classification criteria had a lower sensitivity (90% - 345 patients) than in the original publication (96%), because of the lower sensitivity of our ANA test: positive ANA was detected 94% of the patients tested by enzyme-linked immunosorbent assay (ELISA). Almost all ANA-negative (21/22, 95%) patients showed a positive lupus-associated antibody test: we established 17 patients with dsDNS, 2 patients with antiphospholipid, 1 patient with SSA and another one with C1q positivity. An addition of dsDNS test results to the ANA positivity as an entry criterion strengthened the sensitivity to 95% (362 patients). From the most important clinical manifestations only neurologic involvements showed higher prevalence investigated by SLICC criteria compared to 2019 EULAR/ACR criteria (78/361 patients (21,6%) vs. 29/345 patients (8,4%), $p<0.001$), and it was independent from the addition of dsDNS results to ANA positivity.

Conclusion All investigated criteria sensitivity were similar to the original publication's findings, but in some patients our ANA ELISA test showed false negative results. In case of using another method like standard indirect immunofluorescent staining (on HEp-2 or Crithidia luciliae) we recommend a parallel investigation for dsDNS test and a preparatory analysis of the description of the available ANA test.

PO.2.48 INCOMPLETE SYSTEMIC LUPUS ERYTHEMATOSUS: CLINICAL AND IMMUNOLOGICAL MANIFESTATIONS

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Purpose Incomplete systemic lupus erythematosus (iSLE) is a condition of patients with clinical and immunological signs of lupus who do not fulfill classification criteria for SLE.

Methods All patients were admitted to V.A.Nasonova Research Institute of Rheumatology between January 2018 and December 2021. A total of 42 patients were enrolled in the iSLE group. iSLE was defined by rheumatologists as clinical diagnosis, not fulfilling ACR 1997 or SLICC 2012 criteria (<4 criteria) and had no classification or specific symptoms of other rheumatic diseases. The majority of the iSLE patients were female (98%), aged 38[27–48]years (median [interquartile range 25%-75%]).

Results The median age of iSLE diagnosis was 33[26–43]years, the appearance of the first clinical or immunological manifestations at the age 30[22–40]years. In the most patients, there were no connection with any provoking factors – 57%, in 20%pts the iSLE onset was associated with pregnancy, in 10%-with infection, 5% each-with combined oral contraceptives use and insolation. The median disease duration was 15[2–48]months, 10(24%)pts had a disease duration of ≥5 years.

At the onset of iSLE diagnosis, the most patients had clinical and immunological signs-74%, clinical only-14%, immunological only-12%pts. The clinical manifestations were as follows: fever – 33%, leukopenia – 19%, thrombocytopenia – 17%, autoimmune hemolysis – 2%, psychosis – 5%, migraine – 19%, acute cutaneous lupus – 17%, subacute/discoid cutaneous lupus – 2%, panniculitis-2%, non-scarring alopecia – 5%, Raynaud phenomenon-2%, oral ulcers – 2%, pleural or pericardial effusion – 12%, joint involvement – 45%, nephritis – 12%. Autoantibody profiles revealed the presence of ANA in 83% cases, anti-dsDNA - in 45%, anti-Sm - none, antiphospholipid antibodies(aPL) – in 38% of patients. Fifteen patients (36%) exhibited low complement.

Evolution of iSLE to SLE occurred in 12(28%) of these patients, 1(2%)- to antiphospholipid syndrome, 2(5%) – to osteoarthritis, 6(14%) - to none-rheumatic diseases, with a median interval of 19[8–48]months between iSLE onset and the other definite diagnosis. The majority (50%) of patients continue to be observed by a rheumatologist with a diagnosis of iSLE.

Conclusions The vast majority of patients with iSLE have a combination of clinical and immunological lupus symptoms. The most commonly occurring clinical features are joint involvement, fever, leukopenia, thrombocytopenia and acute cutaneous lupus. The most common immunological disorders are positive ANA and anti-dsDNA, more than a third of iSLE patients had aPL and hypocomplementemia. A significant number of patients with iSLE, however, have serious organ involvement: nephritis (12%), serositis (12%), and up to 5% have neurologic symptoms. This may explain why many iSLE patients should be treated with immunomodulatory medications. Therapeutic intervention during the preclassification period could delay SLE onset and reduce organ damage.

PO.2.49 PREDICTORS OF PROGRESSION IN UNDIFFERENTIATED CONNECTIVE TISSUE DISEASE: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Purpose Undifferentiated connective tissue disease (UCTD) is characterised by symptoms and immunology suggestive of a systemic autoimmune diseases that are not sufficient to diagnose a defined connective tissue disease (CTD). Approximately one third of patients with UCTD will develop a defined CTD, most commonly systemic lupus erythematosus (SLE). The identification of profiles predictive of progression has clinical, therapeutic and prognostic implications. The aim of this systematic review and meta-analysis was to identify whether demographics, clinical and immunological parameters, and novel biomarkers can predict progression from UCTD to SLE.

Methods MEDLINE, EMBASE and the Cochrane Central Register of Randomized Controlled Trials were systematically searched from inception until February 2021. Abstracts and full-text manuscripts were screened by two reviewers. Publications were included if they included at least 20 UCTD patients, a minimum of six months of follow up, and provided data on at least one risk factor for developing a defined CTD. QUIPS tool was used to assess risk of bias and GRADE approach for grading the quality of the evidence. For predictors reported in at least two studies, meta-analysis was carried out using random-effects models to pool effect sizes. Heterogeneity was assessed using the standard chi-squared test and I2 statistic. Influence analysis was carried out to identify outlier studies with extreme effect sizes. Publication bias was assessed using visual inspection of funnel plots and Egger's test. The study is registered with PROSPERO (ID: CRD42021237725)

Abstract PO.2.49 Table 1 Predictors for progression from UCTD to SLE. ANA, antinuclear antigen; anti-dsDNA, anti-double stranded DNA;anti-Sm, anti-Smith; GRADE, grading of recommmendations assessment devolepment and evaluations; MD, mean difference; RR, relative risk; SLE, systemic lupus erythematosus; UCTD, undifferentiated connective tissue disease

Predictive factor	RR/MD (95% CI)	Grade certainty rating	Heterogeneity		Egger's test *p*-value
			p-value	I^2 %	
Age	-5.96 (-11.05—0.87)	Moderate	0.1800	38.7	0.524
Serositis	2.69 (1.61-4.51)	Moderate	0.0039	66.5	0.841
Photosensitivity	1.78 (1.03-3.08)	Low	0.0209	59.8	0.678
Malar rash	2.00 (1.48-2.69)	Low	0.4339	0.00	0.402
Alopecia	1.62 (1.01-2.61)	Low	0.2483	27.3	0.877
Renal disease	2.36 (1.32-4.21)	Low	0.1762	36.8	0.894
Thrombocytopenia	1.79 (1.27-2.51)	Very low	0.7199	0.00	0.253
Coombs' test positive	3.82 (2.05-7.15)	Low	0.8851	0.00	0.902
ANA homogenous pattern	7.74 (1.53-39.19)	Low	0.0023	89.2	-
Anti-Sm	3.73 (1.94-7.16)	Low	0.1417	44.9	0.950
Anti-dsDNA	4.98 (2.12-11.67)	Moderate	<0.0001	88.6	0.976
Anti-Cardiolipin	2.06 (1.36-3.12)	Low	0.1357	42.9	0.765
Hypo-complementaemia	2.28 (1.29-4.04)	Low	0.2060	32.3	0.707
False positive test for syphilis	3.11 (1.38-6.99)	Very low	0.0070	79.9	0.558

Results A total of 3871 articles were initially identified via the literature search; 2559 abstracts were screened and 196 full-texts were reviewed for eligibility. Forty-five studies were included in the systematic review, and thirty-three in the meta-analysis. Key results are summarised in Table 1. The predictors for progression to SLE with the highest quality of evidence included those with younger age, serositis or the presence of anti-dsDNA antibodies. Other clinical predictors included renal involvement, mucocutaneous involvement (malar rash, alopecia, photosensitivity), thrombocytopenia and a positive Coombs' test. Immunological parameters associated with progression included a homogenous pattern of ANA, hypocomplementaemia, positive anti-Smith, anti-cardiolipin and/or anti-SSA antibodies. No novel biomarkers were included in the meta-analysis. HLA antigens, T-regulatory cell shift, and complement activation products were reported as potential predictors in single studies. All studies were rated as high or moderate risk of bias. Significant publication bias was not observed.

Conclusions Demographic, clinical and immunological parameters may predict which patients with UCTD progress to SLE. The baseline predictors with the highest quality of evidence included those with younger age, serositis or presence of anti-dsDNA antibodies. Further work is required to investigate the role of novel biomarkers in predicting progression from UCTD to SLE. High study heterogeneity, risk of bias and low quality of evidence limits the extrapolation of these results.

PO.2.50 UTILITY IN CLINICAL PRACTICE OF ANTI-DSDNA AUTOANTIBODIES VS ANTIDNA CRITHIDIA LUCILIAE IN THE DIAGNOSIS OF SYSTEMIC LUPUS ERYTHEMATOSUS

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Introduction Double-stranded-DNA antibodies (antiDNAds) are the most frequently detected serological markers in patients with Systemic Lupus Erythematosus (SLE). In clinical practice, it is usually determined by the ELISA technique with a specificity of 91–96%. There is another technique with a specificity of 98–100%, which is performed by immunofluorescence (IF) using Crithidia lucilae (CL) parasite.

Purpose To determine anti-DNA by CL in patients with ANA and positive anti-DNAds by ELISA.

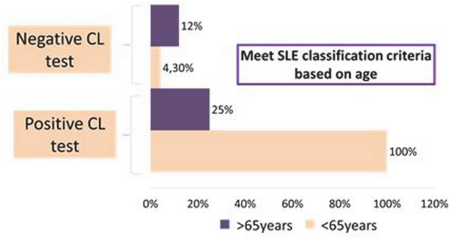
To analyse whether there is a relationship between the patients who meet the 2019-ACR-EULAR classification criteria for SLE, and the positivity of anti-DNA by CL.

Methods Bicentric retrospective observational study (Hospital Universitari Germans Trias i Pujol and Hospital General de Granollers).

Patients with ANA ≥1/320 and DNA by ELISA >100IU/mL between 2018–2019 were collected. All underwent the IF

Clinical and laboratory characteristics	Positive CL test	Negative CL test
N	12	48
Age ±DE (years)	64±23	64±18
Women/Men (%)	92/8	75/25
Clinical manifestations (%)	Joint involvement (50) Serosal involvement (17)	Joint involvement (21) Oral ulcers (6.3)
DNA by ELISA UI/ml(media)	459±645	286±503
Score in SLE classification criteria according to ACR-EULAR 2019	10.58±11.09	5.04±5.42

Characteristics	Positive CL test	Negative CL test	Statistical significance
Meet SLE classification criteria %(n/n total)	50 (6/12)	15 (7/48)	p<0.05
SLE diagnosis made by rheumatologist	50 (6/12)	8 (4/48)	p<0.05



Abstract PO.2.50 Figure 1