of salivary siglec-5 was not correlated with ESSDAI or focus score. On ROC analysis, area under the curve was 0.774(0.724-0.826). With cut off value 400pg/mL, sensitivity and specificity was 0.69 and 0.70 respectively. In validation cohort (45 pSS patients and 45 non SS sicca patients) where patients without sicca symptom but have 1 or more positive items in ESSDAI were included, sensitivity and specificity of siglec-5 was 64.4% and 77.8%, respectively.

Conclusion: The level of soluble siglec-5 is significantly increased in the saliva of pSS patients and reflects the severity of hyposalivation and ocular surface damage. Although the mechanism of the contribution to gland dysfunction is unclear yet, this easily obtainable salivary biomarker may add benefits on the diagnosis of pSS.

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AB0533

POSITIVE RATE OF SMALL INTESTINAL BACTERIAL OVERGROWTH TEST (SIBO) WAS SIGNIFICANT CORRELATIONS TO DISEASE ACTIVITY OF PRIMARY SJOEGREN'S SYNDROME (PSS)

Xiaodong Li¹, Li Xiao-Feng¹, Chong Gao², Sha Dong¹, Sheng-Xiao Zhang¹, Li Zhao-Hua¹. ¹The Second Hospital of Shanxi Medical University, Taiyuan, China; ²Department of Pathology, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, USA., Boston, United States of America

Background: Primary Sjogren's syndrome (pSS) is a chronic inflammatory autoimmune disease that primarily affects the exocrine glands, which is involved in gastrointestinal unavoidably. Once intestinal flora imbalance, it will have a major impact on health. The Small intestinal bacterial overgrowth test (SIBO) is an important method for detecting bacterial growth in the small intestine.

Objectives: To investigate the difference in the positive rate of SIBO between disease active and stable patients with pSS, and to retrospectively analyze the correlation between disease activity and SIBO.

Methods: Total 51 patients with pSS diagnosed and treated in our hospital were selected as subjects of this study from October 2018 to December 2018, according to the PSS Disease Activity Rating System (SSDAI) scores. They were divided into Group A: active period (point $\geq$ 5 points), 25 cases and group B: stable period (point $<$ 5 points), 26 cases. Two sets of clinical data were collected, including SSDAI scores and SIBO. The difference between the percentage of active and stable SIBO positive patients was compared. The maximum sum of hydrogen and methane in the two groups was tested by rank sum test, and the correlation between pSS disease activity and SIBO positive rate was analyzed.

Results: The positive rate of SIBO in patients with active pSS was significantly higher than that in stable phase, and the difference was statistically significant ($P=0.026$), as shown in Table 1. The two groups were compared with H2MaX or CH4MaX, and the Mann-Whitney U test results were statistically significant ($P=0.001$, $P=0.006$), as shown in Table 2.

Conclusion: SIBO positive rate was significant correlations to pSS disease activity. So, correcting intestinal flora imbalance combined with conventional treatment may bring greater benefits to patients with Sjogren's syndrome.

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Table 1. Comparison of SIBO positive rate between active period and stable period [n (%)]

SIBO positive	SIBO negative	total
active period	23(92.00%)	2 (8.00%) 25(100%)
stable period	16(61.50%)	10 (38.50%) 26(100%)
Total	39 (76.50%)	12 (23.50%) 51(100%)

Table 2. Mann-Whitney U test of two sets of H2MaX or CH4MaX independent samples

Disease active(25 cases)	Disease stable(26 cases)	difference
H2MAX	51.00(50.50)	17.50(22.50) $P=0.001$
CH4MaX	6.00(2.00)	5.00(2.00) $P=0.006$

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AB0534

DEVELOPMENT OF A MULTI-MODALITY IMAGING APPROACH TO EVALUATE LUPUS NEPHRITIS AND INITIAL RESULTS

David R. Karp¹, Brad H. Rovin², Mikael Boesen³, Olga Kubassova⁴, Peter Lipsky⁵. ¹UT Southwestern Medical Center, Dallas, TX, United States of America; ²Ohio State University, Columbus, OH, United States of America; ³University of Copenhagen and Bispebjerg Hospital, Copenhagen, Denmark; ⁴ImageAnalysis Group, London, United Kingdom; ⁵RILITE Research Institute, Charlottesville, VA, United States of America

Background: Lupus nephritis (LN) remains a significant cause of morbidity and mortality in subjects with Systemic Lupus Erythematosus (SLE). The gold standard for evaluation of LN remains the kidney biopsy, whereas renal function is usually evaluated by eGFR and urinary protein: creatinine ratio. More effective and sensitive methodology is needed to assess LN and also the response to treatment. Functional imaging of the kidney using quantitative techniques has great potential, as it can assess kidney function and pathologic changes non-invasively by evaluating perfusion, oxygenation, cellular density and fibrosis.

Objectives: To develop a multi-modality imaging approach for the evaluation of the spectrum of pathologic changes in LN.

Methods: In this multi-center study, subjects who were having a standard of care renal biopsy for LN were asked to participate in the imaging evaluation. Local Institutional Review Board approval was obtained, and subjects signed an Informed Consent Form. Dynamic contrast enhanced MRI (DCE-MRI) was employed to detect changes in vascularization and perfusion¹, Diffusion Weighted Imaging (DWI) to assess interstitial diffusion, T2*Map/BOLD - the tissue oxygenation and T1rho to evaluate fibrosis². The imaging scores will be compared to renal biopsy, including ISN/RPS classification of LN, activity index and chronicity index.

Results: Five patients have been evaluated to date and their imaging data assessed for quality. The initial results have demonstrated the feasibility of acquiring multi-modality imaging data, including dynamic imaging sequences, in the multi-center trial setting. Figure 1 illustrates scans from a representative patient. This study will determine whether multi-modality imaging could become an effective, non-invasive tool to assess renal function and pathology in LN.