percentage of the positive stained cells, the semiquantitative analysis was made. The expressions of ERs, including ER α and ER β , of the two groups were compared, and the relationship between the expression of ERs and serum UA levels were analyzed with linear regression analysis.

Results: 1. The mean ages of the LN group and the IgA group were 27.39 $\pm$ 8.09 years and 33.08 $\pm$ 5.45 years, respectively, with significantly different ($t=2.128$, $p=0.042$). There was no renal failure subject in both groups (CRE level above 120 μ mol/l), and all the SLE patients were at stage of onset.

2. Mean UA level of the LN group was significantly higher than that of the IgA group ($t=-3.149$, $P=0.004$), and the CRE level of the two groups were similar ($t=-0.109$, $P=0.914$) (table1).

3. In each group, ER β was well expressed in the tubular epithelial cells, and no in kidney glomeruli. In contrast, ER α was not expressed in the renal tissues of both groups (figure1).

4. The median score of ER β expression in the LN group was remarkable lower than that of the IgA group ($z=-2.080$, $P=0.038$, table 1).

5. Linear regression analysis indicated that ER β expression scores of the total 30 patients had significantly negative correlation with serum UA levels ($t=-2.141$, $P=0.041$, table2).

Conclusion: 1. Low expression of ER β in renal tubular epithelial cell may contribute to hyperuricemia in premenopausal female SLE patients.

2. ER α showed no expression in LN and IgA nephropathy kidney tissues.

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Table 1. Comparative analysis of main clinical biomarkers in LN groups and IgA group

	LN group (n=18)	IgA group (n=12)	P value
Age (year)	27.39 $\pm$ 8.09	33.08 $\pm$ 5.45	$t=2.128$ $p=0.042$
UA (μ mol/L)	510.33 $\pm$ 141.50	383.25 $\pm$ 78.72	$t=-3.149$ $p=0.004$
CRE (μ mol/L)	92.22 $\pm$ 11.71	91.72 $\pm$ 12.64	$t=-0.109$ $p=0.914$
ER α	0	0	
ER β	0.08(0.02,0.23)	0.20(0.10, 0.30)	$z=-2.080$ $p=0.038$

UA: uric acid; CRE: creatine; ER: estrogen receptor.

Table 2. The correlation of ER β expression scores in the renal tubular epithelial cell with serum UA levels in premenopausal female SLE patients

Variable	Unstandardized Coefficients B	Standardized Coefficients SEM	t	P	95%CI
ER β	-317.004	148.040	-2.141	0.041	-620.251 -13.757
Constant	516.455	148.040	14.641	0.000	444.198 588.712

ER: estrogen receptor

Fig 1. a. ER β expressed in renal tubular epithelial cell of LN patients; b. ER β expressed in renal tubular epithelial cell of IgA nephropathy patients; c. ER α was not expressed in renal tissue of LN patients; d. ER α was not expressed in renal tissue of IgA nephropathy patients.

Disclosure of Interests: None declared

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FRI0227

PREGNANCY OUTCOMES IN A LONG-TERM FOLLOW-UP COHORT OF PEDIATRIC ONSET SYSTEMIC LUPUS ERYTHEMATOSUS (PSLE) AT A TERTIARY CARE CENTER IN NORTH-WEST INDIA

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Background: Pediatric-onset SLE (pSLE) represents 10–20% of all SLE cases, and is associated with more severe disease as compared to adult onset SLE. pSLE patients are known to have more frequent systemic involvement especially related to kidneys, central nervous system and musculoskeletal system(1). Pregnant women with SLE have increased risk of adverse outcomes including disease flare, spontaneous abortion, pre-eclampsia/eclampsia, premature birth and maternal death(2). There is paucity of literature in pregnancy outcomes among women with pediatric onset SLE, especially from developing countries

Objectives: To evaluate pregnancy outcomes in a long term follow up cohort of pediatric SLE patients from a tertiary care center in North India

Methods: We have reviewed our previously published cohort of 27 pSLE patients who were diagnosed as SLE between 1998 and 2003. They were being followed-up at Pediatric Rheumatology Clinic, Advanced Pediatrics Centre, Postgraduate Institute of Medical education and research, Chandigarh, India. We have analyzed disease related complications, anti-phospholipid antibody profile, pregnancy related complications and long-term outcomes in these patients.

Results: Follow up records of 27 pSLE patients were retrieved from the clinical files. Data are available for 14 patients (i.e. 52% of the original cohort). Six (22%) of 14 patients expired due to disease related complications (2 had end stage renal disease, 1 had pulmonary thromboembolism, 2 had pulmonary hemorrhage, 2 had sepsis). Eight patients have been on follow-up till date with mean duration of follow-up of 20 years (range:16-25 years). Total patient years of follow up was 160 years. Of the 8 patients on follow up, renal manifestations were seen in 4(50%), neuropsychiatric in 4(50%), severe hematologic in 3(37.5%), musculoskeletal in 1(12.5%), anti-phospholipid antibody (APLA) positivity in 3(37.5%) patients. Disease and therapy related complications were seen in 3 patients (obesity in 2, osteopenia and avascular necrosis of femur in 1, hypertension in 1). Eight pregnancies were observed in 5 of these patients; 1 patient had primary infertility. Mean age at first pregnancy was 19 years (range: 21-25 years). All 5 patients received hydroxychloroquine throughout the pregnancy and disease activity was well controlled. APLA testing was done in 2 patients during pregnancy and both tested negative. Five live births and 3 fetal losses were observed. The fetal losses were spontaneous first trimester abortions. None had eclampsia/pre-eclampsia, ectopic pregnancy or adverse fetal outcomes (prematurity, intrauterine growth restriction, heart defects).

Conclusion: This is one of the longest follow-up studies in pSLE patients and probably the only one where pregnancy outcomes have been studied in a pediatric onset disease in context of a developing country. Our results show that in the presence of well controlled symptoms, pregnancy related outcomes are favorable with minimal fetal and maternal complications even in resource limited settings.

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FRI0228

KL-6 AS A BIOMARKER OF DEVELOPING INTERSTITIAL LUNG DISEASE IN PATIENTS WITH SJÖGREN SYNDROME

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Background: Sjögren syndrome (SS) is an autoimmune disease presented with exocrine gland inflammation and extra-glandular involvement. The