

BACKGROUND

- Pre-eclampsia (PE) remains a major cause of maternal and perinatal morbidity and mortality
- Women high-risk women for preterm PE can be identified in the first trimester using the Fetal Medicine Foundation(FMF) algorithm or NICE guidance.
- Low-dose aspirin (LDA) 150 mg nightly, started before 16 weeks, reduces preterm PE by up to 60%.
- The size of that benefit depends on how reliably the tablets are taken.

AIMS & OBJECTIVES

- To assess effect of compliance of aspirin intake on maternal and neonatal outcome in FMF/NICE screen positive women.

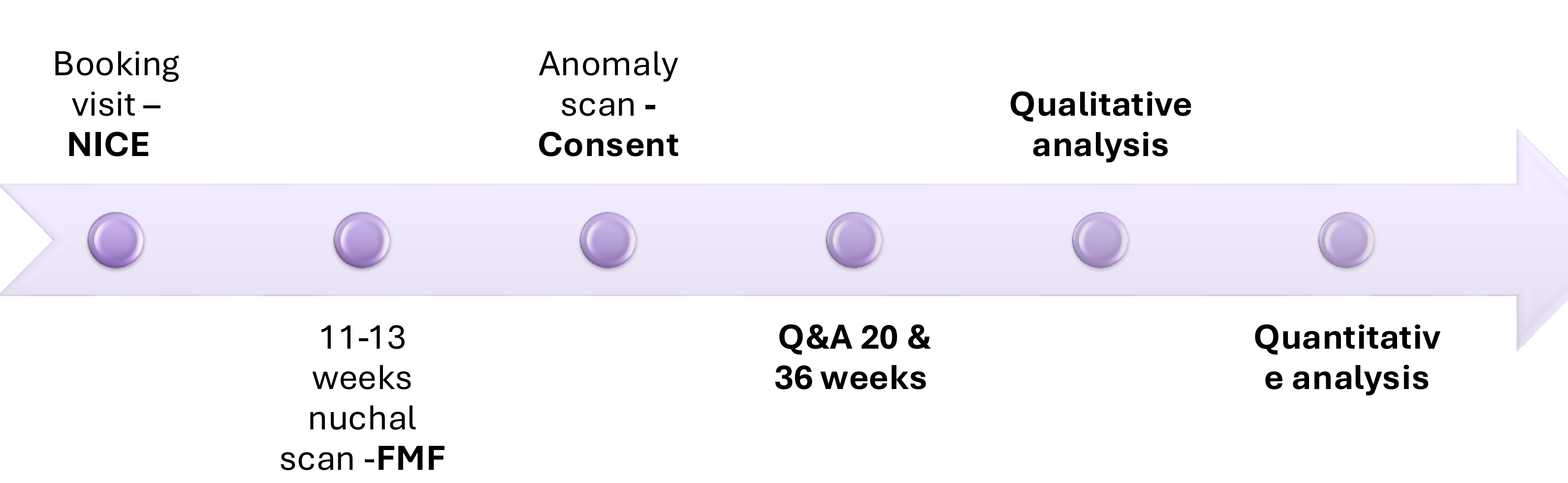
MATERIALS AND METHODS

- An interim analysis of mixed method study on singleton pregnancies screen positive for PE by FMF≥1:100 and NICE criteria between March 2025 - March 2026.
- **INCLUSION CRITERIA**
 - Women aged > 18
 - Screen positive for PE – FMF/NICE
- **EXCLUSION CRITERIA**
 - Unable to provide informed consent
 - Pre-existing Aspirin use
 - Contraindication to Aspirin
 - Congenital anomaly

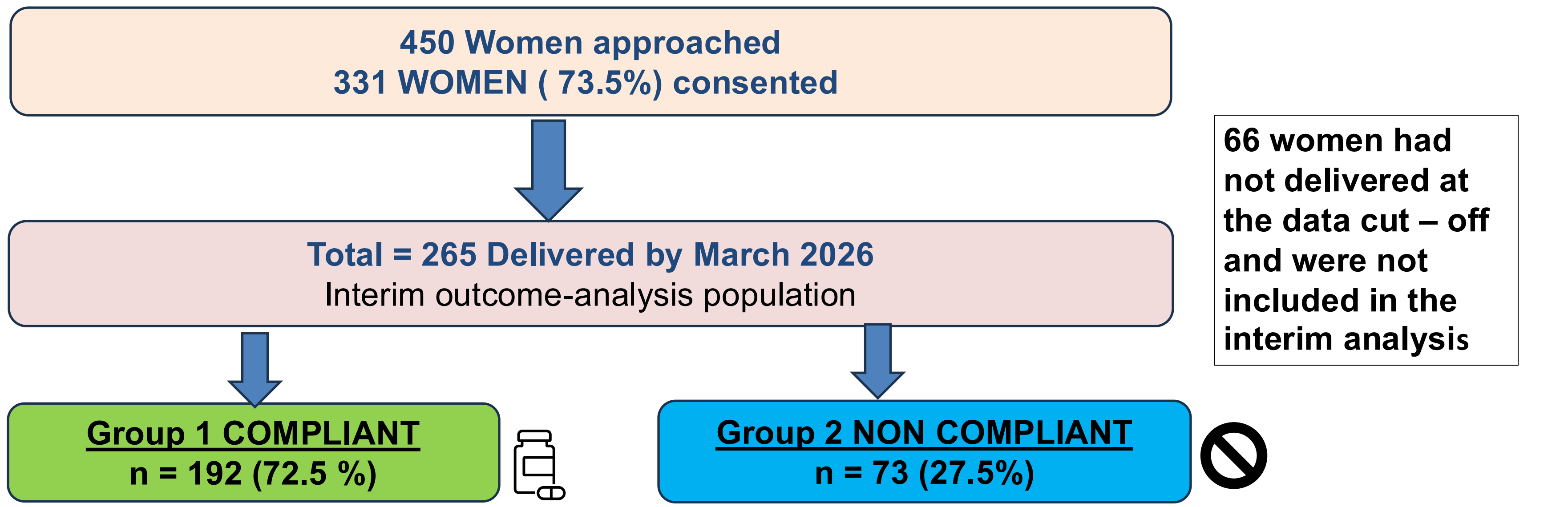
COMPLIANCE defined as:
❖ Commenced before 16 weeks
❖ ≥ 90% doses taken

DATA COLLECTION

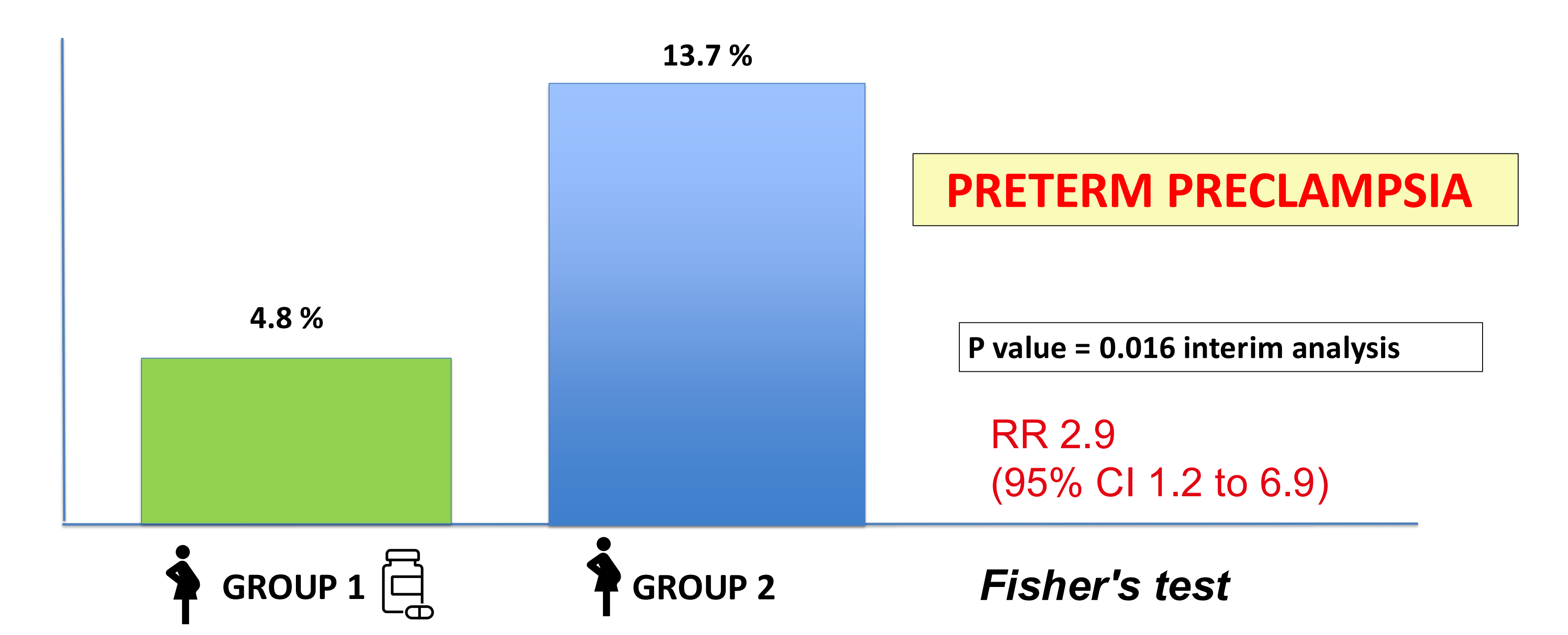
- A standardised questionnaire was administered by the research team at 20 and 36 weeks.



RESULTS



KEY MATERNAL OUTCOMES



	GROUP 1 (n=192)	GROUP 2 (n=73)	pValue
Gestation age of delivery(weeks), median (IQR)	39.2 (38.35 - 39.71)	39.1(38.1- 40)	NS
Estimated blood loss at delivery (ml), median (IQR)	450 (350-550)	400(300-600)	NS
Total Hypertensive disorder of pregnancy), n (%)	18(9.6%)	13(17.8%)	0.08
FGR diagnosed at 36 weeks scan (AC/ EFW < 10th centile)	3(4.1%)	6(24.6%)	0.72

Values presented as n (%) or median (IQR). Fisher's exact test used for binary outcomes; chi-square test for mode of delivery; Mann-Whitney U test for continuous variables. NS- Not significant

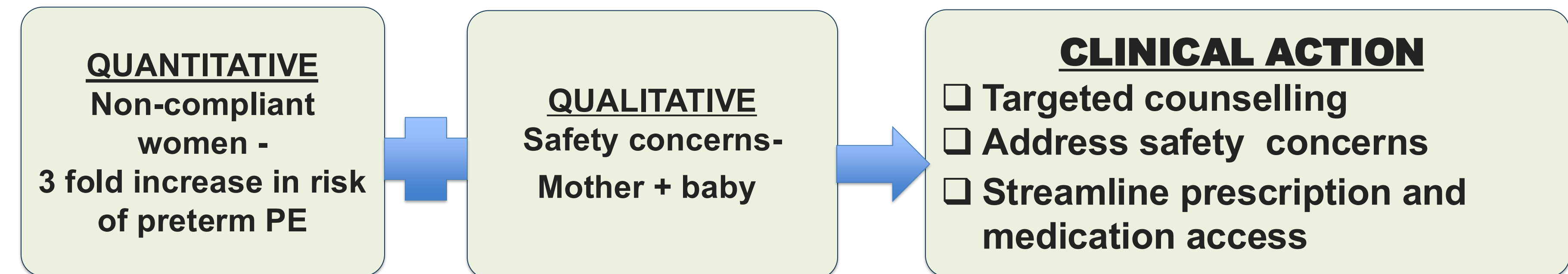
KEY NEONATAL OUTCOMES

	GROUP 1 (n=192)	GROUP 2 (n=73)	pValue
Birthweight (grams), median (IQR)	3310(2937- 3635)	3172(2802-3783)	NS
SGA <10 th centile, n (%)	29(14.6%)	14(21.2%)	NS
NICU admission, n (%)	10(5.1%)	5(3.65%)	NS
Preterm (<37 weeks), n (%)	8(4.3%)	3(4.3%)	NS

QUALITATIVE OUTCOMES

- 75.7% women reported satisfaction with counselling
- 79.7% women still had concerns about LDA at some point
- Some women discontinued LDA after 30 weeks due to pill burden/ prescription barrier
- 81.4% women sought additional information, primarily online.
- 33.7% women used alarm reminders as the most common adherence strategy
- Most reported themes regarding lack of compliance were concerns around fetal safety and haemorrhage risk

CONCLUSION- INTERIM ANALYSIS



- In this high-risk cohort, non-compliance with LDA was associated with an increased risk of preterm PE, despite otherwise similar maternal and neonatal outcomes.
- These findings highlight the importance of optimising adherence, addressing safety concerns, and reducing practical barriers to access.
- Targeted education using virtual group appointments and streamlined prescribing pathways may enhance compliance and improve prevention of early-onset PE

REFERENCES

- Rolnik DL, Tan MY, Syngelaki A, Wright D, Poon LC, Nicolaides KH, et al. Combined impact of first-trimester risk and aspirin adherence on preterm preeclampsia prevention. Am J Obstet Gynecol. 2026
- Rolnik DL, Wright D, Poon LC, O’Gorman N, Syngelaki A, de Paco Matallana C, et al. Aspirin versus Placebo in Pregnancies at High Risk for Preterm Preeclampsia. New England Journal of Medicine. 2017
- Nzelu D, Palmer T, Stott D, Pandya P, Napolitano R, Casagrandi D, et al. First trimester screening for pre-eclampsia and targeted aspirin prophylaxis: a cost-effectiveness cohort study. BJOG. 2024; 131(2): 222–230.