Background Previous studies have found a relationship between overall systemic lupus erythematous (SLE) activity and adverse pregnancy outcomes. We sought to investigate whether 5 types of specific types of SLE activity either in the 6 months prior to conception or during pregnancy were related to adverse pregnancy outcome.

Materials and methods 149 pregnancies occurred in 114 women with mean age 23.7 (SD 6.8) years at SLE diagnosis and 31.0 (SD 5.3) at conception. 68% were White, 15% Hispanic, 11% Black, 7% Asian. Seven women had a history of antiphospholipid syndrome and 23 had a prior adverse pregnancy outcome. During the study period, 40 (27%) pregnancies had an adverse outcome. Cytopenias (15%) and nephritis (11%) were the most common types of SLE activity during pregnancy. In univariable analyses, nephritis 6 months before conception (OR 7.3, 95% CI: [1.5, 35.2]) and during pregnancy OR 4.4 (1.3–14.9) and cytopenias during pregnancy (OR 4.8 [1.7, 14.0]) were significantly associated with adverse outcome. Hispanic ethnicity, prior adverse pregnancy outcome, and steroid and/or azathioprine use during pregnancy were also associated with adverse outcome. In multivariable analyses, nephritis (OR 3.5 [1.0–12.2]), cytopenias (OR 4.2 [1.4,12.2]) and serositis (OR 5.7 [1.1–30.3]) during pregnancy were associated with adverse outcome (Table 1).

Conclusions The majority of pregnancy outcomes were favourable in this SLE cohort. After adjusting for ethnicity, prior adverse pregnancy outcomes, and medications during pregnancy, nephritis, cytopenias and serositis disorders during pregnancy were associated with an elevated risk of adverse pregnancy outcome. Prior studies have suggested variable impact of lupus nephritis on pregnancy outcomes, but this study uniquely demonstrates an additional association between cytopenias and serositis during pregnancy and adverse pregnancy outcomes.

CE-04

SIX DIFFERENCES IN HEALTHCARE UTILISATION, END-STAGE RENAL DISEASE AND MORTALITY AMONG U.S. MEDICAID BENEFICIARIES WITH INCIDENT LUPUS NEPHRITIS

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Abstract CE-03 Table 1 Odds ratios for adverse pregnancy outcome (n = 40) among 149 pregnancies

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Number of occurrences</th>
<th>Univariable OR (95% CI)</th>
<th>Model 1 OR (95% CI)</th>
<th>Model 2 OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cytopenias activity</td>
<td>17</td>
<td>2.6 (0.8–8.5)</td>
<td>1.8 (0.5–6.0)</td>
<td>1.6 (0.5–5.4)</td>
</tr>
<tr>
<td>Nephritis activity</td>
<td>10</td>
<td>7.3 (1.5–35.2)</td>
<td>4.6 (0.9–23.4)</td>
<td>3.3 (0.6–17.9)</td>
</tr>
<tr>
<td>Skin activity</td>
<td>15</td>
<td>1.0 (0.3–3.9)</td>
<td>1.3 (0.4–5.0)</td>
<td>1.2 (0.3–4.8)</td>
</tr>
<tr>
<td>Arthritis activity</td>
<td>13</td>
<td>0.8 (0.2–3.6)</td>
<td>0.7 (0.1–3.2)</td>
<td>0.7 (0.1–3.0)</td>
</tr>
<tr>
<td>Serositis activity</td>
<td>5</td>
<td>1.8 (0.2–14.1)</td>
<td>1.6 (0.2–12.7)</td>
<td>1.0 (0.1–7.8)</td>
</tr>
</tbody>
</table>

Adverse pregnancy outcome: pre-eclampsia, preterm <37weeks, miscarriage (fetal loss at 12–20 weeks gestation), stillbirth (fetal loss at ≥20 weeks gestation), SLE-related elective termination of pregnancy and 95% CI: from generalized linear mixed models to account for correlated data among 114 women carrying a total of 149 pregnancies.

*Model 1: adjusted for ethnicity (Hispanic/non-Hispanic) and prior adverse pregnancy outcome

+Model 2: model 1 + corticosteroid and/or azathioprine use 6 months before conception, and hydroxychloroquine use 6 months before conception

CE-03

ORGAN-SPECIFIC SYSTEMIC LUPUS ERYTHEMATOSUS ACTIVITY DURING PREGNANCY IS ASSOCIATED WITH ADVERSE PREGNANCY OUTCOMES

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