno-umeral unilateral, todos com AR ($p>0,05$), quando comparado com os doentes com PMR. Bursite SAD bilateral foi mais frequente em doentes com PMR comparado com doentes com AR ($p<0,05$), assim como a tenossinovite da longa porção do bicipite ($p<0,05$).

Conclusão: Este trabalho demonstra algumas diferenças ecográficas no envolvimento inflamatório entre doentes com AR e doentes com PMR com omalgia bilateral de novo. A patologia periarticular bilateral (tenossinovite da longa porção do bicípite e bursite SAD) foi mais frequente em doentes com PMR ($p<0,05$) e o envolvimento intra-articular mais comum em doentes com AR, embora não se tenha atingido significado estatístico.

P23 – EARLY VERSUS LATE-ONSET SYSTEMIC SCLEROSIS: ARE THERE CLINICAL AND IMMUNOLOGICAL DIFFERENCES?

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Background: The clinical course of Systemic Sclerosis (SSc) depends on subtype, organ involvement and age. Peak age at onset of SSc is between 30 and 50 years, although SSc may also start in both young and elderly patients. Few data have been reported on patients suffering from late-onset SSc.
Objective: To characterize clinical and immunological features of early and late-onset SSc in a tertiary referral hospital.
Methods: We analyzed data from 178 patients followed at our SSc clinic. All the patients fulfilled the ACR/EULAR 2013 classification criteria for SSc or the LeRoy's criteria for the classification of early SSc.

Based on the mean of age of onset of the whole series (50±15 years), ages extremes were defined as younger than 35 versus older than 65 years of age at onset. Disease characteristics as well as clinical and immunological features were evaluated.
Results: The early and the late-onset groups included 35 and 31 patients, respectively. Patients' current mean age was 42.8±14.1 vs. 75.8±6.2 with a mean disease duration of 14.5±14.7 vs. 4.3±4.6 years. The most common first manifestation of disease was Raynaud phenomena followed by arthritis/inflammatory arthralgia, in both groups. However, the time between clinical onset and SSc diagnosis was higher in the late-onset group (p=0.034). A higher number of diffuse and pre-SS was observed in the early group but this difference didn't prove statistically significant. There was a higher prevalence of centromere antibodies in the late--onset group (p=0.001). Clinical manifestations and target-organ damage didn't differ between groups, except for a higher prevalence of heart conduction abnormalities in the late-onset group (p=0.02). In multivariate analyses, age alone (OR=1.04; 95%CI 1.0, 1.1), but not disease duration (OR=0.99; 95%CI 0.9--1.0), was an independent predictor for the presence of heart conduction abnormalities.
Conclusions: In line with findings from other studies, late-onset SSc shows a distinct clinical and immunological presentation. The present study confirms that late-onset is associated with longer diagnostic delay, positive centromere and heart conduction abnormalities. These observations may be due to age and potential age-associated confounders, rather than the disease itself. Knowledge of these different characteristics can help to improve the management of the disease.

TABLE I. DEMOGRAPHIC, CLINICAL AND IMMUNOLOGICAL FEATURES OF EARLY AND LATE-ONSET SSc PATIENTS

	Early-Onset Group (≤ 35 yr), n=35	Late-Onset Group (≥ 65 yr), n=31	*p*
Demographic Characteristics			
Sex (male:female)	6:29	5:26	0.912
Age at diagnosis (yr)	28.3 ± 5.4	71.4 ± 4.7	< 0.001
Time until diagnosis (yr)	4.3	8.5	**0.034**
Clinical Features			
First manifestation (%)			
- Raynaud	82.9	62.1	0.061
- Arthritis/Arthralgia	14.3	20.7	0.499
Type of SSc (%)			
- Pré-SSc	37.1	25.8	0.324
- Limited	34.3	41.9	0.523
- Diffuse	22.9	12.9	0.295
Capillaroscopy pattern (%)			
- SSc specific	51.7	52.9	0.936
- Unspecific	31.0	41.2	0.486
- Normal	17.2	5.9	0.270
Raynaud phenomena (%)	100	92.9	0.113
Digital ulcers (%)	48.5	30.8	0.169
Arthritis/arthralgia (%)	63.6	44.4	0.137
Esophageal involvement (%)*	31.2	33.3	0.865
Interstitial lung disease (%)**	28.1	26.9	0.919
Pulmonary arterial hypertension (%)***	12.5	29.6	0.103
Heart conduction alteration (%)	18.8	48.1	**0.016**
Immunological Features			
Anticentromere antibodies (%)	45.7	87.1	**< 0.001**
Anti-Scl 70 antibodies (%)	17.1	3.2	0.067
Anti-nuclear antibodies (%)	94.3	100	0.401

Abbreviations: yr – years; SSc – Systemic Sclerosis. *confirmed by esophageal manometry. **Based on pulmonary function tests with diffusing capacity of lung for carbon monoxide. ***Diagnosed with echocardiography and confirmed by right heart catheterization wherever available.

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P24 – SYSTEMIC SCLEROSIS: GENDER-ASSOCIATED DIFFERENCES IN CLINICAL AND SEROLOGICAL FEATURES

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Background: Systemic sclerosis (SSc), as many others connective tissue diseases, is more prevalent in females. However, some studies suggest a more aggressive disease among male patients characterized by higher frequencies of digital ulcers, interstitial lung disease, scleroderma renal crisis and worse prognosis.
Objective: To compare clinical and serological features between female and male patients with SSc.
Methods: We analyzed data from 178 patients followed by our SSc clinic. All patients fulfilled the ACR/EULAR 2013 classification criteria for SSc or the LeRoy's criteria for the classification of early SSc. Demographic, clinical and serological characteristics were recorded. The survival and cumulative incidence of clinically significant organ complications in male and female patients were compared, while controlling for confounders.
Results: From the 178 patients, 29 were male (19.2%). There were no differences regarding age at onset (M:48.2±15.8 vs. F:49.8±15.4) or disease duration (M:10.3±8.7 vs. F8.6±9.5) between male and female patients. Raynaud's phenomenon as the first manifestation of disease was significantly more frequent among females (p=0.041). Time from the first manifestation until SSc diagnosis and the proportion of SSc subsets did not differ between genders. Anti-centromere antibody was significantly more common in females (66.7 vs. 27.9%, p=0.001). Regarding cumulative clinical manifestations, male patients had more skin thickening (p=0.048), heart conduction abnormalities (p=0.022) and interstitial lung fibrosis (p=0.003). Diffusing capacity for carbon monoxide was lower in males (p=0.050). Males were hospitalized twice as frequently as female patients (p=0.029) for disease-related causes and had a significantly shorter mean survival time (p=0.023).
Conclusion: This study confirms that gender differences are important clues to understand the natural history and pathogenesis of SSc. In our cohort, male gender was associated with both worst skin and lung involvement as well as poorer disease prognosis regardless of age of onset or disease duration.

P25 – PHYSICIAN AWARENESS OF RHEUMATIC IMMUNE-RELATED ADVERSE EVENTS IN CANCER PATIENTS TREATED WITH IMMUNE CHECKPOINT INHIBITORS

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Background: Immune checkpoint inhibitors (ICI) are novel and promising therapies for the treatment of a range of cancer types, acting through stimulation of the patient's immune system to engage on tumour cells. This enhanced immune system may potentially cross-react against any organ system, and reporting of rheumatic immune-related adverse events (irAE) has been growing.
Objective: To evaluate awareness of treatment with ICI and rheumatic irAE among Portuguese rheumatologists and oncologists.
Methods: A web-based questionnaire was sent in November 2017 to members of the Portuguese Society of Rheumatology and Portuguese Society of Oncology. Aside from demographic variables, assessed domains included awareness and clinical experience with ICI and irAE, as well as educational needs on the topic and interest in participating in multidisciplinary approaches.
Results: Response rates were 61/221 (27.6%) for rheumatologists and 13/653 (2.0%) for oncologists. Demographics were similar in both groups, including mean age (39.9 and 41.1 years) and female gender (59 and 53.8%), respectively; the majority were consultant physicians (67.2 and 69.2%) working at public hospitals (86.9 and 92.3%), respectively. Regarding ICI, most rheumatologists had heard of but were unfamiliar (63.9%) while most oncologists were at least moderately familiar (92.3%) with such therapies. Almost all physicians were aware but more oncologists reported having patients with rheumatic irAE (46.2 vs 4.9%); the most frequent were arthralgia and arthritis. These physicians were all moderately or very confident in managing these irAE. Most physicians considered that Rheumatology-Oncology multidisciplinary approaches would be of benefit and were interested in participating. Education on pathophysiology, epidemiology, clinical assessment and treatment was deemed necessary. Table I summarizes the main results.

TABLE I. WEB-BASED QUESTIONNAIRE

	Rheumatology n=61	Oncology n=13	Total n=74
How familiar are you with ICI used for the treatment of cancer (for instance, anti-CTLA-4, ipilimumab, and anti-PD-1, nivolumab)?			
Totally unfamiliar, n(%)	7 (11.5)	0 (0.0)	7 (9.5)
I have heard of them, but am not familiar, n(%)	39 (63.9)	0 (0.0)	39 (52.7)
Somewhat familiar, n(%)	11 (18.0)	1 (7.7)	12 (16.2)
Moderately familiar, n(%)	4 (6.6)	7 (53.8)	11 (14.9)
Totally familiar, n(%)	0 (0.0)	5 (38.5)	5 (6.7)
Are you aware that ICI can cause rheumatic irAE?			
Yes, n(%)	52 (85.2)	13 (100)	65 (87.8)
No, n(%)	6 (9.8)	0 (0.0)	6 (8.1)
No answer, n(%)	3 (4.9)	0 (0.0)	3 (4.1)
Do you have any patient treated with ICI (namely, anti-CTLA-4, ipilimumab, or anti-PD-1, nivolumab) who developed a rheumatic irAE?			
Yes, n(%)	3 (4.9)	6 (46.2)	9 (12.2)
No, n(%)	36 (59)	6 (46.2)	42 (56.7)
I have no patient treated with such drugs, n(%)	19 (31.1)	1 (7.7)	20 (27)
No answer/do not know, n(%)	3 (4.9)	0 (0.0)	3 (4.1)
If you answered "yes" to the previous question, what type of rheumatic irAE was it?			
Arthralgia, n(%)	2 (66.7)	3 (50.0)*	5 (50.0)
Arthritis, n(%)	1 (33.3)	1 (16.7)	2 (20.0)
Myositis, n(%)	0 (0.0)	1 (16.7)	1 (10.0)
Sicca syndrome, n(%)	0 (0.0)	1 (16.7)*	1 (10.0)
Vasculitis, n(%)	0 (0.0)	0 (0.0)	0 (0.0)
Other, n(%)	0 (0.0)	1 (16.7)	1 (10.0)
Do you believe there is benefit in a multidisciplinary Rheumatology-Oncology approach allowing timely assessment and referral of patients who develop rheumatic irAE?			
Yes, n(%)	56 (91.8)	11 (84.6)	67 (90.5)
No, n(%)	1 (1.6)	1 (7.7)	2 (2.7)
No answer/do not know, n(%)	4 (6.6)	1 (7.7)	5 (6.8)
What are your educational needs on rheumatic irAE?#			
Pathophysiologic and immunologic principles, n(%)	7 (11.5)	0 (0.0)	7 (7.9)
Epidemiology and clinical features, n(%)	8 (13.1)	0 (0.0)	8 (9.1)
Assessment and treatment, n(%)	19 (31.1)	5 (38.5)	24 (27.3)
All of the above, n(%)	41 (67.2)	8 (61.5)	49 (55.7)

ICI: immune checkpoint inhibitors; irAE: immune-related adverse events
† Postgraduate clinical experience, including residency.
‡ Predominant workplace (> 50% of weekly schedule).
* One patient developed concurrent arthralgia and sicca syndrome.
# More than one answer was allowed.

Conclusions: Most rheumatologists had limited knowledge of ICI and limited experience with rheumatic irAE, compared to oncologists. Both groups considered that the development of multidisciplinary teams would be beneficial to allow timely assessment and referral of these patients. Despite limited by the response rate (particularly low for oncologists) and response bias, this study emphasizes the need for specific education on ICI and irAE, especially for Portuguese rheumatologists.

P26 – SOMATOSENSORY DYSFUNCTION IN RHEUMATOID ARTHRITIS – A QUANTITATIVE SENSORY TESTING ASSESSMENT

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Background: Significant pain persists in a substantial proportion of Rheumatoid Arthritis (RA) patients and features suggestive of neuropathic pain (NP) were described. Few studies applied quantitative sensory testing (QST) to evaluate the somatosensory phenotype of RA pain. Objectives: To explore the sensory abnormalities in RA and study its association with clinical and disease activity parameters.

Methods: Cross-sectional study was performed with RA patients followed at our rheumatology department. QST was applied to patients classified with NP (according to LANSS and/or painDETECT scores) in both the most painful and non-painful contralateral joint areas. This evaluation followed the protocol of the German Research Network on Neuropathic Pain. Patients with diagnosed neuropathy or non-RA risk factors for NP were excluded. Proportions of abnormal detection/pain thresholds were calculated after z-transformation of QST data based on gender, age and site reference values. Correlations were studied (Spearman correlation coefficient) and comparison between groups was performed (Mann-Whitney U and Chi-Square tests). Significance level was set as <0.05.

Results: From 112 evaluated RA patients, 47% were classified as having NP and 39 performed QST. Thirty-four (87%) were females, with a mean (SD) age of 53.5 (11.8) years and median disease duration of 11 years (range: 2-31); 74% were seropositive for Rheumatoid Factor and/or ACPA; 90% were treated with conventional synthetic Disease-Modifying Antirheumatic Drugs (DMARDs) and 39% with biological DMARDs (bDMARDs). Mean (SD) DAS28 CRP was 3.44 (0.7). For non-nociceptive parameters, 23 (59%) patients exhibited sensory loss (Lo), 6 to thermal stimuli (L1), 10 to mechanical stimuli (L2) and the reminder for both (L3). Four (10%) had hyperesthesia to mechanical stimuli. Concerning nociceptive parameters, hyperalgesia (Ga) was noted in almost all the patients (97%), 1 to thermal (G1), 20 to mechanical (G2) and 17 for both stimuli (G3). Twenty-two (60%) patients presented both Lo and Ga findings. Higher proportion of Lo was noted in patients under bDMARDs (86% vs 46%, p=0.02). Lo patients had significant lower median CRP and ESR levels (p=0.04 and p=0.03, respectively), but no differences were observed concerning

disease activity scores. Thermal Lo (L1 and L3) was also more frequent in the bDMARDs group (57% vs 21%, p=0.04) and cold Lo in previous/current hydroxychloroquine (HCQ) treated patients (90% vs 21% p=0.02). Cold Ga was more frequent in patients under methotrexate (MTX) (48% vs 6%, p=0.04) and less frequent in the bDMARDs group (7% vs 46%, p<0.05). A weak positive correlation of Z cold detection and Z warm detection values with CRP and ESR levels was noted (r=0.34 and r=0.35, respectively, p=0.04). Time exposure to HCQ, MTX and bDMARDs was negatively correlated with Z cold detection (r=-0.34, p=0.03), Z pressure pain (r=-0.33, p=0.04) and Z vibration detection (r=-0.32, p=0.04), respectively.

Conclusions: Almost all RA patients presented hyperalgesia, but a sizable proportion also had sensory loss, most frequently involving Aβ fibres. CRP and ESR levels possibly influence small fibre function, but no association with disease activity was found. Possible association of bDMARDs and HCQ treatment with sensory detection loss and of MTX with lower pain thresholds was also pointed.

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P27 – MULTIFACTORIAL EXPLANATORY MODEL OF DEPRESSION IN PATIENTS WITH RHEUMATOID ARTHRITIS: A STRUCTURAL EQUATION APPROACH

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Background: Rheumatoid arthritis (RA) can disturb all aspects of the patient's life, including social relationships, family life and psychological well-being. Not surprisingly, an ever-increasing body of evidence confirms that major depression disorder is common in patients with RA, with a time-point prevalence of 10-20%. Depression in patients with RA deserves a lot more attention than it usually receives by health professionals, not only because it affects patient's lives beyond disease control, but also because it hinders the success of the immunossupressive agents we manipulate to control the disease process.

Objectives: To foster the understand on the interconnections between depression, personality traits, disease impact and disease activity.

Methods: This is an ancillary analysis of an observational, cross-sectional study. Structural equation modelling estimation was used to assess the associations between these dimensions, pursuing four hypotheses: H1 – Disease activity and perceived impact of disease are negatively associated to health-related QoL and positively associated to depressive symptoms; H2 – "Positive" personality traits are related with depressive symptoms, both directly and indirectly through perceived disease impact; H3 – Depressive symptoms have a mediating effect in the relation between impact of disease and health-related QoL; H4 – The proposed mediational model varies in function of the presence/ /absence of identified comorbidities.

Results: Data from 254 patients was analysed. Results obtained in the structural equation measurement model indicated a good fit [2(51)=111.55, 2/df=2.19, p<.005; CFI=.96; GFI=.93; TLI=.95; RMSEA=.06, p=.04, 95% CI=.05-.09] and supported all three first driving hypotheses (Figure 1). Impact of disease showed a negative direct relation with QoL (β=-.55; p<.001) and a positive direct relation with depressive symptoms (β=.48; p<.001). Disease activity showed a positive direct relation with impact of disease (β=.37; p<.001) and a positive indirect effect of .18 (p=.002) on depressive symptoms, through the perception of impact of disease. "Positive" personality had a total effect of -.61 on depressive symptoms, being a direct effect of β=-.46 (p<.001) and an indirect effect of β=-.15 (p=.001) through impact of disease. "Positive" personality also had a negative direct relation with impact of disease (β=-.30; p<.001), and an indirect effect of β=.33 (p=.002) on QoL, through the impact of disease. Impact of disease had a total effect of -.67 on QoL, of which β=-.12 (p=.001) was an indirect effect through QoL, indicating a mediating influence in this relationship. Nevertheless, there was a negative association between QoL and depressive symptoms (β=-.27; p<.001). QoL also reflects the indirect effect of disease activity through the perception of impact of disease (β=-.25;

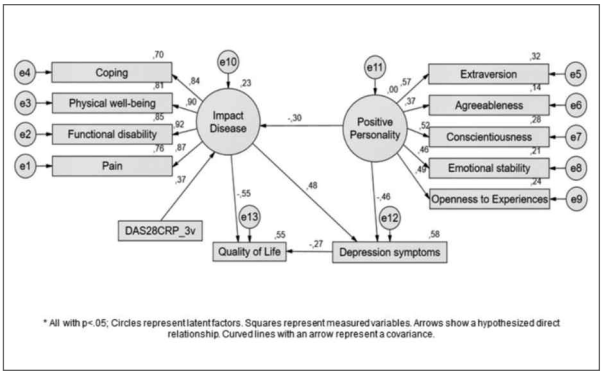

FIGURE 1. Estimated standardised direct effects for the proposed model

p=.003). Multigroup analysis showed that the existence of comorbidities has no relevance for the proposed model (d 2=7.34; df=12; p=.83).

Conclusions: Personality characteristics seem to have a major influence upon the impact of disease and the patient's adjustment to the condition, including the vulnerability or resilience to depression. Individual personality traits deserve attention in personalized approaches to diagnosis and treatment in order to optimize outcomes.

P29 – DETERMINANTS OF HAPPINESS AND QUALITY OF LIFE IN PATIENTS WITH RHEUMATOID ARTHRITIS: A STRUCTURAL EQUATION MODELING APPROACH

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Background: Remission is the core target of disease management in rheumatoid arthritis (RA), but the ultimate goal of medical care is to improve patients' enjoyment of life, a concept akin to happiness. What is the contribution of disease control towards happiness and what other means may the health professional consider towards that goal?

Objectives: To examine the determinants of happiness and quality of life (QoL) in patients with rheumatoid arthritis (RA), with emphasis on disease activity, disease impact and personality traits.

Methods: This is an ancillary analysis of an observational, cross-sectional study. Consecutive patients were assessed on disease activity, disease impact, personality, QoL and happiness. Structural equation modelling estimation was used to assess the associations between these dimensions, pursuing three hypotheses: H1 – Disease activity and perceived impact of disease are negatively associated to overall QoL and happiness in patients with RA; H2 – "Positive" personality traits are related to happiness both directly and indirectly through perceived disease impact; H3 - Happiness has a mediating effect in the relation between impact of disease and QoL.

Results: Data from 213 patients was analysed. Results obtained in the structural equation measurement model indicated a good fit [2/df=1.38; CFI=.98; GFI=.92; TLI=.97; RMSEA=.04] and supported all three driving hypotheses (Figure 1). Happiness was positively related to "positive" personality (total effect of .56, with a direct effect of β=.50, p<.001 and an indirect effect of β=.06, p=.03) and, to a lesser extent, negatively related with perceived impact of disease (β=-.17; p=.02). This impact, in turn, was positively related to disease activity (β=.36; p<.001) and mitigated by "positive" personality traits (β=-.37; p<.001). Impact of disease had a much stronger relation with QoL than with happiness (total effect of .72, of which β=-.02, p=.04 was an indirect effect vs β=-.17; p=.02, respectively). Happiness mitigated the negative effect of disease impact upon QoL (β=.13; p=.01). Moreover, disease activity had a

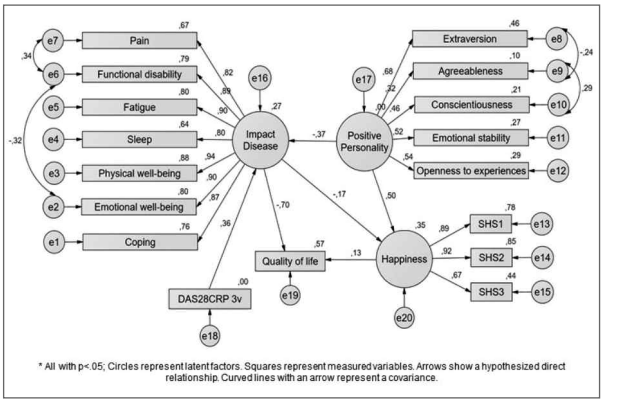

FIGURE 1. Estimated standardised direct effects for the proposed model

negative indirect effect of -.26 (p=.003) on QoL and also a negative indirect effect of β=-.06 (p=.04) on happiness.

Conclusions: Optimization of QoL and happiness of people with RA requires not only effective control of the disease process but also improvement of the disease impact domains. Personality, and its effects upon the patient's perception and experience of life, seems to play a pivotal mediating role in these relations and should deserve paramount attention if happiness and enjoyment of life is taken as the ultimate goal of health care.

P33 – SEPTIC ARTHRITIS: A REALITY OF A PORTUGUESE DEPARTMENT OF RHEUMATOLOGY

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Introduction: Septic arthritis (SA) results from direct invasion of articular space by different pathogens, most commonly by bacteria. It is considered one of the principal causes of destructive arthritis.

It is believed that 20 000 cases of SA occur each year in the United States (7.8 cases per 100 000 individuals), with a similar incidence in Europe. Nowadays, SA is becoming more frequent in the elderly and immunosuppressed individuals, with 45% being older than 65 year-old.

Objective: To evaluate the SA's representability as a cause of admission in a Rheumatology Department and to describe clinical features and potential risk factors.

Methods: All the patients were retrospectively identified between January 2000 and July 2017, according to the diagnosis codification of the hospital admission. Exclusion criteria were pediatric patients and incomplete medical files.

Results: A total of 42 patients had suspected SA that was confirmed in 33 of them, being 60.6% female with a mean age of 54.2±16 years. Twenty six patients (78.8%) had a concomitant rheumatic pathology, the most common being Rheumatoid Arthritis (30.3%). The majority of patients had comorbidities (n=26, 78.8%). The most prevalent were osteoporosis (n=11, 33.3%) and hypertension (n=8, 24.2%). In this cohort, 75.8% of patients were immunosuppressed. SA affected mainly one joint (93.9%), being the knee and the wrist the principal affected locations. About 97% of patients were submitted to an arthrocentesis which identified the microorganism in 63.3% of them (n=21). The most prevalent pathogen was Methicillin-sensitive Staphylococcus aureus (42,9%). Some patients had history of previous corticosteroids injection (n=12, 28.6%). There was not a significant association between SA and gender, surgery, prosthesis, corticosteroid injection or immunosuppression.

Discussion: Our results differ from previous published data (A. Vivekanantham et al, Ann Rheum Dis. 2017;76). In this study, the majority of patients with SA were male and only 11 patients had a rheumatic disease. This may result from the difference in the sample used: we only evaluate individuals that were admitted in a department of Rheumatology, contributing to the higher percentage of concomitant rheumatic diseases. On the other hand, our work has some similarities with previous published studies: the most common pathogen was Staphylococcus aureus, which was expectable, because it is one of the skin commensal microorganism.

Conclusion: SA is considered a rheumatic emergency and its prognosis depends on an early and efficient approach in order to avoid the joint destruction. In rheumatic patients, the diagnosis of SA could be extremely difficult due to the many and potential risk factors inherent to this population. It is essential to perform a detailed clinical examination and an arthrocentesis in order to implement a timely and adequate therapy.

P34 – MATERNAL WEIGHT GAIN DURING PREGNANCY AND OFFSPRING BONE MASS: DIFFERENT ASSOCIATIONS IN HEALTHY WEIGHT VERSUS OVERWEIGHT WOMEN

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TABLE I. ADJUSTED MEANS OF BONE MASS PROPERTIES AT 7 YEARS OF AGE, ACCORDING TO MATERNAL GESTATIONAL WEIGHT GAIN CATEGORIES (INSTITUTE OF MEDICINE, 2009), IN UNDER/NORMAL WEIGHT AND OVERWEIGHT/OBESE WOMEN BEFORE PREGNANCY

	Insufficient GWG	Adequate GWG	Excessive GWG
BMC (g)			
Under/normal weight	581.4 (573.3, 589.5)	589.7 (583.3, 596.1)	597.3 (588.9, 605.7)
Overweight/obese	614.2 (597.9, 630.6)	610.4 (599.9, 620.9)	614.1 (605.9, 622.2)
aBMD (g/cm²)			
Under/normal weight	0.605 (0.600, 0.610)*	0.613 (0.609, 0.617)	0.619 (0.614, 0.625)
Overweight/obese	0.631 (0.620, 0.641)	0.629 (0.622, 0.636)	0.632 (0.627, 0.638)
scBMC (g)			
Under/normal weight	587.4 (583.8, 591.1)*	594.4 (591.5, 597.3)	597.7 (593.9, 601.5)
Overweight/obese	603.7 (595.4, 612.0)	605.2 (599.8, 610.5)	606.6 (602.5, 610.8)

BMC, bone mineral content, aBMD, areal bone mineral density; scBMC, size--corrected bone mineral content; BMI, body mass index; GWG, gestational weight gain. Models are adjusted for maternal age, height and educational level and gestational age at birth of the offspring.
*Statistically significant different compared to "Adequate GWG" group

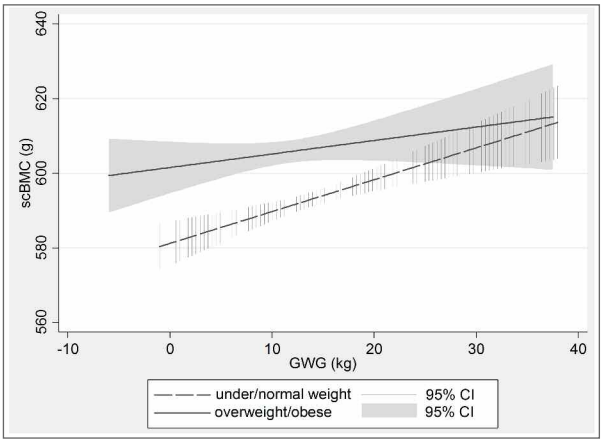

FIGURE 1. Association between gestational weight gain and offspring size-corrected bone mineral content at 7 years

Background: Weight management during pregnancy has been shown to reduce child cardiometabolic risk. However, since maternal weight has an overall positive correlation with offspring bone mass, pregnancy weight management may adversely affect bone health. We estimated associations between gestational weight gain (GWG) and bone mineral content (BMC) and areal density (aBMD) at 7 years (7y), and tested prepregnancy body mass index (BMI) as an effect modifier.
Methods: We analyzed 2140 mother-child pairs from the Generation XXI birth cohort. GWG was analyzed as a continuous measure and using the Institute of Medicine (IOM) categories. Associations between GWG and offspring subtotal bone densitometry measurements at 7y were estimated through linear regression coefficients (95% CI), crude and adjusted for maternal age, height, educational level, and child gestational age.
Results: Overall, we identified a quadratic relationship between GWG and bone measures likely due to a biological interaction between GWG and prepregnancy BMI: in under/normal weight mothers, GWG was associated with increased bone measures at 7y [BMC: 0.07SD per 5kg weight gain (95% CI: 0.02, 0.12); aBMD: 0.10SD (0.05, 0.15) per 5kg], while in overweight/obese mothers no beneficial effect of GWG on bone was observed [BMC: 0.04SD (-0.02, 0.10) per 5kg; aBMD: 0.04SD (-0.03, 0.10) per 5kg]. Also, no advantageous effect of gaining weight above the IOM recommendations was observed in either prepregnancy BMI group.
Conclusion: Adherence to IOM recommendations for pregnancy weight gain is unlikely to have a negative repercussion on offspring bone health, particularly in women with excess weight before pregnancy.

P37 – CELASTROL CONTROLS INFLAMMATION BY DECREASING HUMAN BLOOD CELLULAR ACTIVATION IN VITRO

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Background: Celastrol is a bioactive component of the Tripterygium wilfordii, a plant used in traditional Chinese medicine. We have previously characterized the efficacy and safety of celastrol in an animal model of arthritis, showing a reduction of synovial leukocyte infiltration.
Objectives: The main goal of this work was to study the in vitro effect of celastrol in the activation and survival of human peripheral blood leukocytes.
Methods: Blood was collected from healthy individuals (N=10). Red blood cells were lysed, leukocytes were then cultured for 4h at 37ºC, 5%CO2, stimulated with LPS (10μg/ml) and treated with(out) celastrol (0.3μM). After culture, cell viability was assessed using Alamar Blue by spectrophotometry assay, and an immunophenotyping characterization of neutrophils, monocytes, B and T cells was performed by flow cytometry.
Results: Celastrol had no significant effect on CD66b+,

CD14+, CD19+ and CD3+ cell levels. However, this compound was able to reduce CD62L frequency and restored (after LPS stimulation) CD11b and CXCR2 expression to basal levels in neutrophils, and it was also able to diminish CD115 and restore CD86 and HLA-DR expression to basal levels in monocytes. Regarding adaptive immune system cells, celastrol restored RANKL and CD40L expression to basal levels in B and T cells, respectively, and induced a decrease in CXCR3 expression on T cells.

Conclusion: Celastrol seems to have a stronger effect on innate immune system cells, reducing their overall activation, differentiation and migration potential. This observation has implications for the selection of potential diseases and disease stages where this compound might be particularly effective.

*RC and RAM equally contributed to this study.

P43 – PREDICTORS OF FRAGILITY FRACTURES AND BONE MINERAL DENSITY VARIATION IN A SPONDYLOARTHRITIS COHORT

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Introduction: Spondyloarthritis (SpA) patients have an increased risk of osteoporosis (OP) and vertebral fragility fractures (FF). Bone loss is related with sustained inflammation. We aimed to assess the variation of BMD in SpA and to study the predictors of these changes.

Methods: Observational, retrospective study was performed including patients with the diagnosis of SpA (according to the modified New York and ASAS classification criteria) followed at our Rheumatology Department. Demographic and clinical data were collected from a national database (Reuma.pt). Two time-separated BMD (g/cm2) measurements (by dual-energy X-ray absorptiometry - DXA) of the lumbar spine (LS) and total hip (TH) and the disease activity/functional scores from the respective date, were collected. Secondary causes for OP were identified. Predictors of: Δ BMD/year, % BMD variation/year superior to the median value (gain vs no gain-1yr) and of prevalent FF were studied using univariate/multivariate linear and logistic regression.

Results: Eighty-three SpA patients were included, 44 (53%) were male with a mean baseline (DXA1) age of 41.6 ± 11.5 years and median baseline disease duration of 14 years [0-37]. Fifty seven (67%) had Ankylosing Spondylitis (AS), 24% Psoriatic Arthritis (PsA), 6% Inflammatory bowel disease-SpA and 1% had Undifferentiated SpA. Seventy-four patients (89%) were treated with TNFinhibitors (TNFi) and 45% had previous/current exposure to glucocorticoids (GC). During the study period, 21 (25%) patients had a FF. The mean time between the two DXA was 5.7 ± 2.8 years. Absolute mean Δ BMD for LS was 0.095 ± 0.15g/cm2 and 0.027 ± 0.07g/cm2 for TH; the mean Δ BMD/year was 0.020 ± 0.04 g/cm2/year and 0.007 ± 0.02 g/cm2/year, respectively. The median % BMD variation/year was 1.1% per year [-5.0-18] for LS and 0.4% per year [-4.0-11] for TH. Male gender was a positive predictor of Δ BMD/year for LS (β= 0.021, p=0.04). Baseline age and disease duration were not significantly associated with the outcomes. Presence of syndesmophytes was associated with absolute LS Δ BMD, but not after adjustment for time between the two DXA. Time exposure to GC was a negative predictor of LS Δ BMD/year (β= - 0.030 p=0.04). Comparing to AS, PsA had an inverse linear association with LS Δ BMD/year (β= -0.024, p=0.04), with no differences for other subtypes of SpA. Comparing to adalimumab, etanercept and infliximab groups were negative predictors of LS Δ BMD/year (β= -0.028 and -0.035, respectively, p<0.05), not remaining significant after adjustment for GC exposure time. No other statistically significant differences were found regarding TNFi treatment. BASFI and ASDAS CRP/ESR (DXA2) were all positive predictors of FF (gender and GC adjusted) (OR: 1.33, OR: 1.91 and OR: 2.43, respectively, p<0.05) and also predicted the number of FF. ASDAS CRP/ESR (DXA2) also had lower odds of TH gain-1yr (OR: 0.53 and OR: 0.64, p<0.05). LS and TH gain-1yr significantly reduced the risk of FF (gender adjusted) (OR: 0.32 for both, p<0.05).

Conclusions: Disease activity parameters were significant predictors of FF and higher scores had lower odds of TH BMD gain at one year. Cut-offs of significant BMD increase at 1 year were suggested and were

associated with reduced FF risk. No differences were found concerning TNFi treatment possibly due to the small size of the control group.

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P44 – IS THE RADIOGRAPHIC DAMAGE A RISK FACTOR FOR NEUROPATHIC PAIN IN RHEUMATOID ARTHRITIS PATIENTS?

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Introduction: Features suggestive of neuropathic pain (NP) have been recently described in Rheumatoid Arthritis (RA) patients. The damage assessed on radiographs is a direct consequence and reflection of cumulative of disease activity and the association of structural damage with NP has not been previously studied in RA.

Objectives: To determine whether existence and intensity of neuropathic pain is associated with radiographic damage in RA patients. Methods: Cross-sectional study was performed with RA patients followed at our Rheumatology department. Patients with diagnosed neuropathy or non-RA risk factors for NP were excluded. Selected patients were evaluated in a medical visit. Demographic and clinical data were collected and two questionnaires were applied to assess NP: the Leeds Assessment of Neuropathic Symptoms (LANSS) and the painDETECT (PDQ). Wrist, hands and feet radiographic studies from the previous 12 months before the visit were classified according to the modified van der Heijde Sharp's method by one trained reader, blinded for patient clinical variables and treatment allocation. Correlation studies (spearman coefficient analysis) and univariate/multivariate logistic regression were performed. Significance level was set as <0.05. **Results:** Ninety one RA patients were included. Seventy (77%) were women, with a mean age of 55.6 ± 10.8 years and median disease duration of 12 years [2–41]; 84% patients were seropositive for Rheumatoid Factor and/or ACPA; 85 (93%) were treated with conventional synthetic Disease-Modifying Antirheumatic Drugs (DMARDs) and 41% with a biological DMARD (bDMARDs). The mean DAS28 4V CRP was 3.15 ± 0.77 and the mean HAQ score was 1.04 ± 0.6. The median joint erosion score (JE) was 28 [3-143] and the median joint space narrowing (JN) was 46 [10--133]. Forty-two (46%) patients had NP by the LANSS (≥12), 29% had a possible/likely NP in the PDQ (>12), and 13% had likely NP in the PDQ (>18). JN and global score (GS) had a negative weak correlation with LANSS (r=-0.21 and r=-0.25, respectively, p<0.05) and JN also correlated with PDQ (r=-0.23, p=0.03). No significant correlations were observed with JE. Disease duration significantly correlated with all the radiographic scores (r=0.48 for GS, r=0.43 for JN, r=0.44 for JE, p<0.05) and negatively correlated with LANSS (r=-0.28, p=0.009). Lower median GS values were observed in LANSS positive group (62 vs 79, p=0.01), but no significant differences were observed for PDQ. Patients under bDMARDs had significant higher median GS (80 vs 61, p=0.03) but also significant higher disease duration (14 vs 10 years, p=0.01). No statistically significant differences were observed for other variables. Disease duration was a negative predictor of LANSS NP (OR: 0.98 per year, p=0.03). JN was inversely associated with LANSS NP (OR: 0.978, p=0.02) and remained significant after adjustments for bDMARDs treatment, but not for disease duration. JN was also a negative predictor of likely PDQ NP and remained significant after adjustment for bDMARDs (OR: 0.979, p=0.03), but not for disease duration. Radiographic scores were not significant predictors of possible/likely PDQ NP. Conclusions: In this cohort, JN score had a weak negative association with NP. Higher structural damage and disease duration do not seem to increase the risk of non-nociceptive RA pain. Further studies are needed to confirm these results.

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P46 – THE EFFECT OF CERTOLIZUMAB PEGOL ON SKIN MANIFESTATIONS OF PSORIATIC ARTHRITIS OVER 4 YEARS OF TREATMENT IN PATIENTS WITH AND WITHOUT PRIOR ANTI-TNF EXPOSURE

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Background: In the RAPID-PsA trial (NCT01087788), certolizumab pegol (CZP) improved skin manifestations of psoriatic arthritis (PsA) over 96 weeks (wks). Here we report dermatological outcomes over 4 years' of CZP treatment in patients (pts) with and without prior anti-TNF exposure.
Methods: RAPID-PsA was double-blind and placebo-controlled to Wk24, dose-blind to Wk48 and open-label (OL) to Wk216. Pts had active PsA and had failed ≥1 DMARD; ≤40% of pts could have received 1 prior anti-TNF. Pts randomized to CZP at baseline (BL; 200mg Q2W or 400mg Q4W, following 400mg loading dose at Wks 0, 2, 4) continued their assigned dose in the OL period. The primary clinical outcome (ACR20 at Wk12) has been reported previously. We report dermatological outcomes for CZP-randomized pts with ≥3% skin involvement at BL, for pts with and without prior anti-TNF exposure. Data are reported as observed case (OC) and with imputation: NRI for categorical outcomes, LOCF for continuous measures.
Results: 273/409 randomized pts received CZP from Wk0; of these, 183 (67.0%) completed Wk216. The primary clinical variable showed relevant differences (Wk12 ACR20: 58.0%, 51.9% vs 24.3% for CZP 200mg Q2W, 400mg Q4W vs placebo [NRI]). ACR responses were maintained to Wk216 (ACR20: 54.3%, 54.8% for CZP 200mg Q4W, 400mg Q4W [NRI]).

Of 166 pts with ≥3% skin involvement at BL, 36 pts across CZP dose groups had prior anti-TNF exposure (mean PASI=11.8, mean DLQI=11.7), 130 were anti-TNF naïve (mean PASI=12.1, mean DLQI=11.1).

Improvements in PASI responses observed to Wk96 were sustained to Wk216, both in pts with and without prior anti-TNF exposure (PASI75 with vs without prior anti-TNF: Wk96=69.2% vs 74.0%, Wk216=90.9% vs 75.9%). Improvements were maintained even when stringent NRI imputation was used (PASI75 with vs without prior anti-TNF: Wk96=50.0% vs 54.6%, Wk216=55.6% vs 50.8%).

Similar sustained improvements occurred in mean PASI score (OC: with vs without prior anti-TNF: Wk96=2.4 vs 1.7, Wk216=1.3 vs 2.0; LOCF imputed: with vs without prior anti-TNF: Wk96=2.4 vs 2.6, Wk216=2.4 vs 2.6), and the patient-reported measure DLQI (OC: mean with vs without prior anti-TNF: Wk96=1.8 vs 3.2, Wk216=2.1 vs 3.1; LOCF imputed: mean with vs without prior anti-TNF: Wk96=2.9 vs 3.5, Wk216=3.5 vs 3.6).
Conclusion: Improvements in joint and skin manifestations of PsA were maintained over 4 years' of CZP treatment. Skin outcomes were maintained in pts with and without prior anti-TNF exposure.

P47 – THE EFFICACY OF CERTOLIZUMAB PEGOL OVER 4 YEARS IN PSORIATIC ARTHRITIS PATIENTS WITH AND WITHOUT CONCOMITANT USE OF DMARDS

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Background: In RAPID-PsA (NCT01087788) certolizumab pegol (CZP) improved signs and symptoms of psoriatic arthritis (PsA) over 4-years' treatment. Here we report short- and long-term efficacy of CZP with and without concomitant DMARD use, including effects on extra-articular manifestations of the disease (EAMs).
Methods: RAPID-PsA was double-blind and placebo-controlled to Week (Wk)24, dose-blind to Wk48 and open-label (OL) to Wk216. Patients (pts) had active PsA with ≥1 failed DMARD. Wk0 CZP-randomized pts (200mg Q2W or 400mg Q4W, following 400mg loading dose at Wks 0, 2, 4) continued their assigned dose in OL. We report efficacy to Wk216 for pts receiving CZP from Wk0 (dose combined) with and without DMARD use at baseline (BL; DMARD+ and DMARD-). Outcomes included ACR20, Psoriasis Area Severity Index (PASI), Leeds Enthesitis Index (LEI), and Leeds Dactylitis Index (LDI) in pts with involvement of the respective EAM at BL (psoriasis: BSA ≥3%; enthesitis:

LEI >0; dactylitis: ≥1 digit affected and LDI ≥0). Data are observed case (OC) and imputed: NRI for dichotomous outcomes and LOCF for quantitative data.
Results: 273 pts received CZP from Wk0. 74 (27.1%) CZP pts were DMARD , 6 (8.1%) of whom initiated a new DMARD during the study. 8 DMARD+ pts (4.0%) increased, 29 (14.6%) reduced/discontinued and 13 (6.5%) increased and reduced/discontinued DMARD use. 141 (70.9%) DMARD+ and 42 (56.8%) DMARD--pts completed Wk216.

Efficacy of CZP in both DMARD+ and DMARD- pts was maintained over 4 years (NRI [OC]: DMARD+: ACR20 at Wk24=62.8%, at Wk216=57.3% [79.7%]; DMARD-: ACR20 at Wk24=52.7%, at Wk216=47.3% [83.3%]).

Among DMARD+ and DMARD- pts, at BL, 113 and 53 (56.8%; 71.6%) had psoriasis (mean PASI=11.4; 13.3), 125 and 47 (62.8%; 63.5%) enthesitis (mean LEI=3.1; 2.7), and 47 and 20 (23.6%; 27.0%) dactylitis (mean LDI=54.3; 59.7). Improvements in EAMs at Wk24 were maintained to Wk216 in both DMARD+ and DMARD- pts (imputed [OC]: DMARD+ pts: mean PASI at Wk24=2.6, at Wk216=2.3 [1.7]; PASI75 at Wk24=57.5%, at Wk216=54.0% [79.2%]; mean LEI at Wk24=1.0, at Wk216=0.8 [0.6]; mean LDI at Wk24=3.7, at Wk216=4.3 [0.4]; DMARD- pts: mean PASI at Wk24=2.9, at Wk216=3.2 [2.2]; PASI75 at Wk24=69.8%, at Wk216=47.2% [78.1%]; mean LEI at Wk24=1.0, at Wk216=0.9 [0.2]; mean LDI at Wk24=5.7, at Wk216=3.7 [2.5]).
Conclusion: Pts completing RAPID-PsA, treated with CZP both with and without concomitant DMARD use, showed sustained improvements in their disease, maintained over 4 years.

P48 – CHARACTERISTICS AND OUTCOMES OF PROSPECTIVELY REPORTED PREGNANCIES EXPOSED TO CERTOLIZUMAB PEGOL FROM A SAFETY DATABASE

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Background: Anti-tumor necrosis factor medications (anti-TNFs) are effective in controlling chronic inflammatory diseases, but information about their use and safety in pregnancy is limited. Consequently, anti-TNFs are often discontinued early in gestation. Certolizumab pegol (CZP), a PEGylated Fc-free, anti-TNF approved for treatment of rheumatic diseases and/or Crohn's disease, has no active placental transfer.
Objectives: This project provides information on pregnancy outcomes in women receiving CZP, especially those with early pregnancy exposure.
Methods: Prospective and retrospective data on maternal CZP exposure, including timing and duration, outcomes, comorbidities, and major malformations were extracted from the UCB Pharma safety database through 6 March 2017. This analysis was limited to prospective reports to avoid bias associated with retrospective submissions. Numbers of live births, miscarriages, elective abortions, stillbirths, and major con-

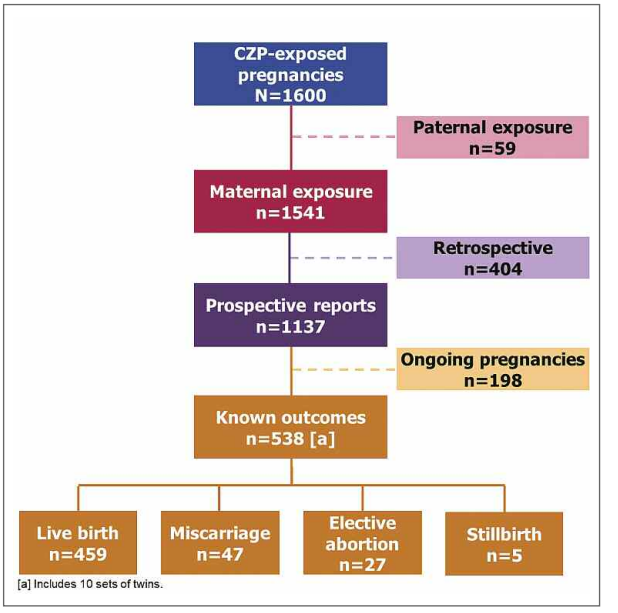

FIGURE 1. Overview of pregnancy reports

genital malformations were ascertained.
Results: From a total of 1541 maternal CZP-exposed pregnancies, 1137 were reported prospectively, of which 528 pregnancies (including 10 twins) had 538 known outcomes: 459 live births (85%), 47 miscarriages (9%), 27 elective abortions (5%), and 5 stillbirths (1%) (Figure). Of the 459 live births, 8 (2%) cases of major congenital malformations were reported (vesicoureteral reflux, club foot, congenital heart disease, cerebral ventricle dilatation, polydactyly, anal fistula, accessory auricle, and hydronephrosis). Of the 528 prospective pregnancies with known outcomes, 436 (83%) were exposed during the 1st trimester, when most organogenesis occurs; 201 pregnancies were exposed during the entire pregnancy.
Conclusions: This analysis represents the largest published cohort of pregnant women exposed to an anti-TNF for management of chronic inflammatory diseases. Analysis of pregnancy outcomes does not indicate a malformative effect of CZP compared to the EU general population (2–3%), nor an increased risk of fetal death. These data are reassuring for women of child-bearing age considering treatment with CZP, however, the on-going collection of post-marketing surveillance data, including the ongoing MotherToBaby study from the Organization of Teratology Information Specialists, will provide further important information.

P50 – SÍNDROME DE ERASMUS: RARO OU SUBDIAGNOSTICADO?

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Introdução: O Síndrome de Erasmus (SE) é definido pela associação da exposição à sílica com o subsequente desenvolvimento de esclerose sistémica (ES), com ou sem silicose associada. Há poucos casos reportados na literatura e a maioria refere-se a mineiros, embora haja outras profissões que podem condicionar, em graus va-

TABELA I. CARACTERÍSTICAS CLÍNICAS E LABORATORIAIS DOS DOENTES COM SÍNDROME DE ERASMUS

	Doente 1	Doente 2	Doente 3	Doente 4	Doente 5	Doente 6	Doente 7	Doente 8	Doente 9
Idade	59	50	48	61	39	51	84	77	38
Sexo	Masculino	Masculino	Masculino	Masculino	Masculino	Masculino	Masculino	Masculino	Masculino
Profissão	Trabalhador numa oficina de mármore	Construtor civil	Construtor civil	Pedreiro	Construtor civil	Construtor civil	Pedreiro	Mineiro	Construtor civil
Anos de exposição á sílica	35	30	12	30	20	31	45	30	20
Silicose	Sim	Não	Não	Sim	Não	Não	Não	Sim	Não
Anos de sintomas até ao diagnóstico	1	2	0,5	3	1	0,5	1	4	1
Idade de diagnóstico	56	48	45	58	37	49	73	74	29
Manifestação inicial	Pulmonar	Cutânea	Pulmonar	Pulmonar	Cutânea	Cutânea	Pulmonar	Pulmonar	Cutânea
Subtipo de ES	Limitado	Limitado	Limitado	Limitado	Limitado	Limitado	Limitado	Limitado	Limitado
Anticorpos	Anti-Scl70	Anti-RNP	Anti-RNP	Anti-SSA e Anti-SSB	Anti-centromero	Anti-SSA e Anti-SSB	Anti-Scl70	Anti-centromero	Anti-centromero
Padrão e títulos	Padrão mosqueado 1/640	Padrão mosqueado 1/160	Padrão nucleolar 1/640	Padrão mosqueado 1/320	Padrão anticentromero 1/640	Padrão mosqueado 1/640	Padrão mosqueado 1/160	Padrão anticentromero 1/640	Padrão anticentromero 1/320
Capilaroscopia padrão esclerodérmico	Sim	Sim	Sim	Sim	Sim	Não realizada	Não realizada	Não realizada	Não realizada
Hipertensão pulmonar	Não	Não	Não	Sim	Não	Não	Sim	Sim	Não
Doença intersticial pulmonar	Sim	Não	Sim	Sim	Não	Não	Não	Sim	Não
Envolvimento gastrointestinal	Não	Não	Não	Sim	Não	Não	Não	Não	Sim
Úlceras digitais	Sim	Sim	Não	Sim	Sim	Sim	Sim	Sim	Sim
Calcinose	Não	Não	Não	Não	Não	Não	Não	Sim	Sim
Último ecocardiograma	IA ligeira, IM mínima	Normal	Normal	IM ligeira, IT mínima, dilatação VD ligeira, PSAP: 52	Normal	IM e IT ligeira, PSAP: 26	Dilatação do VD, AE e AD, IM e IT ligeira, PSAP: 41	Dilatação AE, EM e EA moderada, IM ligeira, PSAP: 67	IT mínima, PSAP: 27
Tabaco	Ex-fumador	Não fumador	Fumador	Ex-fumador	Não fumador	Fumador	Não fumador	Não fumador	Fumador
Terapêutica	HCQ, Nefedipina, Prostaciclinas	HCQ, Nefedipina, Prostaciclinas	MMF Prednisolona 2,5mg	Losartan	HCQ, Nefedipina, Prostaciclinas	Metotrexato	Nefedipina	Deflazacort 15mg Losartan	HCQ, MMF, Prostaciclinas

IA: Insuficiência Aórtica; IM: Insuficiência Mitral; IT: Insuficiência Tricúspide; VD: ventrículo direito; PSAP: pressão sistólica na artéria pulmonar estimada (mmHg); AE: Aurícula esquerda; AD: Aurícula Direita; EM: Estenose Mitral; EA: Estenose Aórtica; HCQ: Hidroxicloroquina; MMF: Micofenelato mofetil

riáveis, exposição à sílica. O objetivo desde estudo foi avaliar a prevalência do SE numa população de doentes com ES, a sua relevância no sexo masculino, e caracterizar os casos diagnosticados.

Material e Métodos: Recolha retrospetiva dos dados demográficos, clínicos e laboratoriais de todos os doentes com ES diagnosticada segundo os critérios ACR/EULAR, vigiados num serviço de reumatologia. Contato telefónico no sentido de pormenorizar a atividade profissional e avaliação de eventual exposição á sílica que ainda não tivesse sido considerada, nos doentes em que este dado não estava claro no processo clinico. Utilizou-se o SPSS para comparar dados demográficos, clínicos e laboratoriais e o valor de significância estatística foi definido como 2-sided p<0,050.

Resultados: Dos 59 doentes incluídos, 12 eram do sexo masculino. A idade média na data do estudo foi de 56,3 anos (SD=15,8), com o mínimo de 38 e o máximo de 84 anos. O diagnóstico foi estabelecido em média 1,6 anos após o início da sintomatologia (SD=1,2), com 52,1 anos (SD=15,0). A prevalência de SE nesta população de 59 doentes foi de 15,3% (9 doentes), todos do sexo masculino, o que correspondeu a 75% dos casos de ES em homens. Em 3 doentes com exposição à sílica, o diagnóstico de silicose foi prévio ao de ES. O tempo de exposição médio à sílica foi de 28,1 anos (SD=9,6), com um mínimo de 12 anos e o máximo de 45 anos. Os 9 doentes, tinham fenómeno de Raynaud e apresentavam uma forma cutânea limitada. A manifestação inicial foi pulmonar em 5 dos doentes e nos outros 4 foi cutânea. À data do estudo, 3 eram fumadores e 2 ex-fumadores. As ulceras digitais estavam presentes em 8 dos doentes. Do ponto de vista terapêutico, 6 doentes estavam com inibidores dos canais de cálcio e/ou antagonistas da angiotensina e 4 dos doentes já tinham necessitado de prostaciclinas endovenosas. Quatro doentes estavam medicados com hidroxicloroquina, 2 com micofenelato mofetil, 1 com metrotexato e 2 com corticoterapia oral.

As características clinicas e laboratoriais estão representadas na Tabela 1.

Discussão e Conclusão: A prevalência do SE nesta população foi muito superior à descrita na literatura (0,3 a 0,9% de todas as ES e em 43% das ES do sexo masculino), concluindo-se que, para um diagnóstico de SE mais preciso é necessário estar atento e averiguar exposições a sílica menos intensas, que podem ter ocorrido muitos anos antes do diagnóstico. A ausência de SE no sexo feminino explicar-se-á pelos fatores ocupacionais e não pela suscetibilidade.

Salienta-se ainda a importância do diagnóstico de um SE pelas eventuais implicações económicas, sociais e profissionais.

P51 – SÍNDROME DE ERASMUS E ESCLEROSE SISTÉMICA SEM EXPOSIÇÃO A SÍLICA: MANIFESTAÇÕES CLÍNICAS DIFERENTES?

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Introdução: A esclerose sistémica (ES) é uma doença do tecido conjuntivo, rara e potencialmente devastadora, caracterizada por fenómenos de autoimunidade, vasculopatia e fibrose. O Síndrome de Erasmus (SE) foi definido em 1957 pela associação da exposição à sílica com o desenvolvimento de esclerose sistémica. A teoria mais credível que explica esta associação é a desregulação dos linfócitos T por exposição à sílica. Classicamente, os casos de SE têm sido descritos como sendo clinica e laboratorialmente idênticos aos outros casos de ES.

O nosso objetivo consistiu na avaliação das características clinicas e laboratoriais dos doentes com ES com ou sem exposição à sílica e identificação de eventuais diferenças.

Material e Métodos: Recolha retrospetiva dos dados demográficos, clínicos e laboratoriais de todos os doentes com ES, diagnosticada segundo os critérios ACR/EULAR, vigiados no nosso serviço. No total foram identificados 59 doentes mas 11 doentes foram excluídos desta avaliação por sobreposição de outra patologia imunomediada. Utilizou-se o SPSS para comparar dados demográficos, clínicos e laboratoriais e o valor de significância estatística foi definido como 2-sided p<0,050.

Resultados: Dos 48 doentes estudados, 37 (77,1%) eram do sexo feminino, a idade média era de 60,1 anos (SD=12,3), a evolução média da doença desde o início da sintomatologia era de 11,0 anos (SD=6,9) e a idade média à data do diagnóstico era de 51,9 anos (SD=13,3). Oito dos 48 doentes correspondiam a SE. Verificou-se associação estatisticamente significativa entre o SE e o sexo masculino (p<0,001), a manifestação inicial pulmonar (p=0,025), as úlceras digitais (OR=1,400, p=0,014) e a exposição ao tabaco (fuma-

TABELA I. CARACTERÍSTICAS CLÍNICAS E LABORATORIAIS DOS DOENTES COM SÍNDROME DE ERASMUS E ESCLEROSE SISTÉMICA SEM EXPOSIÇÃO A SÍLICA, E A SUA COMPARAÇÃO

	Esclerose Sistémica sem exposição à sílica	Síndrome de Erasmus	Comparação
Idade	60,6 (*SD*=11,4)	57,4 (*SD*=16,6)	$t(46)=0,68$, $p=0,503$
Sexo	Masculino: 3 Feminino: 37	Masculino: 8 Feminino: 0	*Teste exato de Fisher*=32,2, $p<0,001$
Idade de diagnóstico	51,7 (*SD*=13,0)	53,0 (*SD*=11,4)	$t(46)=0,50$, $p=0,807$
Anos de sintomas até ao diagnóstico	3,3 (*SD*=5,3)	1,7 (*SD*=1,2)	$t(44)=1,76$, $p=0,393$
Envolvimento inicial	Cutâneo: 34 Pulmonar: 4 Articular: 2 Gastrointestinal: 2	Cutâneo: 4 Pulmonar: 4 Articular: 0 Gastrointestinal: 0	*Teste exato de Fisher*=9,1, $p=0,025$
Subtipo de ES	Limitado: 35 Difuso: 5	Limitado: 8 Difuso: 0	*Teste exato de Fisher*=1,1, $p=0,573$
Anticorpos	Anti-Scl70: 7 Anti-centrómero: 20 Anti-RNP: 0 Anti-SSA: 2 Só ANAs: 4 Anti-PM75: 1 Anti-centrómero e SSA: 2 Anti-SSA e SSB: 0 Anti-RNP, SSA e SSB: 1 Negativos: 2	Anti-Scl70: 2 Anti-centrómero: 3 Anti-RNP: 1 Anti-SSA: 0 Só ANAs: 1 Anti-PM75: 0 Anti-centrómero e SSA: 0 Anti-SSA e SSB: 1 Anti-RNP, SSA e SSB: 0 Negativos: 0	*Teste exato de Fisher*=10,4, $p=0,418$
Padrão	Anti-centrómero: 22 Mosqueado: 12 Fino granular: 1 Homogéneo: 1 Nucleolar: 1 Mosqueado e nucleolar: 1	Anti-centrómero: 3 Mosqueado: 5 Fino granular: 0 Homogéneo: 0 Nucleolar: 0 Mosqueado e nucleolar: 0	*Teste exato de Fisher*=4,5, $p=0,677$
Títulos	1/160: 8 1/320: 18 1/640: 9	1/160: 2 1/320: 2 1/640: 4	*Teste exato de Fisher*=2,3, $p=0,313$
Hipertensão pulmonar	8	3	$X(1)=1,17$, $p=0,361$
Doença intersticial pulmonar	16	3	$X(1)=0,01$, $p=1,000$
Envolvimento gastrointestinal	31	2	$X(1)=8,55$, $p=0,008$ $OR=0,097$
Úlceras digitais	20	8	*Teste exato de Fisher*=6,9, $p=0,014$ $OR=1,4$
Calcinose	17	2	$X(1)=0,85$, $p=0,451$
Dilatação aurícula esquerda	10	2	*Teste exato de Fisher*=0,00, $p=1,000$
Dilatação de camaras cardiacas direitas	2	2	$X(1)=3,49$, $p=0,124$
Hipertrofia ventricular esquerda	3	0	*Teste exato de Fisher*=0,64, $p=1,000$
Insuficiência valvular	35	6	$X(1)=0,84$, $p=0,583$
Estenose valvular	6	1	$X(1)=0,03$, $p=1,000$
PSAP estimada	29,6 (*SD*=7,6)	42,6 (*SD*=17,4)	$U=40,5$, $p=0,122$
Fumador ou ex-fumador	4	6	$X(1)=4,95$, $p=0,047$

*Diferenças estatisticamente significativas encontram-se sublinhadas

dores ou ex-fumadores) (p=0,047). Por outro lado, nos casos de SE, verificou-se, também com significância estatística, um menor risco de envolvimento gastrointestinal (p=0,008, OR=0,097). Todos os doentes com SE apresentavam auto-anticorpos, com títulos tendencialmente mais altos, embora sem diferenças estatisticamente significativas. Também sem significado estatístico, verificou-se que a PSAP estimada por ecocardiograma foi muito superior nos doentes expostos à sílica (42,6 mmHg (SD=17,4) vs 29,6 mmHg (SD=7,6)).

As características clinicas e laboratoriais e respetivas diferenças entre os casos de ES com e sem exposição à sílica estão representadas na tabela 1.

Discussão e Conclusão: Conforme o descrito na literatura, também nesta população, a ES foi mais comum em mulheres, com idade média de aproximadamente 50 anos, aproximando-se dos 3 a 4:1. Neste grupo de doentes, contrariamente ao referido na literatura, verificaram-se, mais frequentemente, sintomas respiratórios como manifestação inicial da doença, maior presença de úlceras digitais, maior exposição ao tabaco e menor envolvimento gastrointestinal. Constataram-se diferenças, estatisticamente significativas, entre os casos com SE e os casos de ES sem exposição à sílica o que pode influenciar o seu diagnóstico, tratamento e prognóstico.

P61 – A AVALIAÇÃO DO NÍVEL DE SATISFAÇÃO DOS UTENTES DE UM SERVIÇO DE REUMATOLOGIA – UTILIZAÇÃO DO QUESTIONÁRIO PSQ-18

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Introdução: No âmbito da Acreditação do Serviço de Reumatologia e Doenças Ósseas Metabólicas do Hospital de Santa Maria - CHLN procedeu-se à avaliação do nível de satisfação dos utentes com os cuidados prestados. Foi aplicado um questionário conciso, validado e aplicável em várias áreas de cuidados de saúde, o *Patient Satisfaction Questionnaire short-form* (PSQ-18), que permite a avaliação de 7 domínios: satisfação geral; qualidade técnica; comunicação; relações interpessoais; aspectos financeiros; tempo dispensado pelo médico; acessibilidade e conveniência.

Objectivo: Avaliação do nível de satisfação dos utentes com os cuidados de prestados pelo Serviço e respectiva evolução temporal, de forma a identificar áreas a melhorar e programar intervenções correctivas.

Métodos: Aplicação do PSQ-18 aos utentes observados em Consulta Externa, Hospital de Dia ou Unidade de Técnicas do Serviço, em 16-20/Out/2017, e análise dos níveis de satisfação para as dimensões avaliáveis. Para efeito de classificação, adoptados os critérios definidos no estudo Rheuma Space: Qualidade se níveis de satisfação >70% (condição em que 2/3 das respostas reportam satisfação [4] e 1/3 resposta neutra [3]) numa escala de 0 (insatisfação elevada) a 5 (satisfação elevada); Excelência se níveis de satisfação >90% (2/3 das respostas reportam satisfação elevada [5] e 1/3 satisfação [4]). Avaliação da evolução do nível de satisfação por comparação com os resultados da aplicação do PSQ-18 no estudo Rheuma Space (1-5/Fev/2016). Análise estatística: SPSS (v.21); teste U de Mann-Whitney; nível de significância para p<0,05.

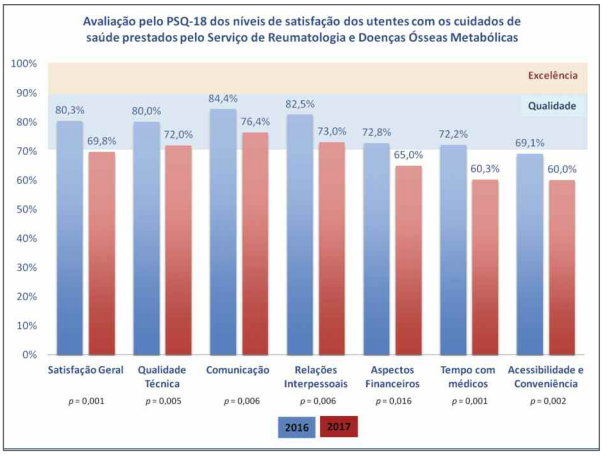

FIGURA 1. Representação gráfica dos resultados do questionário PSQ-18 nas 7 dimensões avaliadas

Resultados: O critério de Qualidade (>70%) foi atingido nas dimensões comunicação (76,4%), relações interpessoais (73%) e qualidade técnica (72%), e aproximou-se daquele limiar na dimensão satisfação geral (69,8%). As restantes dimensões (aspectos financeiros, tempo disponibilizado pelo médico, e acessibilidade e conveniência) apresentaram-se afastadas do critério de Qualidade (respectivamente, 65%, 60,3% e 60,0%). A comparação destes resultados com os obtidos no estudo Rheuma Space revelou uma diminuição significativa (p<0,05) do nível de satisfação em todas as dimensões (Quadro).

Discussão: Os níveis de satisfação acima do limiar de Qualidade relativos a comunicação, relações interpessoais e qualidade técnica, e próximo do mesmo no que se refere a satisfação geral, reflectirão uma prática de qualidade por parte dos profissionais de saúde do Serviço. Os menores níveis de satisfação relativos a aspectos financeiros, acessibilidade e conveniência, e tempo disponibilizado pelo médico dependerão de condições de acessibilidade e participação financeira dos utentes nos custos de saúde, e outras relacionadas com a estrutura e a organização hospitalar. A diminuição do nível de satisfação entre o início de 2016 e o final de 2017 em todas as dimensões deverá merecer a melhor atenção dos profissionais e diferentes níveis de direcção. Para tal terão contribuído paralisações sucessivas dos técnicos de diagnóstico e terapêutica no 2º semestre de 2017, com consequência na regular prestação de cuidados. A presença de 1 assistente de apoio à aplicação dos questionários em 2016, ausente em 2017, poderá ter contribuído para um enviesamento das respostas, quer por condicionamento pela sua presença, quer por não participação por parte de utentes com menor literacia na sua ausência.

Conclusão: A avaliação sistematizada do nível de satisfação dos utentes de um Serviço de Reumatologia pelo questionário PSQ-18 permite identificar áreas a melhorar e programar as adequadas intervenções.

P62 – THE EFFECT OF BIOLOGIC DISEASE-MODIFYING ANTIRHEUMATIC DRUGS PATIENT REPORTED OUTCOMES IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS; A SYSTEMATIC LITERATURE REVIEW AND A CALL FOR ACTION

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Introduction: Patient reported outcomes (PROs) have gained relevance in the evaluation of several diseases such as axial spondyloarthritis (axSpA). They allow the clinician to have a quantitative measurement of several aspects of the disease, according to the patient perspective.

Objectives: In this review we intended to evaluate the efficacy of different biologic disease-modifying anti-rheumatic drugs (bDMARD) in achieving the minimum clinically important difference (MCID) in several PROS's. Data from randomised controlled trials (RCT) conducted in radiographic axSpA (r-axSpA) and non-radiographic axSpA (nr-AxSpA) patients were included.

Methods: A systematic literature review (SLR) was performed using the MEDLINE database (August 17 2017) with the filters "published in the last 10 years" and "humans". Abstracts from the EULAR 2017 were

also considered. The PICO (P, population; I, intervention; C, comparison; O, outcome) concept was used to perform the analysis according to: Patients: adults (>18 years old) with r-axSpA or nr-axSpA; Intervention: any bDMARD regardless of formulation or duration; Comparison: placebo and/or any different drug; Outcomes: The Bath Ankylosing Spondylitis Functional Index (BASFI), the Ankylosing Spondylitis Quality of Life (ASQoL), the EuroQol-5D (EQ-5D), the Short Form 36 Health Survey physical component summary (SF36-PCS), the Short Form 36 Health Survey mental component summary (SF36-MCS), and the Functional Assessment of Chronic Illness Therapy – Facit (FACIT-F). For each outcome we assessed whether the treatment group was superior, equal or inferior to the placebo (PBO) group regarding the achievement of the MCID of the assessed PRO over time.

Results: After screening 557 references (after de-duplication), 16 RCTs were included, studying interleukin 17 inhibitors (IL17i) and tumor necrosis factor inhibitors (TNFi). In r-axSpA, the treatment group (for both TNFi and IL17i) reached the MCID for all the assessed PROs, except for a single study in which both the treatment and PBO groups reached the MCID for the SF36-PCS. For nr-axSpA the results were more heterogeneous (Table 1).

Conclusions: The assessment of PROs in RCT is scarce. The profile of PROs response seems to be different between r-axSpA and nr-axSpA patients; these differences must be further validated in future trials.

This study launches a call for action in PROs reporting standardisation.

TABLE I. PATIENTS REPORTED OUTCOMES IN AXIAL SPONDYLOARTHRITIS – RESULTS FROM SLR

Phenotype	PRO and MCID cut-off for improvement	Difference between MCID from baseline to RCT end in favour of treatment arm (against PBO)	Drug (reference)
r-AxSpA	BASFI (0-10) (≥7mm)	YES	ADA (Maksy 2008); SEC (Deodhar 2017); ADA (van der Heijde 2009)
	ASQoL (0-18) (≥1.8)	YES	SEC (Deodhar 2017); GOL (Deodhar 2017)
	EQ-5D (≥10.0)	YES	SEC (Deodhar 2017;Marzo-Ortega 2017); GOL (Reveille 2017)
	SF36-PCS (≥2.5)	YES	SEC (Deodhar 2017; Marzo-Ortega 2017)
	SF36-PCS (≥2.5)	YES#	GOL (van Heijde 2014;Reveille 2017)
	SF36-MCS (≥2.5)	YES	SEC (Deodhar 2017);GOL (van der Heijde 2004; Reveille 2017)
	FACIT-F (≥4)	YES	SEC (Kvien 2017;Kvien 2017)
nr-axSpA	BASFI (0-10) (≥7mm)	YES	ETN (Maksymowych 2016)
	BASFI (0-10) (≥7mm)	YES#	ADA (Haibel 2008);IFX (Sieper 2014)
	ASQoL (0-18) (≥1.8)	YES	CZP (Sieper 2015)
	EQ-5D (≥10.0)	YES#	ADA (Haibel 2008);IFX (Sieper 2014)
	EQ-5D (≥10.0)	NO	ETN (Dougados 2015)
	SF36-PCS (≥2.5)	YES	ADA (Sieper 2013)
	SF36-PCS (≥2.5)	YES#	ADA (Haibel 2008);ETN (Dougados 2015)
	SF36-MCS (≥2.5)	YES	ADA (Haibel 2008)
	SF36-MCS (≥2.5)	NO	ETN (Dougados 2015)

PRO: Patient reported outcome; RCT: Randomized control trial: ;PBO: Placebo; r-axSpA: radiographic axial spondyloarthritis; nr-axSpA: non-radiographic axial spondyloarthritis; BASFI: The Bath Ankylosing Spondylitis Functional Index; ASQoL: Ankylosing Spondylitis Quality of Life Questionnaire; EQ-5FD; the EuroQol-5D; SF36-PCS: Short Form 36 Health Survey physical component summary; SF-36-MCS: the Short Form 36 Health Survey mental component summary; FACIT-F: the Functional Assessment of Chronic Illness Therapy – Facit; ADA: Adalimumab; SEK: Secukinumab; GOL: Golimumab; ETN: Etanercept; IFX: Infliximab; CZP: Certolizumab pegol; YES: There was an improvement on treatment but not on PBO groups; YES# There was a MCID improvement in both treatment and PBO groups; NO: there was no improvement in neither treatment nor PBO group.

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P63 – PARADOXICAL ARTICULAR EFFECTS OF BIOLOGICAL THERAPY IN INFLAMMATORY BOWEL DISEASE: EXPERIENCE OF AN HOSPITAL CENTRE

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Background: Musculoskeletal manifestations are the most common extraintestinal symptoms in inflammatory bowel disease (IBD). Biological therapies, like anti-TNF alpha agents, have revolutionized these situations approach, been effective in both intestinal and articular involvement. However, paradoxical articular effects induced by anti-TNF have recently been recognized. Its prevalence and pathogenesis remain poorly described.

Objectives: Identify paradoxical articular manifestations (PAM) occurring in IBD patients under biological therapy and describe the different forms of clinical presentation and its course.

Methods: We conducted a retrospective review of IBD cases receiving biological therapy that developed PAM. They were referred to a rheumatology appointment. A paradoxical effect was defined as the new onset of mus-

TABLE I. CLINICAL CHARACTERISTICS OF THE CASE SERIES

	Case 1	Case 2	Case 3	Case 4	Case 5
Gender	F	M	F	F	F
Age at IBD diagnosis	46y	36y	22y	27y	42y
IBD subtype	CD	CD	CD	CD	UC
Disease location†	Terminal ileal	Ileocolonic	Terminal ileal	Terminal ileal	Proctitis
Disease behavior†	Stricturing	Stricturing	Inflammatory	Stricturing	-
Biologic therapy	Infliximab	Infliximab	Infliximab	Infliximab	Infliximab
Duration of anti-TNFα exposure until PAM	1y	4y	7y	10y	1.5y
Peripheral manifestation	Yes	Yes	Yes	Yes	Yes
Axial manifestation	Yes	No	No	No	No
Antibodies associated to rheumatic disease*	No	ANA	No	ANA Anti-dsDNA	ANA
Stop Anti-TNF α	Yes	Yes	Yes	Yes	Yes
Switch biologic therapy	Yes	Yes	Yes	No	Yes

F – female; M – male; y – years; †According to Montreal classification; *ANA-positive ≥1/100, anti-dsDNA >100 UI/mL

culoskeletal manifestations during antiTNF treatment, in individuals without previous rheumatic inflammatory disease. Immunological study and serum angiotensinconverting enzyme (ACE) measurement were performed when individually applicable.

Results: Five patients were included: 4 of the female gender, 4 with Crohn Disease and 1 with Ulcerative Colitis. The mean age (±SD) at IBD diagnosis was 34.6 years (±10). All patients were under infliximab at the time of PAM (in 2 cases, as second-line option after adalimumab failure). Two patients were treated concomitantly with salazopyrine, 1 with mesalazine and 1 with low dose prednisolone. The mean duration time (±SD) to PAM arising after anti-TNFα introduction was 4.7 years (±3.8). All patients presented inflammatory peripheral arthralgias, mainly of the hand's joints and 1 of them had associated night-time cervicalgia. In the whole sample, there was a close time relationship between the drug infusion and the development of arthralgias. In 3 patients a generalized skin rash occurred simultaneously and one of them presented also erythema nodosum in the lower limbs. A significant elevation of anti-double stranded DNA antibodies (202.5 UI/mL), with C3c consumption and antinuclear antibodies (ANA) positivity was observed in 1 case of drug-induced Lupus. Two individuals had elevated ANA, without other immunological markers (namely antihistone antibodies). ACE measurements were normal. In all patients, infliximab discontinuation was necessary and corticosteroid therapy was started with complete resolution of the rheumatic complaints. Concerning subsequent treatment for IBD, 4 patients initiated another biological therapy. Two patients were treated with ustekinumab and 1 with vedolizumab. Switch to adalimumab was tried in 1 patient, but due to arthralgias recurrence, it was also changed to ustekinumab, with clinical improvement.

Conclusions: In our sample, all the reported cases of PAM in IBD patients occurred with infliximab. PAM secondary to anti-TNF presented with a predominating pattern of peripheral joints involvement. In most cases, their resolution required discontinuation of the drug and switching to another biologic therapy with a different mechanism of action. Because classification of articular manifestations as not associated with IBD can be a challenge, the number of cases could be underestimated. More studies are greatly needed to better recognize and understand these paradoxical effects.

P64 – LUMBAR MULTIFIDUS MYOFASCIAL MECHANICAL PHYSICAL PROPERTIES IN HEALTHY ADULTS USING DIFFERENT DEVICES

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Background: Inflammation and aging induce pathological muscle changes characterized by early tissue water changes, and intramuscular fat accumulation in chronic stages. Muscle physical properties might affect disease progression and health-related quality of life. Tools to measure these properties are available but yet poorly studied.
Objective: To provide objective data on mechanical physical properties – stiffness, tone, and elasticity of the lumbar multifidus (LM), the primary stabilizing spinal muscle in healthy subjects.
Methods: This was a pilot study of 16 healthy subjects (aged 18–50 years; n=7 males). Subjects with previous spine surgery or disease were excluded; all participants had right side dominance. Muscle tone, elasticity and stiffness were measured using the MyotonPRO® device. Elasto Mean Pressure and Mean Speed were measured using a Shear Modulus Elastography device. Descriptive statistics are provided, males were compared to females.
Results: Mean (right and left side together) LM stiffness and tone were numerically higher (but not statistically significant: both, p=0.06) in males as compared to females. In the dominant side (right), males had significantly higher stiffness (males 297.5 vs females 211 N/m, p=0.02) and tone (male 15.1 vs 13.2 Hz, p=0.03). Elasticity, evaluated by MyotonPRO, and mean pressure and mean speed, evaluated by Elastography, did not differ between genders or side (see Table I).
Conclusions: Lumbar multifidus stiffness and tone is greater in males compared to females in dominant side. Gender and side differences might be important to consider when assessing effects of pathological conditions on muscle properties.

TABLE I. LUMBAR MULTIFIDUS MECHANICAL PROPERTIES MEASURED BY MyotonPRO AND SHEAR ELASTOGRAPHY

Mechanical Properties	Males (n=7)	Females (n=9)	*p*-value
MyotonPRO			
Stiffness (N/m), Median (IQR)			
Total*	291.3 (214-376.5)	204.1 (197.3-265.1)	0.06
Left	285 (201-344.5)	209.8 (187.3-280)	0.20
Right	297.5 (230-348)	211 (194.8-252.3)	**0.02**
Elasticity (logD), Median (IQR)			
Total*	1.1 (1-1.2)	1.1 (0.9-1.2)	0.49
Left	1.2 (0.9-1.2)	1 (0.9-1.2)	0.64
Right	1.2 (1-1.2)	1.1 (0.9-1.3)	0.69
Tone (Hz), Median (IQR)			
Total*	14.6 (13.6-17)	13.2 (12.7-14.5)	0.06
Left	14.5 (13.6-15.2)	12.9 (12.6-15.2)	0.13
Right	15.1 (13.7-16.9)	13.2 (12.8-14)	**0.03**
Shear Wave Elastrography			
Mean Pressure (kPa), Median (IQR)			
Left	12.8 (11.4-15.6)	15 (12.1-19.3)	0.12
Right	13.6 (13-14.7)	17.4 (12.6-18)	0.44
Mean Speed (m/s), Median (IQR)			
Left	2 (1.9-2.2)	2.2 (2.1-2.5)	0.12
Right	2.1 (2.1-2.2)	2.4 (2-2.4)	0.33

*Total = mean left-right

P65 – ANTI-*SACCHAROMYCES CEREVISIAE* ANTIBODIES IN SPONDYLARTHROPATHIES: PREVALENCE AND ASSOCIATIONS WITH DISEASE PHENOTYPE

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Background: It has been speculated that increased gut inflamation is of aetiopathogenic importance in the development of Spondylarthropathies (Spa). Serological markers, as anti-Saccharomyces cerevisiae antibodies (ASCA), which are rarely positive in healthy controls (<5%), possess clinical significance in inflamatory bowel disease (IBD) management.[1] Because Spa and IBD share similarities and even subclinical intestinal inflamation may be present in a high number of Spa patients, evaluation of this antibodies has gained increasing relevance.
Objectives: To investigate the status and frequency of ASCA in Spa patients and the association of these serological markers with the clinical profile.
Methods: We performed a retrospective study including SpA individuals treated with biologic therapy, followed at our Rheumatology department. Classification of SpA was based on the ASAS criteria. Medical records were obtained by consulting the national database (Reuma.pt). ASCA IgA and IgG levels were measured in the period time between 2016 and 2017 and determined by ELISA. The quantitative ASCA results were expressed in RU/ml and 20 was established as the cut-off point. X2 or Fisher tests were used for analysis of categorical variables and t-test or Mann-Whitney for continuous variables (SPSS 23.0). The adopted significance was of 0.05.
Results: We included 231 Spa patients, 117 of which were men (51%), with a mean age of 48.6±12.5 years. The median disease duration was 17 years [min:2;max: 53]. In total, 39% of the patients had isolated axial form (n=90), 10% isolated peripheral form (n=23) and 51% presented axial and peripheral involvement (n=118). Nine patients had associated IBD [7 cases with Crohn Disease (CD) and 2 with Ulcerative Colitis (UC)] and

66 patients presented concurrent psoriasis (28.6%). Ninety-three patients (40%) were HLA-B27+ and 59 (26%) presented history of uveitis (current or previous). ASCA IgA were positive in 14% of the whole sample (n=33; 14 patients with isolated axial form, 4 with isolated peripheral form and 15 with axial and peripheral form). ASCA IgG positivity was found in 5% of the Spa (n=12; 7 patients with isolated axial form, 1 with isolated peripheral form and 4 with both forms). The median ASCA IgA and IgG titers were 72 RU/ml [min:22;max:200] and 45.5 RU/ml [min:28;max:200], respectively. We found no statistically significant difference in the number of ASCA IgA or IgG-positive patients in CD vs UC (p= 0.722;p=0.583). Current age and at diagnosis, disease duration, gender, active or past smoking habits were similar between ASCA IgA or IgG-positive and negative groups. Also, disease phenotype including peripheral arthritis, axial involvement, psoriasis, HLA-B27 positivity and uveitis were unrelated to ASCA IgA and IgG status.

Conclusions: Our results showed that Spa patients presented an increase of ASCA IgA positivity, in agreement to previous data. No relationship of ASCA status was found with the demographic aspects or clinical presentation. In the future, our purpose is to investigate the relationship between antibody reactivity and endoscopic findings.

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P69 – CERTOLIZUMAB PEGOL MICE EQUIVALENT REDUCES INFLAMMATION AND BONE DAMAGE IN tmTNF TRANSGENIC MICE

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Backgound: Transmembrane (tm) tumor necrosis factor (TNF) mice is a transgenic line (TgA86) that spontaneously develops peripheral arthritis and spondylitis at 4 weeks of age, mimicking human spondyloarthritis (SpA). The aim of this work is to understand the effect of TNF blockade in this SpA-like phenotype mouse strain, focusing on histological inflammation and bone damage.

Methods: (tm)TNF (TgA86) mice were treated with a pegylated anti-TNF Fc fragment of monoclonal antibody, certolizumab pegol like mice equivalent (Ab501), 100mg/kg twice a week intraperitoneal, or with vehicle (phosphate buffer saline), for 12 weeks, in a therapeutic (10 weeks of age) and preventive (4 weeks of age) experimental settings. The macroscopic aspect of peripheral arthritis was assessed using the arthritic paw inflammatory score according to the European Guidelines for Animal Experimentation (0-4 in each paw, maximum of 16). A semi-quantitative score for the severity of histologic inflammation and bone damage, in the paws (infiltration, lining cells, erosions and global), and in the spine (inflammation, intervertebral disc destruction, cartilage damage, bone erosion and ectopic chondrocytes/chondrophyte) was applied to haematoxylin and eosin stained slides.

Results: 14 (tm)TNF (TgA86) mice (6M/8F) at 10 weeks of age (therapeutic group), and 15 (tm)TNF (TgA86) mice (10M/5F) at 4 weeks of age (preventive group), were treated with Ab501; and 30 (tm)TNF (TgA86) mice were exposed to the vehicle, for a period of 12 weeks. After 2 weeks of AB501 administration (both in the therapeutic and preventive strategies) (tm)TNF (TgA86) mice showed statistically significant lower macroscopic scores of arthritis of the paws in comparison with the vehicle treated group ($p<0.001$). On histology, a statistically significant reduction of the inflammatory infiltrate ($p\leq0.001$), lining cells layers ($p\leq0.05$), erosions ($p\leq0.05$) and global inflammatory score ($p\leq0.05$) of the paws, was observed in the two Ab501 treated groups, when compared to the vehicle group. In the spine, statistically significant reductions of the inflammation ($p\leq0.001$), intervertebral disc destruction ($p\leq0.05$), cartilage damage ($p\leq0.001$), bone erosion ($p\leq0.05$), and ectopic chondrocytes/chondrophyte scores ($p\leq0.001$) were also depicted in the Ab501 treated groups, in comparison with vehicle.

Conclusions: The certolizumab pegol mice equivalent reduced macroscopic and histologic inflammatory infiltrate in paws and spine of (tm)TNF (TgA86) mice. Bone damage, as defined by erosions in the paws and spine, and ectopic chondrocytes/chondrophyte formation in the spine, also significantly improved after treatment.

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P86 – EFFICACY OF 5-YEAR THERAPY WITH MYCOPHENOLATE MOFETIL IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Systemic Lupus Erythematosus (SLE) is a systemic chronic disease characterized by widespread inflammation and immunecomplex deposition in the involved tissues. Several organ systems can be affected. Effective therapy is required to control disease activity and to prevent chronic damage. Mycophenolate mofetil (MMF) is useful in the treatment of patients affected by SLE, especially in those with lupus nephritis (LN), with good efficacy and few side effects[1]. However, existing studies are limited and only few evaluated the use of MMF in SLE patients with different clinical manifestations.

Objectives: To evaluate the efficacy and side effects of MMF in SLE patients with LN receiving MMF, as maintenance treatment, for 5 years.

Patients and methods: We performed a retrospective study with 13 SLE patients treated with MMF as maintenance treatment for at least 5 years, followed in a Rheumatology unit. All of the patients had LN. Data were collected at the beginning of MMF, 1, 2 and 5 years. These data included sedimentation rate, serum creatinine, urea, complement 3 (C3), complement 4 (C4), 24h-urine protein (grams), urinary sediment, and anti dsDNA antibodies. Disease activity was measured according to the SLE Disease Activity Index (SLEDAI). Results: Our patients included 10 women and 3 men. The mean age was 44, the mean age of SLE onset was 31 and the mean disease duration was 13.5 (± 6.5). Among the 13 patients, 12 undergone renal biopsies. The histopathological results showed class IV nephritis in 7 patients (58.3%), class III in 4 patients (33.3%), and class III+V in one patient (8.3%). All of the patients were medicated with hydroxychloroquine and 2 with azatiophrine. For induction treatment, 8 patients received cyclophosphamide, 3 received MMF and one received cyclophosphamide and rituximab. The mean dosage of MMF was 2.1 grams/day (range 1-3). We found that the amount of daily urinary protein loss decreased from 1.9 [(IQR 25-75) 0.3-2.8)] to 0.3 [(IQR 25-75) 0.1-0.2)] at 1 year (p=0.03) and to 0.5 [(IQR 25-75) 0.1-0.8)] at 5 years (p=0.03). After 5 years of MMF treatment, the level of C3 increased significantly from 79.5 ± 37.2 to 115.3 ± 22.7 (p=0.008) and the level of C4 increased from 14.4 ± 10.7 to 19.2 ± 8.4 (p=0.03). The comparison before and after therapy revealed that the SLEDAI improved (p=0.03). There were no significant changes in sedimentation rate (p=0.05), serum creatinine values (p=0.58), urinary sediment (p=0.1) and anti dsDNA antibodies (p=0.2). Three patients had proteinuria relapse after reducing MMF dosage to half, which improved after returning to the previous dosage. There were no side effects observed.

Conclusions: LN remains one of the most severe manifestations of SLE patients. MMF seems to be an effective and safe option in these patients. Despite data regarding its long-term efficacy, only few observational studies evaluated the use of MMF in clinical practice[2]. In spite of the reduced number of patients, our study showed that the measured outcomes, namely 24h-urine protein, complement and SLEDAI improved after one year of maintenance treatment, which is sustained at 5 year assessment, with no relevant side effects.

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P88 – THE EFFECT OF BIOLOGIC DISEASE-MODIFYING ANTIRHEUMATIC DRUGS IN RADIOGRAPHIC PROGRESSION IN AXIAL SPONDYLOARTHRITIS (AXSPA): A SYSTEMATIC LITERATURE REVIEW

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Introduction: Radiographic progression involving the axial skeleton has been considered an important outcome in axial Spondyloarthritis (axSpA) and a relevant determinant of incapacity. A significant proportion of patients with non-radiographic axSpA (nr-axSpA) never develop radiographic structural damage, while others evolve from nr-axSpA to radiographic axSpA (r-axSpA).

Objective: In this review we aim to assess the rate of radiographic progression and MRI inflammation resolution/reduction in axSpA patients, treated with different biologic disease-modifying antirheumatic drugs (bDMARD), through a systematic literature review (SLR).

Methods: A SLR was performed using the MEDLINE database (August 17 2017) with the filters "published in the last 10 years" and "humans". The PICO (P, population; I, intervention; C, comparison; O, outcome) concept was used to perform the analysis according to: Patients - Adults (>18 years old) with r-axSpA or nr-axSpA; Intervention - Any bDMARD regardless of formulation or duration; Comparison - Placebo and/or any different drug; Outcomes - for radiographic progression, the modified Stoke Ankylosing Spondylitis

TABLE I. EVIDENCE ABOUT RADIOGRAPHIC PROGRESSION IN RADIOGRAPHIC SCORES AND ABOUT MRI EVALUATION

Title	Study design	Outcome	Results
Van der heijde, D. et al Arthritis & Rheumatism, 2008	Extension; ETN (257) *vs* OASIS (175); 96 w	Mean change in mSASSS	No statistically significant differences between the groups
Van der heijde, D. et al Arthritis & Rheumatism, 2008	Extension; IFX (201) *vs* OASIS (192); 96 w	Mean change in mSASSS	No statistically significant differences between the groups
Van der heijde, D. et al Arthritis Research & Therapy, 2009	Extension; ADA (307) *vs* OASIS (169); 96 w	Mean change in mSASSS	No statistically significant differences between the groups
Braun,J. et al Ann Rheum Dis, 2014	Extension; GOL (50 e 100 mg) *vs* PBO; 208 w	Mean change in mSASSS at w104 and w208	The radiographic progression rate remained stable at the 2nd and 4th year of treatment.
Braun, J. et al Ann Rheum Dis, 2017	Extension ; SEC 75 (124), SEC 150mg (125) *vs* PBO (122); 104 w	Mean change in mSASSS	At week 104,> 80% of the patients had no radiographic progression (defined as mSASSS<2).
Dougados, M et al, 2017	Extension; ETN (164) *vs* DESIR (197); 104 w	mNY radiographic sacroiliitis	The rate of radiographic progression in patients with nr-axSpA is slow. The lowest rate is observed in ETN group.
Pedersen, S. et al Arthritis & Rheumatology, 2016	Extension; ADA (25) *vs* DANISH (27); 48 w	sPARCC	Significant changes occurred after 12 weeks of ADA
Braun, J. et al RMD Open, 2017	Extension; r-axSpA and nr-axSpA; CZP (109) *vs* PBO (54); 96 w	SPARCC	CZP reduces spine and SI inflammation in patients with r-axSpA and nr-axSpA, with improvement maintained up to 96 weeks.
Maksymowych, W. et al Ann Rheum Dis, 2016	Extension; nr-axSpA ETN *vs* PBO; 48 w	SPARCC ASspiMRI-a	Patients with active nr-axSpA-have improved MRI outcomes from week 12 to 48.
Braun, J. et al Ann Rheum Dis, 2012	Extension; GOL 50mg (138); GOL 100mg (140); PBO (78); 104 w	ASspiMRI-a	GOL reduces inflammation in MRI and this improvement is sustained up to week 104.

PBO: Placebo; r-axSpA: radiographic axial spondyloarthritis; nr-axSpA: non-radiographic axial spondyloarthritis; ADA: Adalimumab; SEC: Secukinumab; GOL: Golimumab; ETN: Etanercept; IFX: Infliximab; CZP: Certolizumab pegol; OASIS: cohort OASIS

Spinal Score (mSASSS) and radiographic sacroiliitis according to the New York criteria were selected; for inflammation on MRI, the active sacroiliitis (ASAS/Outcome Measures in Rheumatology (OMERACT) definition, and the Spondyloarthritis Research Consortium of Canada (SPARCC)-score (sacroiliac joints and spine), were used. We evaluated the effect of the treatment on radiographic progression or MRI inflammation.

Results: After screening 557 references (after de-duplication), 10 randomised controlled trials (RCTs) fulfilled the criteria, including Interleukin 17 inhibitors (IL17i) and Tumor Necrosis Factor inhibitors (TNFi) studies. There are no cut-offs or quantitative values to define mean change for these outcomes. In the group where radiographic score outcomes were evaluated, TNFi seem not to alter radiographic progression in comparison with a reference cohort; however recent studies have shown that TNFi might induce no radiographic progression in comparison with placebo groups and that secukinumab may even delay the radiographic progression (table 1). About MRI outcomes, it appears that TNFi can reduce the inflammation evaluated on MRI (table 1), in spite of the lack of definition on cut-offs.

Conclusions: The assessment of radiographic progression outcomes in RCTs is limited, mainly due to lack of homogeneity. The available data suggest a low rate of radiographic progression and resolution of MRI detectable inflammation with different bDMARDs, but these results should be confirmed in longer controlled studies using standardized criteria for radiographic/ /MRI progression.

P95 – INDIVIDUAL RESPONDER ANALYSIS OF THE EFFECTIVENESS OF MANUAL THERAPY AND EXERCISE VERSUS USUAL CARE IN PATIENTS WITH CHRONIC NONSPECIFIC NECK PAIN: PRELIMINARY RESULTS OF A RANDOMIZED CONTROLLED TRIAL

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Background: Chronic nonspecific neck pain (CNP) is a common health problem worldwide. The physiotherapy approach is the second line of treatment and a large variety of modalities are frequently used. However, the mean effect of interventions is small and it is unknown if the patients achieving clinically important change. Individual responder analyses provide researchers with complementary information about the patterns of recovery and the proportion of patients achieving clinically important treatment responses.

Objectives: The aim of this study was to compare the effectiveness of a combined intervention of manual therapy and exercise (MET) versus usual care (UC), on pain intensity and global perceived recovery.

Methods: A randomised controlled trial was conducted on 62 participants with CNP lasting ≥3 months, assigned to MET and UC groups. Participants in the MET group (n=31) received 12 sessions of passive articular mobilisation and exercise (coordination, strength, endurance), whereas the UC group (n=31) received 15 sessions of usual physiotherapy care, combining electrotherapy, massage and stretching exercises. Patients were assessed at baseline, and then at 3 and 6 weeks (final of intervention). The Minimal Clinically Important Difference (MCID) in treatment response for pain intensity was defined as a decrease of >2 point in the Numeric Rating Scale of Pain compared to the baseline score and for global perceived recovery a value of ≥5 in Patient's Global Impression of Change Scale.

Results: A significant difference between-groups was observed at 6 weeks on pain intensity (p≤0.001), favouring the MET group. No significant differences were found between-groups in pain intensity at the baseline (p>≥0.626) and at 3 weeks (p≥0.777). At patient-level response, in the MET group, 58% of the participants experienced an MCID in the first 3 weeks of treatment and this proportion was increased to 94% at 6 weeks on pain intensity, and rose from 68% to 81% on global perceived recovery. In the UC group the proportion of patients that experienced an MCID rose from 55% to 61% on pain intensity, at 3 and 6 weeks, respectively, and 68% in global perceived recovery in both moments. The patients in MET group were 10% (RR=1,1) and 50% (RR=1,5) more likely to achieve the MCID on pain intensity than the UC group, at 3 and 6 weeks, respectively. In global perceived recovery, the MET group were 20% (RR=1,2) more likely to achieve a MCID response at the 6 weeks. No differences were found in chances of recovery at 3 weeks.

Conclusions: These findings suggest that participants

of MET group had a pattern of recovery over 6 weeks and achieved a higher response rate to treatment, on pain intensity and a better global perceived recovery, compared to those receiving UC.

P96 – THE SOCIAL PATTERN OF SARCOPENIA IN PORTUGAL

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Objective: Sarcopenia is one of the least studied conditions associated with disability and lower quality of life in the elderly. The main objective of this study is to identify the social pattern (gender, age, education and income gradients) of Sarcopenia in Portugal.

Material and Methods: Using the SHARE (Survey on Age, Health and Retirement in Europe), wave 3 (2011) and wave 6 (2015) databases, we conducted a logistic regression analysis of 2387 observations, including demographic controls, allowing to establish a socio-economic profile of Sarcopenia in the Portuguese population. The criteria for the likelihood of having Sarcopenia were based on muscle strength, assessed with handgrip dynamometers. An harmonised protocol across countries and waves was used. The thresholds of European Working Group on Sarcopenia in Older People (EWGSOP, 2010) - 20 kg for females and 30 kg for males - were considered.

Results: There are no significant overall differences between 2011 and 2015. Age, gender and education are the principal determinants of Sarcopenia. There are considerable age impacts and gender differences in the probability of Sarcopenia, with women being more likely to present it. On the other hand, there is a strong education gradient benefit: 10 years more of education lead to a Sarcopenia probability percentage points equivalent-in-age decrease of 7.5 years. We find no income gradient associate with the presence of Sarcopenia. Other individual characteristics included in the study, such as body mass index, smoking status and living alone, are not associated with the presence of Sarcopenia.

Conclusions: The results contribute to the elaboration of a social profile of Sarcopenia in Portugal. Preventive interventions should focus on particular groups, based on low education levels, and particularly in women. Future research should focus on establishing early detection tools and innovative therapeutic approaches.

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P97 – THE TEMPORAL PATTERN OF SARCOPENIA IN 22 EUROPEAN COUNTRIES

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Objective: Sarcopenia is an important but under-recognized health challenge in the world today. The main objective of this study is to describe the evolution of Sarcopenia in Europe (2004-2015).
Material and Methods: Data from the SHARE (Survey on Age, Health and Retirement in Europe) was used. The criteria for the presence of Sarcopenia were based on muscle strength, assessed by handgrip dynamometers. An harmonised protocol across countries and waves was established and the thresholds of European Working Group on Sarcopenia in Older People (EWGSOP, 2010) - 20 kg for females and 30 kg for males - were considered. We used the 6 waves of SHARE, from 2004 to 2015, for an unbalanced panel of 22 European countries. A probit regression analysis was computed with 190903 observations, including demographic controls and country fixed effects.
Results: The results show a decreasing trend in Sarcopenia, mainly due to evolution in women's scores. The main determinants of Sarcopenia are age and gender (female), followed by living alone, while years of education and income have a protective effect.

Country differences are large, with Southern Europe countries, particularly Mediterranean countries, having significantly higher levels of Sarcopenia.
Conclusions: There is a trend for Sarcopenia reduction, with social factors playing an important role in this process. Southern European countries seem to be the most affected. Genetic and environmental determinants should be assessed in future studies to allow a comprehensive understanding and an effective intervention.

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P98 – CLINICAL OUTCOMES OF THE FIRST 100 PATIENTS EVALUATED AT A MULTIDISCIPLINARY SJÖGREN'S SYNDROME CLINIC

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Introduction: Primary Sjögren's syndrome (pSS) is an inflammatory rheumatic disease that can affect several organ systems, most frequently the ocular, oral and musculoskeletal domains. Multidisciplinary care is thus crucial in the optimal management of SS patients. A multidisciplinary SS (MDSS) clinic was recently created at our centre aiming to improve patient care and facilitate clinical research.
Objectives: To report the clinical outcomes of the first 100 patients evaluated at the MDSS clinic.
Methods: All patients had a full clinical evaluation, including disease-related questionnaires, specialized oral/ocular assessment, salivary gland (SG) biopsy and

ultrasound, tear and salivary flow and ocular staining scores. We reviewed the major clinical outcomes and compared the results in patients with pSS and other diagnoses

Results: One-hundred patients (97 women, mean age 57±13 years) with sicca symptoms underwent complete multidisciplinary evaluation. The referrals were most frequently from Rheumatology (n=87), but also from Stomatology (n=9) and Internal Medicine (n=4). Most patients were diagnosed with pSS (n=62), followed by non-Sjögren sicca syndrome (nSSS, n=24), secondary SS (sSS, n=9) and undifferentiated connective tissue disease (n=5). Forty-five pSS patients (73%) fulfilled American European Consensus Group classification criteria. Subjective complaints assessed by the EULAR Sjögren Syndrome Patient Reported Index (ESSPRI), the EULAR Sicca Score (ESS), the Xerostomia Inventory (XI) and Profile in Fatigue and Dryness in SS Index (PROFAD-SSI) did not differ between pSS and other patients. However, objective dryness measures such as non-stimulated salivary flow and Clinical oral dryness score (CODS) were significantly associated with pSS. The former was reduced in pSS patients compared to patients with other diagnosis (p=0.017) and decreased sialometry (<0.1ml/min) was seen in 49% of pSS patients (p=0.003). CODS was numerically higher in pSS patients and a greater proportion had a CODS ≥4 indicating moderate-to-severe oral dryness (p=0.002). Schirmer's I Test was positive in 60% of pSS patients but also in 52% of nSSS patients and was not associated with diagnosis. Positive ocular surface staining scores (according to van Bijsterveld and Ocular Staining Score definitions) were not significantly different across patient groups, although a positive van Bijsterveld score (≥4) tended to associate with pSS (p=0.086). Minor SG biopsy was performed/reviewed in 84 patients and Chisholm-Mason histological score was associated with pSS (p<0.001), with focal sialadenitis being present in 28/55 pSS patients, whereas nSSS patients all had normal (n=10) or grade 1 (n=8) biopsies. SG ultrasound (US) was performed in 81 patients and was associated with diagnosis (p=0.049). Grade 2 changes or greater, according the classification by Cornec et al, were associated with pSS (58% of patients, p=0.011). Characterization of pSS patients is summarized in Table 1. Most patients had extra-glandular involvement and 28% had moderately active disease defined by EULAR Sjögren Syndrome Disease Activity Index (ESSDAI) ≥5. Two pSS had history of non-Hodgkin lymphoma (3.2%).

TABLE I. CHARACTERIZATION OF PSS PATIENTS OBSERVED AT THE MDSS CLINIC

	N=62
Age, years	60 ± 11
Female, n(%)	61 (98)
Disease duration, years	6.6 ± 7.9
ANA+, n(%)	51 (82)
Anti-SSA/SSB	42 (68) / 27 (44)
RF+	27 (44)
ESSDAI	3.4 ± 3.5 (0-13)
ESSDAI ≥ 5, n(%)	17 (28)
SSDDI	2.1 ± 1.5
Multi-organ involvement, n(%)	
- Glandular	28 (45)
- Constitutional	24 (39)
- Lymphadenopatic	15 (25)
- Articular	40 (66)
- Cutaneous	21 (35)
- Respiratory	10 (17)
- Renal	3 (5)
- Muscular	3 (5)
- Peripheral Nervous System	3 (5)
- Central Nervous System	0
- Hematological	24 (39)
- Biological	37 (61)
- Hepato-biliary	4 (7)
- Other	12 (21)

ANA, antinuclear antibodies; ESSDAI, EULAR Sjögren's syndrome disease activity; RF, rheumatoid factor; SSDDI, Sjögren's syndrome disease damage index.

Conclusions: Multidisciplinary evaluation was important in the assessment of patients with similar sicca complaints and in the management of ocular/oral/ /systemic involvement. Objective measurements and specialized complementary exams greatly contribute to establishing or confirming the diagnosis of pSS. A significant proportion of pSS patients had active multi-systemic disease.

P99 – A FRAGILE BRIDGE: AN EVALUATION OF PRIMARY CARE REFERRAL LETTERS TO RHEUMATOLOGY CONSULTATION

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Background: Rheumatic and musculoskeletal diseases are among the most common chronic pathologies in Portugal and one of the main reasons for consultation in primary health care. With the emergence of new drugs modifying the course of rheumatic diseases, the

timely identification and referral of inflammatory pathology is very important. However, rheumatology evaluation is often delayed, which is partly due to the difficulty of the family physician in interpreting the clinical manifestations of rheumatic conditions and also due to an ineffective communication between specialties.

Aim: Evaluate if the referral letters from family physicians include the clinical information topics recommended by the "Rede Nacional de Especialidade Hospitalar e de Referenciação" (RNEHR); Assess if the provenience from the different primary care units - Family Health Units (USF), Personalized Healthcare Units (UCSP) and Santa Casa Health Units (USSC) - is associated with different levels of information in the referrals.

Methods: Observational study based on the retrospective collection of data from the referral letters attached to the screening consultations in "Hospital de Santa Maria", between January and March 2017. We collected demographic data and information regarding the clinical information topics recommended by the RNEHR. We evaluated the proportion of letters that contained information regarding each topic and the percentage of topics that was covered in each letter. The difference between groups was evaluated by ANOVA and multivariate regression models. Significance level was set at 0.05.

Results: In total, 432 referral letters were screened corresponding to 432 patients with an average age of 54.7 ± 14.4 years, with a female predominance of 81.6%. Referrals came mainly from USF (57.2%), followed by UCSP (39%) and USSC (3.8%). Regarding the recommended clinical topics mentioned in the letters: Pattern of joint involvement was mentioned in 55.3%, duration of symptoms in 23.9%, rhythm of pain in 19.1% and morning stiffness duration in 9.2%; functional status information was given in 18.2%, other organs/systems involvement was mentioned in 13.5% and constitutional symptoms in 6.6%; relevant personal medical history was missing in 47% and previous treatments and the respective outcome were mentioned in 34.3%; data from physical examination was reported in 14.2%, contrasting with exams results that were reported in 63.1% of the referrals. Finally, 56% didn't provide a suspected diagnosis and 39.2% didn't explain the purpose for rheumatology consultation. The letters covered an average of 31.9 ± 14 % of the 13 topics recommended for the referral. USF referrals had significantly more information than UCSP referrals (33.9 vs 28.9% p=0.002), independent of the patients' age. As a result of the information provided in the referral letters, 68.6% of the referrals were assessed as normal, 24.3% as urgent, and 0.7% as very urgent. Referrals considered very urgent had significantly more information than the ones considered urgent or normal (58% vs 33.4% vs 30.8 %, p<0.001).

Conclusion: Most referral letters lack key topics of the medical history and none covered all the topics recommended for the referral. USF referrals have more information than UCSP's. The lack of information has a negative impact in the communication process indispensable for cooperation between primary and secondary care, hindering the chances for an appropriate triage. Deeming this as a problem and ensuring its resolution is pivotal to create an adequate patient-centred shared-care.

P102 – EFFECTS OF AB501 (CERTOLIZUMAB MICE EQUIVALENT) IN ARTHRITIS BONE LOSS

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Rheumatoid arthritis (RA) causes immune mediated local and systemic bone damage.

Objectives: The main goal of this work was to analyze, how treatment intervention with Ab501 (certolizumab mice equivalent) prevents the disturbances on bone structure induced by arthritis.

Methods: Thirty one DBA/1 collagen-induced arthritis (CIA) mice were randomly housed in experimental groups, as follows: arthritic untreated (N=10), preventive intervention (ab501 administered 2 days before arthritis induction) (N=10) and treatment intervention (ab501 administered upon arthritis onset) (N=11). A non-induced group (N=5) was used as a control. Mice were monitored during 70 days after disease induction for the inflammatory score, ankle perimeter and body weight. After 70 days of disease progression mice were sacrificed and bone samples were collected for histo-

logy and micro-computed tomography (μCT). In addition, blood samples were also collected for bone turnover markers quantification.

Results: Results showed that Ab501 administration was able to control and abrogate disease development both in preventive and early therapeutic intervention. Results from μCT revealed that ab501 was only able to abrogate bone deterioration in preventive administration.

Conclusion: Ab501 preventive administration was able to control inflammation and block the degradative effects of arthritis on trabecular bone structure.

P103 – MULTI-COUNTRY, CROSS-SECTIONAL STUDY TO DETERMINE PATIENT-SPECIFIC AND GENERAL BELIEFS TOWARD MEDICATION AND THEIR TREATMENT ADHERENCE TO SELECTED SYSTEMIC THERAPIES IN SIX CHRONIC IMMUNE-MEDIATED INFLAMMATORY DISEASES (ALIGN): OVERALL RESULTS AND PRELIMIN

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Adherence to immune-mediated inflammatory diseases (IMIDs) treatment is essential to optimize treatment outcomes. In order to improve patient's adherence, it is crucial to understand the balance between patient's beliefs (about the need for medication) and potential side effect's concerns. The objective of ALIGN study was to describe beliefs and concerns of patients with chronic IMIDs, towards their systemic medication (tumor necrosis factor inhibitors [TNFis] and/or conventional treatment). Here we report results of ALIGN study for the overall population and Portuguese subpopulation.

Methods: Cross-sectional, multi-country, non-interventional study, including adults patients with an IMID: rheumatoid arthritis, ankylosing spondylitis, psoriatic arthritis, Crohn's disease, ulcerative colitis and psoriasis receiving systemic medications. Primary outcomes were assessed by the "Beliefs Medication Questionnaire" (BMQ)[1]. Secondary outcomes were assessed by the "Four-item Morisky Medication Adherence Scale" (MMAS-4)[2].

Results: The overall population included a total of 7 197 patients from 33 countries (around 500 sites). Out of these patients, 56.8% were recruited from Western Europe & Canada, 19.8% from Eastern Europe & Middle East, 12.8% from Latin America, and 10.6% from the Asia-Pacific region. The Portuguese subpopulation included 138 patients.

Across all indications and treatment groups, lower mean scores were reported for "BMQ Specific Concerns" compared to "BMQ Specific Necessity" (overall population: 2.6-3.0 versus 3.5-4.2). Combining the BMQ Specific Necessity and Concerns scores revealed that most patients were either "ambivalent" (high need and high concerns) or "accepting" (high need and low concern) towards their medication, both in the overall population (ambivalent: 37.1%-41.2%; accepting: 47.3%-55.5%) and in the Portuguese subpopulation (ambivalent: 34.4%-56.8%; accepting: 36.4%-63.8%).

In the overall population, among highly adherent patients (MMAS-4 score =4), the percentage of patients who were "accepting" towards their medication (regardless of the treatment), was significantly ($p<0.0001$) higher than the percentage of those who were "ambivalent". The percentage of highly adherent patients was higher for patients treated with TNFis than for those treated with conventional treatment (overall population: 67.7%–73.1% versus 49.6%–53.6%; Portugal: 71.2%-71.9% versus 47.8%-54.8%).

Conclusion: The largest percentage of patients was either "accepting" or "ambivalent" towards their current medication for IMIDs. The high percentage of "ambivalent" patients suggests the need for more effective

interventions for addressing concerns regarding the prescribed medication. High adherence to treatment was more prevalent in TNFis patients (either in monotherapy or in combination with conventional therapy).

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P105 – FOLLICULAR CD8 T CELLS: CORRELATION WITH CIRCULATING B CELLS AND DISEASE ACTIVITY IN PRIMARY SJÖGREN'S SYNDROME

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Background: The recently described follicular CD8 T cells (Tcf) were found to be expanded in macaques infected with Simian immunodeficiency virus (SIV) and in HIV patients, denoting their possible role in antiviral responses. Moreover, Tcf are supposed to contribute for the survival and differentiation of B cells and the consequent production of IgG. Viral infections have been proposed as possible etiological agents for primary Sjögren's Syndrome (pSS), in which typical alterations in the B cell compartment are observed. Our objective was to characterize circulating Tcf cells in pSS patients and their correlation with circulating B cells and with disease activity.

Methods: Fifty-seven patients diagnosed with pSS according to the AECG criteria, and 24 healthy controls (HC) were enrolled for this study. Peripheral blood from patients and controls was analyzed by 4-color flow cytometry, in a BD FACS Calibur. CD3, CD4, CD8, CXCR5, CCR7 were used for the characterization of Tcf cells, identified as the CXCR5+CCR7- events within CD4-(CD8+) T cells. The expression of IL21 was also assessed in CD8 T cells after cell stimulation with PMA+ionomycin. B cells were analyzed using CD19, CD27, CD38, IgD, and classified as naïve, unswitched and switched memory and plasmablasts. Data analysis was performed with BD CellQuestPro and Infinicyt 2.0™. GraphPadPrism 6.0 was used for statistical analysis with p-value<0.05.

Results: Compared to HC, SS patients presented similar percentages and absolute counts of CXCR5+CCR7--Tcf cells, while CCR7Hi/+CXCR5- CD8 T cells were significantly decreased (percentages, $p \leq 0.020$; absolute counts, $p \leq 0.014$). After stimulation, higher percentages of IL21+ Tcf cells were present in pSS patients when compared to HC (p=0.029). As for B cells, an increase in the naïve/memory ratio was observed in pSS patients (p=0.013), with augmented naïve (p=0.028) and diminished unswitched memory B cells (p=0.008). The naïve/memory B cell ratio showed a positive correlation with IL21+ Tcf cells (r=0.323; p=0.014). Considering the evaluation of disease activity using ESSDAI, a tendency for positive correlations was observed regarding Tcf subsets. Focusing the analysis in patients with longer disease duration (>10years) we found significant positive correlations between ESSDAI scores and the levels of CXCR5+CCR7- Tcf cells (r=0.429; p=0.029) and IL21+ Tcf cells (r=0.383; p=0.037). No associations were observed between Tcf cells and age nor disease duration. Interestingly, the B cell profile also presented more plasmablasts in pSS patients with >10 years of disease (p=0.045) than in HC.

Conclusions: The decreased numbers of circulating CCR7Hi/+CXCR5- naïve CD8 T cells observed in pSS patients point towards a CD8 T cell compartment more prone to differentiation. In fact, although the numbers of CXCR5+CCR7- Tcf cells may not be increased in these patients, the capacity of CD8 T cells to differentiate into IL21-secreting cells is promoted in pSS. Moreover, this capacity is correlated with the distinctive B-cell profile of patients, which supports an IL21-driven B cell response, with plasma cell differentiation, for which CD8 T cells also contribute. Additionally, the association of Tcf cells and ESSDAI scores suggests a role for these cells in abnormal humoral responses, contributing to disease severity and progression. However, these observations require further evaluation, to elucidate the role of viral triggers in the development of this pathway of CD8 T cell differentiation in pSS pa-

tients, in both systemic and specific organ-driven approaches.

P106 – LONG-TERM SAFETY OF ADALIMUMAB (HUMIRA) IN ADULT PATIENTS FROM GLOBAL CLINICAL TRIALS ACROSS MULTIPLE INDICATIONS: AN UPDATED ANALYSIS IN 29,987 PATIENTS REPRESENTING 56,951 PATIENT-YEARS

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Background: Adalimumab is an anti–tumor necrosis factor-α (TNF-α) agent indicated for the treatment of immune-mediated diseases. The long-term safety of adalimumab was previously reported in 23,458 patients representing up to 12 years of clinical trial exposure in rheumatoid arthritis (RA), juvenile idiopathic arthritis, ankylosing spondylitis (AS), psoriatic arthritis (PsA), plaque psoriasis (Ps), and Crohn's disease (CD). Here we report an updated analysis examining the long-term safety of adalimumab in adult patients with RA, AS, non-radiographic axial spondyloarthritis (nr-axSpA), peripheral SpA (pSpA), PsA, Ps, hidradenitis suppurativa (HS), CD, ulcerative colitis (UC), and non-infectious uveitis (UV).

Methods: Safety data from 78 clinical trials of adalimumab (RA, 33; AS, 5; nr-axSpA, 2; pSpA, 1; PsA, 3; Ps, 13; HS, 3; CD, 11; UC, 4; UV, 2; other, 1) were included in these analyses, including randomized controlled, open-label, and long-term extension studies conducted in Europe, North America, South America, Asia, Australia, New Zealand, and South Africa through December 31, 2016. Adalimumab postmarketing surveillance data were not included in this analysis. Safety assessments included all adverse events (AEs) and serious AEs (SAEs) that occurred after the first adalimumab study dose and up to 70 days (5 half-lives) after the last study dose.

Results: This analysis included 29,987 patients, representing 56,951 patient-years of exposure. The majority of adalimumab exposure was in RA studies (37,106PYs). The most frequently reported SAE of interest was infection (highest incidences in CD: 6.9, UV: 4.1, RA: 3.9, and UC: 3.5). The overall standardized mortality ratio was 0.65, 95% CI [0.5, 0.74]. For most of the adalimumab populations (AS, PsA, Ps, UC, CD, and RA), the observed number of deaths was below what would be expected in an age- and sex adjusted population. For HS, nr-axSpA, pSpA, and UV studies, the small size of these trials precluded accurate assessment of the standardized mortality ratio, and the 95% CIs all included 1.0.

Conclusion: This analysis of data from clinical trials of adalimumab demonstrated an overall safety profile consistent with previous findings and with the TNF inhibitor class. No new safety signals or tolerability issues with adalimumab treatment were identified and, for most indications, the mortality rate was below what would be expected in an age- and sex adjusted population. Efficacy and safety data continue to support the well-established benefits of adalimumab for the approved indications.

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P107 – ADAPTATION AND VALIDATION OF THE RHEUMATOID ARTHRITIS QUALITY OF LIFE (RAQOL) SCALE FOR PORTUGAL

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Background: Rheumatoid Arthritis (RA) is a chronic inflammatory disease that has a major impact on patients quality of life. The Rheumatoid Arthritis Quality of Life Questionnaire (RAQoL) is a patient-centric outcome measure, specific to RA. The measure has not previously been available for use with Portuguese RA patients.
Objectives: To produce a Portuguese version of the RAQoL that is acceptable to Portuguese patients and demonstrates sound psychometric properties.
Methods: The dual panel methodology was used to translate the UK RAQoL into Portuguese. This involved conducting a bilingual panel (providing the initial translation into Portuguese) followed by a lay panel (where items are assessed for comprehension and acceptability). Cognitive debriefing interviews were conducted with Portuguese RA patients to determine the face and content validity of the translated scale. A large-scale postal validation survey was carried out to establish the psychometric properties of the Portuguese RAQoL. The measure was administered on two occasions to RA patients, alongside a comparator instrument - the Nottingham Health Profile (NHP). Internal consistency was assessed using Cronbach's alpha coefficient. Spearman's Rank correlation coefficient was employed to assess test-retest reliability. Convergent validity was tested by correlating RAQoL scores with those on the NHP sections. Known group validity was assessed using non-parametric tests for independent samples. This involved determining the ability of the RAQoL to distinguish between patients that differed according to their self-perceived severity of RA and general health.
Results: The translation panels produced a Portuguese version of the RAQoL that was easily understood and considered natural b native speakers. Interviewees considered the new language version to be relevant and appropriate. One hundred and seventy-eight RA patients (82% female) took part in the postal validation survey with a mean age of 56.6 (range 25 to 79) years. The Portuguese RAQoL demonstrated excellent internal consistency (Cronbach's $\alpha = 0.95$) and test-retest reliability ($r = 0.92$), indicating that the measure produces low levels of random measurement error. RAQoL scores correlated most strongly with scores on the NHP Physical mobility scale ($r = 0.77$) and showed moderately strong correlations with the Emotional reactions, Pain and Energy level section scores. Non-parametric tests for independent samples demonstrated significant differences in RAQoL scores between patients who differed according to their self-perceived RA severity ($p < 0.001$) and general health ($p < 0.001$).
Conclusions: The Portuguese version of the RAQoL was found to be a comprehensive, reliable and valid questionnaire. The new language version is recommended for use in routine clinical practice and for research purposes, to assess the quality of life in Portuguese RA patients.

P109 – IS THE PATIENT-ACCEPTABLE STATUS SIMILAR ACROSS 7 DOMAINS OF HEALTH IN PATIENTS WITH RHEUMATOID ARTHRITIS (RA)? POST-HOC ANALYSES FROM THE VALIDATION IN 549 PATIENTS OF THE RHEUMATOID ARTHRITIS IMPACT OF DISEASE (RAID) SCORE

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Background: Patient Acceptable Symptom State (PASS) is the highest acceptable level of symptoms which patients consider satisfactory. In the Rheumatoid Arthritis Impact Disease (RAID) questionnaire, seven domains of health of importance for RA patients are collected 1). It is possible that levels judged acceptable by patients vary according to the domain of health.
Objectives: To explore the relationship between seven RA domains of health (collected in the RAID) and PASS, and to define their PASS cut-off values.
Methods: This is a post-hoc analysis of the cross-sectional study for RAID validation. Each of 7 domains (Table1) was evaluated through a Numeric Rating Scale from 0 (best) to 10 (worst). PASS was calculated using

TABLE I. THRESHOLDS FOR ACCEPTABLE STATUS FOR EACH RAID DOMAIN

Domain	Cut-off	AUC	Sensitivity (%)	Specificity (%)
Pain	≤5	0.84	80.5	72.9
Function	≤4	0.82	69.7	80.8
Fatigue	≤5	0.75	74.9	62.2
Sleep	≤3	0.70	64.2	67.4
Emotional Well-Being	≤4	0.76	75.0	64.5
Physical Well Being	≤4	0.81	69.3	77.1
Coping	≤3	0.79	65.5	77.1

AUC: Area Under the Curve, and sensitivity and specificity versus PASS

the anchored method based on patients' perspective. Disease activity was assessed based on the DAS28-3 values (joint counts and ESR). Comparison of patients in PASS or not was assessed through Mann-Whitney or Chi-square test, as adequate. Variables with p<0.05 were included in multivariate logistic regression (Forward Conditional) analysis. The thresholds of PASS for each domain was calculated using the receiver-operating characteristic (ROC) curve and the optimal cut-off was determined by Youden Index. 75th percentile analyses were also performed (not shown).

Results: 549 patients [78% female, mean age 56.7 years, mean disease duration 12.3 years, mean (SD) DAS 28-3v 2.7(1.2)] were analyzed. The majority of patients (60.7%) considered themselves to be in PASS. Disease activity (DAS 28-3v mean 2.3 vs 3.4, p<0.01) and all seven domains of health were significantly lower in patients in PASS versus not in PASS (p<0.001). In multivariate analyses, lower disease activity (OR 0.72; 95%IC 0.56-0.92), lower pain (OR 0.75; 95% IC:0.65-0.86) and better physical well-being (OR 0.74 95%; IC:0.65-0.85) were associated with being in PASS. The cut-off for PASS was ≤4.2 for the total RAID score but varied across the seven domains (Table1), with Pain (≤5) and Fatigue (≤5) having the highest acceptability cut-offs. Sleep Disturbance and Coping were the domains with lowest thresholds compatible with PASS (≤3).

Conclusions: Pain and physical well-being appeared as major drivers of PASS. The cut-offs defining PASS were not the same for all RAID domains, indicating that being in PASS doesn't t mean the same acceptable severity for all domains of health. This observation suggests that individualized management, for each domain, should be considered.

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P111 – EFFECTIVENESS OF TOCILIZUMAB (TCZ) AMONG RHEUMATOID ARTHRITIS PATIENTS: FIRST-LINE VERSUS SUBSEQUENT USERS

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Background: Biological disease modifying anti-rheumatic drugs (bDMARDs) targeting interleukin-6 have resulted in improved outcomes among patients with rheumatoid arthritis (RA) resistant to conventional synthetic DMARDs, probably due to its fundamental role in the pathogenesis of this disease. It remains the question if this efficacy is similar among biologic-naive patients and in subsequent TCZ users.

Objectives: This study aims to compare disease activity parameters, clinical response and remission rates between biologic-naive patients and non biologic-naive patients.

Methods: An observational retrospective study was conducted, including all the patients ever treated with TCZ in our Rheumatology Department. Demographic and clinical data were obtained by consultating the national database (Reuma.pt). The six-month and one-year disease activity measures (DAS-28, CDAI and SDAI), functio-

nal status (HAQ), EULAR and ACR responses were compared between biologic-naïve patients starting TCZ versus subsequent TCZ users. Parametric and non-parametric tests were used for statistcs (SPSS 22.0).

Results: 75 RA patients were included (93,3% female), with a mean age of 56,97 ± 9,4, a mean age at diagnosis of 39,6 ± 11,6 and a mean disease duration at TCZ begining of 12,6 ± 8,4. In our sample, 49,3% were first--line TCZ users, 78,6% were current TCZ users and 33,3% were in TCZ monotherapy. At baseline, the mean DAS28 was 6,05 ± 1,06. First-line and subsequent TCZ users were comparable in terms of gender, body mass index, RF positivity, erosive disease, extraarticular manifestations and TCZ monotherapy. These two groups were also comparable in terms of current age, age at diagnosis and age at TCZ begining. They only differed in the number of ACPA-positive patients (p=0,01): 89,5% in the TCZ subsequent users group (vs 59,5 %). At 6 months, there were statistically significant differences in the mean deltaDAS28(SD) between first-line and subsequent TCZ users (p=0,002): 3.02(1.26) vs 2.05(1.28), respectively. Moreover, EULAR response at 6 months was also statistically different (p=0,02): 52,9 % in the first-line TCZ group exhibited a good EULAR response at 6 months (vs 22,2% in the subsequent users). In addition, 55,9% of first-line TCZ users achieved remission or low disease activity at 6 months, compared with only 29,7% of the TCZ subsequent users in the same period (p=0,03). On the other hand, there wasn't statistically significant differences in the deltaDAS28 and EULAR response at 1 year between the two groups, neither in the CDAI, SDAI, HAQ and ACR response at the six-month and one-year assessments.

Conclusions: Our data suggest that the TCZ response is comparable at long-term, however, faster among biologic naive RA patients than in subsequent users. This fact may be due to the higher prevalence of ACPA positivity among subsequente TCZ users, which represents a well-known biomarker of disease severity in RA.

P115 – EVALUATION OF THE IMPACT OF A SUMMER CAMP IN CHILDREN WITH JUVENILE IDIOPATHIC ARTHRITIS

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Background: Summer camps for children with chronic conditions like Juvenile Idiopathic Arthritis (JIA) seem to have a positive impact on physical, psychological, emotional and social aspects.(1) The first Portuguese Summer Camp for Children with JIA was an initiative of the Pediatric Rheumatology Unit of Hospital de Santa Maria, in Lisbon. There have been 2 editions (Ed): the 1st in 2016 and the 2nd in 2017, with one-week duration and 19 participants each.

Aim: The goal of this prospective pre-post study was to evaluate the impact of the Summer Camp for children with JIA.

Methods: All children who participated in the 1st or 2nd Ed of the JIA Summer Camp and completed the questionnaires were included. We tested the hypothesis that the Summer Camp had a positive impact using the Childhood Health Assessment Questionnaire (CHAQ), the Functional Assessment of Chronic Illness Therapy (FACIT), the KIDSCREEN-52 and the "Escala de Avaliação de Competências Sociais e Emocionais" (EACSE) questionnaires. These were done at 2 separate time periods: "pre-camp", in the 3 months that preceded the camp; and "post-camp", within 3 months after camp. Informed consent was obtained from parents. Questionnaires with missing answers were excluded, as were children that only responded pre or post camp.

Statistical analysis was done using SPSS 21.0, with a significance level of $p<0.05$. Descriptive analysis assessed the median and interquartiles (IQ) ranges. Comparative analysis between pre and post-camp results was made by Wilcoxon Signed-Ranks Test.

Results: In the 1st Ed, 16 children completed the questionnaires and in the 2nd Ed 17 children completed the questionnaires. A group of 12 children participated in both Ed and completed a set of questionnaires each year. A total of 33 questionnaires were completed by 20 children. Table 1 shows the demographic characteristics.

The median CHAQ result was 0.125 (IQ 0-0.312) pre-camp and 0 (IQ 0-0.25) post-camp. There was a

TABLE I. DEMOGRAPHIC CHARACTERISTICS

Demographic Analysis	Number of Children (n=20)
Male (%)	10 (50%)
Median age in years (IQ)	12 (10-14)
JIA diagnosis (%)	20 (100%)
JIA category	
Persistent oligoarticular	9 (45%)
Extended oligoarticular	3 (15%)
Polyarticular rheumatoid factor negative	3 (15%)
Enthesitis-related arthritis	3 (15%)
Psoriathic arthritis	2 (10%)
Prednisolone therapy (%)	1 (5%)
Methotrexate therapy (%)	14 (70%)
Biologic Therapy (%)	2 (10%)
Median JADAS-27 (IQ)	1.4 (0.7-2.0)
Clinical remission (%)	11 (55%)

negative variation in pre and post camp CHAQ with statistical significance difference (SSD) (p-value 0.035).

The median FACIT result pre-camp was 46 (IQ 43--50) and post-camp was 45 (IQ 42.5-49), with no SSD. In the KIDSCREEN questionnaire, the domain of Parent Relations and Home Life and the domain of Social Support and Peers had a positive SSD of 0.33 and 0.45 (p-value 0.47 and 0.45, respectively). Other domains did not have SSD. The median global score was 3.60 (IQ 3.47 - 3.78) pre-camp and of 3.54 (IQ 3.50 - 3.83) post-camp, with no SSD observed.

In the EACSE Score, the Emotional Regulation domain had a positive SSD of 0.8 (p-value 0.34). The median global score pre-camp was 4.0 (IQ 3.0-5.0) with no variation in post-camp score. There was also no SSD observed in other domains.

Conclusion: The Summer Camp for children with JIA was a pioneer activity in Portugal, as was the analysis of Camp impact in these children.

The domain of Parent Relations and Home Life and the domain of Social Support and Peers in KIDSCREEN and the Emotional Regulation domain of the EACSE questionnaires showed a positive SSD, which represents an improvement in these domains. Similarly, the negative SSD in CHAQ also substantiates the positive functional impact of this Summer Camp for children with JIA. These results corroborate the idea that Summer Camps have a positive impact in children with JIA.

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P119 – WORK PRODUCTIVITY AMONG WORKERS WITH AXIAL SPONDYLOARTHRITIS

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Background: Axial Spondyloarthritis (axSpA) usually starts in early adulthood and the lifetime impact of the disease can be considerable. Pain, stiffness, sleep disturbances contribute to health-related quality of life reduction with significant impact in work productivity. Absenteeism and presenteeism are still responsible for high costs associated with the disease.

Objectives: Assess absenteeism, presenteeism, work and daily-activities impairment and their related associated factors in patients with axSpA.

Methods: Cross-sectional postal, unicenter, non-interventional study. Patients fulfilling the Assessment of Spa International Society Classification criteria for axSpA under working age were included. Two groups were defined: A) patients under current anti-TNF; B) patients under conventional therapy. Quantitative and qualitative surveys were performed: Work Productivity and Activity Impairment Questionnaire in SpA (WPAI); participants' experiences of working and their perceptions of how their condition had affected their work capacity and workplace relationships were recorded. The questionnaires were applied through a telephone call, after consent of the participant and respecting anonymity.

Results: 60 patients were included (Table 1). No significant differences were found between the two groups. They worked on average 42±14.7 hours per week (h/w) and missed 2.3±4.1h/w due to axSpA. Mean absenteeism, presenteeism, work and activities impairment due to axSpA were 6.8%, 32%, 35% and 41%, respectively. The univariable analysis showed correlations between absenteeism and Visual Analogue Scale physician (phVAS) (p=0.027); presenteeism and Anquilosing Spondylitis disease activity score - C reactive protein (ASDAS-CRP) (p=0.002), Bath AS Disease Activity Index (BASDAI) (p=0.03), Bath AS Functional Index (BASFI) (p=0.02), VAS patient (pVAS) and phVAS (p=0.01, p=0.006), erythrocyte sedimentation rate (ESR) (p=0.03), CRP (p=0.024); percent overall work impairment and ASDAS-CRP (p=0.002), BASDAI

TABLE I. PATIENT DEMOGRAPHICS AND CLINICAL VARIABLES

		Group A under current biological therapy for at least 6 months n=31	Group B conventional therapy n=29	p-value
Patients	Male, female; n (%)	16 (52%); 15 (48%)	21 (72%); 8 (28%)	0.1
	Age; median (min-max)	40 (29-66)	43 (22-66)	0.6
Marital status	Single	7	6	
	Married / non-marital partnership	23	18	0.3
	Divorced	0	5	
	Widower	1	0	
Education	Primary education (5-11 ages)	8	4	0.5
	Secondary education (11-18 ages)	13	15	
	Tertiary education (> 18 ages)	10	10	
Employment	Full-time	18	20	0.8
	Part-time	4	0	
	Retired	1	2	
	Retired due to disability	6	2	
	Partially retired due to disability	1	1	
	Sick leave	1	2	
	Unemployed	0	1	
	Student	0	1	
Clinical characteristics	Number of anti-TNF; median (min-max)	1 (1-4)	NA	
	Anti-TNF duration (months); mean (min-max)	30 (6-63)	NA	
	ASDAS CPR (mean, SD)	1.59 ± 0.97	1.95 ± 1.04	0.1
	BASDAI (mean, SD)	2.95 ± 2.13	2.41 ± 2.11	0.3
	BASFI (mean, SD)	3.04 ± 2.92	1.82 ± 2.43	0.3
	VAS patient (0-100) (mean, SD)	31.04 ± 24.53	27.13 ± 28.88	0.4
	VAS physician (0-100) (mean, SD)	13.35 ± 15.99	15.98 ± 16.81	0.5
	ESR (mm/h) (mean, SD)	13.35 ± 9.05	14.21 ± 11.11	0.9
	CRP (mg/d) (mean, SD)	0.56 ± 0.56	0.74 ± 0.82	0.4
Work Productivity and Activity Impairment Questionnaire in Spa (WPAI)	Absenteeism (Percent work time missed due to problem) (%)	7.6%	5.8%	
	Presenteeism (Percent impairment while working due to problem) (%)	30.9%	34%	
	Percent overall work impairment due to problem (%)	34.2%	35.9%	
	Percent activity impairment due to problem (%)	43.5%	37.9%	

(p=0.019), BASFI (p=0.026), pVAS and phVAS (p=0.016, p=0.01), ESR (p=0.03) and CRP (p=0.03); percent activity impairment and BASDAI (p=0.006), BASFI (p=0.004), pVAS (p=0.0004) and phVAS (p=0.007). No correlation was found between work productivity and anti-TNF medication, education or marital status. Regression analysis revealed that BASDAI, BASFI, phVAS, pVAS and CRP accounted for 63% of the variance of presenteeism, with 10 points increase in phVAS resulted in an increase of 17% in presenteeism (p=0.046). Over time, 95% had already gone to work sick: economic reasons (60%), not liking staying at home even sick (43%) and importance of work (35%) were the major reasons to presenteeism. Overall, 63% considered that the disease can limit their projects or career progression; 56% had already canceled or postponed work; 20% had already changed jobs and 15% stated that had already felt discriminated.

Conclusions: Presenteeism, impairment of work productivity and activity were correlated with disease activity and physical functioning, with the increase of VAS physician resulting in increase in presenteeism. Economic reasons were the major factors to presenteeism and most patients considered that the disease can limit their projects or career progression.

P124 – THE VALUE OF A RHEUMATOLOGY/RADIOLOGY MULTIDISCIPLINARY TEAM MEETING

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Background: Imaging evaluation in rheumatic diseases is an important and challenging part of daily clinical practice. Multidisciplinary team (MDT) meetings with radiologists are commonly used in other specialties like Pneumology, Surgery or Oncology. We report the successful implementation of a rheumatology/radiology meeting, taking place at CHLO - Hospital Egas Moniz in Lisbon and its contribution for a better management of rheumatic patients.
Methods: A monthly morning one-hour session in cooperation with the radiology department was organized. The key attendees include an expert radiologist and his staff with specific interest in musculoskeletal imaging [magnetic resonance imaging (MRI), plain radiographies (X-rays) and computed tomography (CT) scans] and the rheumatology team. Clinical cases presented in the meeting by Rheumatology team members are discussed and documented in real time.
Results: The MDT meeting has been operational for 14 months (since November 2016). Overall, 64 patients (20 male, 44 female, mean age of 47,88±14.8 years) corresponding to 74 different imaging studies were discussed, including 37 MRI (27 sacroiliac joints, 2 pelvis, 4 rachis, 2 knees, 1 arm, 1 hand), 20 X-rays (8 pelvis, 7 rachis and 5 hands), 16 CT (6 pelvis, 7 thorax and 3 rachis) and 1 bone scintigraphy. The patients' clinical manifestations and baseline diseases were diverse. The main complaint was mechanic or inflammatory back pain in 32 cases (50%). MDT meeting contributed to a change in interpretation diagnosis in 60% of cases. From a total of 22 MRI images of the sacroiliac joints previously reported as positive or inconclusive, 10 were considered negative for sacroiliitis after expert review. In 9 cases there was a previous suspicion of a primary or secondary malignancy that was not confirmed after discussion in the MDT meeting. In another case the opposite occurred with a suspicion of Paget disease ultimately considered metastatic disease of a prostate cancer. Additionally, in some cases, there was the need to discuss incidental imaging findings, which would probably otherwise lead to further unnecessary exams. Learning points for the rheumatologists include tips to read images of the sacroiliac joints, rachis or other anatomic areas, not only on X-rays but also on CT or MRI, and the reminder of the need of detailed clinical information to allow a correct interpretation by the radiologist. Finally, the MDT meeting provides a second in-depth clinical evaluation contributing to better patient management and often sparing the need for further unnecessary exams and patient anxiety.
Conclusion: MDT meetings are a very effective organizational structure with great value to the rheumatologic team, students and patients. In a significant number of cases (60%) it led to a change in the diagnosis and improved patient management. Such collaborative teams may contribute to enhance quality of care and may reduce disease burden, morbidity and costs.

Tiago Saldanha, Fernando Pimentel-Santos and Jaime C. Branco were equal contributors to this project.

P125 – TOOLS FOR THE SCREENING OF SARCOPENIA: A HEAD-TO-HEAD COMPARISON BY THE NOVA SARCOAGING GROUP

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Objectives: This review assesses the utility and limitations of the currently available tools for the screening of sarcopenia.
Data Sources: Publications from 2003 to 2018 discussing the definition of sarcopenia in older people were retrieved by searching PubMed, Medline and The Cochrane Library. Original research articles, systematic reviews and international consensus statements were considered.
Study Selection: English language publications from 2003 to 2018 discussing the definition of sarcopenia and tools available for its screening were considered. A total of 23 articles were gathered, of which 5 were excluded after analysis of their abstract.
Data Extraction: Data from each article included in this review was extracted by researchers from the NOVA SarcoAging Group. General characteristics of each study including the authors, journal, year of publication and the level of evidence were collected.
Data Synthesis: Since 2005, several international groups have published definitions for sarcopenia. All definitions based their diagnostic criteria on various combinations of measures of skeletal muscle mass, muscle strength, muscle power, muscle fatigue and physical performance.

Depending on the combination of these parameters and endpoints utilized, the prevalence of sarcopenia varies between 5% and 53% in large epidemiological studies in different populations over the age of 65.
Conclusions: At the present time there is no single standardized quantitative definition of sarcopenia based on these parameters in use in clinical practice.

The development of interventions to alter the natural history of sarcopenia requires consensus on the most appropriate endpoints for determining outcomes of clinical importance which might be utilized in intervention studies.

The future standardization of the diagnostic criteria may aid in the development of clinical tools that enable the screening of sarcopenia in its early stages, where interventions yield the greatest impact.

P128 – IS THERE AN EFFECT OF TOCILIZUMAB IN SERUM AUTOANTIBODIES LEVELS IN RHEUMATOID ARTHRITIS?

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Background: Interleukin 6 (IL-6) plays a role on B cell differentiation and antibody production. However, few information is available considering the effect of tocilizumab (TCZ) on rheumatoid factor (RF) and anti-citrullinated protein antibodies (ACPAs) levels in Rheumatoid Arthritis.
Objective: To compare serum levels of RF and ACPAs on RA patients at the beginning of therapy with TCZ and at 6 and 12 months under TCZ, assessing if its variations correlate with the several disease activity scores.
Methods: Longitudinal retrospective study of RA patients ever treated with TCZ at a Rheumatology Department. Serum levels of RF and ACPAs at 0, 6 and 12 months after starting anti-IL6 treatment were collected, as well as DAS28, DAS28 CRP, CDAI, SDAI, HAQ, ESR and CRP. Demographic and clinical data were collected. SPSS statistics 22.0 was used for statistical analysis; p values under 0.05 were considered significant.
Results: 75 patients were included, 93.3% female (N=70), with a median (min-max) age of 58 (33-80) years and median disease duration at TCZ initiation of 10.7 years (1.0-43.3); 33.3% were on TCZ monotherapy (N=25). At baseline, forty-two (56.0%) were RF positive (>=30UI/ml) and 47 (62.7%) were ACPAs positive (>=10UI/ml). Median serum RF levels were 255.0 UI/mL (37.20-5560.00), 193.5 UI/mL (9.80--5270.00) and 131.0 UI/mL (9.40-6260.00) at 0, 6 and 12 months respectively; serum RF levels were only statistically different (p=0,006) between 0 and 6 months. Median serum ACPAs levels were 278.5 UI/mL (17.00--9300.00), 348.0 UI/mL (19.00-4720.00) and 277.0 UI/mL (16.00-4400.00) at 0, 6 and 12 months respectively, without any statistically significant differences. Considering the autoantibodies levels variation, ΔRF

at 6 months correlated positively with ΔHAQ (r=0.482; p=0.009) and ΔCPR (r=0.413; p=0.026). After one year, ΔRF correlated positively with ESR (r=0.426; p=0.019) and DAS28 (r=0.428; p=0.018). As for ACPAs, no correlations were found at 6 months; at 12 months, there was a positive correlation between ΔACPAs and ΔDAS28 CRP (r=0.407; p=0.021), ΔACPAs and ΔCDAI (r=0.425; p=0.027) and ΔACPAs and ΔSDAI (r=0.467; p=0.016).

Conclusion: In our RA sample, only serum RF levels showed a significant titre difference past 6 months of treatment with TCZ. Moreover, a moderately strong correlation was found between ΔACPAs at 12 months and the variations in several disease activity scores among RA patients under TCZ. Thus, this work reinforces the evidence of an impact of IL-6 inhibition on autoantibodies production in RA patients.

P133 – TERAPÊUTICA BIOLÓGICA E GRAVIDEZ EM MULHERES COM DOENÇA REUMÁTICA INFLAMATÓRIA SISTÉMICA: RESULTADOS PRELIMINARES DE UMA COORTE PORTUGUESA

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Introdução: O controlo da atividade inflamatória inerente às doenças reumáticas é essencial para o sucesso da gravidez. No entanto, a segurança das terapêuticas biológicas durante a concepção e/ou gestação ainda não está completamente compreendida. A elevada prevalência das doenças reumáticas inflamatórias em mulheres em idade fértil reforça a importância desta temática.

Objetivo: Caracterizar o desfecho gestacional em doentes registadas no Registo Nacional de Doentes Reumáticos (Reuma.pt) sob terapêutica biológica antes e/ou durante a concepção/gravidez. Descrever as atitudes em relação à manutenção da terapêutica biológica no planeamento/ocorrência de gravidez.

Métodos: Análise das gestações em doentes sob terapêutica biológica registadas no Registo Nacional de Doentes Reumáticos (Reuma.pt). O desfecho gestacional foi caracterizado tendo em conta o número de nados vivos termo/pré-termo, aborto, morte intra-uterina/fetal/neonatal, restrição de crescimento intra-uterino (RCIU), malformações congénitas, lúpus neonatal e interrupção voluntária/médica da gravidez. Foi avaliada a gestação quanto à presença de flares e à abordagem terapêutica.

Resultados: Foram incluídas 45 doentes, com idade média de 38,6+-5,8 anos, totalizando 55 gestações. Dos diagnósticos maternos, 43,6% (n=24) eram artrite reumatóide, 41,8% (n=23) espondilartrites, 7,3% (n=4) artrite idiopática juvenil, 5,5% (n=3) vasculites e 1,8% (n=1) doença de Still. A duração média da doença foi de 13,9+-5,9 anos. A maioria estava medicada com adalimumab (38,2%), etanercept (30,9%) ou golimumab (12,7%). Do total de gestações, cerca de 54,5% tiveram acompanhamento pelo médico obstetra, 20% em consulta de alto risco, 11% pelo médico de família, 5,4% pelo médico obstetra e em consulta de alto risco e 3,6% pelo médico de família e obstetra. Do total de nascimentos, 74,5% foram nados vivos (87,8% termo e 12,2% pré-termo); 20% das gestações terminaram em aborto espontâneo e 1,8% em interrupção médica da gravidez. Em 72,7% dos casos não se registaram complicações durante a gravidez; verificou-se um caso de RCIU e um caso de malformações (hipospadia), ambos em doentes que suspenderam biológico (adalimumab) aquando do planeamento da gravidez. A generalidade das mulheres não evidenciou exacerbação da doença durante a gravidez (80%, n=44). Em 26 gestações o biológico foi suspenso antes da concepção e em 12 foi suspenso após confirmação da gravidez. Apenas 1 doente manteve o tratamento com biológico (etanercept) durante toda a gravidez, sem intercorrências. Outra doente manteve tratamento com golimumab durante 6 meses, também sem registo de intercorrências.

A maioria não recorreu a corticoterapia ou anti-inflamatórios durante a gravidez.

Conclusão: A escolha da terapêutica biológica deve basear-se na sua capacidade de controlo de atividade de doença, bem como na segurança para o feto. Dos dados obtidos, verifica-se que o tratamento com biológicos não é impeditivo de uma gravidez de sucesso, desde que utilizado de forma criteriosa e baseado na evidência científica. Na maioria das gestações identificadas, o biológico foi suspenso antes da concepção. O planeamento atempado de uma gravidez deve incluir uma ponderação individualizada do risco-benefício da utilização deste tipo de tratamento durante este período, de forma a maximizar a probabilidade de sucesso da gestação.

P137 – KNOWLEDGE, CONFIDENCE AND EDUCATIONAL NEEDS OF PRIMARY CARE NURSES ON PATIENT EDUCATION AND CONTINUITY CARE IN RHEUMATIC DISEASES

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Background: Primary care health professionals (HPs) are essential for continuity of care, especially for chronic conditions, such as rheumatic diseases. Therefore, knowledgeable and skilled HPs are needed in primary care and hospitals, with close contact, to improve quality and excellence of care. Nurses are pivotal to assure this continuity and liaison between care players. In November 2017, was established an "Unidade Coordenadora Funcional da Reumatologia do Centro" (UCF.RC) by the Regional Center Administration to run as a cooperation network within HPs of this Region[1]. However, there is scarce postgraduate rheumatology education for nurses working in rheumatology[2], a reality expected to be even greater in primary care.

Objectives: We aimed at: 1) determining the level of basic knowledge on Disease Modifying Anti-Rheumatic Drugs (DMARDs) of nurses working in primary care in Portugal; 2) determining their confidence in providing patient education (PE) on (i) the rheumatic diseases they contact most, (ii) biological DMARDs and (iii) Methotrexate (MTX); 3) exploring professional factors influencing these confidence levels; 4) exploring their educational needs in rheumatology.

Methods: A national online survey was performed among nurses working in primary settings for ≥6 months. The survey assessed their certifications, experience in primary care, and their practice, knowledge, and confidence (from 0 to 10) in providing PE to these patients. Their educational needs and communication with their colleagues in rheumatology were also assessed. Educational leaflets were provided at the survey's end for didactic purposes. Spearman's correlation and Mann-Whitney tests were used to test nurse's confidence levels on PE.

Results: 290 individuals accessed the survey, but only 129 (44.5%) completed it. Responders had a mean age (SD)=42.6 (7.8) years, mean experience in primary care of 13.7 (8.2) years and 47.3% had a post-graduate specialization.

Osteoarthritis (69.0%), low back pain (68.2), and rheumatoid arthritis (62.8%) were the diseases that nurses contacted the most. Only 5.4% of nurses recognized an image with five sc bDMARDs pens, reporting frequent contact with them; 18.6% reported

TABLE I. KNOWLEDGE ON bDMARDs OF PRIMARY CARE NURSES IN PORTUGAL (N=129)

bDMARDs	% yes
are:	
Immunosuppressant's	27.1
NSAIDs	10.1
Corticosteroids	9.3
Powerful analgesics	1.6
Hormone therapy	0.8
I don't know	51.1
most common side effects are:	
local reactions	15.5
Infections	20.2
Kidney insuf.	7.0
Cytopenia	6.2
Worsening of heart failure	3.1
Neoplasms	6.2
Respiratory insuf.	1.6
Tuberculosis	14.7
Gastritis and peptic ulcers	3.1
Hepatotoxicity	16.3
demyelinating disease	2.3
I don't know	58.9

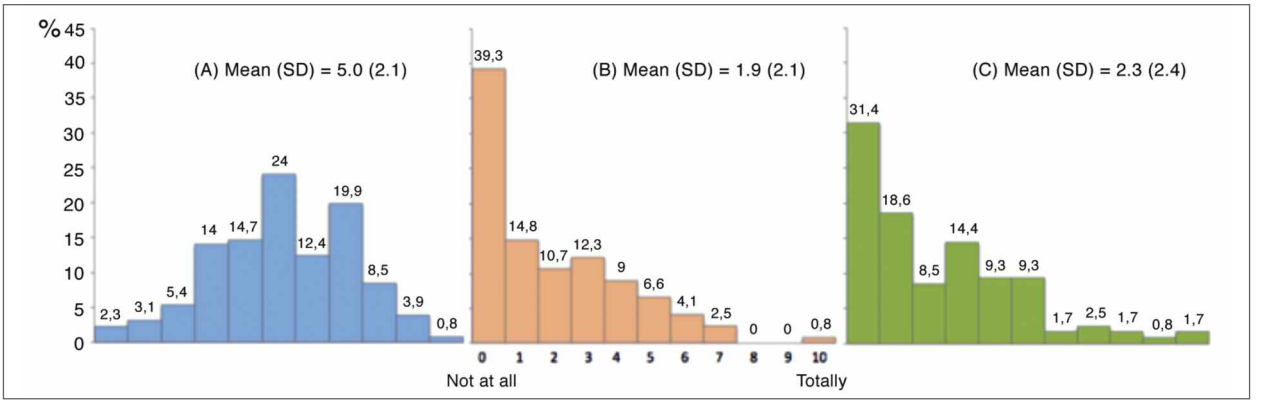

FIGURE 1. Confidence levels of primary care nurses (n=129) in providing patient education on **(A)** most frequent rheumatic disease(s) they care, **(B)** bDMARDs, and **(C)** metotrexate.

rare contact. Knowledge on bDMARDS was poor (Table 1). More than half of nurses reported not knowing what PE to provide (55.0%) and when these drugs should be suspended for patient's safety (63.6%); 55% had never contacted with MTX and only 6.2% reported to know its side effects.

Confidence levels in providing PE were low (Figure 1) and not correlated (p>0.05) with years of experience on primary care or with post-graduate specializations.

Nurses' doubts are answered mainly via internet (68.2%) or by local colleagues (51.2%). Only 2 nurses (1.6%) had formal, although minor, rheumatology education but 88.4% would like to have it (delivery preferences were expressed).

Conclusions: Knowledge and confidence in key areas of rheumatology care seem to be very reduced in Portuguese nurses working in primary care. Unmet education and training needs are highly prevalent and provide useful directions for the development of future training programmes. In a near future, hopefully, initiatives such as UCF.RC will contribute to change this reality, and certainly will contribute to improving rheumatology care in primary care.

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P143 – RHEUMATOLOGY ELECTIVES: EVALUATION OF 87 RESIDENTS – WHAT QUALITY MEANS?

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Introduction: Rheumatic diseases are very prevalent in our population. General and Family practitioners should be trained in the diagnosis and treatment of common musculoskeletal conditions and referral criteria. Rheumatology training is also fundamental for Physical Medicine and Rehabilitation and Internal Medicine training physicians. The main objectives for the elective defined for Family physicians are the participation in screening appointment and general rheumatology in order to be able to diagnose and treat osteoarthritis, osteoporosis, fibromyalgia, referral criteria and musculoskeletal exam.

Methods: Satisfaction questionnaire applied to the residents taking an elective in Rheumatology at our department between 2013 and 2017. The questionnaire included three subsets; 1- qualitative evaluation of the elective's utility in a four-point scale; 2-main positive and negative aspects; 3-suggestions for future improvement. The results were analyzed and presented in the department meeting in order to redefine objectives and strategy.

Results: between 2013 and 2017, 153 residents took an elective in our Department. The majority, 108 (70.6%), were Family physicians, 25 (16.3%) were residents in the common year, 15 (9.8%) were from Physical Medicine and Rehabilitation and 5 (3.3%) from Internal Medicine. The questionnaire was answered by 87 residents. Regarding all general evalua-

tion aspects, 71 (81.6%) residents considered it very good, 15 (17.2%) good and 1 (1.2%) sufficient. The main positive aspects were the availability of the rheumatologists for integration of the residents, scientific quality, good organization, diversity of appointments and activities, differentiation of pathologies, learning and training musculoskeletal examination. The main negative aspects considered were the elevated number of residents assisting the activities (sometimes more than two), short duration (1-3 months), and lack of autonomy. There is an opportunity for oral presentation in the department meeting, which was considered both a positive and a negative aspect for some colleagues. The participation in these meeting was also considered both a strength and a weakness. The main suggestions for improvement were a formal initial presentation to the department and a last meeting with the tutor to evaluate objectives' accomplishment, a decrease in the number of residents accepted, sessions in the main rheumatology topics, and development of a weekly-individualized plan including all the Department's activities.

Conclusions: The majority of residents considered the elective very good. Some positive and negative aspects were consensual and elicited our reflection for future improvement. Other aspects were considered good by some residents and negative by others. We consider that although there is a set of core objectives for the rotation, it is fundamental to have an initial approach to the residents' expectations in order to define the best plan for his/her rotation. Besides training in physical examination, diagnosis, treatment and criteria for referral, these electives are also very important to establish "bridges" between different specialties and promote quality of care.

P144 – INTEGRATED CARE PROCESS FOR SYSTEMIC LUPUS ERYTHEMATOSUS: TOWARDS QUALITY IN HEALTHCARE

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Background: The concept of integrated care has raised a lot of interest in recent years, as a patient-centered approach valuing coordination and continuity of care. Integrated care processes (ICP) imply the articulation of clinical, medical and nursing professionals, hospital departments, primary healthcare and long-term integrated care, as well as the involvement of other healthcare professionals. During the past 12 months, our Department has been under a process of Accreditation by the Health Quality Department from National Health Service, which gave us the opportunity to evaluate our standards of care and develop improvement strategies.

Aim: To describe the ICP for systemic lupus erythematosus (SLE) patients and the evaluation of its indicators for the year 2017.

Methods: Developing the ICP included the definition of the profile of patients eligible to be enrolled, the health professionals involved and their activities with specific quality indicators, the allocated resources, the information roadmap and the indicators to monitor implementation results of the ICP. The indicators of the patients followed at the SLE clinic during 2017 were analyzed, taking a snapshot of our reality for future reference.

Results: The ICP for SLE was designed for patients with a high suspicion or confirmed SLE, fulfilling American College of Rheumatology 1997 or Systemic Lupus International Collaboration Clinics 2012 classification criteria. It includes all the units of our Department, involving doctors, nurses, administrative staff, a specialized psychologist and nutritionist. The quality standards defined for the professional's activities were based on international guidelines and good practices in the management of SLE patients. The procedures for the first appointment and follow-up visits were outlined. Every patient should be evaluated by a nurse, a rheumatologist, a psychologist and, in selected cases, a nutritionist. Other Departments, namely Ophthalmology and Dermatology should be consulted whenever necessary. There is a special emphasis on communication and information to the patient about the disease, therapeutic options and his active role in decision process. The indicators were defined to monitor the ICP focusing on patient's satisfaction, complications of the disease and therapeutics, management of comorbidities, quality of records, and socioeconomic impact.

In 2017, we followed 277 patients at the SLE clinic, 92.1% female, mean age of 49.0 14.6 years. 257 patients (92.8%) have SLE, 7 (2.5%) primary antiphospholipid syndrome, and 13 (4.7%) were still under investigation. The SLE ICP indicators and their evalua-

TABLE I. INDICATORS TO MONITOR THE SLE ICP – OBJECTIVES AND RESULTS IN 2017

Indicator	Objective	2017 (n= 277)
Patient complaints	Gradual decrease	0 (0%)
Registration in reuma.pt	100% (>60% appointments)	145 (53.1%)
Ratio of hospitalization from scheduled appointment/emergency department	Gradual increase	4/5
Complications from systemic steroids (diabetes, secondary osteoporosis, aseptic necrosis)	Gradual decrease	34 (12.3%)
Irreversible visual loss related to antimalarials toxicity	0%	3 (1.1%)
Cardiovascular events	Gradual decrease	2 (0.7%)
Outcomes in lupus nephritis: end stage renal disease or submitted to transplant	Gradual decrease	6 (2.2%)
Miscarriages	Gradual decrease	1 (in 4 pregnancies)
Term pregnancies	Gradual increase	2 (in 4 pregnancies)
Temporary incapacity for work decided by the rheumatologist	Gradual decrease	1 (0.4%)
Requests for medical reports for evaluation of incapacity	Gradual decrease	16 (5.8%)

ICP: integrated care process

tion for 2017 are described in table 1. This was our first evaluation, follow-up data will be valuable.

Discussion: ICPs are essential for the management of patients with complex chronic diseases. This type of approach decreases the number of hospitalizations and improves patient satisfaction. Besides health professional's role, patients are also expected to play an active role based on shared decision-making. Integrated care of patients at a specialized reference center is only possible with a multidisciplinary team, with adequate time and space resources, namely with a dedicated nurse, an aspect to be improved in the future.

P147 – OBESIDADE E ARTRITE REUMATÓIDE: INFLUÊNCIA NA ATIVIDADE DA DOENÇA E NA QUALIDADE DE VIDA

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Introdução: Na obesidade, principalmente se visceral, a produção de citoquinas pró-inflamatórias, como o TNF alfa e a IL6, conduzindo a um estado inflamatório subclínico, contribui para o aumento do risco cardiovascular associado ao síndrome metabólico (SM). Na inflamação associada à artrite reumatoide (AR) há igualmente aumento de TNF alfa e IL6, pelo que, na presença de ambas as condições, estes mediadores podem estar potenciados. Vários estudos têm mostrado impacto da obesidade na evolução, atividade e qualidade de vida na AR.

Objetivo: Avaliar a influência do índice de massa corporal (IMC), do perímetro abdominal e do SM, na atividade e na qualidade de vida da AR, utilizando parâmetros de atividade inflamatória (VSG e PCR), o *Disease Activity Score* (DAS28), a escala visual analógica da dor (EVA) e o *Health Assessment Questionnaire* (HAQ).

Material e Métodos: Avaliação do peso, altura e perímetro abdominal e recolha de dados demográficos, clínicos e laboratoriais de doentes com AR, diagnostica-

TABELA I. CARACTERÍSTICAS CLÍNICAS E LABORATORIAIS DOS DOENTES COM ARTRITE REUMATÓIDE ESTUDADOS

	Artrite reumatóide
Idade (anos)	58,8 (*SD*=13,0), mínimo de 24 e o máximo de 85 anos
Sexo	Masculino: 19,7% (15) Feminino: 80,3 % (61)
Idade de diagnóstico	48,3 (*SD*=14,6)
Anos desde início sintomas	12,1 (*SD*=8,6)
Anos desde o diagnóstico	9,9 (*SD*=7,3)
Classificação portuguesa das profissões	Especialistas das Atividades Intelectuais e Científicas: 13,0% Técnicos e Profissões de Nível Intermédio: 9,3% Pessoal Administrativo: 7,4% Trabalhadores dos Serviços Pessoais, de Proteção e Segurança e Vendedores: 14,8% Trabalhadores qualificados da Indústria, Construção e Artífices: 7,4% Operadores de Instalações e Máquinas e Trabalhadores da Montagem: 1,9% Trabalhadores não qualificados: 46,3%
Escolaridade	Analfabeto ou <4 anos de escolaridade: 8,6% Até ao 3º ciclo de escolaridade, inclusive: 54,3% Ensino secundário: 20,1% Ensino superior: 17,1%
Anticorpos	AR seronegativa: 16,4% Apenas fator reumatoide (FR) positivo Limitado: 21,9% Apenas anti- peptídeo citrulinado cíclico (ccp): 11,0% FR e anti-ccp positivos: 50,7%
Número de comorbilidades	3,4 (*SD*=2,2)
Comorbilidades	Excesso de peso ou obesidade: 59,2% (45) Diabetes mellitus tipo 2: 9,2% (7) Hipertensão Arterial: 36,8% (28) Dislipidemia: 38,2% (29) Hiperurecemia: 1,3% (1) Consumo excessivo de álcool: 5,3% (4) Fumador ou ex-fumador: 15,3% (11) Patologia pulmonar: 13,2% (10) (3 doentes com DIP associada à AR) Patologia cardíaca: 14,5% (11) Patologia psiquiátrica: 30,3% (23) (15 doentes com ansiedade/insónia, 9 com depressão) Osteoporose: 13,2% (10) Patologia tiroideia: 7,9% (6) (5 com hipotiroidismo) Patologia dermatológica: 9,2% (7) (5 com psoríase) Neoplasia: 9,2% (7) (ativa:4; passada:3) Outras Comorbilidades: 48,7% (37)
Medicação Habitual	4,4 (*SD*=2,8)
Tratamento	Prednisolona: 47,4% (36) Metotrexato: 63,2% (48) Leflunomida: 18,4% (14) Hidroxicloroquina: 7,9% (6) Sulfassalazina: 7,9% (6) Tocilizumab: 5,3% (4) Etanercept: 3,9% (3) Rituximab: 3,9% (3) Golimumab: 1,3% (1) Adalimumab: 1,3% (1)
Síndrome metabólico	21,1% (16)
Medidas de avaliação de obesidade	Índice de Massa Corporal: 26,6 (*SD*=3,9) (Normal: 32,9% (25); Excesso de peso: 48,7% (37); Obesidade grau I: 17,1% (13); Obesidade grau II: 1,3% (1)) Perímetro abdominal Normal: 25,4% (18); Aumentado: 29,6% (21); Muito aum.: 42,1% (32) Relação cintura/altura: 0,56 (*SD*=0,08) (aumentado: 74,6% (53))
Atividade de doença	EVA: 27,7 (*SD*= 23,3) HAQ: 0,811 (*SD*=0,768) DAS 28: 2,705 (*SD*=1,265) Articulações Tumefactas: 1,2 (*SD*=1,6) Articulações Dolorosas: 2,5 (*SD*=2,8) PCR: 1,06 (*SD*=1,80) VS: 23 (*SD*=18)

AR: Artrite Reumatoide; DIP: Doença do Interstício Pulmonar; EVA: Escala Visual Analógica da dor; *HAQ: Health Assessment Questionnaire; DAS28: Disease Activity Score*; Proteina C Reativa; VS: Velocidade de Sedimentação

da segundo os critérios ACR/EULAR, observados consecutivamente em consulta de reumatologia. A presença de SM foi avaliada de acordo com a definição da OMS: alteração da glicose (diabetes mellitus (DM) ou resistência à insulina) associada a duas das seguintes comorbilidades: obesidade (IMC >30kg/m2 e/ou relação cintura anca >0,9 nos homens ou 0,85 nas mulheres); dislipidemia (triglicerídeos >150mg/dL ou HDL <35mg/dL em homens ou <39mg/dL em mulheres); hipertensão arterial (sistólica ≥140 mmHg, diastólica ≥90mmHg ou tratamento farmacológico); albuminúria≥ 20mcg ou albumina/ creatinina ≥30mg/g. Foi utilizado o SPSS para a analise estatística e o valor de significância foi definido como 2-sided p<0,050.

Resultados: Dos 76 doentes incluídos, 80,3% (61) eram do sexo feminino, com idade média de 58,8 anos (SD=13,0) e evolução média da doença de 12,1 anos (SD=8,6). O SM esteva presente em 21,1% dos doentes. As características clinicas e laboratoriais dos 76 doentes estão representadas na Tabela 1.

Doentes com IMC ≥ 25kg/m2 tiveram EVA significativamente mais elevada (p=0,019), correspondendo a dor moderada a severa. Verificou-se uma correlação positiva entre o IMC e o HAQ (p=0,037). Não se verificou associação do IMC ou do perímetro abdominal com a VSG, PCR ou DAS28. Doentes com SM apresentaram um risco 8,7 vezes superior (IC 95%: 1,07 a 70,30) de ter VSG elevada (p=0,029) e tinham HAQ significativamente mais elevado (p=0,042). Numa análise multivariada dos constituintes do SM, isoladamente, não se verificou, qualquer associação destes constituintes com a elevação da VSG.

Discussão e Conclusão: Neste grupo de doentes verificou-se uma prevalência aumentada de excesso de peso e obesidade. O aumento do IMC associou-se, significativamente, a EVA e HAQ elevados, independentemente da atividade da doença, dado que não se verificou correlação com os parâmetros inflamatórios ou com o DAS28. A prevalência do SM neste estudo foi comparável à encontrada na literatura (16-45,2%) em doentes com AR. A associação do SM, enquanto síndrome, à elevação da VSG, o que não aconteceu com cada um dos seus constituintes isoladamente, justifica a necessidade de uma avaliação global do doente. Ao contrário de outros estudos, não se verificou associação do SM ao DAS28, o que pode ser explicado pelo baixo número de doentes incluídos. A continuação deste estudo, incluindo um maior número de doentes, permitirá uma melhor análise de fatores que podem influenciar a avaliação da atividade na artrite reumatóide.

P148 – ACHADOS ECOGRÁFICOS EM DOENTES COM GOTA

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Introdução: A gota é uma doença inflamatória frequente, causada pela deposição de cristais de monourato de sódio (MUS) nas articulações e nos tecidos extra-articulares, na presença de hiperuricemia. Diferentes técnicas de imagem podem ser usadas no diagnóstico e monitorização da doença. A ecografia músculo-esquelética apresenta um papel importante pela sua capacidade de visualizar não apenas inflamação e dano articular, como também deposição de cristais de MUS[1].

Objetivo: Identificar os achados ecográficos em diferentes articulações em indivíduos com gota.

Material e métodos: Avaliaram-se trinta e nove pacientes com gota e 25 indivíduos saudáveis, com uricemia normal, emparelhados para idade e sexo. Foram recolhidas as características sociodemográficas, clínicas e analíticas e efetuou-se, em todos os participantes, avaliação ecográfica bilateral da 1ª metatarsofalângica (1MTF), da 2ª metacarpofalângica (2MCF) e dos joelhos, procurando-se as seguintes alterações: sinovite (derrame intra-articular), hipertrofia sinovial, erosão, presença de duplo contorno e depósitos (agregados ou tofos) intra-articulares. Realizados testes paramétricos e não paramétricos, definindo-se p <0.05 como estatisticamente significativo.

Resultados: A média de idade dos doentes com gota foi de 62.0 e de 62.2 nos indivíduos saudáveis. 92% dos doentes eram do sexo masculino. O tempo médio de duração da doença foi de 4.5 anos. 74.4% tinham história pregressa de podagra e 23% apresentavam tofos gotosos. A média de uricemia foi de 6.8±2.1 para os indivíduos com gota e de 4.8±0.9 para os indivíduos saudáveis. Nove doentes (23.1%) estavam sem medicação hipouricemiante, 21 (53.8%) faziam alopurinol, 8 (20.5%) febuxostate e 1 (2.6%) cumpria alopurinol em associação com febuxostate.

Comparativamente aos indivíduos saudáveis e considerando em conjunto as seis articulações avaliadas, os pacientes com gota apresentavam, com significância

estatística, resultados superiores relativamente à presença de hipertrofia sinovial, erosão, sinal de duplo contorno e de depósitos intra-articulares (p <0.001; p <0.001; p=0.004 e p=0.005, respetivamente).

Analisando apenas os achados das 1MTF, os doentes com gota apresentavam mais hipertrofia sinovial (p<0.001), erosões (p=0.001) e agregados intra-articulares (p=0.04), comparativamente aos controlos. Considerando os achados encontrados nos joelhos, os doentes com gota apresentavam mais sinovite (p=0.04) e hipertrofia sinovial (p <0.001). Tendo em conta apenas a avaliação das 2MCF, não se registaram diferenças significativas entre os diferentes achados ecográficos nos dois grupos.

O sinal de duplo contorno foi encontrado em onze doentes (28.2%) com gota, não se constatando a presença deste achado ecográfico em qualquer individuo saudável.

Encontrou-se correlação entre os valores de uricemia e a presença de erosões (p=0.019) e os agregados intra-articulares (p=0.018).

Conclusão: Apesar do número reduzido de doentes, neste estudo, os achados ecográficos mais frequentemente encontrados nos doentes com gota foram a hipertrofia sinovial, a presença de erosão e de depósitos intra-articulares. O sinal de duplo contorno foi apenas observado no grupo dos doentes.

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P150 – RESULTADOS DA UTILIZAÇÃO E SATISFAÇÃO COM UMA LINHA DE APOIO TELEFÓNICO EM REUMATOLOGIA: EXPERIÊNCIA DE 78 MESES DE UM HOSPITAL DE DIA E CONSULTA DE ARTRITE PRECOCE

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Introdução: O apoio telefónico tem sido usado como abordagem inovadora de prestação de cuidados e esclarecimento de dúvidas pelos enfermeiros, desenvolvendo-se especialmente na doença crónica[1]. Em setembro de 2011 estabeleceu-se em Portugal uma Linha de Apoio disponível para os utentes de Hospital de Dia em reumatologia e de uma Consulta de Artrite Precoce (cerca de 580 doentes). Ao fim de 18 meses realizou-se uma primeira avaliação dos seus resultados, que não incluiu a satisfação dos utilizadores e que indicou oportunidades de melhoria[2].

Objetivo: Descrever os principais motivos da utilização de uma linha de apoio telefónico em reumatologia, os seus resultados e a satisfação dos utilizadores.

Métodos: Trata-se de um estudo descritivo, retrospetivo, que analisou os 78 meses após implementação desta linha de apoio, gerida por 3 enfermeiros com formação específica em Reumatologia, com o suporte/apoio de 3 reumatologistas. A cada chamada recebida é registado um resumo mínimo de dados, agora usado para esta análise. Realizou-se ainda um inquérito de satisfação (com 4 perguntas) a todos os utilizadores dos últimos 12 meses para avaliar a satisfação com o serviço. Esta avaliação foi realizada uma semana depois, via telefone, por um elemento externo ao serviço. O serviço está disponível nos dias úteis, das 9 às 17 horas, com gravação de mensagem no telemóvel no restante período.

Resultados: Desde o início de funcionamento da linha foram registadas 612 chamadas. Estima-se que cerca de 5-10% não tenham sido registadas devido a constrangimentos vários. Os utilizadores mais frequentes foram mulheres (60%), com uma média de 53 anos de idade, sobretudo com o diagnóstico de Artrite Reumatóide (42%). Conhecer os resultados de exames auxiliares de diagnóstico (24%) manteve-se como o principal motivo da chamada, ainda que tenha diminuído face à primeira avaliação. A comunicação de efeitos secundários e intercorrências da medicação e da doença (22%), o apoio na gestão da doença (20%) na toma da medicação (18%), nomeadamente devido ao agravamento dos sintomas (15%) foram outros dos principais motivos de chamada. Em 81% dos casos não houve necessidade de referenciação para outros serviços de saúde; em 9% houve necessidade de avaliação presencial no serviço de reumatologia; em 5% o doente foi encaminhado para o serviço de urgência e 5% para os cuidados de saúde primários.

Da avaliação da satisfação realizada a 62 doentes, 92% ficaram satisfeitos com o serviço prestado, 94% viram as sua dúvidas completamente esclarecidas, e 100% a utilização da linha de apoio evitou uma ida ao hospital (não contabilizando os que foram encaminhados para um serviço de saúde). Para 89% poder recorrer a esta linha dá-lhes mais confiança para a autogestão da sua doença. Como principal sugestão de melhoria referiu-se o alargamento do horário de atendi-

mento ao fim de semana.
Conclusões: A disponibilização de uma linha de apoio telefónico num serviço de reumatologia português parece ser exequível, bem aceite pelos destinatários e parece proporcionar ganhos importantes para a saúde dos doentes. Além disso, estima-se que aporte uma redução de custos económicos associados, pois evita idas desnecessárias ao hospital, além ao conforto e tranquilidade para o utente. Para que este serviço seja de qualidade é essencial tempo dedicado para a gestão deste serviço, bem como uma plena colaboração interprofissional, centrada nas necessidades do doente.

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P151 – EXTENDED OLIGOARTICULAR AND POLYARTICULAR JUVENILE IDIOPATHIC ARTHRITIS PATIENTS HAVE A SIMILAR B CELL PHENOTYPE WHEN COMPARED TO ESTABLISHED RHEUMATOID ARTHRITIS

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Background: Our group has recently described that the majority of polyarticular juvenile idiopathic arthritis (pJIA) and a large fraction of extended oligoarticular JIA (oJIA) patients fulfil classification criteria for rheumatoid arthritis (RA) in adulthood. B cells play several important roles in RA pathogenesis, but it is still unclear if the pattern of B cell involvement in pJIA and extended oJIA follows what has been described for adults with RA.
Objectives: The main goal of this study was to characterize peripheral blood B cell phenotype and cellular activation in pJIA and extended oJIA patients when compared to established RA.
Methods: Blood samples were collected from JIA patients (N=10; mean age 10 ± 4 years), established RA patients treated with synthetic DMARDs (N=10; mean age 72 ± 7 years) and two corresponding groups of age- and sex-matched healthy donors. B cell phenotype was characterized by flow cytometry and B cell apoptosis was assessed after 48H of in vitro cell culture. Serum levels of BAFF and IL-6 were quantified by ELISA. Results: JIA patients recruited in this study were either classified as extended oJIA (N=6) or pJIA (N=4). Seven JIA patients (4 extended oJIA and 3 pJIA) were treated with methotrexate and three patients (2 extended oJIA and 1 pJIA) were untreated. We found that JIA patients had similar CD19+ B cell levels in circulation when compared to controls, but significantly higher CD19+ B cell frequencies in comparison to established RA. In addition, increased frequencies of transitional (IgD+CD38++) and naïve (IgD+CD27+) B cell subpopulations were observed in JIA patients when compared to RA. However, established RA patients had significantly higher levels of CD21lowCD38low, post-switch (IgD-CD27+) and IgD-CD27- memory B cell subsets when compared not only to controls, but also to JIA patients. No significant differences were detected in pre-switch (IgD+CD27+) memory and plasmablasts (IgD-CD38++) levels in JIA patients when compared to both controls and RA. Furthermore, the frequency of CD5+ B cells, CD5 median fluorescence intensity (MFI), CD40 MFI and CXCR5 MFI B cell expression levels were significantly increased in JIA patients when compared to established RA, but not to controls. No significant differences were observed between JIA and established RA patients in BAFF-R, FcgRIIB, CD21, CD23, CD38, CD86, CD95, HLA-DR, TLR9 and RANKL expression on B cells. After 48H of in vitro cell culture a significantly higher B cell death was found in JIA in comparison to RA patients. Moreover, BAFF and IL-6 serum levels were significantly higher in both JIA and RA patients when compared to controls.
Conclusions: The increased frequencies of transitional, naïve and CD5+ B cells in circulation and reduced levels of memory B cell subpopulations in JIA patients when compared to established RA are probably related to an immature immune system present in children when compared to adults. Nevertheless, the similarity in B cell phenotype found between extended oJIA, pJIA and established RA patients suggests an early B cell involvement in the pathogenesis of these two categories of JIA.

P153 – PREMATURE OVARIAN FAILURE IN PREMENOPAUSAL WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS AND SYSTEMIC VASCULITIS TREATED WITH INTRAVENOUS CYCLOPHOSPHAMIDE

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Background: Premature ovarian failure (POF) is a disorder defined as the permanent cessation of menstruation resulting from the loss of ovarian follicular activity before the age of 40 years. It has long been believed that in patients with systemic lupus erythematosus (SLE) the prevalence of POF is higher than in the general population, in part as a result of treatment with intravenous cyclophosphamide (IVCYC) and generally related to age and cumulative dosage of IVCYC. The risk of POF might delay or even avoid the implementation or acceptance of this therapy in young women.
Aims: To assess the incidence of POF and its associated factors in patients with SLE and systemic vasculitis treated with IVCYC and determine which factors may predispose to this side effect. To gain a better understanding of the rate of amenorrhea in premenopausal women who were given IVCYC.
Material and methods: A retrospective study of premenopausal women ≤ 44 years old who had been treated for SLE or systemic vasculitis with IVCYC in our Department. Demographic, clinical and therapeutic data were obtained through from the electronic clinic record and from the Rheumatic Diseases Portuguese Register, Reuma.pt and completed with a telephonic interview. The variables studied were: age at diagnosis, age at the beginning of the therapy, number of pulses, dosage per pulse, cumulative dosage, treatment duration and associated drugs. POF was defined by amenorrhea (transient or permanent). Exclusion criteria were patients with known causes of secondary amenorrhea, such as chronic kidney disease and reported hysterectomy or oophorectomy.
Results: We included 20 women treated with IVCYC, 16 caucasian, with a mean age at IVCYC beginning of 29.7 ± 8.4 years. Thirteen had the diagnosis of SLE, 3 had polyarteritis nodosa, 3 Behçet disease and 1 granulomatosis with polyangiitis. Four women had also secondary antiphospholipid syndrome. The indication for IVCYC was central nervous system disease in 10 (50%) women, renal involvement in 7 (35%) and peripheral nervous system disease in 3 (15%). They received a median of 6 IVCYC pulses (3-18), with a cumulative dose of 5.5 ± 2.8 g. Patients were also treated with prednisolone (100%), hydroxychloroquine (60%), azathioprine (70%), rituximab (30%), infliximab (15%) and IvIg (5%). Ten women (50%) developed transient amenorrhea and 4 (20%) developed permanent amenorrhea. Age at IVCYC beginning and cumulative IVCYC dose did not associate with permanent amenorrhea development. All permanent amenorrhea cases occurred in women starting IVCYC for kidney disease. Four pregnancies after IVCYC treatment occurred in 2 women, resulting in 2 successful deliveries, 1 fetal death and 1 therapeutic abortion (SLE flare with proteinuria and deep vein thrombosis).
Discussion: The incidence of permanent amenorrhea in our patients was 20%, similar to the values reported in the literature 17-60%. All cases occurred in patients starting IVCYC for renal involvement. There was no association between age or cumulative IVCYC dose and the development of POF in our sample, probably due to a small number of patients and also to a low cumulative IVCYC dose, with only two patients receiving more than 10 g. In the future, early detection of SLE patients with low ovarian reserve and introduction of fertility preservation, may be considered as a part of patient care.

P154 – NEOPLASMS IN PATIENTS WITH SYSTEMIC SCLEROSIS: A RETROSPECTIVE STUDY OF A CENTER

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Background: Systemic sclerosis is a connective tissue disease that can involve the skin and internal organs. Some studies have shown an increased risk of cancer in these patients (3-11%).
Objectives: The aim of this study is to demonstrate whether there is a relationship between scleroderma and malignancies and the potential risk factors associa-

ted with this condition.
Methods: We included 108 patients who fulfill the ACR/EULAR 2013 criteria for Systemic Sclerosis, followed in a Rheumatology Center in Hospital de São João, Portugal. Parametric and non parametric tests were used for statistics (SPSS 22,0).
Results: 96 were women (88.9%) and 12 were men (11.1%), 96 (88.9%) had a diagnosis of limited cutaneous systemic sclerosis and 12 (11, 1%) were diagnosed with diffuse cutaneous systemic sclerosis. 11 neoplasms (10.2%) were found: 2 gastric adenocarcinomas, 2 papillary thyroid carcinomas, 1 lymphoplasmocytic lymphoma, 1 breast adenocarcinoma, 1 multiple myeloma, 1 vulvar cancer, 2 undifferentiated metastatic cancers and 1 sarcoma de kaposi. Of the reported cases of death in our sample, 2 out of 8 were due to malignancies. The median (min-max) age of cancer diagnosis was 57 years [35-84]. 8 out of 11 neoplasms were found in women (72.7%) and 3 in men (27.3%), 9 in the cutaneous limited form (81.8%) and 2 in the cutaneous diffuse form (18, 2%). The median time between diagnosis of systemic scleroderma and cancer diagnosis was 2.5 years [(-10) - (26)]. Only 1 of the cases occurred before the diagnosis of the disease. There was a statistically significant difference in cancers among patients taking azathioprine (37.5% vs. 62.5%, p = 0.043): two of the cases had interstitial lung disease, with subsequent onset of myeloma multiple and Kaposi's sarcoma. Lymphoblastic lymphoma occurred in a patient with gastrointestinal involvement, but without pulmonary involvement.

There wasn't statistically significant association between tumors and other immunosuppressive drugs, neither in overlap with other rheumatic diseases, presence of ulcers, telangiectasia, pitting scars, pulmonary hypertension, lung interstitial disease or anticentromere, anti-Scl70 or anti-RNA polymerase III positivity. However, there was a trend towards an increased incidence of cancer in patients with gastrointestinal envolvement (81.8% vs. 18.2%), but with no statistical significance.
Conclusions: In our sample, the vast majority of cases occurred after the diagnosis of systemic sclerosis and there was a higher proportion of neoplasms in patients receiving azathioprine. There appears to be a probable association between scleroderma and neoplasia. Even though this association remains weak and contradictory, it seems prudent for us to monitor these patients more closely. Further studies are needed to clarify this possible relationship.

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P155 – EFICÁCIA DA TERAPÊUTICA COM TOCILIZUMAB EM MONOTERAPIA VERSUS EM ASSOCIAÇÃO COM csDMARDs: REAL-WORLD DATA

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Introdução: A terapêutica com Tocilizumab na Artrite Reumatóide tem demonstrado eficácia tanto em monoterapia como em associação com csDMARDs, nomeadamente com o metotrexato, constituindo deste modo uma importante arma terapêutica nos doentes com contraindicação ou intolerância para os csDMARDs.
Objectivos: O objetivo deste estudo consistiu em comparar os doentes sob Tocilizumab (TCZ) em monoterapia com os sob TCZ associado a csDMARDs em termos de parâmetros de atividade de doença, resposta clínica e taxas de remissão da doença, de modo a corroborar a eficácia deste fármaco em monoterapia, já extensamente descrita na literatura.
Métodos: Um estudo retrospectivo observacional foi desenvolvido, incluindo todos os doentes tratados com Tocilizumab no Serviço de Reumatologia do Hospital de São João. Os dados foram obtidos através de consulta do Reuma.pt. Foram comparadas as medidas de DAS-28, CDAI, SDAI, HAQ, respostas EULAR e ACR aos 6 meses e aos 12 meses após introdução do fármaco biotecnológico e comparadas as respostas nos dois grupos. Foram realizados testes paramétricos e não-paramétricos para a análise estatística (SPSS 22.0).
Resultados: Foram incluídos 75 doentes com Artrite Reumatóide (93,3% do sexo feminino), média de idades 56,97± 9,4 anos, média de idades na altura do diagnóstico 39,6 ± 11,6 anos e média de duração da doença aquando do início do TCZ de 12,6 ± 8,4 anos. Na nossa amostra, 25 doentes estavam sob Tocilizumab em monoterapia (33,3%) e 50 doentes faziam este

fármaco em associação com csDMARDs (66,7%). O DAS-28 médio antes de iniciar o TCZ era de 6,05 ± 1,06. Não se encontraram diferenças estatisticamente significativas entre os 2 grupos em relação à idade atual, idade de diagnóstico e idade de início do TCZ, assim como em relação ao sexo, índice de massa corporal, positividade para o fator reumatoide e anticorpos anti--CCP, presença de doença erosiva e de manifestações extra-articulares, duração da doença, DAS-28, CDAI, SDAI e HAQ aquando do início da terapêutica com tocilizumab. Também não se verificaram diferenças estatisticamente significativas em termos de remissão/baixa atividade da doença aos 6 e aos 12 meses entre o grupo que fazia TCZ em monoterapia vs a associação (p=0,065 e p=0,793, respetivamente). De igual forma, não se constataram diferenças estatisticamente significativas entre os dois grupos em termos de resposta ACR aos 6 meses (p=0,865) e aos 12 meses (p=0,361), de resposta EULAR aos 6 meses (p=0,337) e aos 12 meses (p= 0.812), assim como de Delta DAS-28 aos 6 meses (p=0,830) e aos 12 meses (p=0,574). Além disso, também não foram demonstradas diferenças nas seguintes escalas de atividade da doença entre os 2 grupos: CDAI aos 6 e aos 12 meses (p=0,486 e p=0,553, respetivamente); SDAI aos 6 e aos 12 meses (p=0,472 e p=0,562, respetivamente) e HAQ aos 6 e aos 12 meses (p=0,719 e p=0,576, respetivamente).

Conclusão: A nossa amostra, com dados do mundo real, sugere uma resposta comparável quer quando o TCZ é utilizado em monoterapia, quer quando em associação com outros fármacos modificadores do prognóstico, corroborando os estudos prévios já descritos na literatura. Além disso, acrescentámos evidência à importância deste fármaco na prática clínica, nomeadamente para doentes intolerantes ou com contraindicação para terapêutica concomitante com csDMARDs.

P156 – DOES DISEASE ACTIVITY AFFECT THE B-CELL COMPARTMENT IN ANKYLOSING SPONDYLITIS?

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Background: Although regarded as a mainly T-cell mediated disease, previous studies[1] have identified mutations and expression of B-cell regulatory genes that may take part in the pathophysiology and progression of Ankylosing Spondylitis (AS).

Objective: The aim of this study is to assess the correlation between disease activity scores in AS with changes in B-cell subset counts.

Methods: Patients with AS according to the modified New York criteria for AS naïve to biologic DMARD's were included in this cross-sectional study. Sociodemographic and clinical variables were recorded, including DMARD intake, Ankylosing Spondylitis Disease Activity Score - C reactive protein (ASDAS-CRP) and the Bath Ankylosing Spondylitis Disease Activity Index (BASDAI). Blood samples were collected for quantification of inflammatory markers (ESR and CRP) and B-cell immature transitional stages and mature subsets were measured using flow cytometry. Pearson and Spearman's correlation coefficients were calculated.

Results: A total of 22 AS patients were included (11 male and 11 female) with a median age of 56 years (IQR: 45.8-65.5). The median level of CRP was 1.1 mg/dL (IQR: 0.9-1.7) and ESR was 14 (IQR: 10-29.3). HLA B27 was positive in 14 patients (n=16, 87.5%) and 6 patients (27.2%) were taking csDMARDs. Regarding disease activity scores, median ASDAS-CRP was 2 (IQR: 0.7-2.5) and median BASDAI was 1.6 (IQR 1-5). According to ASDAS-CRP cut-offs, 6 patients had inactive disease, 4 patients had moderate disease activity, 9 patients had high disease activity and 2 patients had very high disease activity. Using BASDAI cut-offs (≥4), 7 patients had active disease. Patients were separated according to ASDAS-CRP in two subgroups, one including inactive and moderate disease activity and the other including high and very high disease activity. Two subgroups were also formed according to BASDAI activity (active and inactive patients). The subgroup of patient with ASDAS-CRP high and very high disease activity presented higher median levels of absolute CD20+CD5+CD27-IgD- (0,22 vs 0.07, $p<0.01$) and relative CD20+CD5+CD27-IgD- (0,11% vs 0.04%, $p<0.05$) cell counts comparing with patients with lower disease activity. The same was found for BASDAI active vs BASDAI inactive patients for both median absolute CD20+CD5+CD27-IgD- (0.17 vs 0.04, $p<0.01$) and median relative CD20+CD5+CD27--IgD- cell counts (0.1 vs 0.02, $p<0.05$) cell counts.

Conclusions: These results suggest that there is a disturbance in CD20+CD5+CD27-IgD- cell counts in AS

patients with higher disease activity scores. The clinical meaning and usefulness of these findings is still unclear, highlighting the need for further research.

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P157 – FIABILIDADE E VALIDADE DE CONSTRUCTO DO QUESTIONÁRIO PainDETECT

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Introdução: Em Portugal, a Dor Lombar Crónica (DLC) é uma das manifestações osteo-articulares mais frequentes, afectando 12,3% (95%IC: 10,5-14,3) dos indivíduos adultos. As queixas de dor nestes indivíduos são diversas, sendo usualmente classificadas como dor Nociceptiva (NOC), Neuropática (NEP) e mista (MISTA), sugerindo que diferentes mecanismos poderão estar envolvidos na sua génese.
Objectivo: Contribuir para a validação do Pain Detect Questionnaire (PDQ-PT) através do estudo da fiabilidade e validade de constructo na classificação das componentes NOC, NEP e mista, em utentes com DLC.
Metodologia: Realizou-se um estudo metodológico, transversal para avaliar as propriedades psicométricas da versão portuguesa da PDQ em 102 indivíduos com DLC. Foi realizado o estudo da validade estrutural do PDQ-PT através da Análise Fatorial Exploratória (AFE), da consistência interna, fiabilidade teste-reteste e validade de constructo (convergente e discriminativa). Para avaliação da validade de constructo foram estabelecidas hipóteses apriori relativas à força da correlação e significado estatístico com a Douleur Neuropathique en 4 Questions (DN4-PT) (validade convergente) e relativas à capacidade do instrumento detetar diferenças com significado estatístico entre os subgrupos NOC e NEP na intensidade da dor (Escala Numérica de Dor) e na incapacidade funcional (Quebec Back Pain Disability Scale- PT) (validade discriminativa).
Resultados: A AFE revelou uma solução fatorial inicial de apenas um fator comum (descritores da dor neuropática), com um engeinvalue de 3,45 que explica 49,3% da variância total no conjunto dos 7 itens analisados. O PDQ-PT revelou uma boa consistência interna (de Cronbach=0,84) e excelente fiabilidade teste-reteste (CCI= 0,97; IC 95%: 0,95-0,98, p<0.001). Relativamente à validade de constructo foram corroboradas todas as hipóteses estabelecidas apriori. Foi observada uma forte correlação entre o PDQ-PT e a DN4-PT (r=0,739, p<0.001) e detetaram-se diferenças significativas, no que respeita à intensidade da dor e incapacidade funcional, entre NEP e NOC em utentes com DLC (p=0,005 e p=0.011, respetivamente).
Conclusões: O PDQ-PT demonstrou boa validade e fiabilidade, recomendando-se o seu uso na medição e classificação do tipo de dor predominante (NOC, NEP e MISTA) em utentes com DLC, em contexto clínico e de investigação.

P159 – FRAGILITY HIP FRACTURE AFTER THE AGE OF 90 - THE EXPERIENCE OF A FRACTURE LIAISON SERVICE

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Background: Hip fractures are the most serious outcome of osteoporosis and are a leading public health concern due to the associated increase in morbidity and mortality, loss of independence and financial burden. A growing number of people over 90 years of age will suffer from traumatic events and hip fractures that will need care and rehabilitation treatment. Moreover this advanced age is associated with increased mortality and poorer functional recovery. Few studies have investigated the outcomes and follow-up of elderly peo-

ple aged 90 years or older.
Objective: To describe the outcomes in nonagenarian patients with proximal femur fragility fracture evaluated in a fracture liaison service, and compare it with those of younger patients.
Materials and methods: Retrospective study including patients with fragility proximal femur fractures admitted in our hospital from March 2015 to March 2017 who were referred to the Rheumatology outpatient clinic. In this setting patients were evaluated with laboratorial and imagiological workup and afterwards anti-osteoporotic therapy was started. The group of nonagenarians was compared with the group of patients aged 65-89 years attending the same outpatient clinic. The statistical analysis was performed using SPSS 23.0 software, and $p<0.05$ was taken to indicate statistical significance.
Results: Among 522 patients referred to our outpatient clinic, 130 were aged 90 years or older (110 females, median age 92 years, range 90-104). The median length of hospital stay was 11 days (range 0--129) and median Charlson comorbidity index (CCI) 5 (range 3-11). Ninety-one patients were discharged to their home, 29 were discharged to short/medium--term care facilities and 10 patients died during hospitalization. Fifty patients were evaluated in the outpatient clinic and 34 started anti-osteoporotic treatment.

Comparing nonagenarians with younger patients time to intervention was significantly shorter ($p=0.020$), the level of physical autonomy after the fracture was lower ($p<0.0001$), and the adherence to outpatient clinic appointments was lower ($p=0.01$). In what concerns imagiological and laboratorial parameters, total femur T-score was lower ($p=0.016$), vitamin D levels were lower ($p=0.003$), osteocalcin and betacrosslaps levels were higher ($p=0.029$ and $p=0.049$, respectively) in older patients.

There were no statistically significant differences in the following parameters: gender, length of hospital stay, CCI, previous level of physical autonomy, discharge outcome, 1 year mortality, previous or new fragility fractures during follow-up, femoral neck bone density, type of anti-osteoporotic treatment.
Conclusions: The outcomes of patients aged 90 years or older after fragility hip fracture had some differences comparing with those of younger patients, namely poorer functional recovery, lower adherence to outpatient clinic and densitometric/biochemical parameters. These findings must be confirmed in larger studies.

P164 – SACROILIAC JOINT MRI AND THE CONTRIBUTION OF RHEUMATOLOGY/ /RADIOLOGY MULTIDISCIPLINARY TEAM MEETINGS

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Background: Sacroiliac joint Magnetic Resonance Imaging of the sacroiliac joints (SIJ MRI) has become an important tool for an early identification of axial Spondylarthritis (axSPA) patients. However, its interpretation is challenging, leading to significant variability among radiologists and rheumatologists. This aspect assumes a central topic in the Rheumatology/Radiology multidisciplinary team (MDT) meetings which provide an opportunity for experts in both specialties to optimize the interpretation of imaging studies and to perform in-depth discussions of clinical cases. The aim of this study is to review the clinical cases discussed in these meetings and to evaluate the impact of the correct interpretation of the MRI SIJ to establish the diagnosis of axSPA according to the ASAS classification criteria.
Methods/materials: Clinical records from patients discussed in the MDT meetings were retrospectively retrieved regarding demographic characteristics and clinical features. Information from the previous SIJ MRI radiology report and the reading from the experts at the meeting were both registered and classified as positive or negative for sacroiliitis. When enough information was available, the ASAS axSpA criteria were applied prior to and after the clinical discussion of the cases.
Results: A total of 22 patients (6 males) with a median age of 43.5 years (IQR: 36-47) were included, corresponding to 22 MRI images. HLAB27 was positive in 9 (41%) patients. Inflammatory back pain was the most frequent presenting complain (n=11), followed by non-

TABLE I. CHARACTERIZATION OF THE PATIENTS CLASSIFIED ACCORDING TO THE ASAS AXSPA CLASSIFICATION CRITERIA

Age	Presenting complain	HLA B27 (pos/neg)	MRI SI before MDTm (SI pos/neg)	MRI SI after MDTm (SI pos/neg)	ASAS criteria before MDTm (pos/neg)	ASAS criteria after MDTm (pos/neg)
47	Buttock pain	-	+	+	+	+
27	Inflammatory back pain	-	+	+	+	+
43	Inflammatory back pain	+	+	+	+	+
37	Inflammatory back pain	+	+	-	+	+
27	Inflammatory back pain	-	+	-	+	+
31	Inflammatory back pain	-	-	-	+	+
64	Non-inflammatory back pain	-	+	-	+	-
51	Inflammatory back pain	+	+	-	+	-
36	Non-inflammatory back pain	-	+	-	+	-
40	Non-inflammatory back pain	+	+	-	+	-
47	Inflammatory back pain	+	+	-	-	-
29	Non-inflammatory back pain	-	+	-	-	-
22	Buttock pain	-	+/-	-	-	-
37	Inflammatory back pain	+	-	-	-	-
37	Inflammatory back pain	-	-	-	-	-
50	Inflammatory back pain	+	-	-	-	-

MDTm – multidisciplinary team meeting; SI – Sacroiliitis

-inflammatory back pain (n=4), buttock pain (n=3) and anterior uveitis (n=1). According to the initial SIJ MRI reports, 14 patients had sacroiliitis, 3 patients had doubtful sacroiliitis and 5 did not have sacroiliitis. The SIJ MRI status was changed to negative in 13 (60%) patients, with the initial report being positive in 10 and doubtful in 3 of these patients. Out of the 22 patients only 16 had enough information to apply the axSPA ASAS classification criteria (table). In the group initially classified as axSPA positive (n=10), 9 had a positive initial SIJ MRI report. After discussion at the MDT meeting, 4 patients were reclassified as axSPA negative based on the evaluation of the SIJ MRI images and 3 patients remained positive for axSPA despite being evaluated as SIJ MRI negative. The 6 patients initially classified as axSPA negative remained so after the meeting. Overall, the diagnosis of axSPA was changed in 4 out of 16 patients (25%).

Discussion/Conclusion: The Rheumatology/Radiology MDT meeting contributed to the optimization of axSPA classification in a significant proportion of patients. This study highlights the importance of the collaboration and communication between the rheumatology and radiology departments in addressing a well described problem in SPA diagnosis and management.

*Tiago Saldanha, Fernando M Pimentel-Santos and Jaime C Branco were equal contributors to this project

P168 – "ESPELHO MEU, ESPELHO MEU…" - PERCEPÇÃO DA IMAGEM CORPORAL NOS DOENTES COM ARTRITE REUMATÓIDE

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Introdução: O conceito de "imagem corporal" diz respeito à perceção do indivíduo acerca da sua aparência física. Esta pode ser influenciada negativamente por vários fatores, nomeadamente estados patológicos e tratamentos daí decorrentes. A Artrite Reumatóide (AR) é uma doença crónica, potencialmente deformante e incapacitante, podendo desta forma resultar em alterações importantes na funcionalidade e aparência do indivíduo, com possíveis consequências na sua autoestima. A versão portuguesa da *Body Image Scale* (BIS) é um instrumento psicométrico utilizado para avaliação da perceção da imagem corporal em doentes com variadas patologias, em que valores mais elevados traduzem uma perceção mais negativa da imagem corporal.
Objectivo: Este trabalho teve como principal objetivo a avaliação da perceção da imagem corporal nos doentes com AR.
Metodologia: Colheita de dados sociodemográficos e clínicos e aplicação do instrumento *Body Image Scale* (BIS) a doentes com AR observados consecutivamente no serviço de Reumatologia. Foi considerado o valor p<0,05 como estatisticamente significativo.
Resultados: Obteve-se uma amostra de 78 doentes com AR, 76,9% pertencendo ao sexo feminino e 23,1% ao sexo masculino, com uma média de idades de 57±14,8 anos. Cerca de metade dos doentes (51,3%) encontrava-se em remissão clínica (DAS 28 <2.6) e em 23,1% verificou-se atividade moderada a alta. 38,5% dos doentes encontrava-se sob terapêutica biotecnológica.

O valor médio obtido na BIS foi de 4,8 ± 6,3, com uma pontuação obtida entre 0 e 29 pontos. Não houve diferenças estatisticamente significativas entre os dois sexos, embora se verificasse uma tendência para valores superiores nas mulheres. Constatou-se que os doentes com valores mais elevados de EVA e incapacidade funcional (avaliada pelo *Health Assessment Questionnaire* - HAQ) apresentavam também uma perceção mais negativa relativamente à sua imagem corporal (r=.294; p<0,05 e r=.553; p<0,001, respetivamente). Por outro lado, doentes com uma perceção mais positiva da sua aparência física apresentavam níveis mais elevados de autoestima e de afeto positivo (r=-.568; p<0,001 e r=-.437; p<0,001, respetivamente). Obteve-se uma correlação negativa entre os valores reportados na BIS e a duração da doença, embora sem significado estatístico. Não se encontraram correlações significativas entre a perceção da imagem corporal e a atividade da doença ou os valores séricos dos parâmetros inflamatórios.
Conclusão: Apesar do carácter potencialmente deformante da AR, os doentes com esta patologia apresentam uma perceção de imagem corporal tendencialmente positiva. Doentes com valores mais elevados de EVA e de incapacidade funcional possuem tendencialmente, uma percepção menos positiva da sua aparência. Além disso, demostrou-se que os níveis de autoestima e afeto positivo tendem a ser mais baixos nos doentes com uma perceção menos positiva da sua imagem corporal.

P169 – ADESÃO TERAPÊUTICA, AUTOESTIMA E AFETO EM DOENTES COM ARTRITE REUMATÓIDE

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Introdução: A adesão terapêutica constitui um fator importante no outcome dos doentes. A preocupação com os custos em saúde tem vindo a valorizar cada vez mais a questão da adesão terapêutica, uma vez que o incumprimento terapêutico se pode traduzir em complicações da doença, acarretando custos económicos acrescidos. As doenças crónicas, nas quais se inclui a

Artrite Reumatóide (AR), correspondem a uma fração substancial das despesas em saúde, sendo que a educação para a saúde e o envolvimento do doente no seu processo de tratamento são elementos chave na abordagem destas patologias. O instrumento *Medical Outcomes Study* (MOS) *Measures of Patient Adherence* permite uma avaliação subjetiva da adesão terapêutica.

Objectivo: Verificar a existência de relação entre a adesão terapêutica e os níveis de autoestima e afeto em doentes com AR.

Metodologia: Colheita de dados demográficos e clínicos e aplicação dos instrumentos *Medical Outcomes Study* (MOS) *Measures of Patient Adherence,* escala de auto-estima de Rosenberg e versão reduzida da escala portuguesa de afeto positivo e negativo (PANAS-VRP) a doentes com Artrite Reumatóide observados consecutivamente no serviço de Reumatologia. Foi considerado o valor p<0,05 como estatisticamente significativo.

Resultados: Obteve-se uma amostra de 78 doentes com AR, 76,9% do sexo feminino e 23,1% do sexo masculino, com uma média de idades de 57 ± 14,9 anos. O valor médio de adesão terapêutica reportada foi de 25,8 ± 4,8, com cerca de 83% dos doentes referindo uma pontuação total superior a 15 pontos. Constataram-se correlações estatisticamente significativas entre a adesão terapêutica e: a atividade da doença (r=-.269; p<0,05); os parâmetros inflamatórios (r=-.246; p<0,05); os níveis de autoestima (r=.343; p<0,01); e de afeto positivo (r=.345; p<0,01) dos doentes com AR. Assim, verificou-se uma correlação inversa entre a adesão terapêutica e os valores de DAS28 e de velocidade de sedimentação (VS). Os indivíduos com valores mais elevados de autoestima segundo a Escala de Autoestima de Rosenberg apresentaram níveis tendencialmente mais elevados de adesão terapêutica, à semelhança do que se verificou para os níveis de afeto positivo obtidos através da aplicação do PANAS-VRP. Não se encontraram correlações estatisticamente significativas entre os níveis de adesão terapêutica e variáveis sociodemográficas tais como sexo, grau de escolaridade, situação laboral ou estado civil. Também não se constataram diferenças relativamente à adesão terapêutica e o tipo de terapêutica estabelecida, i.e.: fármacos modificadores da doença clássicos (cDMARDs) versus fármacos biotecnológicos.

Conclusão: Na população com AR, verificou-se um melhor controlo da doença nos doentes que apresentam níveis mais elevados de adesão terapêutica. Não se verificou correlação estatisticamente significativa entre os níveis de adesão terapêutica e o sexo ou grau de escolaridade ou mesmo entre os doentes sob cDMARDs e sob terapêutica biotecnológica. Por outro lado, quanto mais alto for o afeto positivo, maior é a adesão, o que parece indiciar que a adesão terapêutica poderá estar mais ligada a aspectos afectivos e não somente com a eficácia concreta dos fármacos.

P170 – SECONDARY OSTEOPOROSIS PREVENTION CREATION OF AN OSTEOPOROSIS OUTPATIENT CLINIC: REPORT OF FIRST YEAR EXPERIENCE

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Introduction: In January of 2017 an osteoporosis outpatient clinic was started in Local Health Unit of Guarda, proposed by the Rheumatology Service, with the collaboration of the Orthopaedic Service and other services that identified patient with osteoporosis or fragility fractures. Our objective was to identify patients with osteoporotic fracture and institute secondary prevention.

Methods: All patients with fractures resulting from low-impact trauma identified at emergency department and/or outpatient clinic should be referenced for an osteoporosis appointment. Patients with risk factors for osteoporosis should also be referenced for an osteoporosis appointment.

Results: Between January of 2017 and December of 2017 forty six patients were referred to an osteoporosis outpatient clinic. Eleven patients did not attend the appointment; of these 91% are women with a mean age of 84 (δ ± 10.9). Thirty five patients attended; of these 89% are women with a mean age of 76.3 (δ ± 12.6). We identify 27 femur fractures, 21 vertebrae fractures and 23 other sites. Nineteen have one fracture, sixteen have two or more fractures. Thirty six percent already was supplemented with calcium and colecalciferol and 22% was doing antireabsorptive therapy. After the appointment 75% was prescribing calcium and colecalciferol supplementation, 58% was prescribe bisphosphonates, 14% was prescribe teriparatide. 19% was discharched because of contraindication to antireabsorptive therapy.

Conclusions: Hip and vertebral fractures are a manifestation of severe osteoporosis. Osteoporotic fracture

patients will incur in another fracture in the next years. Clinicians and patients need to be educated on the importance of osteoporosis treatment after a fracture. Unfortunately, the majority of patients who have had fragility fractures are not evaluated for osteoporosis and do not subsequently receive antiresorptive therapy, which has been shown to reduce the risk of a second fracture.

Our outpatient clinic was developed to fulfill this very important gap in the secondary osteoporosis prevention, providing a clinical evaluation and treatment for their underlying osteoporosis.

P171 – THE EFFECT OF BIOLOGIC DISEASE-MODIFYING ANTIRHEUMATIC DRUGS IN TARGETING DISEASE REMISSION IN AXIAL SPONDYLOARTHRITIS (axSpA): A SYSTEMATIC LITERATURE REVIEW

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Background: The treat-to-target concept is currently recommended in axSpA management and remission is the main objective of treatment. Although consensual definitions of remission are lacking, most authors assume remission as a state of inactive disease or, alterna-

TABLE I. bDMARD TRIALS ADDRESSING ASAS-PR OR ASDAS-ID AS PRIMARY OUTCOMES

Reference	Phenotype	Study design and duration	Drug (number of patients enrolled)	Primary Outcome	Results
Braun, 2008	r-axSpA	Extension 254 weeks	IFX/IFX *vs* PBO/IFX (38)	ASAS-PR	**34.2%**of patients achieved **ASAS-PR**
Sieper, 2012	r-axSpA and nr-axSpA	RCT 28 weeks	NPX +PBO (51) *vs* NPX +IFX (105)	ASAS-PR	**ASAS-PR in 61.9% NPX+IFX** *vs* 35.3% NPX+PBO (p<0.05)
Sieper, 2013	r-axSpA and nr-axSpA	Extension 52 weeks	NPX (40) *vs* no treatment (40) after partial remission under IFX+NPX or NPX+PBO	ASAS-PR	No statistically significant differences between the groups
Davis, 2008	r-axSpA	Extension 192 weeks	ETN/ETN (128) *vs* PBO/ETN (129)	ASAS-PR	**44%** of patients achieved **ASAS-PR**
Song, 2012	nr-axSpA	RCT (first part) 48 weeks	ETN (40) *vs* SSZ (36)	ASAS-PR plus MRI remission	**ASAS-PR+MRI remission in 33% ETN** vs 11% SSZ (p<0.05)
Sieper, 2011	r-axSpA	RCT and Extension 5 years	ADA/ADA *vs* PBO/ADA (311)	ASAS-PR and ASDAS-ID	**ASAS-PR in 45%** **ASDAS-ID in 55%**
van Heijde, 2014	r-axSpA	RCT (first part) 24 weeks	GOL (278) *vs* PBO (78)	ASDAS-ID	**ASDAS-ID in 27.3% GOL** *vs* 2.8% PBO (p<0.001)

Legend: - ADA: adalimumab; ASAS-PR: ASAS- Partial Remission; ASDAS-ID: ASDAS Inactive Disease; ETN: etanercept; GOL: golimumab; IFX: infliximab; MRI: magnetic resonance image; NPX: naproxen; nr-axSpA: non-radiographic axial spondyloarthritis; PBO: placebo; r-axSpA: radiographic spondyloarthritis; RCT: randomised controlled trial; SSZ: sulfasalazine, *vs – versus*.

tively, of low disease activity, as a near concept. In current practice, ASAS-Partial Remission (ASAS-PR) and ASDAS-Inactive Disease (ASDAS-ID) scores have gained wide acceptance as clinical remission-like definitions.
Objectives: In this review we assessed the efficacy of different biologic disease-modifying anti-rheumatic drugs (bDMARD) in achieving ASAS-PR or/and ASDAS-ID as remission-like primary outcomes. Data from randomised controlled trials (RCT) conducted in radiographic axSpA (r-axSpA) and non-radiographic axSpA (nr-axSpA) patients were included.
Methods: A systematic literature review was performed using the MEDLINE database (August 17 2017) with the filters "published in the last 10 years" and "humans". The PICO (P, population; I, intervention; C, comparison; O, outcome) concept was used to perform the analysis according to: Patients - adults (>18 years old) with r-axSpA or nr-axSpA; Intervention - any bDMARD regardless of formulation or duration; Comparison - placebo and/or any different drug; Outcomes: ASAS-PR and ASDAS-ID.
Results: After screening 557 references (after de-duplication), 7 RCTs fulfilled the inclusion criteria, all concerning tumor necrosis factor inhibitors (TNFi) bDMARDs – Table 1. ASAS-PR was the most commonly used remission-like definition- in 6 of the 7 trials, 1 of those as a composed measure with a magnetic resonance score. Despite different baseline populations (including r-axSpA and nr-axSpA), all these trials provide evidence of TNFi efficacy in achieving remission. The proportion of patients achieving ASAS-PR and ASDAS-ID varied between 33-61.9% and 27.3-55%, respectively, with a minimum and maximum follow-up periods of 28 to 254 weeks for ASAS-PR and 24 weeks to 5 years for ASDAS-ID.
Conclusions: Clinical trials addressing remission-like concepts as primary outcomes are scarce. ASAS-PR score was the most commonly used remission outcome. Depending on the studies, between one third to one half of patients treated with TNFi achieved ASAS-PR or ASDAS-ID. Considering nowadays aimed treatment targets, these data raise the unmet need for improved treatment options and strategies that favour optimized remissions rates in axSpA patients.

P172 – FACTORS PREDICTING DIFFICULTIES WITH DISCHARGE TO OWN HOME IN PATIENTS WITH FRAGILITY HIP FRACTURES

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Background: Little is known about risk factors that may prevent hip fracture patients from being discharged to home. The aim of this study was to investigate possible predictive factors of difficulties with discharge to home in these patients.
Material and methods: Retrospective observational study including patients with low trauma proximal femur fracture admitted in our hospital from March 2015 to March 2017 who were living at home before the injury. Patients were divided into those who were discharged to home (home discharge group) and those who were discharged to rehabilitation or short/medium-term care facilities or died in hospital (non-home discharge group). Charlson Comorbidity Index (CCI), which accounts for most major medical comorbidities, was calculated for each patient. Logistic regression was conducted to determine risk factors of non-home discharge.
Results: Four hundred and seventy patients were included, 373 (79.4%) females. There were 303 patients (64.5%) in the home discharge group and 167 patients (35.0%) in the non-home discharge group. Median age at injury was 84.0 years (range 65-104)\. The most frequent fracture type was femoral neck fracture (42.3%), followed by transtrochanteric fracture (37.5%). Median lenght of stay in hospital was 11 days (range 0 -175) and median time to intervention 2 days (range 0-44). Comparing the two groups (non-home discharge vs home discharge) patients from the first group were more frequently male (26.3% vs 17.5%, p=0.016), had higher CCI score (5.70±1.83 vs 5.0±1.61, p<0.0001), higher length of hospital stay (35.0±26.9 vs 11.7±14.2 days, p<0.0001). Higher length of hospital stay (OR=1.097, p<0.001) was a risk factor for not achieving the goal of discharge to home and arthroplasty was identified as a protective factor (OR=0.229, p=0.029).

Conclusions: In this study, higher length of hospital stay was associated with difficulties with discharge to home. On the other hand, having an arthroplasty was a protective factor for non-home discharge. More studies, with larger sample sizes and prospective design, should be undertaken to better assess this subject.

P173 – ESTUDO MISTO SOBRE UM PROGRAMA DE FISIOTERAPIA EM GRUPO BASEADO NO EXERCÍCIO E EDUCAÇÃO PARA UTENTES COM FIBROMIALGIA

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Introdução: Na investigação sobre a efectividade de tratamentos não-farmacológicos para utentes com fibromialgia, o exercício e a educação têm demonstrado resultados positivos nos níveis de dor e incapacidade. Porém, as abordagens tradicionais que investigam a efectividade do tratamento apenas com base em medidas quantitativas têm vindo a ser consideradas insuficientes por não integrarem a perspectiva dos utentes sobre os resultados das intervenções. O conhecimento aprofundado da perspectiva dos utentes sobre os benefícios do tratamento poderá contribuir para o ajuste de tratamentos que melhor respondam às suas necessidades.
Objectivo: Este estudo teve dois objectivos. Primeiro, analisar a efectividade de um programa de fisioterapia em grupo (incluindo uma componente de educação e exercício) na intensidade da dor, na incapacidade funcional e na percepção global de melhoria de indivíduos com fibromialgia. Segundo, explorar como os utentes, que consideraram ter melhorado na dor e na função (de acordo com os resultados obtidos na Escala de Percepção Global de Melhoria - PGIC), compreenderam e explicam os resultados.
Metodologia: Foi implementado um estudo misto sequencial explanatório, que combinou métodos quantitativos (1ª fase) e métodos qualitativos (2ª fase). Na 1ª fase, os participantes participaram num programa de intervenção estandardizado durante 8 semanas (frequência trissemanal). Os participantes foram avaliados no início, a meio (4 semanas) e no final do programa (8 semanas). Para a avaliação dos resultados foi utilizada a Escala Numérica de Dor (NPRS), e as versões Portuguesas da *Revised Fibromyalgia Impact Questionnaire* (FIQR) e da PGIC. Os participantes que apresentaram valores na PGIC ≥5, foram convidados a participar na 2ª fase do programa. Na 2ª fase, foram realizados 2 grupos focais para a recolha dos dados. A entrevista semi-estruturada com guião foi gravada e transcrita integralmente.
Resultados: 37 participantes (mulheres; 49.3±10.2 anos) completaram a 1ª fase. A análise, utilizando o SPSS, mostrou melhorias significativas na intensidade da dor (média, desvio-padrão da mudança: 1.38± 2.363,P=0.001) e incapacidade funcional (21.577± 21.02,P<0.001). Quanto à percepção de melhoria, 26 participantes (70,3%) consideraram ter melhorado substancialmente na dor e na função (PGIC ≥5). Destes, 12 aceitaram participar nos grupos focais. Da análise qualitativa "fazer mais actividades da vida diária" e "tomar menos medicação" foram os principais aspectos identificados como melhoria pelos participantes. De acordo com estes participantes, o conhecimento sobre as estratégias para a auto-gestão da doença teve uma importância-chave para o sucesso.
Conclusões: A combinação dos dados de ambas as fases possibilitou uma informação mais detalhada sobre a percepção dos participantes acerca dos aspectos que consideraram mais importantes para alcançar o sucesso com o tratamento. É recomendada investigação futura sobre a efectividade de tratamento considerando a perspectiva dos utentes, visto que esta poderá contribuir para o desenho de tratamentos mais efectivos e centrados no utente.

P176 – CONTRACEPTIVE COUNSELING AND USE AMONG PORTUGUESE WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Systemic Lupus Erythematosus (SLE) is an autoimmune disease that primarily affects women of reproductive age. Disease activity and medication use can complicate pregnancies in SLE, therefore these patients should be counseled and are candidates for highly effective contraceptive methods. We examined contraceptive counseling and use among SLE patients attending an Universitary Portuguese Hospital.
Methods: Cross-sectional study in which women aged 15-50 followed in our Rheumatology Centre with a diagnosis of SLE were approached to complete a researcher-administered survey. Premenopausal women

<50 years who were sexually active were considered at risk of pregnancy. We compared self-reported rates of contraceptive counseling and use, stratified by treatment with teratogenic medications, and by history of thrombosis or antiphospholipid antibodies (aPL). The statistical analysis was performed using SPSS 23.0 software, and p<0.05 was taken to indicate statistical significance.

Results: 95 women were included, median age 34 years (range 15-50), with median disease duration of 8.5 years (range 0.50-34.0), median SELENA-SLEDAI of 2 (range 0-16) and SLICC /ACR damage index of 0 (range 0-4) at the time of the interview.

Seven patients were in menopause, 2 were pregnant at the time of the survey, and 24 had not been sexually active with a man in the previous 3 months. Sixty women (63.2%) were sexually active and were considered to be at risk for unplanned pregnancy. Among these, 85% (n=51) were aware of the complications associated with pregnancy in their medical condition and 73.3% had received contraceptive counseling. Fifty-six patients (93.3%) reported consistent contraceptive use: 33.3% were using hormonal methods, 21.7% depended solely on barrier methods and intrauterine contraceptives (IUDs) were used by 26.7%.

Twenty-eight (46.7%) of the sexually active women were taking one or more of methotrexate, mycophenolate mofetil, cyclophosphamide or warfarin; 16.7% (n=10) had history of thrombosis and 40% (n=24) had positive aPL. Younger patients were more likely to have received contraceptive counseling (35 [17-46] years versus 42,5 [20-48] years, p=0.021). Patients with lower level of education reported significantly less counseling (p=0.026).

Those who received contraceptive counseling were using more effective contraceptives (p<0.001). Women using potentially teratogenic medications or with a history of thrombosis were no more likely to have received contraceptive counseling or to use more effective contraceptives. Those with positive aPL were using more effective contraceptives (p=0.024).

History of thrombosis or aPL accounted for low rates of estrogen-containing contraceptives, however 3 women with aPL were using this type of contraceptives.

Conclusions: In this study, a significant number of patients did not receive any contraceptive counseling, especially older patients and those with lower educational level. Particular attention must be paid to women using potentially teratogenic medications or with a history of thrombosis. These findings suggest the need to improve the education and provision of adequate contraceptive counseling and services to these women.

P188 – RA-VOICE: EVALUATING LARYNGEAL INVOLVEMENT IN RHEUMATOID ARTHRITIS PATIENTS, A PRELIMINARY REPORT

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Introduction: Laryngeal involvement is not uncommon in connective tissue diseases including Rheumatoid Arthritis (RA). Its prevalence has been estimated between 15% and 70% of patients and, in post mortem series, between 45% and 88% of patients. The cricoarytenoid joint is the most commonly affected site.

Dysphonia, cough, dryness symptoms, foreign body sensation and odynophagia are among the symptoms of laryngeal involvement in RA although, quite often, it is asymptomatic. Due to the fact that these symptoms are nonspecific, laryngeal manifestations of RA are often underdiagnosed.

Aims: To evaluate laryngeal involvement in RA patients and compare the findings, according to disease activity and duration of disease.

Methods: This is a cross-sectional study that evaluated laryngeal involvement in RA. The patients were accessed using videolaryngostroboscopy (VLS) and objective changes were recorded using the validated version of the reflux finding score (RFS). The Reflux Symptom Index (RSI), was used to evaluate laryngopharyngeal symptoms and Vocal cord impairment was accessed using the validated version of Voice Handicap Index-10 (VHI-10). Statistical analysis was performed using non-parametric tests given the small sample size and non-normal distribution of the variables.

Results: We enrolled 48 RA patients, 38 females and 10 males, with mean age of 60 years and mean disease duration of 13 years. Within this sample, 2 males were active smokers and 4 males and 3 females were previous smokers. 77.8% of the patients were being treated with Metotrexate and only 6.25% were receiving concurrent medication with prednisolone above 7.5 mg daily. 14.58% were also medicated with AINE's on demand and 66.67% used proton pump inhibitors,

mostly as a preventive measure.

Comparing the group of patients with DAS 28 3V above 2.6 vs patients with values below 2.6 at the time of evaluation, there were no significant differences, in the RFS, RSI nor VHI-10. However, we found statistical significant differences, regarding the RSI, when evaluating the patients according to duration of disease. Patients with disease duration <5 years had significantly less symptoms than the rest of the groups (6-10 years, 11-15 years, >15 years), p=0.015. Even though no differences were found regarding the RFS, patients within the > 15 years of disease duration group, presented a higher median score, when compared to the others (median scores for: < 5 years = 2.5, 6-10 years = 3, 11-15 years = 4, > 15 years= 7).

Conclusions: We were able to verify that RA patients with longer disease duration had more symptoms, and appear to have more alterations on direct laryngeal examination, even though the role of other comorbidities and medications cannot be excluded. There was no significant relationship between laryngeal alterations and disease activity. The current evidence, as identified in the present study, suggests that laryngeal manifestations in RA patients are often underdiagnosed. A multidisciplinary team approach is necessary to improve the overall patient management.

This study had some limitations, namely the small sample size and the fact that the scales used were not specifically developed for rheumatic patients.

In order to enhance the ongoing work, the authors are recruiting an age matched control group. Results to be presented soon.

P190 – POOR RESPONSE TO HEPATITIS B VACCINATION IN RHEUMATIC PATIENTS TREATED WITH BIOLOGIC THERAPY – PRELIMINARY RESULTS OF AN OBSERVATIONAL STUDY

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Background: Hepatitis B virus (HBV) vaccination is recommended for rheumatic patients before starting biologic therapy, according to national and European guidelines. There is some evidence that HBV vaccination is effective in patients under conventional synthetic disease modifying anti-rheumatic drugs (csDMARDs), but it is currently unclear whether this also applies to biologic DMARDs (bDMARDs).

Objectives: To assess the efficacy and safety of HBV vaccination in patients with rheumatic diseases treated with biologics.

Methods: We included patients with any inflammatory rheumatic disease treated with any bDMARD drug, followed in a day-hospital setting, who were negative for anti-HBs and anti-HBc and had never been vaccinated for HBV. Engerix B® (20µg/1mL) was administered at 0, 1 and 6 months and anti-HBs was re-assessed at least one month after the last dose. Response was defined as anti-HBs>10IU/L. Disease activity was evaluated as per the appropriate clinical tools (DAS28, ASDAS, SLEDAI) before and until at least one month post-vaccination. Disease flare was defined according to recommended criteria. We recorded serious adverse events (SAE), defined as an unexpected illness that is life-threatening or requiring hospitalization, before and up to at least one month post-vaccination.

Results: We included 39 patients, the majority of whom were treated with tumour necrosis factor inhibitors (TNFi). Patients characteristics are represented in Table 1. Most patients were taking concomitant csDMARDs (72%) and were in remission (42%) or low disease activity (25%). Only 8 out of 39 patients had a positive response to vaccination (20.5%), with a mean anti-HBs titre of 403±668IU/L. Responders diagnoses were rheumatoid arthritis (RA, n=5), psoriatic arthritis (n=1), ankylosing spondylitis (n=1) and inflammatory bowel disease-associated spondyloarthritis (n=1) and all but one (tocilizumab) were on TNFi (2 adalimumab, 3 etanercept, 2 infliximab). Importantly, half of the responders had to temporarily interrupt bDMARDs due to other intercurrences for at least one administration, for a period from 2 weeks to 5 months. No clinical variables were associated with response. Eight patients experienced disease flares, of which 6 were mild, did not require therapy adjustment and subsequently returned to previous disease activity; one patient with

TABLE I. BASELINE PATIENT CHARACTERISTICS (N=39)

Age (years), mean ± sd (range)	56±8 (43-70)
Female, n (%)	23 (59)
Disease, n (%)	
- Rheumatoid arthritis	21 (54)
- Psoriatic arthritis	8 (21)
- Ankylosing spondylitis	6 (15)
- Systemic lupus erythematosus	2 (5)
- Inflammatory bowel disease-associated spondyloarthritis	1 (3)
- Adult onset Still's disease	1 (3)
Disease duration (years), mean ± sd	19±9
Biologic DMARDs, n (%)	
- Infliximab	14 (36)
- Etanercept	8 (21)
- Adalimumab	5 (13)
- Golimumab	3 (8)
- Tocilizumab	5 (13)
- Belimumab	2 (5)
- Rituximab	1 (3)
- Anakinra	1 (3)
Conventional DMARDs, n (%)	
- Methotrexate	22 (56)
- Sulfasalazine	4 (10)
- Hydroxychloroquine	1 (3)
- Azathioprine	1 (3)
- None	11 (28)
Glucocorticoids, n (%)	18 (46)
NSAIDs, n (%)	12 (31)
Disease activity score, mean ± sd	
- DAS28	2.9±1.2
- ASDAS	2.1 ± 1.6
- SLEDAI	6 ± 2.8
Disease activity class, n (%)	
- Remission	15 (42)
- Low	9 (25)
- Moderate	9 (25)
- High	1 (3)
- Very high	2 (6)

PsA experienced significant skin disease worsening that led to switch a few months after the 3rd vaccine dose; and one patient had a RA flare between the 2nd and 3rd vaccine dose that also led to a switch. There was one SAE: a 70 year-old RA patient treated with golimumab had an acute diverticulitis complicated by abdominal abscess and hemicolectomy 1 month after the first vaccine dose and did not restart a bDMARD.

Conclusions: In this study, HBV vaccination response was poor and lower than expected based on published data for healthy adults and rheumatic patients treated with csDMARDs. Vaccination was overall safe but there were 2 severe disease flares and one SAE that lead to treatment switch/interruption, although causal association is difficult to establish. Our data reinforce the recommendation for HBV vaccination prior to starting bDMARDs.

P191 – CARACTERIZAÇÃO DOS DOENTES COM ARTRITE IDIOPÁTICA JUVENIL SEGUIDOS NA CONSULTA DE REUMATOLOGIA PEDIÁTRICA DO CENTRO HOSPITALAR UNIVERSITARIO DO ALGARVE

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Introdução: Artrite Idiopática Juvenil (AIJ) integra um grupo de doenças de origem desconhecida, durante mais de 6 semanas, com início antes dos 16 anos. É a doença reumática mais frequente na infância (prevalência de 16-150/100.000 habitantes) e com predomínio pelo género feminino, sobretudo no subtipo oligoarticular (o mais frequente, correspondendo a 50% dos casos). O tratamento é baseado numa combinação farmacológica, reabilitação e suporte psicossocial. A atividade da doença é demonstrada pela atividade inflamatória, sendo a implicação desta nas atividades de vida diária do doente um ponto fulcral na avaliação. Assim, pretendemos caracterizar doentes com AIJ seguidos na consulta de Reumatologia Pediátrica do Centro Hospitalar Universitário do Algarve (CHUA).

Materiais e Métodos: Estudo observacional descritivo realizado com base no registo clínico e Reuma.pt de todos os doentes com AIJ, seguidos durante 2017, na consulta Multidisciplinar de Doenças Reumáticas Pediátricas do CHUA. Registaram-se dados sociodemográficos, clínicos, analíticos e terapêuticos. Incluímos a referenciação a Medicina Física e de Reabilitação (MFR) e os respectivos motivos. A análise estatística realizada através do Microsoft Excel 2010.

Resultados: Amostra de 10 doentes (total de 32), 6 e 4 . Idade de início da doença, em média, 6,6 anos (1-15); idade no diagnóstico 6,8 anos e duração da doença 4,2 anos (1-10). A distribuição da classificação ILAR: oligoarticular persistente 60%, artrite/entesite 30% e sistémica 10%. Analiticamente verificamos ANAs e HLA B27 positivos em 30% dos casos; o FR e anti-CCP estavam sempre negativos. 60% dos doentes encontravam-se com doença ativa e 40% em remissão; em relação ao CHAQ/HAQ, obtivemos score médio de 0,28 pontos, sendo que apenas 2 doentes apresentaram valores diferentes de zero. 50% dos doentes já tinham estado expostos a corticoesteróides (CE), 60% a DMARDs

sintéticos e 10% a DMARDs biológicos; atualmente apenas 10% estão sob CE, mantendo-se 60% com DMARDs sintéticos (Metotrexato) e 10% com DMARDs biológicos (Etanercept). A exposição cumulativa à terapêutica foi 0,76 anos para CE, 3,11 anos para DMARDs sintéticos e 0,1 anos para DMARDs biológicos. 20% dos doentes já tinham (em algum momento do percurso da doença) sido referenciados à consulta de MFR, ambos por deformidade em flexo do cotovelo.

Discussão/Conclusão: A elevada frequência de AIJ justifica os 31% de doentes encontrados; não se verificou o predomínio de género esperado, apesar da dominância da categoria oligoarticular. Esta categoria surge preferencialmente em meninas e antes dos 6 anos; na nossa amostra encontramos 4 (nesta categoria), com início da doença antes dos 6 anos. Dois dos 3 doentes com HLA B27 positivo enquadravam-se na categoria artrite/entesite, como esperado. Esta categoria surge predominantemente em meninos, depois dos 7-8 anos; os 3 casos obtidos enquadravam-se nestas características. É expectável evolução favorável, dada a negatividade para FR e anti-CCP, bem como ausência das variantes poliarticular e sistémica. Apesar de 60% dos doentes terem ainda doença ativa, 50% têm duração da doença e seguimento em consulta inferior a 2 anos, podendo justificar esta percentagem. Sendo os principais objetivos do tratamento o controlo da dor, preservação das amplitudes articulares, manejo e evicção de complicações e facilitação do desenvolvimento psicomotor adequado, a MFR terá um papel preponderante na equipa multidisciplinar responsável pelo apoio prestado a estes doentes, como se pode observar pelos 20% de doentes referenciados a essa consulta.

P192 – TOCILIZUMAB ABROGATES EXPANSION OF ACTIVATED TFH CELLS FOLLOWING INFLUENZA VACCINATION AND PARTIALLY LIMITS VACCINE RESPONSE IN RHEUMATOID ARTHRITIS PATIENTS

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Background: Seasonal influenza vaccination is recommended in rheumatoid arthritis (RA) patients treated with conventional and biological disease modifying anti-rheumatic drugs (DMARDs). T follicular helper (Tfh) cells are essential for generation of high affinity antibodies following vaccination and are involved in the pathogenesis of RA. Interleukin (IL)-6 has been shown to be critical for Tfh differentiation in mice, while its importance in humans has been less clear.

Objectives: To investigate the response to seasonal influenza vaccination in RA patients treated with tocilizumab (TCZ, IL-6R blocker) and methotrexate (MTX) and the importance of IL-6 for the in vivo differentiation of human Tfh cells.

Methods: Blood was collected before and 7 and 28 days after vaccination from established RA patients treated with TCZ, MTX ± other DMARDs and age- and sex-matched healthy donors (HD). We analysed the frequency of Tfh and T follicular regulatory (Tfr) populations at each time point. Haemagglutination inhibition (HI) assays were conducted to determine humoral response to each influenza type and subtype (A(H1N1), A(H3N2), B). Geometric mean titres (GMT) were assessed before and after vaccination. Response was defined as post-vaccine GMT, fold rise in GMT, seroprotection rates (titres ≥1/40) and frequency of patients with ≥4-fold rise in GMT and final titre ≥1/40. We used logistic regression to study predictors of response, including clinical variables and frequencies of Tfh and Tfr at baseline and day 7 post-vaccination. P-value deemed significant at <0.05.

Results: We included 137 participants (42 TCZ, 42 MTX, 53 HD) with similar age and gender distribution. Following vaccination, the overall blood Tfh and Tfr populations remained unchanged in all groups. However, we found a marked expansion of activated CXCR5+ICOS+ Tfh cells at day 7, in HD and MTX-treated patients, but this was impaired in the TCZ group. The increase in activated CXCR5+ICOS+ Tfh

cells was mainly due to a Tfh-Th1-like (CXCR3+CCR6-) subpopulation, greatly increased in HD and MTX--treated patients. The proliferative capacity of CXCR5+ICOS+ Tfh cells seemed to be partially impaired in patients under IL-6R blockade, that displayed marked reduction of Ki67+CD38+ proliferative cells within that compartment. At day 28 a significant GMT rise was seen in all groups, with no significant differences between groups. However, GMT fold rise was significantly higher in MTX-treated patients for A(H1N1) and for A(H3N2) when compared to TCZ group. Importantly, seroprotection for ≥2/3 strains were achieved in 80/90% of patients/HD, but the proportion of patients with ≥4-fold rise in GMT and post-vaccination titre≥1/40 for ≥2/3 strains was lower in TCZ compared to MTX-treated patients. Disease duration and frequency of CXCR5+ICOS+CXCR3+ Tfh cells at day 7 were independently associated with seroprotection and serological response.

Conclusions: Anti-IL-6R treatment limits proliferative ability of activated CXCR5+ICOS+ Tfh cells, blocking their emergence following influenza vaccination. This does not compromise the attainment of excellent post-vaccination GMT and seroprotection rates, similar to HD. However, TCZ did lead to smaller increases in GMT in 2/3 strains and lower overall response comparing to MTX, suggesting that IL-6 is crucial for optimal in vivo generation of activated Tfh cells in humans.

P193 – SERUM LEVELS OF DKK2 AND sFRP1 ARE ASSOCIATED TO INCIDENT FRAGILITY FRACTURES IN OLDER WOMEN

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Background: Secreted Frizzled-related protein-1 (sFRP-1), dickkopf-related protein 2 (DKK2), dickkopf-related protein 1 (DKK1) and sclerostin (SOST) are inhibitors of Wnt signaling and, consequently, inhibitors of osteoblast-mediated bone formation. Our aim is to evaluate the association of serum levels of SOST, DKK1, DKK2 and sFRP-1 with bone mineral density and incident osteoporosis- related fractures.

Methods: This longitudinal study analyzed 828 women, aged 65 years old and older, from EPiDOC a population-based cohort. A structured questionnaire was applied during baseline clinical appointment in order to capture prevalent fragility fractures, clinical risk factors for fracture and Osteoporosis diagnosis. Blood was collected to measure serum levels of markers of bone fragility and serum levels of WNT regulators. Vertebral and hip bone mineral density (BMD) were determined by DXA. Two follow-up assessments were performed through a phone call interview and incident osteoporosis-related fractures were defined by any new self--reported low impact fracture. Multivariate Cox proportional hazards regression models were used to analyze fracture risk, adjusted for clinical risk factors for fracture.

Results: During a mean follow-up of 2.3±1.0 years, a total of 62 fragility fractures were sustained in 58 women. High serum levels of sFRP-1 were associated with a 1.4-fold increase in fracture risk. Association between sFRP-1 and fracture risk was not independent of BMD. Low serum levels of DKK2 were associated with a 1.6--fold increase of fracture risk in our multivariate model. Association between low levels of DKK2 and fracture risk were independent of BMD. Women in the two lowest quartiles of DKK2 had a fracture rate incidence of 32 per 1000 person-year, while the ones in the highest two quartiles of DKK2 had 14 fragility fractures per 1000 person-year. Serum levels of SOST (r=0.191; p=0.0025) and DKK1(r=-0.1725; p=0.011) were correlated with hip bone mineral density, but no association

TABLE I. CRUDE AND ADJUSTED ANALYSIS OF THE ASSOCIATION BETWEEN SERUM LEVELS OF SOST, DKK1 AND INCIDENT FRAGILITY FRACTURES AMONG PORTUGUESE WOMEN WITH 65 YEARS OLD AND OLDER

SOST (pmol/L)	HR	p	HR	p
Crude	1.001	0.939	1.017	0.939
Adjusted¹	1.007	0.677	1.099	0.677
Adjusted²	0.999	0.956	0.983	0.956
Adjusted³	0.989	0.578	0.851	0.578
DKK1 (pmol/L)	**HR**	**p**	**HR**	**p**
Crude	0.998	0.512	0.848	0.512
Adjusted¹	0.996	0.307	0.747	0.307
Adjusted²	0.993	0.151	0.593	0.151
Adjusted³	0.991	0.078	0.515	0.078
DKK2 (ng/mL)	**HR**	**p**	**HR**	**p**
Crude	0.861	0.059	0.652	0.059
Adjusted¹	0.842	0.041†	0.612	0.041†
Adjusted²	0.767	0.008†	0.467	0.008†
Adjusted³	0.798	0.015†	0.525	0.015†
sFRP1 (ng/mL)	**HR**	**p**	**HR**	**p**
Crude	1.318	0.043†	1.453	0.043†
Adjusted¹	1.431	0.017†	1.624	0.017†
Adjusted²	1.265	0.188	1.375	0.188
Adjusted³	1.329	0.075	1.470	0.075
CTX (ng/ml)	**HR**	**p**	**HR**	**p**
Crude	2.076	0.543	1.128	0.543
Adjusted¹	2.687	0.422	1.177	0.422
Adjusted²	1.469	0.924	1.065	0.924
Adjusted³	1.024	0.995	1.004	0.995
P1NP (ng/mL)	**HR**	**p**	**HR**	**p**
Crude	1.005	0.679	1.111	0.679
Adjusted¹	1.010	0.434	1.221	0.434
Adjusted²	1.032	0.361	1.901	0.361
Adjusted³	1.025	0.413	1.665	0.413
Osteocalcin (ng/mL)	**HR**	**p**	**HR**	**p**
Crude	1.075	0.346	1.195	0.346
Adjusted¹	1.091	0.266	1.239	0.266
Adjusted²	1.299	0.087	1.901	0.087
Adjusted³	1.123	0.373	1.330	0.373
Vitamin D (nmol/mL)	**HR**	**p**	**HR**	**p**
Crude	0.997	0.793	0.955	0.793
Adjusted¹	0.995	0.623	0.918	0.623
Adjusted²	0.987	0.489	0.797	0.489
Adjusted³	0.984	0.409	0.764	0.409

1. Adjusted for Age, Parent Hip Fracture, and Prevalent Fragility Fracture (self-reported).
2. Adjusted for Age, Parent Hip Fracture, Prevalent Fragility Fracture (self-reported), and Vertebral Bone Mineral Density (g/cm2).
3. Adjusted for Age, Parent Hip Fracture, Prevalent Fragility Fracture (self-reported), and Hip Bone Mineral Density (g/cm2).
Sample size is not constant due to: SOST (pmol/L): Crude (n=529), Adjusted¹ (n=496); Adjusted² (n=368); Adjusted³ (n=371). DKK1 (pmol/L): Crude (n=476), Adjusted¹ (n=443); Adjusted² (n=323); Adjusted³ (n=320). DKK2 (ng/mL): Crude (n=527), Adjusted¹ (n=494); Adjusted² (n=366); Adjusted³ (n=369). sFRP1 (ng/mL): Crude (n=529), Adjusted¹ (n=496); Adjusted² (n=366); Adjusted³ (n=369). CTX (ng/mL): Crude (n=450), Adjusted¹ (n=420); Adjusted² (n=138); Adjusted³ (n=138). P1NP (ng/mL): Crude (n=451), Adjusted¹ (n=421); Adjusted² (n=138); Adjusted³ (n=140). Osteocalcin (ng/mL): Crude (n=455), Adjusted¹ (n=425); Adjusted² (n=138); Adjusted³ (n=140). Vitamin D (nmol/mL): Crude (n=937), Adjusted¹ (n=889); Adjusted² (n=319); Adjusted³ (n=325). †p-value<0.05.

was found with incident osteoporosis related fractures. **Conclusion:** Low serum levels of DKK2 are an independent risk factor for osteoporosis related fractures. High serum levels of sFRP-1 are significantly associated with fractures although this association is not independent of BMD. SOST and DKK1 were associated with BMD but not with incident fractures however, the number of new fractures recorded may not allow to detect this association.

P194 – PROCESSO ASSISTENCIAL INTEGRADO DO ADULTO COM OSTEOPOROSE NO SERVICO DE REUMATOLOGIA E DOENÇAS ÓSSEAS METABÓLICAS DO HOSPITAL DE SANTA MARIA – CHLN

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Introdução: No âmbito da Acreditação do Serviço de Reumatologia e Doenças Ósseas Metabólicas do Hospital de Santa Maria – CHLN, a Unidade de Doenças Ósseas Metabólicas (UDOM) desenvolveu um Processo Assistencial Integrado (PAI) do Adulto com Osteoporose (OP) com o objectivo de melhorar a qualidade dos cuidados de saúde prestados ao doente com risco fracturário. Este PAI visa uma prática clínica orientada para os resultados e para a qualidade, tendo como objectivo uma utilização efectiva dos recursos, centrada nas necessidades e expectativas da pessoa adulta com risco de fractura osteoporótica, e na antecipação e planeamento integral da continuidade dos cuidados.
Objectivo: Apresentação do conceito funcional de PAI do Adulto com OP e dos respectivos procedimentos adoptados na UDOM.
Métodos: Utilizando o modelo conceptual concebido pelo Sistema Sanitário Público da Andaluzia adoptado pela Direcção Geral da Saúde, e considerando que tanto a prevenção como a identificação e abordagem terapêutica do risco fracturário no adulto devem estar centralizada nos Cuidados de Saúde Primários (CSP), desenvolveu-se um PAI – alicerçado na melhor evidência disponível e na utilização racional dos recursos – adequado a uma Unidade inserida num Centro Hospitalar Académico, com as suas multidisciplinaridade e dife-

renciação, de forma a dar resposta efectiva às solicitações quer dos CSP, quer de Unidades Hospitalares igualmente diferenciadas que acompanham doentes com condições, co-morbilidades e terapêuticas que se associam a elevado e mantido risco de fracturas osteoporóticos.

Resultados: Apresentam-se a Descrição Geral do PAI, o Roteiro de Informação ao Adulto com Risco Fracturário, as indicações para a referenciação e continuidade de cuidados na UDOM, e um conjunto de procedimentos que garantam a continuidade de qualidade nos diferentes níveis de cuidados, enfatizando-se a importância da informação entre os diferentes prestadores de cuidados. São sistematizados os critérios e respectivos procedimentos para (1) a avaliação do risco fracturário, (2) a realização de exames complementares, (3) a classificação diagnóstica, (4) a implementação de medidas gerais, (5) a avaliação de indicação de tratamento farmacológico – incluindo, no caso, a avaliação da terapêutica mais adequada (incluindo revisão sistematizada de indicações, contra-indicações e principais efeitos adversos), respectivas monitorização e duração, e suplementos associados -, (6) a definição de resposta inadequada à terapêutica e, no caso, as abordagens alternativas, (7) e, quando aplicável, a pausa de tratamento com bisfosfonato, respectiva monitorização e critérios para reintrodução de terapêutica. Incluem-se os procedimentos na realização, análise e relato de DXA, e os relativos à administração e ensino de terapêutica no Hospital de Dia. São ainda incluídos procedimentos relativos à abordagem multidisciplinar, à partilha da informação no caso de continuidade de seguimento na UDOM e à referenciação à Unidade de origem e aos CSP do adulto sem indicação para continuidade na UDOM. Anexos sistematizam os principais critérios e procedimentos acima mencionados.

Discussão: O PAI agora desenvolvido, focado na actividade assistencial prestada pela UDOM no âmbito de cuidados hospitalares diferenciados e especializados na abordagem da OP, com a homogeneização das actuações alicerçadas numa consolidada experiência na aplicação da melhor evidência disponível e na utilização racional dos recursos disponíveis, permite a continuidade de qualidade nos diferentes níveis de cuidados.

P199 – DENSITOMETRIA ÓSSEA – A IMPORTÂNCIA DA MEDIÇÃO BILATERAL NO FÉMUR PROXIMAL PARA A AVALIAÇÃO SERIADA DA DENSIDADE MINERAL ÓSSEA

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Introdução: A densitometria óssea (DXA) é o método de referência de medição da densidade mineral óssea (DMO). Como instrumento de medida, requer exactidão - capacidade de determinar o valor real da DMO – e precisão – a capacidade de reproduzir o mesmo resultado em determinações repetidas. A precisão é essencial na utilização da DXA para avaliação seriada da DMO num indivíduo, nomeadamente na monitorização do efeito da intervenção terapêutica. Esta deve ser feita com o mesmo equipamento e requer que seja conhecida a precisão in vivo do centro de densitometria, de forma a que se possa afirmar se a diferença entre 2 medições é real ou apenas dependente da aleatória variação associada ao equipamento e ao procedimento de medição. O valor de precisão do aparelho no centro é um dos critérios de qualidade definidos pela ISCD *(The International Society for Clinical Densitometry)*. Não sendo consensual a relevância para a classificação da DMO baseada na média da medição bilateral do fémur, este valor médio poderá ser útil na avaliação seriada da DMO.

Objectivo: No processo de determinação da precisão in vivo do equipamento de densitometria do Serviço de Reumatologia e Doenças Ósseas Metabólicas do Hospital de Santa Maria - CHLN, procedeu-se à comparação das variações mínimas significativas (LSC – *least significant change)* para as diferentes regiões de interesse (ROI – *region of interest)*.

Métodos: De acordo com as recomendações da ISCD, procedeu-se à realização de 2 exames sucessivos com reposicionamento entre os mesmos em 30 mulheres em peri- ou pós-menopausa com valores de DMO com baixa massa óssea ou osteoporose, em que tanto a coluna lombar (L1-L4) como os 2 fémures proximais eram passíveis de análise. Foi pedido consentimento informado por escrito. Foram seguidos os procedimentos habituais no posicionamento e aquisição dos exames, assim como na respectiva análise, efectuada pelo médico responsável habitual, adoptando-se, sempre que possível, pela análise automática e, obrigatoriamente, pela função "comparar" na análise comparativa. O Coeficiente de Variação (CV) foi obtido pela raiz quadrada da média aritmética dos quadrados dos va-

TABELA I. RESULTADOS DOS COEFICIENTES DE VARIAÇÃO E *LEAST SIGNIFICATIVE CHANGE*

Coeficientes de Variação para os principais ROIS	
L1-L4	1,61%;
L2-L4	1,63%;
Colo fémur direito	1,36%;
Colo fémur esquerdo	1,51%;
Média Colo fémur	0,96%
Fémur total direito	1,02%;
Fémur total esquerdo	1,24%;
Média Fémur total	0,75%.
Least Significative Change	
L1-L4	0,043g/cm^2 (4,47%);
L2-L4	0,044g/cm^2 (4,51%);
Colo fémur direito	0,030g/cm^2 (3,76%);
Colo fémur esquerdo	0,033g/cm^2 (4,18%);
Média Colo fémur	0,021g/cm^2(2,67%);
Fémur total direito	0,024g/cm^2 (2,84%);
Fémur total esquerdo	0,029g/cm^2 (3,43%);
Média Fémur total	0,018g/cm^2 (2,07%).

lores, comummente expressa em % pela fórmula:

$$= \sqrt{\sum (a-b)^2 \times 100 / (c + d)}$$

2n 2

em que a e b são as 2 determinações em cada indivíduo e c e d são as médias das determinações para os 2 grupos e n o número de pares de determinações efectuadas. As LSC para intervalos de confiança de 95% foram determinadas multiplicando os CV por 2,77. Os procedimentos foram previamente aprovados pela Comissão de Ética.

Resultados: Foram avaliadas 23 mulheres com baixa massa óssea e 7 com osteoporose, com média de idades de 63,0+8,6 anos e IMC de 25,6+4,5 Kg/m2. A tabela 1 apresenta os resultados dos CV e LSC obtidos.

Conclusão: As LSC calculadas para as principais ROIs cumprem os critérios de qualidade da ISCD: < 5,3% na coluna vertebral, < 6,9% no colo do fémur (CF) e < 5,0% no fémur total (FT). As LSC determinadas para os valores médios da medição nos 2 fémures, com LSC de 2,07% no FT e de 2,67% no CF, que são inferiores aos valores unilaterais, confirmam a importância da medição bilateral no fémur na avaliação seriada da DMO.

P201 – TUMOR NECROSIS FACTOR INHIBITORS PERSISTENCE IN PSORIATIC ARTHRITIS PATIENTS

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Background: Tumor necrosis factor inhibitors (TNFi) lead to a dramatic improvement in the management of psoriatic arthritis (PsA). Nevertheless, a significant proportion of patients still do not respond and/or are intolerant to TNFis, requiring treatment switch for an adequate control of disease activity.
Aim: To assess TNFis drug retention and the main reasons for TNFi discontinuation in PsA patients.
Methodology: This was a non-interventional study of PsA patients registered at the Rheumatic Diseases Portuguese Registry (Reuma.pt), with at least one TNFi prescription. Drug retention for a first, second and third line TNFi was assessed by Kaplan-Meier survival analysis. The reasons for discontinuation were described as frequencies.
Results: 750 PsA patients were included, with a mean age of 47.6 years (± 11.6); 50.3% (n=377) female. 200 patients (26.7%) treated with adalimumab, 335 (44.7%) with etanercept, 114 (12.2%) with golimumab and 101 (13.5%) with infliximab, as first line TNFi. The majority (67.6%) were receiving concomitantly conventional synthetic disease modifying anti-rheumatic drugs (62.3% MTX) and 33.9% corticosteroids. The mean duration of TNFi retention was of 48.5±40.1 months, when treated with a 1st TNFi, decreasing to 35.5±33 months for the 2nd TNFi, and to 22.7±22.9 months for the 3rd TNFi (Figure 1). After being treated with a 1st TNFi, the majority of discontinuers (35,8% of the total population), withdraw due to lack or loss of effectiveness (53.5%) and due to adverse events (24.4 %). The rates of discontinuation for the 2nd and 3rd TNFi were of 39% and 54%, respec-

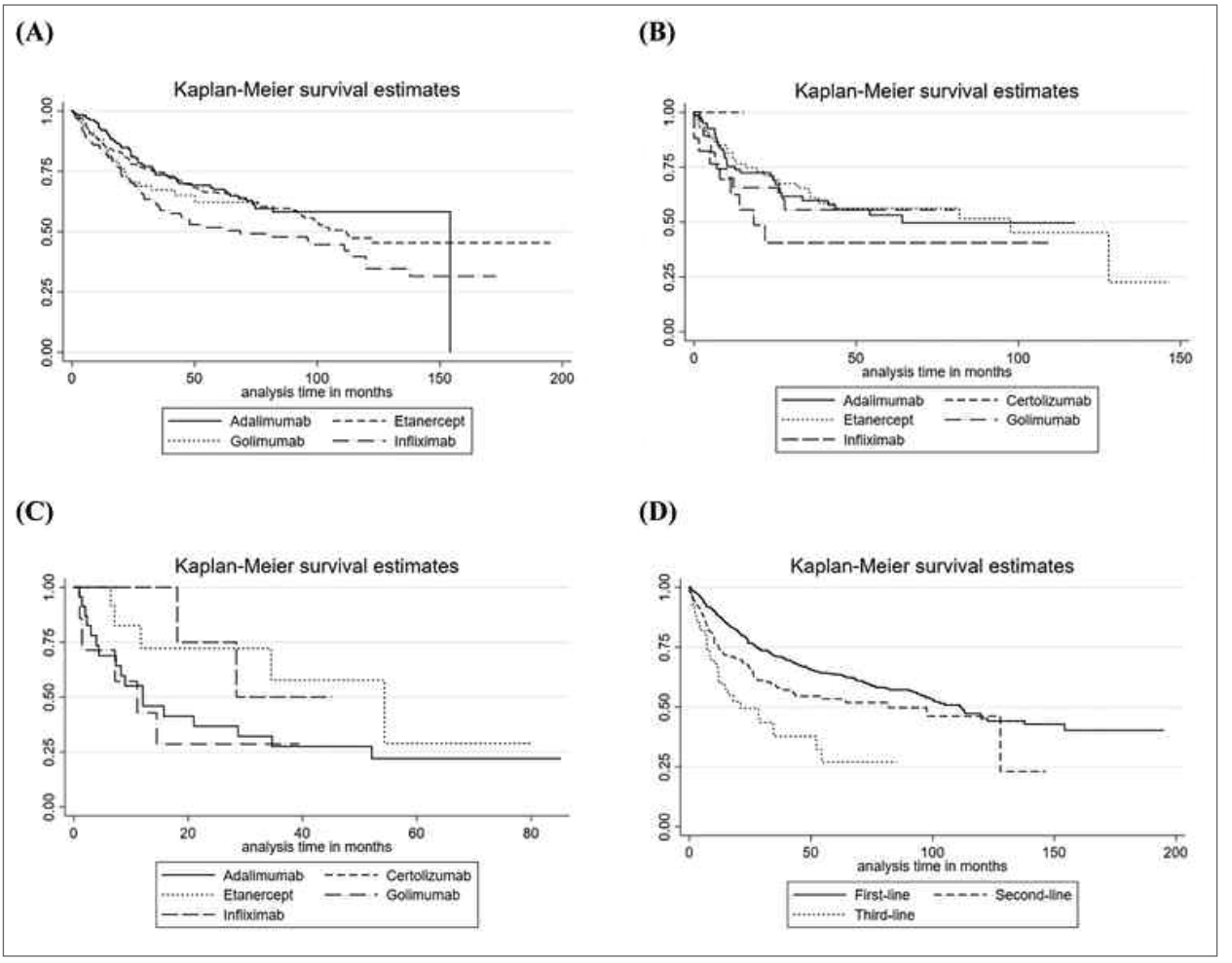

FIGURE 1. Drug retention of psoriatic arthritis patients registered at Rheumatic Diseases Portuguese Registry (Reuma.pt), treated with a first (A) second (B) and third (C) tumor necrosis factor inhibitor (TNFi) and overall (D) TNFi drug retention

tively. Lack or loss of effectiveness and adverse events were maintained the two main reasons of withdrawal for the 2nd (62.3%; 21.6%) and 3rd (63%; 22.2%) TNFi.
Conclusions: PsA patients registered at Reuma.pt treated with a 1st TNFi had an overall drug retention of 49 months. We observed a decrease in the average retention of TNFi therapy of 13 months in PsA patients who switched to a 2nd TNFi or a 3rd TNFi. Lack or loss of response were the main reason for TNFi discontinuation independently of TNFi position, responsible for more than half of the discontinuations. The observed short survival of TNFis in PsA, and the inability to regain drug expectancy when switching to another TNFi, highlights the limitations from recycling between TNFi when aiming at long-term remission.

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P204 – VASCULITE CRIOGLOBULINÉMICA: REVISÃO DE CASOS NOS ULTIMOS 15 ANOS NUM SERVIÇO DE REUMATOLOGIA

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Introdução: A vasculite crioglobulinémica (VC) é uma vasculite sistémica que envolve vasos de pequeno e médio calibre por deposição de complexos imunes (crioglobulinas/factor reumatóide-FR) e frações de complemento. Até 80 a 90% dos doentes com VC têm infeção crónica pelo vírus da Hepatite C (VHC). Outras etiologias incluem doenças imunomediadas, infeção pelo vírus da hepatite B (VHB) ou distúrbios hematológicos malignos. As manifestações clínicas mais comuns são artralgias, envolvimento cutâneo, neuropatia periférica e envolvimento renal. O regime terapêutico atual na VC associada ao VHC consiste na administração de antivirais. Nos doentes com doença refratária ou recorrente, a adição de rituximab tem melhorado significativamente o prognóstico. O tratamento das VC não associadas ao VHC consiste em corticoesteróides, imunossupressores ou plasmaferese, mas com resultados pouco animadores. A associação de rituximab à corticoterapia tem mostrado melhor eficácia terapêutica nestes doentes.
Objetivo: Avaliação dos doentes com VC no serviço de reumatologia do Hospital Garcia de Orta nos últimos 15 anos.
Resultados: Foram identificados 7 doentes com VC, dos quais 4 apresentavam VC associada ao VHC, 1 ao VHB, 1 com gamapatia monoclonal e 1 com lúpus eritematoso sistémico e gamapatia monoclonal. O envolvimento musculoesquelético, cutâneo e a neuropatia periférica foram as manifestações clínicas iniciais mais frequentes. Três dos 4 doentes com VC associada ao VHC receberam tratamento com antivirais (interferão alfa pegilado (INF PEG) semanalmente e ribavarina diária) com remissão completa da sintomatologia em 2 doentes. No outro doente houve manutenção de sintomatologia de neuropatia periférica pelo que realizou terapêutica com imunoglobulina endovenosa. O único doente com VC associada ao VHC não tratado com antivirais faleceu 5 anos após o diagnóstico. Os três doentes com VC não associada ao VHC realizaram terapêutica com corticoesteróides, 2 deles associado a ciclofosfamida e 1 doente iniciou terapêutica com rituximab. Os três tiveram complicações infeciosas graves e faleceram, dois deles entre 1 a 2 anos após o diagnóstico.
Conclusão: A VC é uma doença rara com envolvimento multisistémico grave e potencialmente fatal. A

TABELA I. CARACTERÍSTICAS DEMOGRÁFICAS, CLÍNICAS E DE TRATAMENTO DE DOENTES COM VASCULITE CRIOGLOBULINÉMICA

	Idade diagnóstico (min. e máx.)	Sexo	Manifestações clínicas	Terapêutica	Evolução
VC associada a VHC (n=4)	38-54 anos	Mulher- 2 Homem- 2	Envolvimento musculoesquelético (3), cutâneo (2) e neuropatia periférica (2)	INFalfa+ribavirina -3 Ivlg – 1	Resolução completa -2 Queixas neuropáticas -1
VC não associada a VHC (n=3)	75-82 anos	Mulher- 3 Homem- 0	Envolvimento cutâneo (3), neuropatia periférica (2)	Corticoesteróides - 3 Ciclofosfamida - 2 Rituximab – 1 Plasmaferese -1	Infeção grave (3) e morte (3)

VC: vasculite crioglobulinémica; VHC: virus da Hepatite C

etiologia da VC é importante não só para avaliação do prognóstico mas também para a decisão terapêutica. O diagnóstico precoce da VC associada ao VHC é fundamental para início atempado de terapêutica antiviral, pois pode alterar o prognóstico da doença. Os doentes com VC não associada ao VHC apresentaram maior número de complicações infeciosas e pior prognóstico global. Contudo, um potencial confundidor nos casos apresentados é a idade mais avançada neste subgrupo de doentes.

P205 – LOSS TO FOLLOW-UP IN REGISTRIES OF RHEUMATIC PATIENTS TREATED WITH BIOLOGICS: A POTENTIALLY VALUABLE HIDDEN REAL-WORLD DATA THAT IS BEING OVERLOOKED?

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Introduction: The information associated with loss to follow-up (LFU) patients may affect a real-world data evaluation of the use of biologics that is not being adequately captured in registries.
Objective: To identify the reasons for LFU in rheumatic patients treated with biologics in our center.
Methods: We identified all patients treated with biologics in our center who had no registered visits in Reuma.pt for more than 6 months. We retrieved baseline information from Reuma.pt and from the hospital electronic clinical record. We then performed a telephonic interview to characterize the reasons for LFU up at our day care unit. For patients unable to be contacted by telephone a letter of invitation to an appointment at the hospital was sent.
Results: One-hundred and ninety-one patients were registered in Reuma.pt with active biologic therapy at our center and did not have any information registered in last 6 months. More than half (n=102) had suspended biologic administration and this information was registered in the hospital electronic clinical records but not updated in Reuma.pt. For 89 patients (47%) no information could be retrieved from either the hospital electronic clinical record or Reuma.pt and we classified these patients as true LFU.

26 (29.2%) of these LFU patients were being followed in other Rheumatology centers. The most frequent reasons for this change were: 14 (15.7%) had follow-up at a new and closer Rheumatology Department; 6 (6.7%) moved to another city; 4 patients (4.5%) had administrative problems related to our Department/Hospital and 2 (2.3%) patients had socio-economic reasons.

25 (28.1%) patients died, at a mean age of 66.3 years. The mean disease duration was 14.3 years and 19 patients (21.3%) had RA. The mean duration of biologics was 5.9 years and 68% were under anti-TNF therapy, 16% under Anti-CD20 therapy and 12% under interleukin-6R inhibitors. Cause of death was iden-

TABLE I. LOSS TO FOLLOW-UP PATIENTS CHARACTERISTICS

Characteristics	n = 89
Male (%)	29 (32.6%)
Age (Y), mean ± SD	51.3 ± 20.02
Disease duration (Y), mean ± SD	15.7 ± 10.3
Biologic therapy duration (Y), mean ± SD	5.5 ± 3.5
Diagnosis, n (%)	
Rheumatoid arthritis	42 (48.3%)
Spondyloarthritis	19 (22.5%)
Juvenile idiopathic arthritis	10 (11.2%)
Psoriatic arthritis	8 (9.0%)
Other	10 (11.2%)
Last Biologic, n (%)	
Etanercept	31 (24.7%)
Infliximab	12 (13.4%)
Rituximab	10 (11.2%)
Adalimumab	11(12.4%)
Tocilizumab	7 (7.9%)
Golimumab	6 (6.7%)
Other	12 (13.5%)

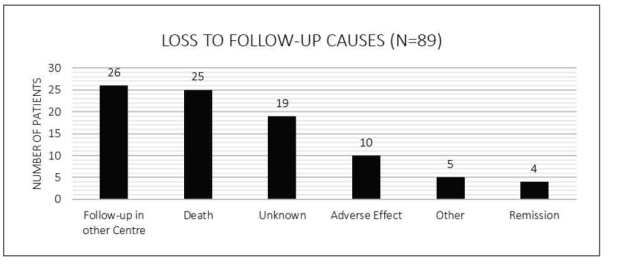

FIGURE 1. Loss to follow-up causes

tified in only 3 patients: 1 had a myocardial infarction, 2 had surgery complications. None of these patients was on biologic therapy at the moment of death.

10 patients (11.3%) had stopped biologic therapy and abandoned follow-up by their own decision after suffering adverse effects attributed by the patient to the use of biologics. 5 patients (5.62%) had infections: cutaneous (n=2, 2.2%) or urinary tract related (n=2, 2.2%); with need of hospital admission in 2 of the cases (2.2%). The remaining patients stopped the drug because of cutaneous reactions (n=5. 5.62%).

4 patients (4.5%) were in remission and decided to stop the drug and the medical follow up. All of them believed that the disease was inactive without the need of medical drugs.

We were not able to contact 19 (21.3%) of the LFU patients.

Conclusion: Identifying LFU patients and clarifying the reason contributes to a better knowledge on strategies to discontinue biologics in stable patients, to a better pharmacovigilance of adverse effects and to more efficiency in data capture by registries. The authors of this study are now making additional efforts to contact the 19 still missing patients and obtaining access to death certificates in order to further clarify the cause of death of 23 patients.

P212 – DO ASAS, ASDAS AND BASDAI THERAPY RESPONSE EVALUATION TRANSLATE THE SAME INFORMATION?

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Background: The ASAS-EULAR recommendations for the continuation of biological Disease-Modifying Anti-rheumatic Drugs (DMARD) suggest the evaluation of patients after at least 12 weeks of treatment by either the Ankylosing Spondylitis (AS) Disease Activity Score-C reactive protein (ASDAS-CRP) or by the Bath AS Disease Activity Index (BASDAI). For ASDAS-CRP, a Minimal Clinical Important Difference (MCID) ≥1.1 is necessary, while for the total BASDAI score a 50% reduction or a change of ≥2.0 points is considered clinically relevant. In clinical trials, the Assessment in Ankylosing Spondyloarthritis (ASAS) response criteria – ASAS 20, ASAS 40 and ASAS 70 – are still the most frequent primary outcome measures to evaluate improvement in treatment response. However, in clinical practice the BASDAI is still routinely used.

Objectives: The aim of this work was to assess the concordance/agreement between different therapeutic outcome measures, such as the ASAS response criteria, ΔASDAS-CRP and BASDAI 50.

Methods: Data from 54 patients who fulfilled the modified New York criteria for AS were collected at baseline and at weeks 2 and 14 post-treatment with Adalimumab. Pearson's correlation (PCCs) and the Cohen's Kappa coefficients were calculated for the three scores.

Results: A strong correlation was found between the three scores throughout the visits: rho=-0.676 for ASDAS/ASAS, rho=-0.807 for ASAS/BASDAI, and rho=0.786 for BASDAI/ASDAS (all PCCs with $p<0.001$). Additionally, when the categorization in different disease activity states and response levels was performed, PCCs revealed significant concordance/agreement between the three scores' cut-offs (see Table).

The individuals categorized as responders, by eitheir BASDAI50 or ΔASDAS≥1.1, have shown similar clinical characteristics (Erythrocyte Sedimentation Rate, CRP, AS Quality of Life Scale and Bath AS Functional Index).

Importantly, when more stringent measures of ASAS response criteria and ASDAS were used (i.e. ASAS 70 and ASDAS ≥2.1) the agreement with BASDAI values decreased.

Conclusion: Our results suggest that the ASAS response criteria, ΔASDAS-CRP and BASDAI 50 report the

TABLE I. SUMMARY INFORMATION OF THE AGREEMENT AND COHEN'S KAPPA

Concordance/agreement	n	Agreement	Cohen's κ	p-value
ΔASDAS≥1.1 and ASAS20	130	76.92%	0.496	<0.001†
ΔASDAS≥1.1 and ASAS40	130	74.62%	0.492	<0.001†
ΔASDAS≥1.1 and ASAS70	133	57.14%	0.259	<0.001†
ΔASDAS≥2.1 and ASAS20	130	61.54%	0.310	<0.001†
ΔASDAS≥2.1 and ASAS40	130	73.08%	0.462	<0.001†
ΔASDAS≥2.1 and ASAS70	133	75.19%	0.365	<0.001†
BASDAI50 and ASAS20	150	82.67%	0.638	<0.001†
BASDAI50 and ASAS40	152	84.21%	0.687	<0.001†
BASDAI50 and ASAS70	156	61.54%	0.301	<0.001†
BASDAI50 and ΔASDAS≥1.1	134	79.85%	0.571	<0.001†
BASDAI50 and ΔASDAS≥2.1	134	64.93%	0.351	<0.001†

†p-value<0.05, n: number of visits

same clinical information. Hence, the clinician's decision should still be consistent independently of the score adopted. However, this study also highlights the importance of establishing a new and more stringent BASDAI cut-off, in alignment with ASDAS-CRP'≥2.1 and ASAS 70.

P214 – PATIENTS' PERSPECTIVE ON THE EFFICACY AND RISKS OF GLUCOCORTICOIDS IN RA – AN INITIATIVE UNDER THE GLORIA PROJECT

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Background: The Glucocorticoid Low-dose Outcome in Rheumatoid Arthritis Study (GLORIA) is an international investigator-initiated pragmatic randomised trial designed to study the effects of low dose glucocorticoids (GC) in elderly patients with Rheumatoid Arthritis (RA). The research team is also committed to promote a better understanding of the risks and benefits of these drugs among health professionals and patients. In order to achieve these goals, it is important to assess the current concepts and concerns of patients regarding GCs.

Objective: In this study, we evaluated the beliefs about GC in RA patients who are, of have been treated with GC.

Methods: Patients with RA from three different countries (United States (US), Portugal, and the Netherlands) completed an online survey which was presented in their native language.

Members of People with Arthritis and Rheumatism, and national associations were involved in the development of the questionnaire. Participants were asked to agree or disagree with statements on a 5-point scale. In Europe, patients were invited to participate through national patients' organizations, and SurveyMonkey® was used to disseminate the online surveys. In the US, patients were invited to participate and surveyed through MediGuard.org.

Results: Data was collected from 314 RA patients with exposure to GCs (table 1). Mean education level was around 15 years and duration of GC exposure was skewed (median 48 months [inner quartiles 8, 120]). The majority of US patients had received prednisone and in Europe, prednisolone. The majority of participants in all three regions had already read articles or pamphlets on the benefits or harms related to GC therapy.

Regarding GC risk, about half of the European pa-

TABLE I. PATIENS BELIEFS ABOUT GC FROM SURVEYS IN USA, PORTUGAL AND THE NETHERLANDS

	USA	Portugal	Netherlands
Number of patients	139	131	44
Education, mean ± SD (years)	14 ± 3	15 ± 5	16 ± 4
GC prescribed (%)			
Prednisone	78	18	33
Prednisolone	11	73	62
Methylprednisolone	9	10	5
Other	1	0	0
Treatment duration, median (inner quartiles, months)	24 (5-84)	120 (36-180)	36 (4-108)
Have you read any articles or pamphlets on the benefit or harm of GC therapy? (%)	72	64	75
Level of agreement for statements (%)*			
If I take GC, I am concerned that I may suffer a serious adverse event	82 (55)	NA	NA
I have suffered serious adverse events due to GC	NA	48 (18)	51 (23)
GC are or have been very useful to me	79 (56)	86 (55)	85 (69)
At a dose of less than or equal to 7.5 mg of predniso(lo)ne/day, GC:			
- are very effective in the control of signs and symptoms of RA	61 (38)	78 (41)	69 (44)
- improve RA symptoms within days	60 (41)	74 (45)	69 (49)

* Total of 'slightly agree' and 'agree' in parentheses the percentage of 'agree';
SD: Standard Deviation; GC: Glucocorticoid; RA: Rheumatoid Arthritis; NA: Not Asked.

tients stated that they had already suffered a serious adverse event (SAE) due to GC. US patients were not asked if they suffered GC-related SAE due to regulatory reporting rules, but 82% showed concern about experiencing an SAE from GC use.

Regarding GC efficacy, high levels of endorsement were found for the three questions asked: more than 78% of patients considered that GC were very useful in their case, more than 61% considered that GC were effective even in low doses, and more than 60% agreed that GC improved RA symptoms within days.

Conclusion: Patients with RA exposed to long-term GC report a high prevalence of SAEs or fear thereof. This is accompanied by a strong conviction that GC are very useful and effective for the treatment of their RA, even at low dosages.

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P216 – O AFETO POSITIVO COMO VARIÁVEL PREDITORA DA ADESÃO TERAPÊUTICA EM DOENTES COM ARTRITE REUMATÓIDE

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Introdução: A escala de afeto positivo e negativo (PANAS) avalia o Afeto Positivo (AP) e o Afeto Negativo (AN), definidos com medidas gerais que descrevem a experiência afetiva dos indivíduos (1). O AP elevado reflete prazer e bem-estar subjetivo, incluindo emoções como entusiasmo e determinação, enquanto que o AN reflete desprazer e mal-estar subjetivo, envolvendo emoções como medo e nervosismo. A adesão dos doentes às terapêuticas propostas é influenciada por vários fatores, nomeadamente variáveis socioeconómicas e psicológicas. A adesão terapêutica constitui um importante aspeto no outcome dos doentes e o conhecimento dos fatores que possam influenciar positiva ou negativamente essa adesão poderá ser um importante instrumento médico para a compliance terapêutica. O instrumento *Medical Outcomes Study* (MOS) *Measures of Patient Adherence* permite uma avaliação subjetiva da adesão terapêutica.

Objectivo: Os autores tiveram como principal objetivo avaliar as possíveis variáveis preditoras de adesão terapêutica nos doentes com Artrite Reumatóide (AR).

Metodologia: Colheita de dados demográficos e clínicos e aplicação dos instrumentos *Medical Outcomes Study* (MOS) *Measures of Patient Adherence,* escala de autoestima de Rosenberg e versão reduzida da escala portuguesa de afeto positivo e negativo (PANAS-VRP) aos doentes com AR observados consecutivamente no serviço de Reumatologia. Foi considerado p valor p<0,05 como estatisticamente significativo.

Resultados: Obteve-se uma amostra de 78 doentes com AR, 76,9% do sexo feminino e 23,1% do sexo masculino, com uma média de idades de 57 ±14,8 anos Verificaram-se correlações estatisticamente significativas entre a adesão terapêutica e a atividade da doença, os valores séricos de parâmetros inflamatórios e os níveis de autoestima e de afeto positivo. Relativamente a esta última variável, o modelo de correlação entre adesão terapêutica (MOS total) e afeto (PANAS positivo e negativo) verificou a existência de uma correlação forte positiva e estatisticamente significativa (r=0,345; p<0,001) entre o afeto positivo e a adesão terapêutica. O carácter causal e preditivo foi confirmado mediante a execução da regressão linear entre estas duas variáveis, tendo-se constatado um modelo estatisticamente significativo, cujo contributo explicativo do afeto positivo é de 34,5% (p= 0,05) da adesão terapêutica. Não

se verificou correlação estatisticamente significativa entre a adesão terapêutica e o afeto negativo.
Conclusão: Este estudo confirma a noção de que fatores psicológicos do doente afetam a sua adesão terapêutica. Consistindo a saúde, segundo a definição da Organização Mundial de Saúde, num estado de "(…) completo bem-estar físico, mental e social (…) (2)", é papel crucial do médico abordar holisticamente o doente, visando o seu esclarecimento e bem-estar, por forma a aumentar a sua compliance terapêutica.

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P217 – DO SYMPTOMS OF DEPRESSION AND ANXIETY INFLUENCE TREATMENT RESPONSE AND LONG-TERM PHYSICAL HEALTH OUTCOMES IN ANKYLOSING SPONDYLITIS?

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Background: Psychological disturbances, frequently observed in inflammatory rheumatic diseases, seem to negatively influence patient's clinical status and treatment response.
Objectives: The aim of this study was to examine the longitudinal impact of depression (D)/anxiety (A) in treatment response, disease activity, physical disability and quality of life in patients with Ankylosing Spondylitis (AS).
Methods: Data from patients who fulfilled the modified New York criteria for AS were collected at baseline, weeks 2 and 14 post-treatment with Adalimumab. The Hospital Anxiety and Depression Scale (HADS) was used to evaluate D/A symptoms severity. The primary outcomes were AS disease activity score-C reactive protein (ASDAS-CRP), Bath AS Disease Activity Index (BASDAI), Bath AS Functional Index (BASFI) and AS Quality of Life (ASQoL) Scale. Secondary outcomes were patient and physician global assessment by Visual Analogue Scale (VAS), erythrocyte sedimentation rate (ESR), CRP and BASDAI question 1 (fatigue). Difference-in-differences estimation took into account the covariates gender, age at baseline and disease duration.
Results: Data from 54 patients were included. At baseline, D/A symptoms significantly influenced the mean value of BASFI (p=0.006; p=0.003) and ASQoL (p<0.001; p=0.004). On the other hand, BASDAI (p=0.009), CRP (p=0.017), patient's VAS (p=0.003) and fatigue (p=0.015) were only influenced in the individuals with A symptoms, while the physician's VAS (p=0.005) was only influenced in patients with D symptoms. After 14 weeks of treatment, significant differences in ASQoL mean values were found in patients with both D/A symptoms at baseline (p=0.005; p=0.022) and in BASFI (p=0.044) and patient VAS (p=0.006) for the population showing only A symptoms at the baseline. Apart from the physician VAS (p=0.023), D/A baseline symptoms did not affect the treatment's response.
Conclusions: Psychological status does not seem to affect response to treatment with Adalimumab, even if the overall characteristics of the population are different at baseline between patients with/without D/A symptoms.

P219 – O PAPEL DA ECOGRAFIA ARTICULAR NO DIAGNÓSTICO DE GOTA

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TABLE I. DIFFERENCE-IN DIFFERENCES ESTIMATION RESULTS

Difference-in-differences		Baseline Mean difference (p-value)	3 Months Mean difference (p-value)	Global Mean difference (p-value)
Anxiety symptoms (HADS≥11)	*ASDAS-CRP*	0.27 (0.308)	0.30 (0.317)	0.03 (0.317)
	BASDAI	1.63 (0.009†)	1.08 (0.106)	-0.55 (0.541)
	BASFI	2.04 (0.006†)	1.62 (0.044†)	-0.42 (0.693)
	ASQoL	7.32 (<0.001†)	4.53 (0.005†)	-2.79 (0.199)
	ESR	-7.24 (0.208)	-2.99 (0.644)	4.26 (0.622)
	CRP	-10.05 (0.017†)	-0.503 (0.914)	9.54 (0.128)
	Patient's VAS	21.43 (0.003†)	21.52 (0.006†)	0.09 (0.993)
	Physician's VAS	-0.70 (0.909)	-0.54 (0.931)	0.16 (0.986)
	Fatigue	1.90 (0.014†)	1.05 (0.204)	-0.84 (0.452)
Depression symptoms (HADS≥11)	*ASDAS-CRP*	0.35 (0.339)	0.19 (0.665)	-0.17 (0.769)
	BASDAI	0.93 (0.293)	0.56 (0.587)	-0.37 (0.784)
	BASFI	2.94 (0.003†)	1.88 (0.100)	-1.06 (0.476)
	ASQoL	5.84 (0.004†)	5.26 (0.022†)	-0.58 (0.846)
	ESR	9.85 (0.168)	-1.48 (0.859)	-11.33 (0.301)
	CRP	-4.44 (0.450)	1.36 (0.843)	5.80 (0.522)
	Patient's VAS	15.25 (0.121)	1.70 (0.881)	-13.55 (0.366)
	Physician's VAS	25.76 (0.005†)	-3.16 (0.721)	-28.92 (0.023†)
	Fatigue	0.69 (0.509)	0.271 (0.825)	-0.424 (0.793)

†p-value<0.05

Introdução: A gota é uma doença inflamatória que resulta da deposição de cristais de monourato de sódio (MUS) nas articulações e nos tecidos extra-articulares. A ecografia músculo-esquelética, pela sua capacidade de identificar depósitos de cristais de MUS nas articulações e regiões periarticulares, sendo um exame de imagem simples, de baixo custo e sem radiação ionizante, tem vindo a ter um papel cada vez mais importante no diagnóstico e mesmo na monitorização desta patologia[1]. O sinal de duplo contorno, incluído nos Critérios de Classificação ACR/EULAR de 2015 e a presença de agregados são os achados ecográficos mais característicos desta patologia. Os dados da literatura são ainda controversos relativamente à sensibilidade e especificidade destes achados no diagnóstico de gota.
Objetivo: Avaliar a especificidade e sensibilidade de achados ecográficos articulares no diagnóstico de gota. Material e métodos: Realizada ecografia, com avaliação em escala de cinzentos, da 1ª metatarsofalângica (1MTF), 2ª metacarpofalângica (2MCF) e joelho, bilateralmente, a trinta e nove pacientes com gota e 25 indivíduos saudáveis com uricemia normal, emparelhados para idade e sexo. Os achados ecográficos recolhidos foram a presença de duplo contorno, de depósitos intra-articulares e a presença de erosão. Calculou-se a especificidade e sensibilidade para cada um destes achados no diagnóstico de gota.
Resultados: Os doentes com gota tinham um tempo médio de duração da doença de 4.5 anos e uma uricemia média de 6.8±2.1mg/dL. O sinal de duplo contorno estava presente em 11 doentes, não tendo sido encontrado em qualquer dos indivíduos saudáveis. Assim, a especificidade deste achado foi de 100% e a sensibilidade foi de 28%. Os agregados intra-articulares foram identificados em 10 indivíduos com gota, estando ausentes nos controlos saudáveis. A especificidade e sensibilidade deste achado ecográfico para o diagnóstico de gota foi de 100% e 25.6%, respetivamente. As erosões articulares foram encontradas em 15 dos casos de gota não se tendo registado em qualquer dos indivíduos saudáveis. Neste caso, a especificidade e sensibilidade deste achado foi de 100% e 38.5%, respetivamente.
Conclusão: Neste estudo, apesar do número limitado de doentes, a presença do sinal de duplo contorno, de erosões ou de agregados intra-articulares, mostrou uma elevada especificidade no diagnóstico de gota. Desta forma, na suspeita de uma artropatia gotosa, a ecografia articular pode auxiliar a investigação diagnóstica.

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P220 – CHANGING PATTERNS OF MULTIMORBIDITY IN THE GENERAL POPULATION: THE CONTRIBUTION OF OSTEOARTHRITIS

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Objective: Our aim was to identify recent patterns of multimorbidity in the Portuguese general population in comparison with those observed a decade before, and

to assess the relative contribution of osteoarthritis to multimorbidity.

Methods: We analysed cross-sectional data from the 2014 National Health Survey (n=18 204). Patterns of co-occurrence of 10 NCDs (osteoarthritis, hypertension, diabetes, stroke, myocardial infarction, heart disease, kidney disease, asthma, non-asthma respiratory disease, and depression) were identified through latent class analysis. The interpretation of model results was based on item profiles in each category, obtained from the probabilities of endorsing each response item, conditional on class membership. We compared the 2014 multimorbidity patterns with those previously published for the 2005/6 survey. Construct validity was assessed through the associations of each pattern with sociodemographic characteristics.

Results: Six patterns were identified and labelled according to disease probability as follows: low disease probability (assigned to 61.0% of individuals), common cardiometabolic conditions (22.1%), osteoarthritis and depression (8.6%), respiratory conditions (3.7%), complex cardiometabolic conditions (1.6%), and high multimorbidity load (3.0%). The first four clusters were remarkably consistent with those documented in 2005/6, while the latter two emerged only in the 2014 survey. Whereas the probability of osteoarthritis was distinctively high in the pattern labelled osteoarthritis and depression (82.9% of subjects), all of the remaining multimorbidity patterns had high prevalence estimates for this disease: 87.4% in the high multimorbidity load pattern, 70.6% in the complex cardiometabolic conditions pattern, 48.7% in the common cardiometabolic conditions pattern, and 27.3% in the respiratory diseases pattern. When compared to the low disease probability pattern, the osteoarthritis and depression pattern was also the most strongly associated with female sex (PR 2.97, 95% CI 2.62–3.37), and lower social support (PR 1.48, 95% CI 1.17–1.86). It was also more frequent among older individuals, those with higher adiposity, as well as those of lower formal education and income.

Conclusion: Our findings suggest the stability of most multimorbidity patterns but also the emergence of a small cluster of high multimorbidity load in the general population. Osteoarthritis remains a heavy contributor to the burden of multimorbidity in the general population, suggesting that patient-centered chronic disease programmes should comprise a component directed to the management of degenerative joint disease.

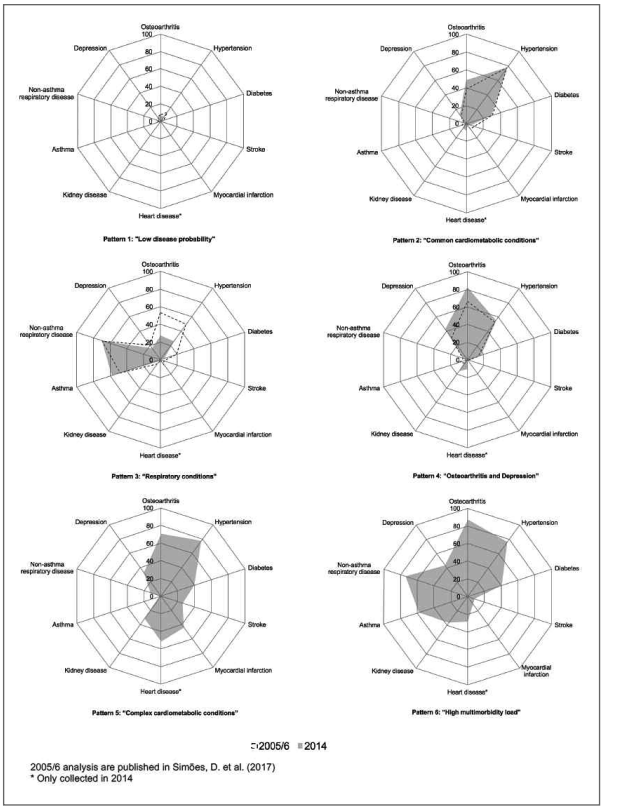

FIGURE 1. Disease probabilities in each assigned latent class (pattern) in 2014 (filled) and 2005/6 (dotted)

P225 – ADAPTAÇÃO CULTURAL E PROPRIEDADES PSICOMÉTRICAS DA VERSÃO PORTUGUESA DA GLOBAL BACK RECOVERY SCALE EM INDIVÍDUOS COM DOR LOMBAR CRONICA

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As medidas de avaliação autoreportadas apresentam uma importância crescente na avaliação da efetividade das intervenções de saúde. Estas são amplamente utilizadas em contexto clínico e de investigação principalmente por serem um meio eficiente para captar as perspetivas dos utentes acerca do impacto da sua condição ou de uma intervenção em diferentes domínios da sua vida.

As medidas de perceção global de melhoria são um dos tipos de medidas autoreportadas mais utilizadas. Estas medidas apresentam especial relevância pelo facto de sumariarem, através de uma única questão e de forma simples, a perspetiva de melhoria ou de mudança do estado de saúde após uma intervenção. Devido ao facto do utente poder agregar numa única resposta a mudança percecionada em diversos domínios por ele considerados relevantes, faz com que estas medidas sejam, efetivamente, centradas no utente. Para além da sua aplicabilidade na avaliação do sucesso das intervenções, estas medidas são igualmente recomendadas como critério externo para avaliar as propriedades psicométricas de medidas específicas do estado de saúde. A *Global Back Recovery Scale* (GBRS) é um exemplo deste tipo de medidas especificamente desenvolvida para utentes com dor lombar.

Considerando que a utilização clínica e no contexto de investigação de uma medida de resultado deve ser precedida pela análise das suas características psicométricas e pontos fortes/fracos, o objetivo deste estudo foi contribuir para a adaptação cultural e estudo da fiabilidade, validade de constructo e poder de resposta da GBRS em indivíduos com Dor Lombar Crónica (DLC) em tratamento de fisioterapia.

Este estudo foi dividido em 2 fases: (1) adaptação cultural e (2) avaliação das propriedades psicométricas (fiabilidade teste-reteste, validade de constructo, poder de resposta e interpretabilidade). A versão original da GBRS foi inicialmente traduzida e retraduzida de acordo com as orientações internacionais. Na segunda fase, recorreu-se a um desenho de estudo de coorte prospetivo, com uma amostra de 98 indivíduos com DLC, a iniciar tratamento em 12 unidades de Fisioterapia. A recolha dos dados decorreu em 3 momentos de avaliação: T0 referente à baseline; T1 com 48 horas de intervalo; e T2 após 6 semanas de intervenção. A fiabilidade foi analisada através do coeficiente de correlação intraclasse (CCI) enquanto a validade de constructo foi avaliada através da correlação entre as pontuações da GBRS-PT e a Patient Global Impression of Change (PGIC-PT). Para estimar o poder de resposta e determinar a diferença mínima clinicamente importante recorreu-se ao método "Coeficiente correlação âncora" e curva Receiver Operating Characteristic (ROC).

Os resultados da fiabilidade teste-reteste revelaram um valor de CCI = 0.717 (IC 95% 0.479-0.859, p <0.0001). Relativamente à validade de constructo, a GBRS-PT mostrou correlacionar-se moderadamente e significativamente com a PGIC-PT, em T0 e T2. Na análise da curva ROC, a GBRS-PT mostrou também um adequado poder de resposta (AUC > 0,70), com o ponto ótimo de corte identificado de 3.

De acordo com os resultados obtidos, a GBRS-PT apresenta uma adequada fiabilidade teste-reste, uma boa validade de construto e poder de resposta. A diferença mínima clinicamente importante identificada foi a pontuação 3 neste instrumento. Com base nestes resultados, considera-se que a GBRS-PT é um instrumento com capacidades psicométricas apropriadas sendo um instrumento passível de utilização na prática clínica e contexto de investigação.

P228 – BONE DISEASE IN A CYSTIC FIBROSIS COHORT – A DESCRIPTIVE ANALYSES

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Background: Cystic fibrosis (CF) is the most common lethal autosomal recessive genetic disorder in the Caucasian population. Long-term survivors CF have a dramatic increase in the risk of osteoporosis (OP) and incident fracture. Risk factors include nutritional deficiency, low physical activity, hormonal alterations, chronic inflammation, and chronic use of glucocorticoids.

Objectives: To characterize a cohort of patients with CF that underwent evaluation in our reference centre. Methods: We conducted a descriptive study of all patients aged >18 years old (y) with the diagnosis of CF. We collected data regarding age, age at diagnosis, gender, genotype, body mass index (BMI), forced vital capacity % predicted (FVC%), forced expiratory volume % predicted (FEV1%), serum 25-hydroxyvitamin D (25OHD) and Parathyroid hormone (PTH), bone mineral density (BMD) and BMD Z-score as evaluated by dual-energy x-ray absortiometry (DEXA) of the femoral neck, presence of low impact fractures and therapeutics.

Results: We included 30 patients, 56,7% males and 43,3% females, mean current age 33,45y (ranged between 19-59y) and mean age at diagnosis 13,61y (ranged between <1- 50y); 40,7% were homozygous for F508del mutation and 33,3% were heterozygous for this mutation. We found 35.7% patients with low BMD, defined as a BMD Z-score ≤−1. Within the known risk factors described we highlight hypovita-

minosis D that was found in 41,4%, despite 77.4% of patients were on high dosage cholecalciferol supplementation, corticosteroid therapy that was present in 25,8% and low BMI, as 25% were underweight.

Referral to the Rheumatology consultation was made in 10 patients, 7 males and 3 females with mean time from baseline of 64.5 months (ranged between 2-147 months). Mean current age 32.3y (ranged between 21--46y). There were 4 patients with history of lung transplantation and 2 of them maintain current steroid use (one under 2.5 mg of prednisolone/every other day and one under 10 mg prednisolone/day). Mean BMI was 20.7+/- 3.78Kg/m2 with 4 patients underweight (4/10). 4/10 of the patients had CF related diabetes. Mean FVC% was 84.3% (ranged between 52.6-115.2) and mean FEV1% was 63.7% (ranged between 33.9--103.4). There were 2 patients with low impact fractures (at baseline or during follow-up), 1 had vertebral radiographic and 1 patient had both vertebral and bilateral hip fractures. Mean BMD was 0,873 g/cm2 (ranged between 0.693- 1.220). Mean initial Zscore was -1.49 (ranged between -3.8 - 0.1); mean current Zscore was -1.09 (ranged between -2.3 -1). Mean vitamin D level was 10.7 ng/mL (ranged between 3-30) with hypovitaminosis (25OHD<20 ng/mL) in 8/10 at baseline; mean current level of 25.9 ng/mL (ranged between 12-42), with hypovitaminosis in 4/10 at present time. Mean PTH level was 69,78 pg/mL (ranged between 24,00- 181,50). All patients included were on high dosage cholecalciferol suplementation regimens; 2 patients were under oral bisphosphonates; 1 patient was under zoledronic acid and 1 patient was under denosumab.

Conclusions: Despite the mean young age and in keeping with earlier data, we found a high prevalence of low BMD in CF patients. Patients with low impact fractures or with significantly altered DEXA values were referred to rheumatology consultation, where a higher prevalence of risk factors for osteoporosis was observed. Although our small sample, we could see a trend towards an improvement in BMD and 25OHD levels with an effective therapeutic regimen. Early recognition and treatment are the most effective strategies to reduce osteoporosis morbidity.

P230 – BIOSSIMILARES: A PERSPECTIVA DE REUMATOLOGISTAS PORTUGUESES

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Introdução e Objetivos: Biossimilares são agentes terapêuticos de origem biológica, semelhantes a outros previamente existentes cujas propriedades pretendem reproduzir, a custo mais baixo, aumentando a acessibilidade às terapêuticas biotecnológicas. A Sociedade Portuguesa de Reumatologia foi pioneira no estabelecimento de recomendações para a sua utilização, através de um "position paper" o qual foi recentemente atualizado. Existe porém, pouca informação acerca da perspetiva dos Reumatologistas Portugueses sobre este tema na sua prática clínica diária. Este estudo pretende mostrar a percepção, as motivações e os receios existentes associados à sua prescrição.

Métodos: Foi enviado um questionário aos responsáveis dos Serviços/Unidades de Reumatologia Portugueses com o intuito de se obterem as respostas dos seus especialistas e internos.
Resultados: Obtiveram-se 51 respostas (35 Reumatologistas e 16 Internos da Especialidade). O conceito de "Biossimilar" é considerado estar muito/bastante assimilado por 80% dos inquiridos e há convicção generalizada de que a prescrição subirá nos próximos 12 meses. No entanto, apenas 44% sentem estar muito/ /bastante familiarizados com a sua prescrição sendo os aspectos económicos- custo (33%) e poupanças associadas (31%) os principais factores apontados para justificar o uso. Na tomada da decisão para escolha do produto, são apontados por ordem decrescente de importância os factores de eficácia (controle dos sintomas), de segurança e o custo. A confiança na eficácia, segurança e extrapolação de indicações, dos biossimilares é de 63%, 51% e 15%, respetivamente.

A prescrição de biossimilares em 1ª linha (doentes naïve) é ponderada por 47% dos inquiridos, aumentando essa proporção para 59% e 65% quando se consideram em 2ª e 3ª linha, respectivamente. Nas situações de *switch* motivada por ineficácia do produto anterior, a possibilidade de utilizar um biossimilar, do produto original que pretenderia prescrever, é considerada em 84%; no caso de switch por razões de segurança, 47 % preferem utilizar um produto original. Em situações em que o doente se encontra controlado, a realização de switch para um biossimilar do produto original é ponderada em 53%, sendo que 37% não considera realizar qualquer alteração.
Conclusões: O conceito de produto biossimilar é assumido como estando bem assimilado, havendo confiança na sua eficácia e segurança mas não na extrapolação de indicações. Os factores económicos são os principais determinantes para o seu uso; os aspectos de eficácia e segurança os principais determinantes no processo de decisão terapêutica. Os biossimilares são sobretudo ponderados em situações de switch por ineficácia.

P236 – REMISSION RATES OF BIOLOGIC-TREATED RHEUMATOID ARTHRITIS, SPONDYLOARTHRITIS AND PSORIATIC ARTHRITIS PATIENTS: A SINGLE-CENTER CROSS-SECTIONAL STUDY

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Introduction: Biologic disease-modifying drugs (bDMARD) have revolutionized the treatment of rheumatoid arthritis (RA), non-psoriatic spondyloarthritis (SpA) and psoriatic arthritis (PsA), allowing clinical remission to become a realistic goal.
Objectives: To determine the percentage of RA, SpA and PsA patients fulfilling remission criteria in a cohort of bDMARD-treated patients in the Rheumatology department of Hospital de Santa Maria. These patients were further characterized regarding disease features, treatment and length of remission.
Methods: Data from the Rheumatic Diseases Portuguese Register (Reuma.pt), from Hospital de Santa Maria, was extracted on August 2017 for patients with RA, SpA and PsA treated with bDMARDs. Remission was defined as ASDAS <1.3 for SpA and DAS28 <2.6 for RA and PsA. The number of patients in remission at the last consultation and in stable remission (remission at every assessment during the previous year) was determined. These patients were analyzed concerning disease duration, time from diagnosis to bDMARD treatment, type of bDMARD and previous switches, non-bDMARD co-medication, persistence in remission and labour situation. The number of medical appointments and days of hospitalization were also collected from the hospital's database.
Results: From a cohort of 561 patients treated with bDMARDs for RA, SpA and PsA, 143 patients (25.5%) were in remission at the last visit. These included 68 RA patients, 40 SpA patients and 35 PsA patients (respectively, 24.6%, 23.8% and 29.9% of RA, SpA and PsA patients treated with bDMARDs). For patients in remission the mean age (±SD) was 56.8(±11.9) years, 85.3% females, for RA patients; 44.0(±10.1) years, 75.0% males for SpA, and 52.4(±10.5) years, 14.3% males for PsA. In this subgroup the duration of disease (±SD) was of 15.9(±9.9) years for RA patients, 18.2(±10.0) years for SpA and 16.2 (±8.5) years for PsA; ranging from 1.2 to 59.2 years. Time from diagnosis until start of first bDMARD (±SD) was 8.5(±9.6) years for RA patients, 7.2(±7.5) years for SpA and 6.6(±5.5) years for PsA. 13 patients (9.1%) were re-

tired because of their disease and 68 (47.6%) were active. 96 patients had never switched a bDMARD (67.1%), 26 (18.2%) had switched once, 18 (12.6%) had switched twice and 3 patients were on their fourth bDMARD (2.1%). Co-medication with non-bDMARDs was recorded in 51 RA patients (75%), 12 SpA patients (30%) and 21 PsA patients (60%).

Persistence on current bDMARD (±SD) was 55.8 (±41.5) months in RA patients in remission, 81.9 (±49.3) months in SpA and 62.4 (±52.5) months in PsA. Persistence (in months) on biologic treatment was roughly proportional to the time the drug is available in the market: 113.5 (±47.4) months for infliximab, 74.1(±50.6) for etanercept, 64.5 (±18.6) for rituximab, 60.2 (±31.3) for adalimumab, 36.8 (±23.3) for tocilizumab, 32.7(±26.7) for golimumab, 31 for ustekinumab (single patient), 26.0(±7.8) for certolizumab and 7 for abatacept (single patient), ranging from 1.9 to 208 months.

Persistent (12 month) remission was observed in 17 RA patients (6.2% of RA patients treated with bDMARDs), 12 SpA patients (7.1% of SpA patients treated with bDMARDs) and 23 PsA patients (19.7% of PsA patients treated with bDMARDs).

Conclusion: Remission, in particular persistent remission, is a feasible target in a real-life clinical setting although in a small proportion of patients. Even patients with longstanding disease can reach sustained remission after starting bDMARDs and most patients in remission persisted in their first bDMARD for several years.

P237 – RASTREIO E TRATAMENTO DE TUBERCULOSE LATENTE NUM CENTRO HOSPITALAR DE LISBOA – INTERVENÇÃO NA CONSULTA DE RISCO DE INFEÇÃO NA IMUNOMODULAÇÃO

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Introdução: O rastreio de tuberculose latente (TBL) é mandatório em doentes propostos para terapêutica imunossupressora/imunomoduladora, face ao risco acrescido de reactivação de TBL associado a várias entidades clínicas e a fármacos imunossupressores/imunomoduladores, bem quantificado com biológicos como anti factor de necrose tumoral-alfa.

Objetivos: Avaliar a prevalência, critérios de diagnóstico e tratamento de tuberculose latente (TBL), em doentes com patologia inflamatória crónica, autoimune e desmielinizante, oncológica e em contexto de transplantação, seguidos na Consulta de Risco de Infeção na Imunomodulação (CRINI).

Material e métodos: Estudo retrospetivo, através da consulta de registos clínicos informático dos doentes seguidos na CRINI, desde o seu início, a um Maio de 2014 até 30 de Novembro de 2017. Foi feita a caracterização demográfica e avaliados três parâmetros que contribuem para estabelecer o diagnóstico de TBL: risco epidemiológico de exposição a M. tuberculosis, resultado de prova de Mantoux (indisponível a partir de Outubro de 2015) e de teste IGRA (QuantiFERON-TB Gold®), sendo que bastou um parâmetro positivo para se admitir o diagnóstico de TBL.

Resultados: Foram avaliados 530 doentes, 213 (40.19%) do género masculino e 317 (59.81 %) do género feminino. A média de idade foi 50,2 anos. Destes, 500 (94.34%) foram encaminhados por patologia inflamatória crónica, autoimune ou desmielinizante, 26 (4.91%) por patologia hematológica e oncológica e 4 (0.75%) em contexto de transplante. Do total dos doentes, 293 (55.28%) foram encaminhados por Reumatologia.

A maioria dos doentes seguidos na CRINI (n=506) (95.4%) fez rastreio de TBL, sendo que 478 (94.4%) já concluíram o estudo. Dos 506 doentes que fizeram rastreio 366 (72,3%) estava sob terapêutica imunossupressora/ imunomoduladora no momento da referenciação à CRINI.

Foi admitido o diagnóstico de TBL em 210 doentes (43.9%). Em 102 doentes (48.5%) o critério de diagnóstico foi apenas epidemiológico, em 29 doentes (13.8%) pela prova de Mantoux positiva isolada e em 30 doentes (14,2%) pelo teste IGRA positivo isolado. Observou-se risco epidemiológico e prova de Mantoux positiva em 22 doentes (10,8%), risco epidemiológico e IGRA positivo em 23 doentes (10,9%), IGRA e prova de Mantoux positivos em 3 doentes (1.4%) e todos positivos em 1 doente (0.4%).

Cento e catorze doentes iniciaram tratamento de TBL, na maioria a proposta inicial foi isoniazida 9 meses (n=109) (95.6%). Deste grupo, 62 doentes (56.9%) concluíram tratamento, 31 (28.4%) estão sob tratamento, 4 (3.7%) interromperam tratamento por toxicidade, 11(10.1%) deixaram de ser seguidos na CRINI e foi registado 1 óbito (0.9%) sem relação directa com

o tratamento antibacilar.

Conclusão: A prevalência de TBL foi elevada nesta série, fruto da valorização do risco epidemiológico, que os autores salientam face à potencial interferência dos fármacos imunossupressores/imunomoduladores no resultado da prova de Mantoux ou do teste IGRA. Globalmente, sempre que possível, o tratamento prescrito foi isoniazida 9 meses, que demonstrou boa tolerabilidade.

P247 – HEALTH PROFESSIONALS' PERSPECTIVE ON BENEFITS AND RISKS OF LOW DOSE GLUCOCORTICOIDS IN RA – AN INITIATIVE UNDER THE GLORIA PROJECT

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Background: The Glucocorticoid Low-dose Outcome in Rheumatoid Arthritis Study (GLORIA) is an international investigator initiated pragmatic randomised trial designed to study the effects of low dose glucocorticoids (GC) in elderly patients with Rheumatoid Arthritis (RA). The research team is also committed to promoting a better understanding of the risks and benefits of these drugs among health professionals and patients. In order to achieve these goals, it is important to assess the current concepts and concerns of health professionals (HP) regarding GCs.

Objective: In this study, we evaluated the beliefs about GC benefits and risks of HP who regularly use and monitor them in the treatment of RA.

Methods: These surveys were disseminated to HP who have experience dealing with RA patients in their daily clinical practice. These surveys mainly enrolled physicians, but also nurses or physiotherapists who considered themselves experienced in this field. The surveys were made available in Portuguese and English, and disseminated through the GLORIA investigational team. National medical societies contributed by inviting clinicians to participate.

Regarding the questions on GC efficacy, HP could signal (dis)agreement on a 5 point scale: disagree,

TABLE I. HEALTH PROFESSIONAL'S CHARACTERISTICS (N=130) AND DATA ON GC's EFFICACY

Country of participants, number (%)	
Netherlands	70 (57)
Portugal	41 (33)
Others	11 (9)
Physicians, number (%)	122 (97)
Level of agreement for statements, number (%)	
At a dose ≤ 7.5 mg prednisolone/day, GC:	
- **are very effective in the control of signs and symptoms of RA**	88 (90)
- **improve** RA symptoms within days	86 (88)
GC reduce the probability of articular damage caused by RA	77 (79)
In RA these doses of GC lose efficacy after a few	
- months of therapy	15 (15)
- years of therapy	18 (18)

GC – Glucocorticoid; RA – Rheumatoid Arthritis.

TABLE II. FREQUENCY OF LOW DOSE GC's ADVERSE EVENTS ACCORDING TO HEALTH PROFESSIONALS WHO ATTENDEND THIS SURVEY (% OF HP PER FREQUENCY CATEGORY)

	None	Very rare (<1%)	Rather rare (1-3%)	Rather frequent (4-10%)	Frequent (11-20%)	Very frequent (>21%)	Don't know
Acne	13	**33**	29	19	2	1	4
Mood disturbances	8	19	**40**	28	4	0	2
Poor DM control	1	6	15	**42**	27	9	1
Cardiovascular events	6	**34**	33	16	3	0	9
Osteoporosis	1	7	21	**43**	19	7	3
Serious infections	13	33	**42**	11	1	0	1

slightly disagree, neutral, slightly agree, and agree. Agreement was defined as the proportion of HP answering slightly agree or agree. Survey Monkey® software was used to disseminate the online surveys.
Results: Responses provided by 130 HP are summarized in table 1. The results are presented taking all participating countries in account as the rates are similar between them. Most responses came from The Netherlands (57%) and Portugal (34%). Almost all participants were physicians (97%).

Efficacy of GC was highly endorsed. Close to 90% of HP considered low dose GC were very effective in the control of signs and symptoms of RA, and agreed that GC improve RA symptoms within days. Almost 80% agreed that GC reduce structural damage, and 85% disagreed that GC lose their efficacy after a few months.

The opinions of health professionals regarding frequency of GC adverse events are presented in table 2.

Regarding GC AE events, most of the respondents considered that low dose GC adverse events were very rare or rather rare, except for glycaemic control in patients with diabetes and osteoporosis. Acne and cardiovascular events were evaluated as very rare adverse events by approximately one third of HPs. However, there was significant heterogeneity in the responses.
Conclusion: GC are widely used drugs in RA. The vast majority of participating HPs are convinced that GCs are efficacious in the treatment of RA, including DMARD effects, and retain this efficacy long term. However, concerns about severe side-effects are also very prevalent.

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P248 – SWITCHING TO BIOSIMILARS: WHAT HAVE WE LEARNED?

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Background: Biosimilar drugs intend to be as effective and safe as the originator product and would increase patients' access to biological therapies. There is emerging evidence from randomized controlled trials concerning this issue, but data from real world clinical practice is still lacking. The decision for switching is not allways promoted the physicians', as in this case.
Objective: To evaluate disease activity and treatment withdrawal in patients with axial spondyloarthrits (axSpA), rheumatoid arthritis (RA) and psoriatic arthritis (PsA), treated with Infliximab (IFX) and Etanercept (ETN), who were switched to CTP13 and SB4, respectively. Additionally, physicians' and patients' perspectives concerning biosimilars and the switching process were also evaluated.
Methods: AxSpA, RA and PsA patients treated in a tertiary referral rheumatology center, who were switched from IFX and ETN originators to biosimilars were included. Disease activity and adverse events 3 months before and after switching were evaluated. A Δ means the difference between 3 months before and after the switch). An on-site survey was conducted aimed at physicians' perspectives and a telephone survey was applied to patients who experienced a switch to a biosimilar.
Results: Overall, 48 patients (18 males) were included, 12 switching to IFX biosimilar and 36 to ETN biosimilar. There were no significant changes in efficacy for both biosimilars compared to their originators in all disease subgroups, as assessed by DAS 28 [ΔDAS28:-0.26 (IQR:0.79) for IFX; ΔDAS28:-0.2 (IQR:1.26) for ETN] in RA, and BASDAI [ΔBASDAI:2.1 (IQR:5.4) for IFX; ΔBASDAI:0.6 (IQR:2.2) for ETN] and ASDAS-CRP [ΔASDAS:0.99 (IQR:2.2) for IFX; ΔASDAS:0.19 (IQR:1) for ETN] in axSpA. Similar results were found in terms of VAS patient's global score (0-10). There were 3 mild to moderate adverse events reported with ETN and none with IFX.

The survey was applied to 11 rheumatologists, all of whom consider that biosimilar prescription will increase in the future. Their use is mainly due to economic reasons (costs n=5, savings n=2). The more important factors influencing prescription were safety, followed by efficacy and cost. Regarding the 22 patients who answered the telephone survey, most of them (n=15; 68.2%) claimed to have been at least 'reasonably' informed about biosimilars. Several health care

providers were involved in this process. The patients' main worries about switching were safety (n=11; 50%) and efficacy (n=6; 27.3%). Only 31.8% (n=7) had little or no confidence in the efficacy of biosimilars while 50% (n=11) were confident about it. Similarly, 18.2% (n=4) had little or no confidence in the safety of biosimilar, while 36.4% (n=8) were confident. Nearly half of the patients (n=10) has accepted the switch without apprehension while the other half (n=11) believed they had no other choice, and 50% (n=11) considered that the switch was made by economic reasons. Globally, most patients didn't change the degree of satisfaction with the switch.

Conclusion: In this case-study, where a switching for non-medical reasons has occurred, disease activity was largely unaffected in the majority of patients and the satisfaction with biological therapies seems to be unchanged. However, switching should remain a case-by--case clinical decision made primarily by the physician and patient on an individual basis.

P249 – ASSESSING THE QUALITY OF BIOLOGIC SWITCH DECISIONS IN PSORIATIC ARTHRITIS: RESULT FROM A MODIFIED-DELPHI CONSENSUS

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Background: Psoriatic arthritis (PsA) is a chronic inflammatory disease commonly managed by rheumatologists. Pharmacological treatment of PsA varies in real-world clinical practice despite the ongoing efforts to guide treatment strategies, especially concerning biologic therapies initiation and switch. Treatment options have expanded in PsA and biologic therapies switch is increasingly more frequent. However, there are no agreed definitions about the quality of biologics switch in PsA and about which outcome measure should be used for this quality assessment.

Objectives: To develop a measurement tool to evaluate the quality of biologic therapies switch in PsA patients.

Methods: A Task Force and an Expert Panel were specifically created for the purpose of this study. The Task Force comprised six members from different backgrounds, including health economics and medical affairs and was chaired by a rheumatologist, while the Expert Panel comprised seven experienced rheumatologists, all but one practicing in Portugal. A modified-Delphi consensus method in a four-step procedure was then applied: 1) literature search and experts' opinion collection about quality indicators for disease course management; 2) Delphi design to address the development of a measurement tool; 3) three Delphi questionnaire rounds; 4) Consensus meeting.

Results: The literature search and experts' opinion resulted in the identification of 45 domains for disease management, which were distributed according to three perspectives: physician (n=19), patient (n=20) and society (n=6). During the Delphi process, experts agreed that biologics switch should be classified into three quality levels: "Good", based on treat-to-target thresholds; "Moderate", based on baseline improvement thresholds; and the remaining as "Insufficient". Through the Delphi questionnaires experts pre-selected 11 domains to be included in the measurement tool (physician=5, patient=4, society=2), and listed instruments and quality thresholds for 8 domains. Domains selection will be concluded at the Consensus meeting. A "Good" switch was defined as comprising a majority of domains with "Good" outcome, and up to 3 and

1 domains with "Moderate" and "Insufficient" outcomes, respectively. A "Moderate" switch outcome was defined as comprising a majority of domains with "Good" or "Moderate" outcomes, and up to 2 domains with "Insufficient" outcome.

Conclusion: The proposed measurement tool is a first attempt to address the quality of treatment decisions regarding biologics switch in PsA in clinical practice. In the future, this tool needs to be validated and then may be used to evaluate the quality of switching strategies. Its implementation is expected to support rheumatologists in making better and more informed therapeutic decisions.

Disclosure of Interest: This publication was developed under the project "Switch to Quality: Psoriatic Arthritis biologic switching consensus" that was sponsored by Novartis and executed with the collaboration of IQVIA.

P250 – ADHERENCE TO BIOLOGIC THERAPY: IS THERE ANY DIFFERENCE BETWEEN SPONDYLOARTHRITIS AND RHEUMATOID ARTHRITIS PATIENTS?

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Background: In the last years, there has been an increase interest in using Patient Reported Outcomes (PROs) in clinical trials and daily clinical practice in Rheumatology to provide patient-centered care. The most frequently reported PROs are patient's pain, patient's global assessment (PGA) of disease activity and reports of functional capacity, fatigue, anxiety and depression. To date, studies that explore patient adherence to rheumatic medications are scarce.

Objective: To study the level of adherence to biologic therapy of Spondyloarthritis (SpA) and Rheumatoid Arthritis (RA) patients, followed at a day care hospital of Rheumatology.

Methods: An observational and cross-sectional study was undertaken during two months of clinical visits at a day care hospital (5 periods per week). It included SpA (including patients with psoriatic arthritis) and RA patients on biologic therapy, able to complete a questionnaire autonomously and who agreed to participate. The classification criteria (CC) used for SpA were 2009 Assessment of SpondyloArthritis international Society

TABLE I. DEMOGRAPHIC AND CLINICAL VARIABLES OF RA AND SpA GROUPS

	RA patients		SpA patients		*p*-value
	Mean±SD	Median (IQR)	Mean±SD	Median (IQR)	
Current age - years	56.1±11.1	58.1 (48.1-62.8)	49.9±12.3	49.1 (40.7-57.6)	**p=0.002**
Disease duration - years	15.0 ±7.5	13.1 (10.1-18.2)	18.0 ±11.1	14.1 (10.3-21.9)	p=0.387
Time on treatment with the current biologic therapy - years	3.5±2.7	2.8 (1.0-5.6)	4.2±2.6	4.3 (2.0-6.0)	p=0.146
DAS28-4V	3.4±1.2	3.3 (2.7-4.2)	-	-	NA
CDAI	9.7±7.8	7.0 (3.6-15.1)	-	-	NA
SDAI	10.1±8.0	7.0 (4.0-15.7)	-	-	NA
BASDAI	-	-	2.9±2.2	2.8 (0.9-4.7)	NA
BASMI	-	-	3.4±1.4	3.4 (2.4-4.2)	NA
ASDAS			2.1±0.9	2.2 (1.4-2.8)	NA
HADS-A	6.5±3.9	6.0 (3.0-9.0)	5.8±4.1	5.0 (1.0-9.0)	p=0.406
HADS-D	5.4±3.7	5.0 (2.0-8.0)	5.2±4.2	4.0 (1.0-9.0)	p=0.643
FACIT-F	36.5±8.8	37.0 (29.1-43.5)	37.3±10.1	36.0 (30.0-47.0)	p=0.686
MMAS-8 score	7.0±1.2	7.0 (6.8-8.0)	6.9±1.1	7.0 (6.5-8.0)	p=0.428

(ASAS) CC for axial spondyloarthritis or 2011 ASAS CC for peripheral spondyloarthritis. The CC used for RA were 1987 American College of Rheumatology (ACR) and/or 2010 ACR/European League Against Rheumatism criteria. Demographic and clinical data (BASDAI, ASDAS and BASMI to assess SpA disease activity; DAS28, CDAI and SDAI to assess RA disease activity; HADS-A for anxiety, HADS-D for depression, FACIT-F for fatigue) were collected. To assess adherence, a Portuguese version of the Morisky Medication Adherence Scale (MMAS-8) was used and the patients were asked to apply it only regarding biologic therapy. Three levels of adherence were considered based on the following scores: 0 to <6 (low); 6 to <8 (medium); 8 (high). Statistics: Mann-Whitney and Chi-squared tests, $p<0.05$, SPSS® v.23.

Results: In total, 116 patients were included, 55 with SpA (including 16 with psoriatic arthritis) and 61 with RA. There were significantly more women in the RA group compared to the SpA group (91.8% vs 54.5%, respectively, $p<0.001$). Table 1 reports the means and medians of demographic and clinical variables included for both groups.

In the SpA group, regarding to biologic therapy, 54 patients were on anti-Tumor Necrosis Factor (anti--TNF), the other one on Ustekinumab. The values of the MMAS-8 score were between 3.5 and 8. The adherence was medium in 52.7%, high in 27.3% and low in 20.0% patients.

In the RA group, 82.0% were on anti-TNF, the others on Tocilizumab (16.4%) or Abatacept (1.6%). The values of the MMAS-8 score were between 2.5 and 8. The adherence was medium in 50.8%, high in 36.1% and low in 13.1% patients.

As described in Table 1, we have found a significant difference between the groups for current age. No differences were found between the two groups for disease duration, time on treatment with the current biologic therapy, HADS, FACIT-F, MMAS-8 score and for each item of the MMAS-8 individually.

Conclusions: The adherence to biologic therapy was at least medium for more than 80.0% of patients. There were no differences in adherence between RA and SpA patients based on our cohort study.

P253 – REFERENCIAÇÃO A CONSULTA DE REUMATOLOGIA – A REALIDADE DE UMA UNIDADE DE SAÚDE FAMILIAR

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Introdução: Existem poucos estudos sobre a referenciação entre níveis de cuidados. Na prática diária, verifica-se escassez de informação nos registos após a referenciação aos cuidados de saúde secundários. Este trabalho procura estudar a realidade atual de forma a contribuir para um acréscimo dos ganhos em saúde e melhor gestão de recursos.

Objetivos: Caracterizar do ponto de vista sociodemográfico os doentes referenciados para a consulta de Reumatologia. Verificar o registo da codificação do problema referenciado e após a consulta hospitalar. Verificar o seguimento oferecido ao doente após consulta de reumatologia, comparando os dados dos registos a nível dos CSP com os registos hospitalares disponíveis.

Metodologia:

Tipo de estudo: observacional, descritivo, transversal.

População: Utentes da USF referenciados à consulta de reumatologia durante os últimos 10 anos (janeiro de 2008 a dezembro de 2017).

Variáveis: Sexo, Idade, Estado civil, Escolaridade, Comorbilidades, Diagnóstico codificado na consulta de referenciação e após a consulta de reumatologia (de acordo com a codificação ICPC2), registo de informação clínica relativa ao seguimento do doente (a nível dos CSP e hospitalar).

Dados: Dados colhidos em fevereiro de 2018 no programa SClinico®.

Análise das variáveis: Excel®

Resultados: Nos últimos 10 anos foram referenciados à consulta de reumatologia 99 doentes, sendo a maioria do sexo feminino (78.8%, n=78). A idade média foi de 58.7 anos, com idades compreendidas entre os 25 e os 95 anos. Informações tais como a profissão ou a escolaridade encontram-se por preencher em mais de 50% dos casos. No que se refere às patologias associadas mais prevalentes, destacam-se a dislipidemia em 41.4%, HTA em 36.4%, seguidas da depressão, tabagismo e ansiedade em 30.3%, 26.3% e 25.2% respetivamente. Analisando a codificação antes da referenciação à consulta, não existe codificação em 13% dos doentes, sendo os diagnósticos mais encontrados: Sinais e sintomas articulação (mão L12, anca L13 e joelho L15) em 10.1%, L99 - Doença do aparelho mús-

culo-esquelético,outra em 10,1%, L88 - Artrite reumatóide / seropositiva em 7.1% e L18 - Dor muscular em 5.1%. Após a consulta de reumatologia, verifica-se registo sobre informação clínica após consulta em apenas 33% dos doentes, sendo a L88 - Artrite reumatóide / seropositiva e a L18 - Dor muscular (Fibromialgia) as mais codificadas (em 15.1% e 8.1%, respetivamente). Analisando o destino dos doentes após referenciação, no sistema informatizado do médico de família, apenas 4% dos doentes apresentam informação acerca de alta da consulta. Contudo, os dados a nível hospitalar revelam que 25.3% dos doentes ainda mantém seguimento em consulta, tendo 44.4% alta. Quanto aos diagnósticos registados nos processos hospitalares, verifica-se registo em apenas 28% dos doentes referenciados à consulta.

Discussão: Os resultados obtidos permitem refletir acerca da escassez de registos informatizados quer ao nível dos cuidados de saúde primários quer a nível hospitalar. Por outro lado, a troca de informações após a consulta hospitalar apresenta claras limitações, sendo que na maioria dos casos os esclarecimentos após alta e o respetivo diagnóstico não retornam ao médico de família.

Conclusão: Todas estas informações são fundamentais para uma boa avaliação clínica, seja do médico de família ou do médico hospitalar. É necessário investir na melhoria da interação e integração entre os diferentes níveis de cuidados.

P255 – VACINAS EM DOENTES COM ARTRITE REUMATÓIDE – A REALIDADE DE DUAS UNIDADES DE SAUDE FAMILIAR

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Introdução: A vacinação assume um papel primordial na prevenção secundária nos doentes com artrite reumatóide sob imunossupressão. As recomendações atuais indicam a necessidade de vacinar os doentes sob terapêutica com fármacos biológicos ou DMARDs *(Disease Modifying AntiRheumatic Drugs)* ou corticoterapia sistémica com a vacina anual contra a gripe e com as duas vacinas disponíveis anti-pneumocócicas: vacina pneumocócica polissacárida 23-valente (VPP23) e a vacina pneumocócica conjugada 13-valente (VPC13) de acordo com esquemas específicos.

Objetivos: Caracterizar do ponto de vista sociodemográfico os doentes com artrite reumatóide das unidades em estudo. Determinar a prevalência de vacinação antigripal na população com artrite reumatóide. Determinar a prevalência de vacinação anti-pneumocócica na população com artrite reumatóide. Verificar o cumprimento das recomendações relativamente aos esquemas vacinais.

Metodologia:

Tipo de estudo: observacional, descritivo, retrospetivo.

População: Todos os utentes inscritos nas duas unidades em estudo em fevereiro de 2018, com problema ativo L88 - Artrite Reumatoide/Seropositiva (de acordo com a codificação ICPC2) e registo válido de vacinação.

Variáveis: género, idade, vacina anti-influenza no último ano, vacina anti-pneumocócica (VPP23 e VPC13), cumprimento do esquema vacinal recomendado.

Colheita de dados: Dados colhidos em fevereiro 2018, SClinico® e MedicineOne®.

Tratamento de dados: Excel®

Resultados: A prevalência de artrite reumatóide na população de estudo é de 0,53% (n=124), dos quais 73,4% dos doentes são do sexo feminino (n=91). A média de idades é de 61,37 anos, com uma mediana de 63 anos. Em relação à vacina anti-influenza, as recomendações atuais foram cumpridas no último ano em 32,3% dos indivíduos (n=40). Desde o momento de diagnóstico da doença até à data, a vacina anti-pneumocócica VPP23 foi administrada em 21% dos doentes (n=26) e a vacina anti-pneumocócica VPC13 em 6,5% (n=8). Apesar de 10,5% dos doentes terem sido vacinados com VPP23 nos últimos cinco anos (n=13), nenhum cumpriu o atual esquema terapêutico recomendado.

Discussão: Nas duas unidades de estudo, a prevalência de artrite reumatóide coincide com a prevalência estimada a nível nacional. Verificou-se uma maior taxa de vacinação anti-gripal comparativamente à anti-pneumocócica, provavelmente relacionada com o acesso gratuito da primeira, bem como uma maior divulgação. As vacinas antipneumocócicas, sobretudo a VPC13, apesar da recente comparticipação, apresentam um custo muito elevado para os utentes, o que limita a sua utilização.

Conclusão: A totalidade dos doentes que fizeram a va-

cinação anti-pneumocócica não cumpriu os esquemas recomendados, o que poderá resultar em parte da dificuldade de interpretação dos mesmos. É fundamental promover a formação médica de modo a melhor esclarecer os esquemas vacinais recomendados. É também essencial facilitar o acesso a estas vacinas que, apesar da comparticipação, são caras para a nossa realidade. A troca de informação de forma mais direta e regular entre médico de família e reumatologista poderá facilitar melhorias na prestação de cuidados.

P256 – AVALIAÇÃO DO CONSUMO DE AINES EM DOENTES COM ARTRITE REUMATÓIDE E ESPONDILITE ANQUILOSANTE NO CONTROLO DA DOR – RETRATO DE UMA UNIDADE DE REUMATOLOGIA

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Introdução: Os anti-inflamatórios não esteróides (AINEs) são eficazes no alívio sintomático da artrite reumatóide (AR), espondilite anquilosante (EA) e outras condições inflamatórias. Exercem os seus efeitos por bloqueio das prostaglandinas, inibindo a enzima ciclooxigenase.

Estando o uso de AINEs a ser generalizado, devem averiguar-se os seus efeitos adversos para serem aplicados com segurança em doentes reumáticos, incluindo os com AR e EA. A escolha farmacológica deve, assim, ser personalizada, tendo em conta a eficácia, a potencial toxicidade com outra medicação, o custo e os efeitos adversos de cada paciente.

Objetivos: Avaliar o consumo dos fármacos utilizados para a AR e a EA; Determinar a atividade e duração das doenças; Caracterizar a dor dos pacientes com AR e EA; Avaliar o estudo gastrointestinal (GI) e cardiovascular (CV) associado aos AINEs; Determinar os fatores associados à dor e ao consumo de AINEs.

Metodologia: Estudo observacional retrospetivo em 121 doentes (96 com AR e 25 com EA) seguidos na Unidade de Reumatologia de Castelo Branco (UR-CB), de março/2011 a abril/2017. Os dados foram recolhidos a partir dos processos clínicos. DAS28, BASDAI e ASDAS e EVA foram os instrumentos utilizados para a avaliação da atividade da AR, da EA e da dor, respetivamente.

Utilizou-se o *software* SPSSv24.0 para a análise estatística dos dados. As inferências para a população com AR e EA, seguida na UR-CB, foram feitas ao nível de significância de 5%.

Resultados: Os doentes com AR são principalmente mulheres (80,2%) com idade superior a 60 anos (55,2%) e com duração da AR superior a 10 anos (36,5%), enquanto os pacientes com EA são, em maior percentagem, homens (64%) com idades entre 40-50 anos (40%) e com duração da EA entre 3-5 anos (36%).

A maioria dos doentes com AR apresenta-se em remissão (DAS28-PCR:75% e DAS28-VS:54,2%) e sem dor/ dor ligeira (74%). Da mesma forma, quanto à EA, BASDAI, ASDAS-PCR, ASDAS-VS e dor medianos são, respetivamente, 1,6; 1,6; 1,5; e 1 – pelo que a maioria dos doentes apresenta atividade ligeira e ausência de dor/dor ligeira.

Em relação à medicação, em ambas as doenças, os AINEs são os fármacos mais consumidos (AR: 76% e EA: 72%), embora DMARDs, corticosteróides e biológicos também contribuam para o controlo destas patologias reumáticas, especialmente da AR.

Quanto às comorbilidades, a dislipidemia é a mais importante (AR: 77,1% e EA: 60%), contudo, excesso de peso/obesidade, HTA e diabetes mellitus também são prevalentes.

Relativamente ao estudo CV e GI associado aos AINEs, apenas 5,5%, 2,7% e 1,4% dos doentes com AR foram submetidos a endoscopia digestiva alta (EDA), cateterismo cardíaco e internamento em Cardiologia, respetivamente. Na EA, apenas 22,2% foram submetidos a EDA.

Da análise estatística, apurou-se que são mais os doentes que consomem AINEs do que os que não tomam (AR: p=0,000 e EA: p=0,0215) e que a dor está associada às escalas de atividade da AR (DAS28-PCR: p=0,001 e DAS28-VS: p=0,000) e da EA (ASDAS-PCR: p=0,048 e ASDAS-VS: p=0,009). As medianas de DAS28-PCR e DAS28-VS são superiores nos pacientes com dor (respetivamente, p=0,000; p=0,0005) e, por outro lado, as medianas de BASDAI, ASDAS-PCR e ASDAS-VS são superiores não só nos pacientes com dor

(p=0,000), como também nos que consomem AINEs (respetivamente, p=0,0015; p=0,0055; p=0,000).
Conclusão: Na UR-CB, a AR e a EA encontram-se bem controladas: remissão/atividade ligeira, ausência de dor/dor ligeira e poucos efeitos adversos CV e GI, sendo os AINEs os fármacos mais consumidos. Existem associações significativas entre dor-DAS28 e dor--ASDAS.