

Forecasting flares and future cardiovascular health—A survey of reproductive health research priorities of people living with SLE

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Objectives

- Systemic Lupus Erythematosus (SLE) predominantly affects females of reproductive age, who face increased risks of adverse pregnancy outcomes (APOs) and disease flare in pregnancy.
- Currently, prediction of APOs and flare relies on identification of clinical factors (e.g. presence of lupus nephritis, major organ involvement) and laboratory markers (e.g. rising C-reactive protein, falling complement, antiphospholipid antibody positivity).
- Whilst people with SLE are aware of heightened APO risk; awareness that problems such as pre-eclampsia (high blood pressure and proteinuria in pregnancy) doubles the risk of future cardiovascular disease (CVD) in the general population is limited.
- This study aimed to survey females of reproductive age living in the United Kingdom (UK) with SLE to assess reproductive health research priorities and views on studying pregnancy-related predictors of long-term health.

Results

- Ninety-one participants met inclusion criteria; 70/91 (77%) had experienced pregnancy, and 21/91 (23%) were currently considering pregnancy.
- Participants ranked importance of presented research topics which are shown in order of participants' perceived importance in Figure A.
- Two thirds of participants (n=62/91) also provided free-text self-reported research priorities when asked 'what is the one question you want researchers to answer?' presented in Figure B.
- Importantly, reception to testing for factors relating to future cardiovascular health was high with 88/91 (97%) willing to have an additional blood test in pregnancy if it could predict future CVD risk with only 3/91 (3%) not willing.
- There was near-identical receptiveness to blood testing for predicting disease activity (88/91, 97%) and APOs (89/91, 98%).

Methods

- An online survey was piloted and distributed in University College London Hospital clinic and Lupus UK social media channels (August–September 2025).
- **Inclusion criteria were females with SLE aged 18–49 who were pregnant, previously pregnant or considering pregnancy.**
- Analysis was via 5-point Likert scale (from Very important–Not very important).

Conclusions

- People with SLE strongly prioritise research into understanding APO aetiology, developing biomarker-based risk prediction, investigating infant health outcomes and into exploring pregnancy's link to future CVD through predictive non-invasive tests during pregnancy.
- These findings highlight there is unmet need for improved biomarker APO and flare risk prediction and validated patient-reported outcome measures to assess quality of life in pregnancy.

Figures: Rated and Self-Reported SLE pregnancy Research Themes by Participants

