Conclusions This study comprehensively profiled the serum metabolites of primary APS patients and identified metabolic biomarkers that have the potential to be used as a diagnostic tool for differentiating APS from healthy controls. The APS metabolome analysis also revealed a potential significant role of S1P/S1PR axis in APS pathogenesis.

Abstract LSO-013 Figure 1

The effect of S1P on aPL mediated NETosis. aPL mediated NETosis was significantly potentiated by S1P in a concentration dependent manner. S1P did not trigger NETosis by itself.

Short oral presentation session 3: SLE biomarkers 1

**LSO-014** CLINICO-PATHOLOGICAL ASSOCIATION OF SERUM CD44 LEVEL IN LUPUS NEPHRITIS PATIENTS

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Background Conventional serological markers do not always correlate with clinical activity in lupus nephritis (LN). CD44 is a transmembrane glycoprotein that is widely expressed in immune and non-immune cells, and is implicated in tissue inflammation and fibrosis. CD44 also serves as a cell receptor for hyaluronan (HA), a glycosaminoglycan that contributes to inflammatory and fibrosis processes. This study investigated clinico-pathological associations of circulating CD44 level.

Methods Serial serum samples from patients with biopsy-proven Class III/IV LN were collected at intervals of 3–4 months over 3 to 4 years. Sera from sex- and age-matched patients with non-renal SLE or non-lupus chronic kidney disease (CKD) or healthy subjects served as Controls. Serum CD44 level was measured by ELISA.

Results Six hundred and sixty-seven sera from 41 patients with LN (31 female and 10 male, age 38.78±12.02 years) were included. Serum CD44 level was significantly higher in immune and non-immune cells, and is implicated in tissue inflammation and fibrosis processes. This study investigated clinico-pathological associations of circulating CD44 level.

Conclusion Active LN is associated with increased serum CD44 level. Further studies are required to determine whether CD44 can serve as a clinically useful biomarker in the diagnosis and monitoring of LN activity.