**Methods** Patients from two well-defined multiethnic and multicenter lupus cohorts, one from the US and the other from Latin America were included. SLE was defined in the US cohort using the 1982/1997 ACR criteria and as diagnosed by the physician for the Latin American cohort although more than 95% of these patients also achieved the 1982/1997 ACR criteria. For these analyses the 1982/1997 ACR criteria were used as the gold standard. Demographics and disease activity at baseline were compared in order to determine differences between those patients who achieved the EULAR/ACR criteria before, at the same time or after than 1982/1997 ACR criteria.

**Results** Five-hundred and fifty-eight patients out of 640 from the US cohort and 956 out of 1047 from the Latin American cohort achieved the EULAR/ACR criteria. The sensitivity of the EULAR/ACR criteria in the US cohort was 87.2% and in the Latin American cohort was 91.3%; in the US cohort, 41 (7.3%) achieved the EULAR/ACR criteria earlier, 344 (61.6%) at the same time and 173 (31.0%) later than the ACR criteria; for the Latin American cohort these numbers and percentages were 71 (7.4%), 556 (58.2%) and 329 (34.4%), respectively. Patients who achieved the EULAR/ACR criteria earlier were less likely to be Caucasian; disease activity (measured with the SLAM: systemic lupus activity measure for the US cohort, and with the SLEDAI: Systemic Lupus Erythematosus Disease Activity Index for the Latin American cohort) did not differ between the groups. These data are depicted in table 1.

**Conclusions** The sensitivity of the 2018 EULAR/ACR criteria against the 1982/1997 ACR criteria (gold standard) was high (87.2% for the USA and 91.3% for the Latin American cohort). While the large majority of patients were classified at the same time (58.2% to 61.6%) with both criteria, about one third were classified later and a small proportion (about 7%) were classified earlier with the 2018 EULAR/ACR criteria. Further examination of the 2018 EULAR/ACR criteria is warranted.

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## 84 COMPARATIVE STUDY IN SLE PATIENTS WITH AND WITHOUT RENAL INVOLVEMENT BY LABEL FREE PROTEOMIC ANALYSIS OF URINE

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**Background** Lupus nephropathy (LN) is an important cause of morbidity and mortality in patients with Systemic Lupus Erythematosus (SLE). Considering that renal biopsy is a specialized technique and not risk free, a proteomics study is proposed to determine biomarkers that may help us to differentiate patients diagnosed with SLE with and without renal involvement.

**Methods** We selected 12 patients with SLE and renal involvement and 14 patients with SLE without renal involvement. There were no differences between groups according to race, gender and age. The patients were classified as moderate (<500), mild (150–500) or normal (<150) level of proteinuria in the urine. A 24 hour urine sample was obtained for analysis. Proteomic analysis was conducted by label free nLC MS/MS analysis.

**Results** The Principal Component Analysis (PCA) revealed differences between samples from patients who have high level of proteinuria in 24 hours and patients who do not have renal involvement. Interestingly, patients with mild proteinuria correlated better with patients without renal involvement than with the severe proteinuria group. A total of 292 proteins (identified with at least two peptides with a FDR<1%) were quantified and further considered in the analysis. Consistent with the nature of the sample, the Gene Ontology (GO analysis) of the whole list of identified proteins revealed the presence of extracellular (277 proteins, p=2.25E–171) and secretion-related proteins (49 proteins, p=1.1E–09), among others. Proteins related to defensive processes were prominent among them.

Interestingly, clear differences were detected between the three subgroups of samples. The Students T-test analysis reflected the differential presence of 147 proteins ($p<0.01$) between patients with and without renal involvement, being 17 more abundant in the urine of the patients with renal damage, whereas 130 showed the opposite pattern. The subset of proteins whose abundance increases upon renal damage is comprised of typical highly-abundant serum proteins. In addition, differences between most closely related groups (mild proteinuria and no renal affectation) revealed differences that may be useful for a better stratification of patients.

**Conclusions** A different protein pattern is observed between the groups of patients, so in a more detailed study we may indicate if some of these can serve as prognostic markers for this type of patients.

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**Abstract 84 Table 1**

| Status | Accession | Un. Pepts | Score | Anova (p) | Ratio |
|---|---|---|---|---|---|
| Down upon damage | KLK1_HUMAN | 2 | 105.38 | 2.37E-09 | 0.07 |
| | CBPM_HUMAN | 4 | 144.09 | 2.27E-08 | 0.10 |
| | PVR_HUMAN | 3 | 178.14 | 3.30E-08 | 0.15 |
| | MASP2_HUMAN | 3 | 213.26 | 5.71E-08 | 0.10 |
| | KNG1_HUMAN | 18 | 1100.55 | 7.86E-08 | 0.16 |
| | BT2A1_HUMAN | 2 | 96.76 | 1.88E-07 | 0.16 |
| | I18BP_HUMAN | 3 | 118.31 | 5.71E-07 | 0.08 |
| | AMYP_HUMAN | 2 | 650.58 | 6.01E-07 | 0.10 |
| | AMY1_HUMAN | 2 | 628.48 | 6.01E-07 | 0.10 |
| | VMO1_HUMAN | 4 | 342.57 | 6.68E-07 | 0.21 |
| | VASN_HUMAN | 6 | 498.27 | 9.25E-07 | 0.19 |
| | APOD_HUMAN | 7 | 403.15 | 1.06E-06 | 0.24 |
| | CADM4_HUMAN | 4 | 271.26 | 1.42E-06 | 0.21 |
| | SHSA5_HUMAN | 2 | 62.75 | 1.81E-06 | 0.15 |
| | CNTFR_HUMAN | 3 | 115.39 | 1.96E-06 | 0.05 |
| | LRP2_HUMAN | 13 | 798.35 | 2.19E-06 | 0.23 |
| UP upon damage | CYTC_HUMAN | 3 | 232.73 | 1.9E-03 | 1.42 |
| | THBG_HUMAN | 8 | 571.1 | 8.2E-03 | 2.47 |
| | A2GL_HUMAN | 10 | 801.87 | 3.3E-03 | 2.69 |
| | CNDP1_HUMAN | 2 | 150.97 | 8.1E-03 | 3.41 |
| | CBG_HUMAN | 7 | 492.53 | 4.2E-03 | 3.69 |
| | HPT_HUMAN | 18 | 1236.53 | 5.3E-03 | 3.76 |
| | CFAB_HUMAN | 2 | 155.83 | 2.0E-04 | 4.46 |
| | TRFE_HUMAN | 42 | 3539.5 | 7.5E-04 | 4.67 |
| | ALBU_HUMAN | 70 | 6073.45 | 2.3E-10 | 6.29 |
| | A1AG2_HUMAN | 8 | 834.2 | 1.3E-05 | 6.76 |
| | A1AG1_HUMAN | 10 | 996.35 | 1.3E-05 | 6.88 |
| | AFAM_HUMAN | 13 | 1120.44 | 1.2E-06 | 8.01 |
| | A1AT_HUMAN | 20 | 1493.01 | 3.6E-05 | 12.06 |
| | CO3_HUMAN | 9 | 693.16 | 6.8E-03 | 12.43 |
| | A1BG_HUMAN | 13 | 950.86 | 2.3E-04 | 15.19 |
| | CFAD_HUMAN | 4 | 224.79 | 9.7E-03 | 137.49 |

Representative deregulated proteins in case of renal damage. Adhesion: Uniprot Adhesion. United Nations. Pepts.: Unique peptides. Score: Score by mascot. Test T (p): p value for the T test used for the differential analysis. Relationship: Relationship between the abundances of proteins calculated in the samples of patients with renal involvement/samples without renal involvement.

## 85 POLYAUTOIMMUNITY IN SYSTEMIC LUPUS ERYTHEMATOSUS. DATA FROM A LARGE SPANISH COHORT: SPANISH SOCIETY OF RHEUMATOLOGY REGISTRY OF PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS (RELESSER)

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