hospitalisation included disease activity (36 [12%]), infection (19 [6.3%]), surgery (10 [3.3%]), and management of clinical morbidities (6 [2.0%]). Hospitalisation was associated with ethnicity ($p < 0.016$), occupational status ($p < 0.001$), age ($p = 0.02$), and the use of hydroxychloroquine (HCQ) or chloroquine (CQ; $p < 0.001$).

Conclusion: This nationwide study highlights ethnic, social, and patterns-of-care disparities among Brazilian patients with SLE. The modelling shows evidence that such disparities contribute to the divergent clinical spectrum observed in Brazil.

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Figure 1. Distribution of the A) Brazilian SLE clinical profile according to the ACR Classification Criteria and B) Brazilian prescriptive profile for SLE treatment according to the use of immunosuppressive drugs, biological agents, and corticosteroids during the study (12 months)

ANA, antinuclear antibody

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POS0748

EASY-BILAG: A NEW TOOL FOR FASTER AND MORE ACCURATE RECORDING OF BILAG-2004 DISEASE ACTIVITY IN SLE

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Background: BILAG-2004 index is an important disease activity instrument for SLE which is widely used in clinical trials and in treatment commissioning. It is more comprehensive and responsive than SLEDAI. However, BILAG-2004 may be difficult or time-consuming to complete during routine clinic visits. To derive the eventual scores from A (highly active) to E (no current or prior disease involvement) for each of the 9 organ domains, the current BILAG-2004 relies on a separate index form, glossary and scoring algorithm.

Objectives: The Easy-BILAG project aimed to develop and validate a simplified tool for scoring the original BILAG-2004 index more rapidly and accurately in routine clinical care.

Methods: Data from the UK BILAG-Biologics Registry (BILAG-BR) were used to measure the frequency with which the 97 BILAG-2004 clinical items occurred in a population with active SLE. These data and a series of prototypes were used to draft a new tool for simplified scoring of the BILAG-2004 index - the "Easy-BILAG". After preliminary testing, a validation study was conducted to test accuracy, speed and usability of Easy-BILAG compared to the standard BILAG-2004 template. Rheumatologists and specialty trainees from centres around the UK were invited to score BILAG-2004 disease activity in a timed workbook of 10 exemplar case vignettes, using either Easy-BILAG or standard BILAG-2004 reference documents. The case vignettes tested clinicians in scoring both frequent and uncommon SLE manifestations as well as longitudinal scoring of items in flare and remission. All workbooks contained an overview and detailed instructions on BILAG-2004.

Results: Among 2395 submissions to BILAG-BR the 6 most frequently scored clinical items were each present in more than 20% of records; arthralgia (72%), mild skin eruption (47%), moderate arthritis (38%), mild mucosal ulceration (34%), mild alopecia (34%), pleurisy / pericarditis (22%). Twenty-five items were active in less than 1% of assessments. Easy-BILAG was therefore designed to enhance the visibility of the most frequently scored items and capture all clinical items scoring >5% in a rapid single-page assessment. All remaining, less common items, are scored, only when necessary, on a second page. Easy-BILAG incorporates an abridged glossary definition immediately adjacent to clinical each item. A new colour-blindness compatible, colour-coding system directs clinicians instantly to the overall A-E score for each domain.

In the validation exercise, clinicians were asked to identify active disease and assign BILAG-2004 scores, from A-E, for all 9 organ domains in a workbook of 10 case vignettes. Twenty clinicians, with a range of prior experience, have so far participated. Among clinicians working with the standard BILAG-2004 reference documents (n = 11), scoring 10 case vignettes took 90 +/- 9 minutes (mean +/- SEM) to complete. Clinicians using Easy-BILAG (n = 9) completed the exercise significantly faster at 66 +/- 8 minutes (p = 0.05). Crucially, Easy-BILAG yielded significantly higher percentage accuracy (mean +/- SEM) at 95.3 +/- 0.8 % across all domains, as compared with 81.8 +/- 6.2 % achieved by clinicians using standard BILAG-2004 documentation (p = 0.05). The difference was most apparent when specifically comparing accuracy across domains where the case exercises registered active disease. Here, Easy-BILAG showed no decline in accuracy at 94.9 +/- 1.0 % compared 75.7 +/- 5.3% achieved with standard BILAG-2004 documents (p = 0.005). In a usability survey, all (9/9) clinicians testing the Easy-BILAG template rated it as intuitive and simple to navigate.

Conclusion: Easy-BILAG facilitates more rapid and accurate scoring of BILAG-2004 and provides a format which is amenable to use in routine clinical practice. Following completion of validation, it will be made widely available to clinicians.

The figure shows a sample of the Easy-BILAG template. It includes a key for the A-E score (A: 0, B: 1, C: 2, D: 3, E: 4) and a table for scoring items. The table has columns for ITEM, ABBREVIATED GLOSSARY, and a grid for scoring (0-4) for each organ domain. The items are categorized by organ domain: Skin eruption, Mucosal ulceration, Alopecia, Digital infarct / nodular vasculitis, Periorbital erythema/chilblains, Other features, Arthritis, Pleurisy / Pericarditis, Pleural effusion with dyspnoea, and Interstitial alveolitis/pneumonitis. The table shows the scoring for each item across the organ domains, with a final column for the overall A-E score.

Figure 1. Illustration of the Easy-BILAG template shows format, colour scheme and method of scoring highest prevalence items mucocutaneous and musculoskeletal domain.

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POS0749

ASSOCIATION BETWEEN IMMUNE-SEROLOGICAL PROFILE AND PULMONARY MANIFESTATIONS IN COLOMBIAN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS (LES)

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Background: Pulmonary involvement is common in Systemic Lupus Erythematosus (SLE) patients with varying degrees of parenchymal, vascular, and pleural compromise. In GLADEL, pulmonary involvement was reported in 28.4% of the cohort, but its occurrence ranges between 30-90% due to diversity in populations and the methods used to define it.

Objectives: To describe the immune-serological profile of a Colombian cohort of SLE patients and to establish its association with pulmonary manifestations.

Methods: Retrospective analysis of observational data from the follow-up of a cohort of adult patients with SLE. We included 559 patients that fulfilled the SLICC 2012 classification criteria with at least 6 months of disease history and being treated in a rheumatology specialized medical center between 2015 and 2018. The immuno-serological profile was characterized, and pulmonary involvement was monitored for 1 year. Diagnosis of pulmonary involvement was performed with the rheumatologist report in the clinical chart. Prevalence of pulmonary manifestations and immune-serological profile was determined, and logistic regression was performed afterward adjusted by age, sex, and level of education to establish the association between pulmonary manifestations and a positive auto-antibodies profile.

Results: The median age of the cohort was 45 years, 96.5% were female. Pulmonary involvement was documented in 113 patients (20.5%) at the beginning of the study. Their frequency was: pleuritis (14.3%), lupus pneumonitis (3.6%), pulmonary hypertension (3.2%), interstitial lung disease (ILD) (2.3%), pulmonary embolism (2.3%), lung fibrosis (2.14%), alveolar hemorrhage (1.4%), shrinking lung (0.2%). At 1 year of follow up, there were no statistically significant differences in the frequency of pulmonary manifestations. As for the immune-serological profile, there were positive ANA in 92%, anti-dsDNA in 53.1%, anti-B2GP IgM 15.2%, anti-B2GP IgG in 17.2%, and ENA in 97.2%; as for the ENA 41.7% had positive anti-RNP, 40.2% anti-Ro, 36.4% anti-SM and 16.5% anti-La. Low complement levels was characterized as follows: C3 53.1% and C4 29.2%. In the logistic regression adjusted by age, sex and level of education, there was an association between anti-SM and pulmonary manifestations with an adjusted OR of 1.85; 95% CI 1.13-3.01.

Conclusion: An association between anti-SM positivity and pleuro-pulmonary manifestations was found. In other cohorts with a greater size, anti-La and anti-RNP have been associated with pulmonary involvement (OR 2.51; 95% CI 1.39-4.57 and OR 1.32; 95% CI 1-1.75 respectively). Anti-RNP positivity has been associated in particular with ILD, pulmonary hypertension and shrinking lung. Although these manifestations prevalence was similar in our cohort, an association with this antibody was not found (OR 1.01, 95% CI: 0.2-4.9). This could be explained by the smaller sample size. As for anti-La positivity, its prevalence in our cohort was less than what was found in the GLADEL cohort (16.5% vs 24.3% respectively). It is possible that this could explain the poor association between anti-La positivity with the presence of pulmonary manifestations in our study compared with those of the GLADEL cohort. There are data that indicates that anti-SM and anti-RNP simultaneous positivity is related mainly to pleuritis OR 1.98 (95% CI: 1.31-3); and this kind of involvement was found to be more frequent in our study. Our results suggest an association between positive anti-SM and pulmonary manifestations in Colombian patients with SLE, pleuritis in particular.

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POS0750

THE CHARACTERISTICS OF SYSTEMIC LUPUS ERYTHEMATOSUS WHO HAVE CONSTITUTIONAL SYMPTOMS AND LYMPHADENOPATHY

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Background: Systemic lupus erythematosus (SLE) is the prototype of systemic autoimmune diseases. It may affect any organ system and may present with a variety of clinical symptoms. Lymphadenopathy (LAP) is a nonspecific finding of SLE and often associated to the active disease state. LAP associated SLE pose a significant diagnostic challenge especially in the presence of constitutional symptoms.

Objectives: In this retrospective cohort study, we evaluated the clinical and imaging characteristics of SLE patients who presented with LAP and constitutional symptoms.

Methods: SLE Patients with lymphadenopathy who had constitutional symptoms were reviewed retrospectively. The characteristics of the patients such as age, sex, disease duration, clinical features, and laboratory tests including autoantibodies against ANA, dsDNA and ENA were recorded. Imaging findings such as positron emission tomography-computed tomography (PET/CT), thoracic or abdominal CT or diagnostic lymph node biopsy were identified.

Results: There were 28 patients in this study. The mean age at the time of LAP was 38.9±15.2 years, 22 (78.6%) were female. All patients were fulfilling SLICC 2012 classification criteria for SLE. LAP was the presenting feature of SLE in 15 (53.6%) patients. The most common clinical features associated with LAP were arthritis (42.8%), fever (35.7%), acute lupus rash (32.1%) and serositis (28.5%). There were 11 (39.2%) who had significant proteinuria and 4 (14.3%) had class III or IV renal histology. Anti-phospholipid antibodies were present in nearly one-third of the patients and 12 of them had venous or arterial thrombosis or pregnancy co-morbidity. Cervical LAP was present in 57.1%, axillary LAP in 82.1% and inguinal in 36%. On CT, the prevalence of thoracic and abdominal LAP and hepatomegaly and splenomegaly were 61.5%, 37.5%, 40% and 16% respectively. The pericardial and pleural effusion and intra-abdominal free fluid were 19.2%, 30.8% and 10.2% respectively. There were 19 (67.8%) patients who underwent PET/CT imaging and all were reported as reactive LAP. In terms of SUV max 7 (36.8%) of them had a threshold ≥2.5. 17 (60.7%) patients required lymph node biopsy; 2 did not include lymphoid tissue, 4 (30.7%) with atypical lymphoid hyperplasia suggestive of viral infection and remaining were reactive lymphoid hyperplasia. Autoantibody testing showed that anti-dsDNA was positive in 66.7% and the most common anti-ENAs were anti-nucleosome (35.7%) and anti-Sm-RNP (35.7%) followed by anti-SSA (25%), anti-ribosomal P (17.9%) and anti-histone (14%). The clinical and laboratory features of the clinical and laboratory features of the group is summarized in Table 1.

Table 1. Data at the time of LAP

Age, years	38.9±15.2
Disease duration, months	3 (2- 300)
SLE-DAI, median (min-max)	9 (2-30)
Sex, female n(%)	22 (78.6)
Clinical features	n (%)
Acute cutaneous	9 (32.1)
Arthritis	12 (42.8)
Fever	10 (35.7)
Other constitutional symptoms	18 (64.2)
Serositis	8 (28.5)
Renal involvement	11 (39.2)
Neurologic involvement	1 (3.6)
Leucopenia	7 (25.0)
Trombocytopenia	5 (17.8)
Hemolytic anemia	7 (25.0)
ANA (+)>1/320	28 (100)
Anti-dsDNA (+)	18 (66.7)
Anti-Sm(+)	5 (17.9)
Anti-phospholipid antibody (+)	9 (32.1)
Low complement	16 (88.5)