

Objectives

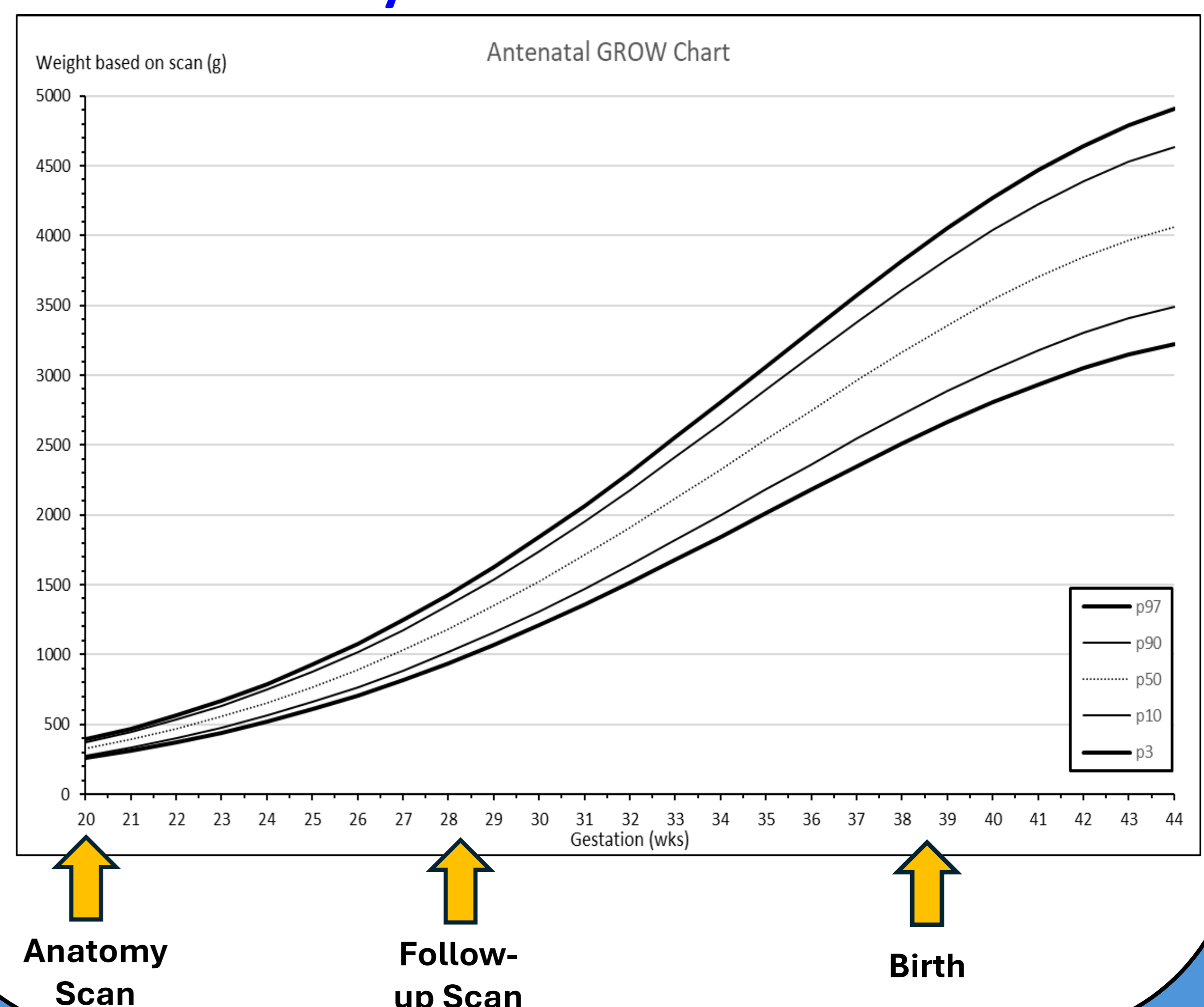
- RCOG guidelines¹ recommend assessment of estimated fetal weight (EFW) at the 2nd trimester anatomy scan.

- There is little information about the effectiveness in predicting fetuses that are small for gestational age (SGA) in the third trimester and at birth.

Methods

- We analysed data from the 7 NHS trusts in the GAP programme that recorded their anatomy scans routinely.
- We included all singleton pregnancies from June 2024 to December 2025 that had a subsequent scan between 24+0 and 32+0 weeks gestation, and assessed the second trimester scan's ability to predict SGA (<10th centile) in the 3rd trimester and at birth.
- All centiles were calculated using the GROW standard without sex adjustment, and we determined positive predictive value (PPV) and relative risk with 95% Confidence Interval (RR, CI).

Figure – Chart displaying gestation of scans and births analysed



Results

- The cohort included 8438 pregnancies in 7 units over the study period, with an EFW measurement at the anatomy scan at a median 20+1 of weeks.
- 211 (2.5%) fetuses were SGA, of which 177 (83.9%) were followed up with a scan at an average of 28+2 weeks.
- 65 of these fetuses were also SGA at the follow up scan (PPV: 36.7%, RR: 7.1 CI: 5.7-9.0).
- For SGA at birth (median gestational age 38+4 weeks), the PPV at anatomy scan was 31.6% (RR: 2.4; CI 1.9-3.1).

Diagnostic characteristics of anatomy scan predicting SGA at follow-up scan & at birth

Outcome	Follow-up scan	Birth
Average gestation	28+2	38+4
Outcome SGA rate	6.2	13.7
Sensitivity	20.4	8.0
False positive rate	2.3	2.8
Positive predictive value	36.7	31.6
Relative risk (with 95% CI)	7.1 (5.7-9.0)	2.4 (1.9-3.1)

Conclusion

Routine fetal weight assessment at the 20 week scan can identify pregnancies that have an increased likelihood of being SGA in the third trimester and require a more intensive level of surveillance.

Reference

1. RCOG Green-top Guideline No. 31. BJOG 2024 <https://doi.org/10.1111/1471-0528.17814>