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Cardiac maladaptation in women with pre-eclampsia: a longitudinal study across pregnancy

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Aim

The pattern of cardiac changes from early pregnancy to late gestation in women who develop PE remains uncertain. It is also uncertain whether these alterations are independently associated with PE or mediated by shared risk factors. This study aimed to explore cardiac maladaptation in the development of preeclampsia (PE) across pregnancy.

Methods

Cite: Prince of Wales Hospital, Hong Kong SAR

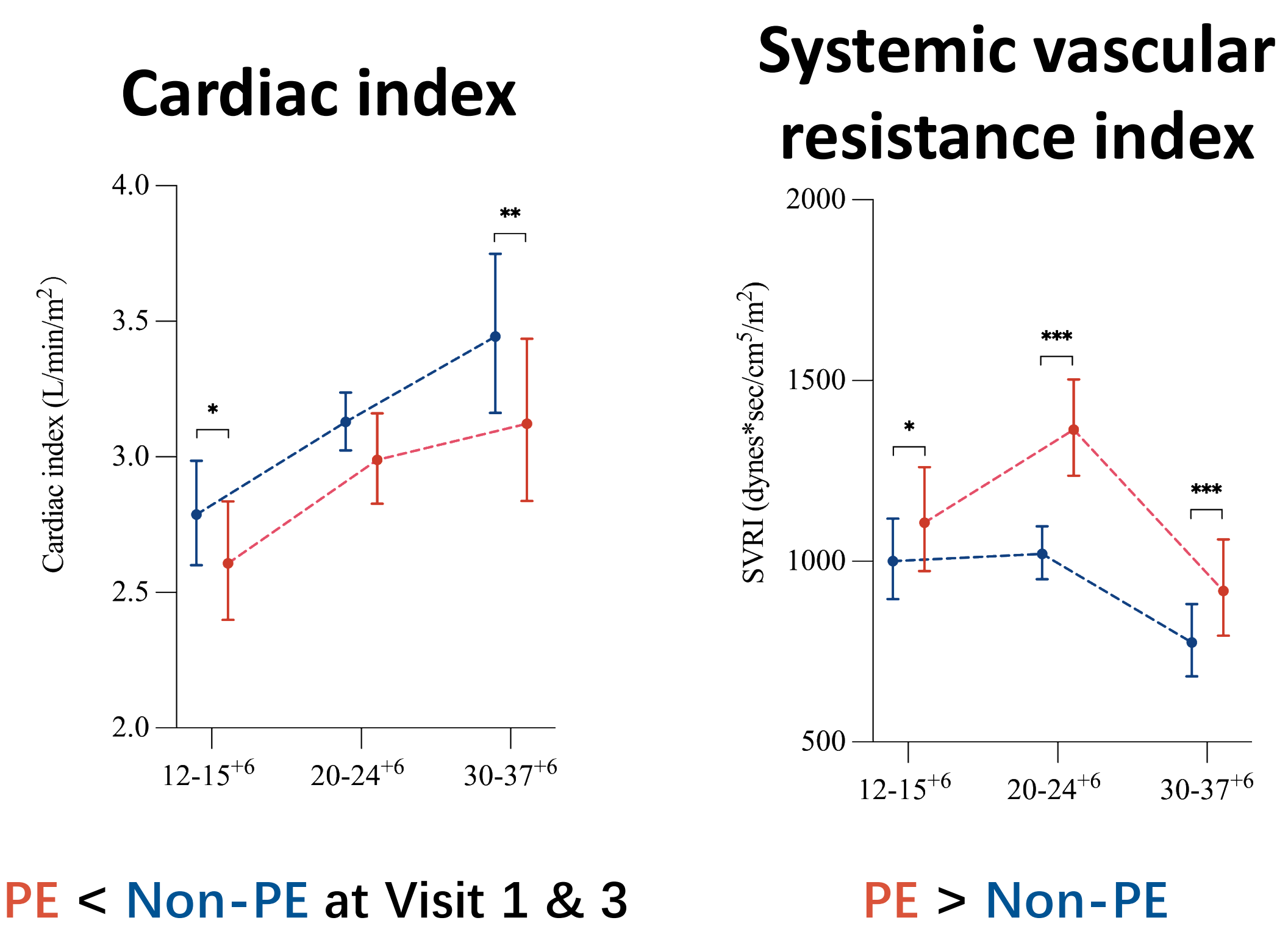
Period: October 2023 — March 2025

Study design: Prospective longitudinal study

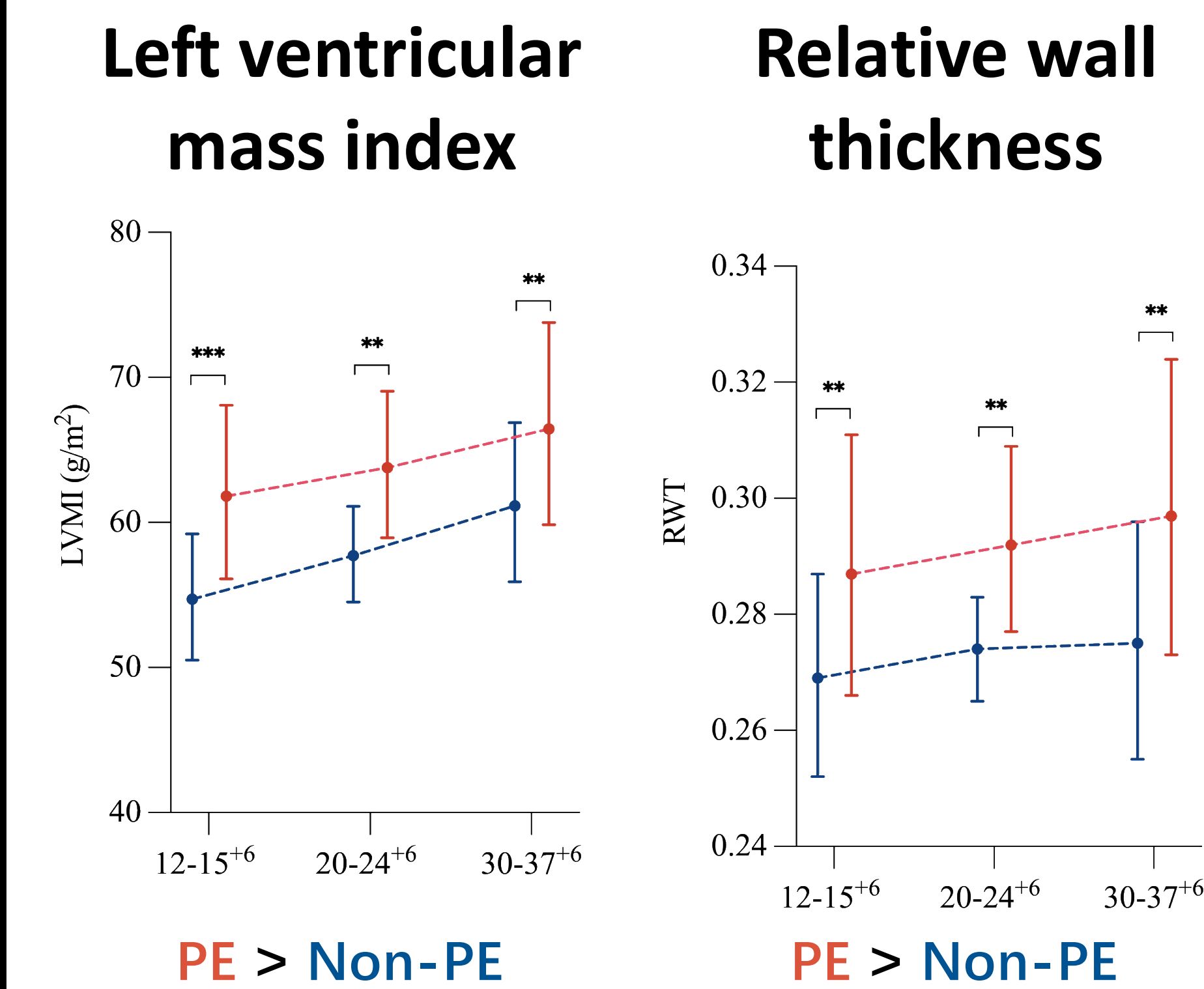
Method: Multilevel linear mixed-effects analysis

Results

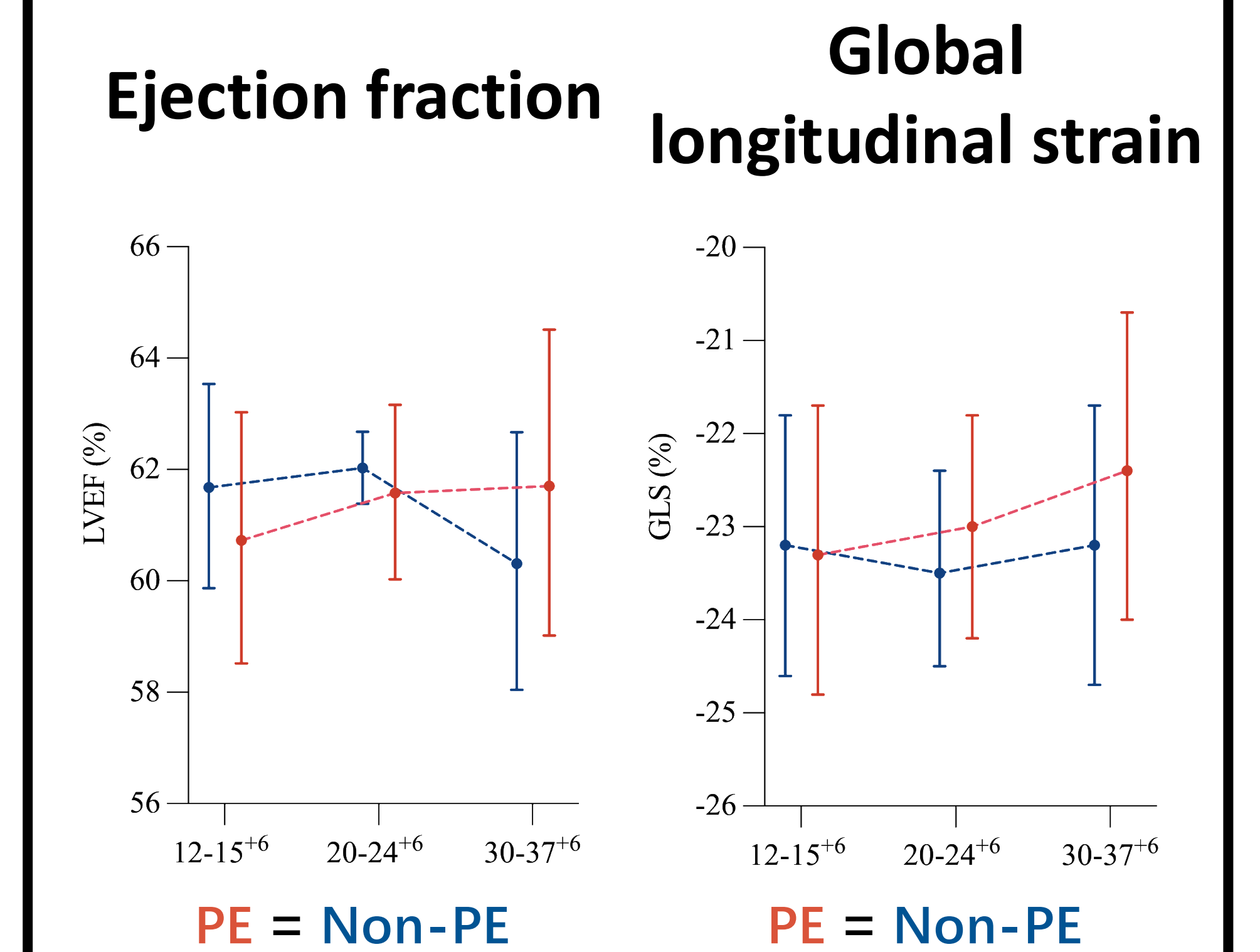
Hemodynamics



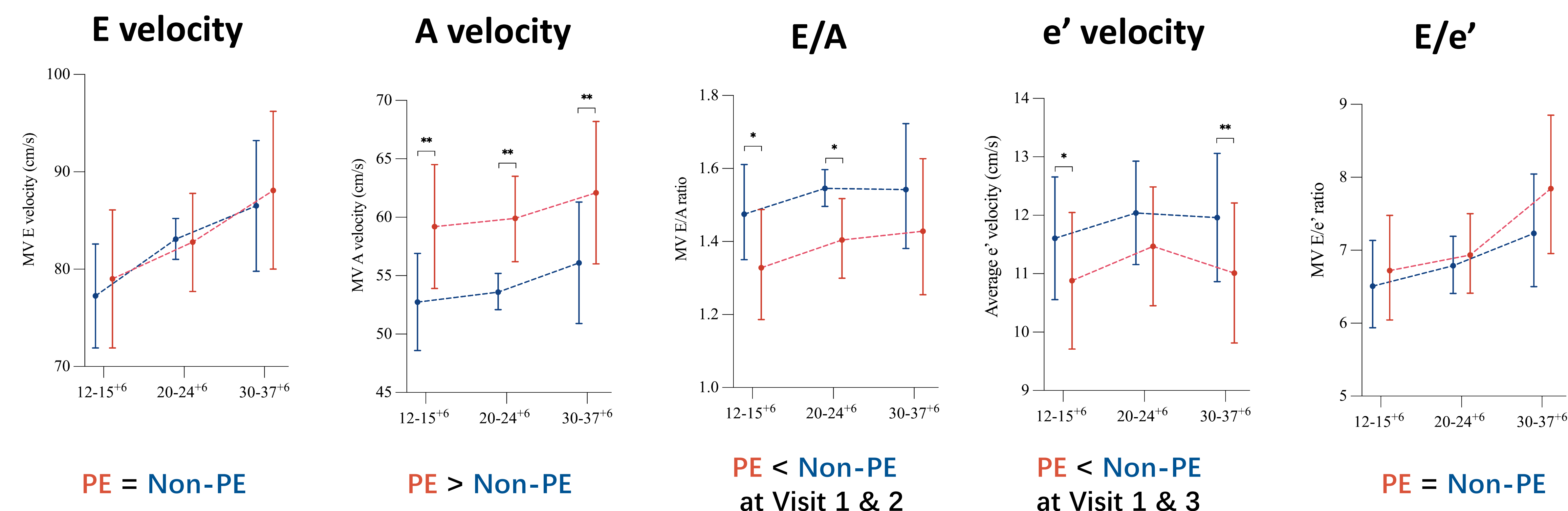
Geometry



Systolic function



Diastolic function



Conclusion:

Women who later develop PE exhibit early and progressive changes in maternal cardiac geometry and function throughout pregnancy.

