not any dose GCs group. Case 1–3 took NSAIDs. Case 2 received mPSL pulse therapy (mPSL 1 g x 3 days). Case 1 and 2 developed SDPs within 3 months from initiating GCs. Case 1 recurred SDPs at 17 and 63 months from initiating GCs. Case 2 was prescribed Tacrolimus as a concurrent medication. All four patients were operated to remove the perforated segment, and case 2 and 4 were created artificial anus. Although they were clinically diagnosed as SDPs only case 4 clarified perforation in pathological findings.

case	age sex	target	age at onset (year)	period from GCs start to onset (mo)	maximum doses of GCs (mg)	doses at onset (mg)	cumulative doses of GCs (mg)
1	76 female	Dermatomyositis	70	3	60	32.5	2.5
2	72 male	Polymyositis	70	2	60	19	6
3	74 female	Rheumatoid vasculitis	74	94	50	9	30
4	73 male	Psoriatic arthritis	71	103	40	10	25

table – patients characteristics and GCs profile

Conclusions: We should take care of developing SDPs in patients described high dose GCs.

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AB1160 EPIDEMIOLOGY AND CLINICAL PRESENTATION OF OCULAR INVOLVEMENT IN A POPULATION OF 278 PATIENTS WITH NON INFECTIOUS UVEITIS

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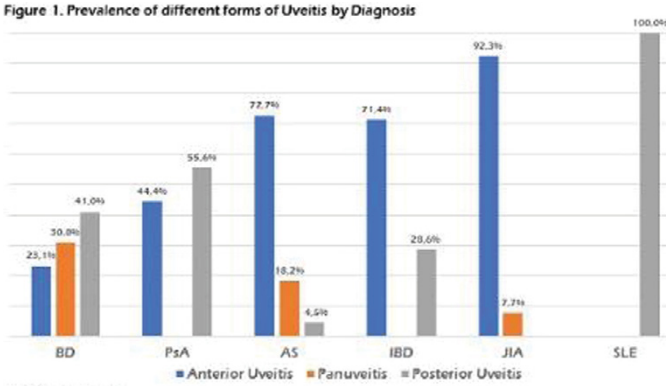
Background: Uveitis is a sight-threatening inflammation which may involve different anatomic parts inside the eye. Rheumatologists should be aware of the ocular clinical signs and of the frequency of uveitis because it may cause irreversible lesions to the eye that predominantly affect people in their most productive years, being one of the most common extra-articular manifestation in several rheumatic diseases.

Objectives: We aimed to describe the presentation of the clinical features of ocular involvement in a population of patients affected with newly diagnosed Non Infectious Uveitis (NIU).

Methods: 278 patients (mean age 42±18,18 years, range 4 - 87) from three specialized centres, all affected with uveitides, were enrolled; 158 were female, 120 male, all caucasian but one asiatic. Complete ophtalmologic examination was carried out in all of them, malignancy or infections of any kind were preventively ruled out. In addition blood tests, serum antibodies level evaluation and HLA haplotype typization were performed. Moreover instrumental tests were performed when a relation with systemic diseases was suspected. Uveitides were then classified according to the Standardization of Uveitis Nomenclature Working Group Criteria.

Results: 149 (53,6%) patients were affected with Anterior Uveitis (AU), 45 (16,2%) with Panuveitis, 16 (5,8%) with Intermediate Uveitis (IU) and 68 (24,5%) with Posterior Uveitis (PU). 110 (41,7%) patients were known to have a systemic disease at the moment of the uveitis onset. HLA-B27 positivity was found in 15,8% of patients, whereas HLA-B51 positivity was found in 21,9% of patients. Behçet's Disease (BD) was diagnosed in 39 (14%) patients: in particular AU was found in 9 out of 39 patients (23,1%), while PU in 16 out of 39 patients (41%). Ankylosing Spondylitis (AS) was recognized in 22 (7,9%) patients: AU was diagnosed in 16 out of 22 (72,7%) of them while 4 out of 22 (18,2%) where affected with Panuveitis. The cases of Psoriatic Arthritis (PsA) were 9 (3,2%); specifically, AU was recognized in 4 out of 9 (44,4%) of them while PU was found in 5 out of 9 (55,6%) of them. We also defined the most common form of uveitis in patients affected with either Juvenile Idiopathic Arthritis, or Systemic Lupus Erythematosus, or Sarcoidosis, or Vogt-Koyanagi-Harada disease or Inflammatory Bowel Diseases. The idiopathic form of uveitis, was diagnosed in 162 (58,3%) patients. Anti-nuclear antibodies (ANA) levels were assessed in 148 patients of whom 57 (38,5%) have been found ANA positive and 91 (61,5%) ANA negative. Notably 38 (66,7%) ANA positive patients were affected with AU.

Figure 1. Prevalence of different forms of Uveitis by Diagnosis



BD: Behçet's Disease
PsA: Psoriatic Arthritis
AS: Ankylosing Spondylitis
IBD: Inflammatory Bowel Diseases
JIA: Juvenile Idiopathic Arthritis
SLE: Systemic Lupus Erythematosus

Conclusions: Our study provides a depiction of clinical features and epidemiology of ocular involvement in a huge population of patients presenting newly diagnosed NIU. Notably, in our population, idiopathic uveitis was the most commonly diagnosed form; it took shape of AU in 56,6% of cases. The majority of HLA-B27 positive uveitides were also AU (68,2%), while, among HLA-B51 uveitides, PU (39,3%) and AU (37,7%) were recognized as the most common presentations.

Disclosure of Interest: None declared

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Validation of outcome measures and biomarkers

AB1161 PORTUGUESE ADAPTATION AND VALIDATION OF THE ANKYLOSING SPONDYLITIS QUALITY OF LIFE (ASQOL) QUESTIONNAIRE

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Background: Ankylosing Spondylitis (AS) is a chronic rheumatic disease that affects mainly the axial skeleton and entheses. If left untreated, AS evolves with limited spine mobility and irreversible structural changes, with severe repercussions in patients' quality of life. Throughout the years many instruments have been used in order to evaluate AS impact in patients' lives, focusing predominantly on symptoms and functioning however, these instruments do not inform on the impact of the condition on quality of life (QoL). The ASQoL is a patient reported outcome measure, specifically developed to evaluate QoL in AS patients. It has been adapted to several languages worldwide, though a Portuguese version hadn't been developed yet.

Objectives: Translation of the ASQoL questionnaire into Portuguese and ascertain its psychometric properties.

Methods: Translation of the original UK English ASQoL into Portuguese was performed by bilingual panel and then assessed by a lay panel. Cognitive debriefing interviews were performed with AS patients to assess face and content validity. Finally, a sample of AS patients were included in a test-retest postal survey, administered on two different occasions, two weeks apart, to investigate the reliability and construct validity of the new Portuguese adaptation of the ASQoL. Nottingham Health Profile (NHP) was used as a comparator measure.

Results: The Portuguese version of ASQoL proved to be relevant and easy to understand.

Validation of the ASQoL included fifty-eight AS patients, with a mean age of 51 years (Range 25.0 – 80.0), with 55.2% males. The Portuguese ASQoL had good internal consistency at Time 1 (α =0.93) and Time 2 (α =0.91). Test-retest reliability was excellent, with a strong positive correlation between scores at two time points ($r=0.92$, $p<0.001$). Correlation between ASQoL scores and NHP was moderately strong with Spearman's rank correlation coefficients between ASQoL and NHP section scores, including the distress scale embedded within, all $p<0.001$. These results suggest that patient's quality of life is influenced by many factors in addition to disease severity, including social skills and ability to adapt to physical limitations.

The Portuguese version of ASQoL was able to discriminate between patients who differed on their perception of general health and presence of comorbidity, although there were no significant differences according to self-perception of disease severity.

Conclusions: The Portuguese version of the ASQoL performed well, demonstrating good psychometric properties for use in clinical studies and trials of patients with AS. The lack of significance in the analysis by self-perceived disease severity may be due to the relatively small sample size.

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AB1162 RAPID3 SCORE CAN PREDICT DISEASE ACTIVITY IN PRIMARY SJÖGREN'S SYNDROME

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Background: Sjögren's syndrome (SS) is a chronic autoimmune disease that causes salivary and lacrimal gland dysfunction, resulting in oral and ocular dryness. The European League Against Rheumatism (EULAR) SS disease activity index (ESSDAI) is a systemic disease activity index measuring disease activity in patients with SS. The ESSDAI includes 12 domains. EULAR SS patient-reported index (ESSPRI) is used to evaluate dryness, fatigue, and pain symptoms, and their impact on the disease. Routine Assessment of Patient Index Data 3 (RAPID3) is used to evaluate disease activity in patients with rheumatoid arthritis which is another inflammatory disorder.

Objectives: This study aims to evaluate whether RAPID3 is useful in primary SS.

Methods: 30 patients with primary SS were enrolled in the study. ESSDAI, ESSPRI and RAPID3 scores were recorded. Chi-square, Mann Whitney U test and Pearson correlation analysis were performed for the statistical analysis.

Results: Demographically and clinical data were shown in the Table-1. Mean ESSDAI, ESSPRI and RAPID3 scores were 3.8±3.6, 5.8±1.7, and 14.8±5.2, respectively. RAPID3 scores were positively correlated ESSPRI ($r=0.669$, $p<0.001$). In addition, when we set the cut-off value to 12 on the RAPID3 score (>12 accepted as active, and ≤ 12 accepted as inactive), ESSPRI score was significantly higher in active patients (6.4±1.4 vs. 4.1±1.4, p=0.002). However, there was no relationship between RAPID3 and ESSDAI scores.

Schirmer test was positively correlated with tear break up time (BUT) ($r=0.573$, $p=0.007$). Lissamine green score was negatively correlated with Schirmer test and BUT ($r=-0.484$, $p=0.007$, and $r=-0.507$, $p=0.004$, respectively). Despite there was high compliance among these three scales evaluating eye involvement, these scales did not appear to correlate with the ESSDAI, ESSPRI, and RAPID3 scores that assess global disease activity. The mean age was significantly higher in patients with Schirmer test ≤ 5 mm compared to the patients with >5 mm (55.6±6.9 vs. 47.6±8.5 years, p=0.044).

Table 1. Demographics and clinical variables

	SS (n=30)
Mean age, years	51.0±8.7
Disease duration, years	6.3±4.6
Sex, % females	100
WBC, $10^3/\mu l$	5.9±1.8
Hemoglobin, g/dl	13.3±1.5
ESR, mm/h	19.5±16.4
CRP, mg/dl	7.2±13.5
ANA positivity, %	83.3
Anti-Ro positivity, %	65.5
Anti-La positivity, %	46.2
HAQ	32.4±4.9
Schirmer test, mm	11.4±6.4
BUT, sec	3.2±1.8
Lissamine green score	2.2±1.1

SS; Sjögren's syndrome, WBC; white blood cell count, ESR; erythrocyte sedimentation rate, CRP; C-reactive protein, ANA; anti-nuclear antibody, HAQ; health assessment questionnaire, BUT; tear break up time.

Conclusions: In SS, it is not simple to detect disease activity. Comorbid psychosomatic diseases affect the set detecting global disease activity. On the other hand, the activity of glandular involvement and global disease activity are not with compliance. Therefore, new and easy tools are necessary in primary SS. In our study, RAPID3 score is corelated with ESSPRI. This result suggests that RAPID3 is useful to detect disease activity in primary SS.

Disclosure of Interest: None declared

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AB1163 ANTIBODIES BINDING SYNTHETIC OLIGONUCLEOTIDES DISTINGUISH LUPUS FROM RHEUMATOID ARTHRITIS, SCLERODERMA AND SJOGREN'S SYNDROME

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Background: The SLE-key® RuleOut iCHIP® antigen microarray-based test rules out a diagnosis of SLE with a sensitivity of 94%[1].

Objectives: Here we report the use of the iCHIP® platform and a set of synthetic oligonucleotide antigens to distinguish between SLE subjects and those with a diagnosis of Rheumatoid Arthritis (RA), Scleroderma (SSc), Sjogren's syndrome (SS), or healthy individuals (HC).

Methods: We examined IgM and IgG antibody binding to 22 synthetic oligonucleotides (44 features) in the sera of HC subjects (N=40); SLE (N=30); SSc (N=40); SS (N=20); or RA (N=30) patients. Univariate analysis (FDR adjusted p-values) was used to determine the ability of each feature to separate between SLE and the different classes of subjects.

Results: Table 1 shows that multiple oligonucleotides successfully distinguished SLE patients from all other groups. All significant features were IgG antibodies, except for 1 IgM. Table 2 shows the impact of single nucleotide change on autoantibody binding. PolyG (G17) separates SLE from all but SS. T1G16 separates SLE from HC subjects, while G16T1 gave no significant separation. The addition of a G to the 5' and 3' end of T16 enhanced IgG antibody binding and improved separation between SLE and other autoimmune diseases with at least 10-fold improved significance as compared to T20. PolyG sequence length impacts the ability of the oligonucleotides to separate between SLE and the other groups (Fig. 1A). Unexpectedly, sequences either shorter or longer than G14 were effective in separating SLE from HC, RA, and SSc, while G14 was not effective. Furthermore, none of the polyG homopolymers could separate SLE from SS. Sequences rich in C or T were more effective at separating between SLE and SS patients (Fig. 1B).

Table 1

SLE Compared to:	Number of significant oligonucleotides Minimal FDR corrected p value: 0.003–4E-6	
	IgG	IgM
HC	17	0
RA	10	0
SSc	14	1
SS	2	0

Table 2

Class	Oligo	HC Vs SLE	RA Vs SLE	SSc Vs SLE	SS Vs SLE
PolyG ± 3' or 5' T	G17	0.04	**0.0006**	**0.007**	NS
	T1G16	0.03	NS	NS	NS
	G16T1	NS	NS	NS	NS
PolyT ± 3' & 5' G	GT16G	**0.000004**	**0.008**	**0.0001**	**0.003**
	T20	**0.001**	0.03	**0.007**	0.04

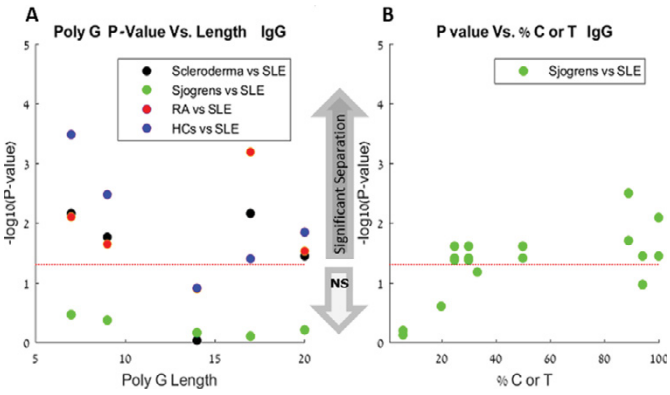

Figure 1

Conclusions:

- Autoantibody binding to oligonucleotides can be used to differentiate SLE from other autoimmune conditions and healthy subjects.
- The structural basis for the differences in binding of antibodies from disease sera to the various oligonucleotides is not yet understood, but may be due to immunologically unique conformations and secondary structures of oligonucleotides of defined length and sequence.
- SSc can be differentiated from SLE based on particular antibody binding to epitopes of oligonucleotides containing C and T.
- RA can be differentiated from SLE more significantly than the other autoimmune conditions.