limited overlap. The heterogeneity of patient ethnicity and variety in detection method may in part explain some of the discrepancies.⁽⁴⁾

Objectives: to study the role of micro-RNA 20a expression in SLE in an Egyptian cohort and its role as a potential biomarker of lupus nephritis.

Methods: Expression levels of micro-RNA-20a extracted from peripheral blood mono-nuclear cells determined using quantitative reverse transcription-polymerase chain reaction assay. A total of 90 plasma samples were obtained from 30 SLE patients without clinical and laboratory evidence of lupus nephritis, 30 SLE patients with lupus nephritis and 30 healthy control subjects.

Results: The expression of micro-RNA-20a in SLE patients was significantly lower than the expression in normal healthy control, $p < 0.001$. In addition the Roc curve of micro-RNA-20a showed that micro-RNA-20a expression levels can significantly discriminate between lupus patients with and without lupus nephritis at a cut off level $\leq 9.3 \times 10^{-6}$ with a specificity of 76.67% and sensitivity of 96.67%. We also found a significant correlation between micro-RNA-20a expression levels and the pathological activity index of renal biopsy, while there was no significant correlation between micro-RNA-20a expression level and the pathological chronicity index.

Conclusions: The expression level of micro-RNA-20a could be considered a diagnostic marker of SLE. Also, the expression level of micro-RNA-20a could be considered a potential biomarker for recognition of renal involvement in SLE patients.

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THU0367

PREVALENCE AND SIGNIFICANCE OF ANTI-PHOSPHATIDYL SERINE ANTIBODIES: A POOLED ANALYSIS IN 5992 PATIENTS

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Background: The current classification criteria for antiphospholipid syndrome (APS) include three laboratory tests: lupus anticoagulant, anti-cardiolipin, and anti-b2 glycoprotein-Ig¹.

Among the so-called 'extra-criteria' aPL tests, anti-phosphatidylserine (aPS) antibodies have been proposed as an additional tool to be considered when patient is suspected for having APS. However the exact prevalence of aPS antibodies, and their independent role as risk factor for developing clinical manifestations of APS, is uncertain.

Objectives: To estimate the prevalence of aPS antibodies in patients with clinical manifestations of APS, by systematically reviewing the literature.

Methods: A detailed literature search was applied *a priori* to Ovid MEDLINE, In-Process and Other Non-Indexed Citation 1989 to present and to abstracts from EULAR and ACR/ARHP Annual Meetings (2011–2017) (figure 1).

Results: Data from 5992 patients from 20 studies were analysed (table 1). In APS patients, we report an overall estimated median prevalence of aPS antibodies of 55% [S.D.±21.1, range 29%–87%] and 35% [S.D.±17.9, 16–65%] for IgG and IgM, respectively. aPS antibodies were more frequently found in patients with known APS, when compared to patients with thrombosis/pregnancy loss or SLE (IgG mean 55%±28.9, 30±19.6, 22±13; IgM 35±4.3, 1±2.8, 14±8.3, respectively, $p < 0.05$). In detail, patients were distributed as follow: 366 APS patients in 7 studies [55% aPS IgG/37% aPS IgM-positive; in more detail, 78 primary APS in 2 studies (64% aPS IgG/48% aPS IgM-positive), 29 secondary APS in 2 studies (37% aPS IgG/24% aPS IgM-positive) and 259 not specified], 787 SLE patients in 7 studies (22% aPS IgG/14% aPS IgM-positive), 24 aPL asymptomatic carriers in one study (21% aPS IgG/25% aPS IgM-positive), 3565 patients with cardiovascular accidents in 4 studies (18% aPS IgG/7% aPS IgM-positive), 1250 patients with pregnancy morbidity in 6 studies (30% aPS IgG/1% aPS IgM-positive) and 952 healthy controls.

DIAGNOSIS	Number of patients included in the analysis	% of positive patients for anti aPS IgG antibodies	% of positive patients for anti aPS IgM antibodies	Studies included in the analysis
APS*	366	55	37	Roggenbuck et al. 2016 Khoger et al. 2014 Jaskowski et al. 2009 Lopes et al. 2004 Musial et al. 2003 Ware Branch et al. 1997
PAPS	78	64	48	Roggenbuck et al. 2016 Musial et al. 2003
Secondary APS	29	37	24	Roggenbuck et al. 2016 Bertolaccini et al. 1998
SLE	787	22	14	Nojima et al. 2014 Fialova et al. 2003 Musial et al. 2003 Amoroso et al. 2003 Palomo et al. 2002 Bertolaccini et al. 1998 Toschi et al. 1993
aPL+, asymptomatic	24	21	25	Roggenbuck et al. 2016 Carmel-Neiderman et al. 2017 Bu et al. 2016 Saidi et al. 2009 Khaless et al. 2005
Cardiovascular accidents**	3565	21	7	Ching et al. 2013 Sater et al. 2012 Jaskowski et al. 2009 Aljijotas-Reig et al. 2010 Ulcova-Gallova et al. 2005 Ware Branch et al. 1997
Pregnancy Morbidity**	1250	30	1

Conclusions: While aPS are frequently detected in patients with known APS, their added diagnostic value and clinical role in patients with thrombosis/pregnancy loss and/or concomitant autoimmune disease remain uncertain.

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THU0368

ARE ANTI-PHOSPHATIDYLSERINE PROTHROMBIN ANTIBODIES A USEFUL SCREENING TOOL FOR THE LUPUS ANTICOAGULANT?

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Background: Anti-phosphatidylserine prothrombin antibodies (PSPT) have been reported to be strongly associated with the lupus anticoagulant (LAC) in established antiphospholipid syndrome (APS) and autoimmune cohorts. However, there is a paucity of similar studies assessing clinical utility on an all-comer patient population undergoing evaluation for suspicions of APS.

Objectives: To determine the sensitivity and specificity of IgG and IgM PSPT to the LAC in patients undergoing evaluation for APS.

Methods: Patients from June 2017 to December 2017 undergoing evaluation for APS had blood draws for the LAC, anti-cardiolipin (aCL), anti-β2 glycoprotein-1 (β2GP1), and PSPT. Both IgG and IgM isotypes were tested for each antibody. Presence of the LAC was determined by trained haematologists interpreting a number of mixing and neutralisation studies. Demographic details were abstracted from the medical record and cases meeting the SLICC criteria for systemic lupus erythematosus (SLE) and the revised Sapporo criteria for APS were enumerated.

Results: Fifty six eligible patients were identified. Mean age was 50±18 years. 68% were female, 20% with SLE, and 20% with APS. At time of testing, 18% were on warfarin, 7% on direct factor Xa inhibitors and 2% on low-molecular weight heparin. The LAC was negative in 45% (25/56) of those tested. In LAC negative cases, the IgG and IgM PSPT were negative in 100% and 92% of cases, respectively. In LAC positive cases, IgG PSPT was positive in 35% and IgM PSPT was positive in 61%. Compared to the LAC, IgG PSPT was 100% (95% CI: 72%, 100%) sensitive but was only 56% (40%, 70%) specific. Similarly, the IgM isotype of PSPT showed 90% (70%, 99%) sensitivity but only 66% (48%, 81%) specificity. Overall, 38% (21/56) of the cases possessed an isolated, singly positive LAC with concurrent negative IgG/M aCL and β2GP1 antibodies. In this isolated LAC positive-only group, further testing with IgG and IgM PSPT was positive in 38% and 57% of the cases, respectively.

Conclusions: In this study, IgG and IgM PSPT were found to be highly sensitive to the LAC and may be a useful tool in the screening of and the interpretation of the LAC.

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THU0369

CREATION OF A WEIGHTED SLICC SLE CLASSIFICATION CRITERIA AND COMPARISON WITH PROPOSED EULAR/ACR SLE CLASSIFICATION CRITERIA

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Background: In previous validation work, the SLICC 2012 SLE classification criteria were more sensitive than the revised ACR-11 criteria, while both criteria had similar agreement with physician diagnoses. Both of these classification rules count each SLE manifestation equally.

Objectives: Our objective was to derive and test a classification rule which differentially weights the variable used in the SLICC classification rule. We also compared this rule to a recently proposed EULAR/ACR classification rule that also uses a weighted approach.

Methods: The physician-rated patient scenarios used to develop the 2012 SLICC classification criteria were re-employed to devise a weighted classification rule. A multiple linear regression model was constructed with the 2012 SLICC criteria variables as predictors and the binary outcome (physician classification of SLE) as the outcome. To generate the weights for each criteria, we then multiplied each criteria's coefficient by 100 and rounded to the nearest integer. The 'Direct Coombs' criteria (coefficient <1) was deleted for simplicity. The weights for the remaining manifestations were: acute cutaneous, 26 chronic cutaneous, 12 oral ulcers, 16 arthritis, 9 serositis, 16 renal without biopsy, 9 neurologic, 9 hemolytic anaemia, 16 leukopenia or lymphopenia, 14 thrombocytopenia, 15 alopecia, 11 ANA, 11 anti-dsDNA, 19 anti-Sm, 16 antiphospholipid antibodies, 9 low complement. A cutoff for classification was chosen as the score that maximised overall agreement (i.e., the sum of sensitivity and specificity) of the new weighted criteria with physician diagnosis. Patients with lupus nephritis or the new weighted classification rule of 56 or more with at least one clinical component and one immunologic component were classified as SLE. We evaluated the performance of this revised SLICC criteria, on an independent set of patient scenarios, and compared this to the performance of the older revised ACR criteria, the previous SLICC 2012 criteria, and the newly proposed EULAR/ACR criteria.

Results: Table 1 shows the performance of the four classification rules. There was no statistically significant difference (at the 0.05-level) between any pair of rules with respect to overall agreement with the physician diagnosis.

Abstract THU0369 – Table 1. Sensitivity and specificity of four different SLE classification rules based on physician diagnoses of patient scenarios

Classification Rule	Sensitivity (n=349)	Specificity (n=341)	Overall Agreement (n=690)
Revised ACR-11	290 (83%)	326 (96%)	616 (89%)
SLICC 2012	340 (97%)	288 (84%)	628 (91%)
Proposed EULAR/ACR	317 (89%)	302 (90%)	619 (90%)
Weighted SLICC 2012 criteria	310 (88%)	304 (89%)	614 (89%)

Conclusions: The two newly derived weighted classification rules did not perform better than the existing list-based rules in terms of over-all agreement. Given that the list-based rules are easy to calculate, they may be preferred in most clinical settings.

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THU0370

THE SIGNIFICANCE OF NON-MYDRIATIC FUNDUS EXAMINATION OPERATED BY RHEUMATOLOGISTS IN SCREENING FOR RETINOPATHY OF SYSTEMIC LUPUS ERYTHEMATOSUS (SLE)

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Background: Retinopathy is a common fundus lesion in SLE patients. Non-mydiatic Fundus Camera images directly and objectively and avoids the mydiatic drug-induced glaucoma attack, which can not only reduce the suffering of patients but also save time and costs.

Objectives: To understand the significance of non-mydiatic fundus examination operated by rheumatologists in screening for retinopathy of SLE.