

three-month intervention period. Mentee outcomes of health-related quality of life, self-management (including treatment adherence), and disease progression (including disease activity, damage, and cytokine balance) will be obtained at baseline, mid-intervention (6 weeks from baseline), and immediately post-intervention (12 weeks from baseline), using validated tools. Descriptive statistics and effect sizes will be calculated to determine clinically important ( $>0.3$ ) changes.

**Results** This study is currently in progress. Preliminary results will be shared.

**Conclusions** Given the success of the peer mentoring approach in other chronic conditions that disproportionately impact minorities, and its responsiveness to the needs of this unique population, this intervention could result in health improvements that have not been attainable with other interventions. This could lead to significant reductions in disparities and have considerable public health impact.

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## CE-03

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

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**Background** Previous studies have found a relationship between overall systemic lupus erythematosus (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)

**Results** 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.

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

Predictor	Number of occurrences	Univariable OR (95% CI):	Model 1* OR (95% CI):	Model 2# OR (95% CI):
<b>Organ-specific activity six months prior to conception</b>				
Cytopenia	17	2.6 (0.8–8.5)	1.8 (0.5–6.0)	1.6 (0.5–5.4)
Nephritis	10	7.3 (1.5–35.2)	4.6 (0.9–23.4)	3.3 (0.6–17.9)
Skin disease	15	1.0 (0.3–3.9)	1.3 (0.4–5.0)	1.2 (0.3–4.8)
Arthritis	13	0.8 (0.2–3.6)	0.7 (0.1–3.2)	0.7 (0.1–3.0)
Serositis	5	1.8 (0.2–14.1)	1.6 (0.2–12.7)	1.0 (0.1–7.8)
<b>Organ-specific activity during pregnancy</b>				
Cytopenia	23	4.8 (1.7–13.9)	4.2 (1.4–12.2)	3.9 (1.3–11.4)
Nephritis	16	4.4 (1.3–14.9)	3.5 (1.0–12.2)**	3.6 (1.0–12.8) <sup>5</sup>
Skin disease	13	1.9 (0.5–7.1)	1.3 (0.3–5.4)	1.3 (0.3–5.2)
Arthritis	8	3.2 (0.6–16.2)	3.7 (0.8–18.5)	3.9 (0.8–19.7)
Serositis	8	4.8 (0.9–25.5)	5.7 (1.1–30.3)	5.9 (1.0–34.0)**

Adverse pregnancy outcome: pre-eclampsia, preterm  $<37$  weeks, miscarriage (fetal loss at 12–20 weeks gestation), stillbirth (fetal loss at  $\geq 20$  weeks gestation), SLE-related elective termination OR and 95% CI: from generalised 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 six months before conception, and hydroxychloroquine use six months before conception

\*\*p = 0.046 <sup>5</sup>p = 0.045 \*\*p = 0.049

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

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

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