Results: Among differentially expressed renal microRNAs in LN, miR-127-3p was reduced in renal tissues of patients with LN. The miR-127-3p suppressed the fluorescein gene expression of ISRE induced by ISRE, and the phosphorylation of STAT1 and STAT2. By microarray analysis, we found that most ISG was inhibited by miR127-3p in IFN-stimulated Hela cells. The functional deletion of miR-127-3p enhanced the IFN response in human primary mesangial cells, which was manifested by enhanced ISRE mediated reporter gene expression, enhanced STAT2 phosphorylation and increased ISG expression. In addition, we found that JAK1, the upstream tyrosine kinase of STAT1 and STAT2, was a new target molecule for miR-127-3p.

Conclusion: Our study shows that miR-127-3p can inhibit IFN signal transduction by targeting JAK1. The decreased expression of miR-127-3p in the kidney is associated with an overactive IFN response in the renal tissue of patients with LN. Subsequent mouse model studies indicate the therapeutic potential of miR-127-3p in treating lupus associated organ damage.

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AB0198B BENEFIT OF CRITHIDIA TESTS IN DIAGNOSING CONNECTIVE TISSUE DISEASES

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Background: The diagnosis of systemic lupus erythematosus (SLE) relies on autoantibody testing, including double stranded DNA (dsDNA), the testing of which has evolved over time from the FARR assay through to ELISA/ELIA. dsDNA assays can pick up non-specific single stranded DNA as false positives and can give occasional false negative results. To evaluate the implications of this we analysed our hospital's use of crithidia testing as a confirmatory assay of dsDNA results.

Objectives: Investigate the relation between dsDNA Abs measured by Crithidia test and ELIA. Define the clinical role for Crithidia testing.

Methods: All crithidia tests for an 8 months from January 2017 to August 2017 were reviewed and results of ANA, ENA, dsDNA and complement collected. Data were collected regarding referral to rheumatology and where possible rheumatology clinic letters were reviewed regarding final diagnosis.

Results: One hundred and four crithidia tests were undertaken of which 91 were negative and 13 positive. Sixteen of the 104 patients were ANA negative, 18 ANA 1:100, 70 ANA >=1:400, and 14 patients had a positive ENA. Positive crithidias had a dsDNA range from 2 to 333 and negative crithidia from <1 to 131 however positive crithidias were more likely to have higher dsDNA and ANA titres. Of the 65 patients seen by rheumatology 4 did not have available notes for analysis. Ten of the 13 crithidia positive patients were seen by rheumatology, 6 diagnosed as SLE, 1 as TNF induced lupus, 1 MCTD, 1 RA and 1 had no clinical evidence of autoimmune disease. 88 patients were dsDNA positive (cut off of >=9) of whom 11 were also crithidia positive. Of the 13 positive crithidia results, 2 had a negative dsDNA level, one of whom was ANA 1:400 Ro positive and diagnosed with RA, the other was diagnosed as TNF induced lupus. Of the crithidia negative patients the median dsDNA level was 20, a range of diagnoses were made including 5 patients with SLE who had a positive Ro or La, 3 patients with SLE who were ENA negative, 4 UCTD, 2 MCTD, 2 with GCA/PMR, 3 with RA and 5 with inflammatory arthropathy. Twenty patients were documented as having no evidence of connective tissue disorders (CTDs), others remain under assessment.

Conclusion: We have shown a significant number of patients using our ELIA assay are dsDNA positive and crithidia negative. In patients with crithidia positivity autoimmune disease is more likely to be diagnosed. Crithidia testing appears to influence whether or not a patient will be referred to rheumatology, with negative crithidias less likely to be referred. This highlights some of the limitations of dsDNA ELISA testing however

there is a clear role for this assay as depicted above in preventing over diagnosis of CTDs and unnecessary commitment to immunosuppression.

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Systemic sclerosis, myositis and related syndromes – etiology, pathogenesis and animal models

AB0199 ASSESSING DISABILITY AND QUALITY OF LIFE IN ALGERIAN SYSTEMIC SCLEROSIS PATIENTS: CONSTRUCT VALIDITIES OF THE ARAB HAND FUNCTION INDEX AND HEALTH ASSESSMENT QUESTIONNAIRE (HAQ)

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Objectives: To assess the construct validity of the Arab Hand Function Index (AHFI), an Arabic and adapted version of the Cochin hand functional scale (CHFS) and an Arabic version of the Health Assessment Questionnaire (HAQ) in SSc.

Methods: We evaluated 100 patients with SSc followed between 2015 and 2017. All patients were white and fulfilled the American College of Rheumatology/European League Against Rheumatism criteria and/or the Leroy and Medsger (2) criteria for SSc. Mean±SD age at the time of evaluation was 47.66±12.28 years. The mean±SD disease duration was 6.54±6.23 years. Forty-one (41%) patients had diffuse cutaneous SSc and 59 (59%) had limited cutaneous SSc. Global hand and wrist mobility were evaluated using the hand functional index (HFI) and Kapandji index. Global disability and hand disability were assessed by an Arabic and adapted version of the HAQ and by the Arab hand functional index, an Arabic and adapted version of the CHFS, respectively. Anxiety and depression significant symptoms were assessed with the Arabic version of Hospital Anxiety and Depression Scale (HADS) anxiety and HADS depression. Construct validity was assessed by convergent and divergent validity (Spearman's rank correlation coefficient) and factor analysis.

Results: The AHFI had correct convergent validity with global disability assessed by the HAQ (0.61) and the HFI (0.55), moderate correlation with the Kapandji Index (-0.48: inverse correlation), depression (HADd) (0.45) and anxiety (HADa) (0.42) and no correlation with the disease duration (0.29) and the age (0.19) (Table 1). Factor analysis (Table 2) extracted 2 factors that accounted for 64.45% of the total variance. The HAQ has a good correlation with hand disability (AHF: 0.61), anxiety (0.57) and the HFI (0.51), a moderate correlation with depression (0.47) and Kapandji index (-0.46) and a little correlation with the age (0.28) and the disease duration (0.10) (Table 1). The factor analysis of the HAQ, extracted 1 factor that accounted for 50.64% of the total variance (Table 2).

Conclusion: In patients with SSc, the AHFI and the Arabic HAQ have good construct validity. The total score of the AHFI explained 61% of the variance of the HAQ.

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Table 1. Convergent and divergent validities of the AHFI and the HAQ for patients with SSc (correlation with other variables)*

Scales	Spearman's correlation Coefficient	P Value
AHFI		
Convergent validity		
HAQ	0.61	<0.001
HFI	0.55	<0.001
Kapandji	- 0.48	<0.001
Divergent validity		
Depression (HADd)	0.45	<0.001
Anxiety (HADa)	0.42	<0.001
Disease duration	0.29	0.003
Age	0.19	0.058