

# Assessing benefits and risks of continuing treatment for maternal hypertension and thyroid disorders in the UK Clinical Practice Research Datalink

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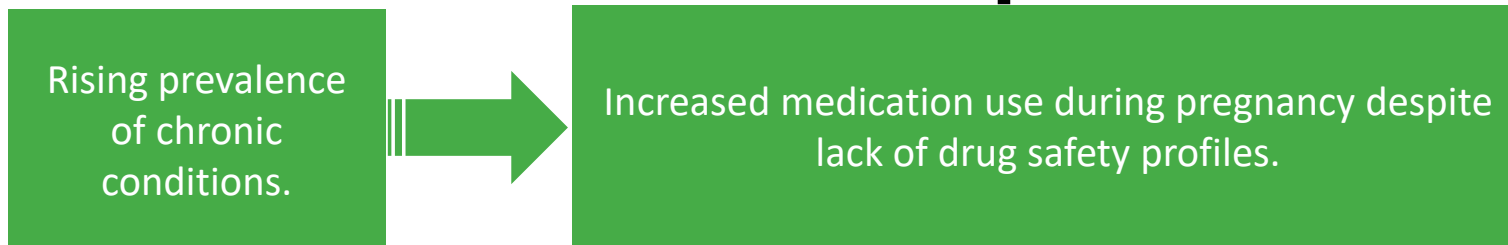
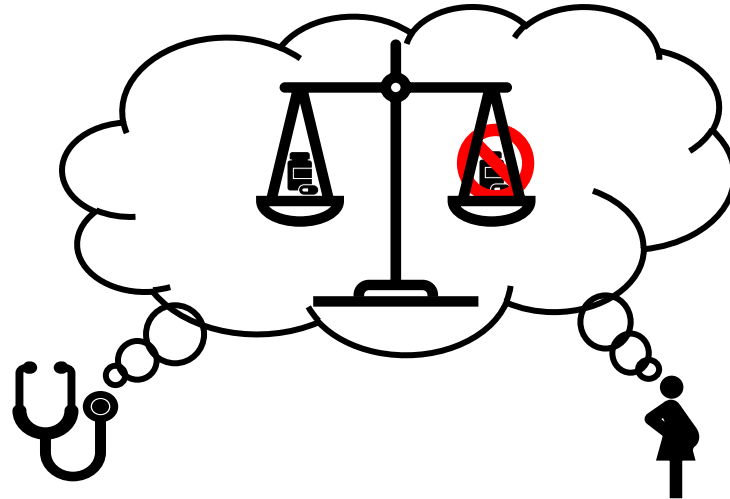
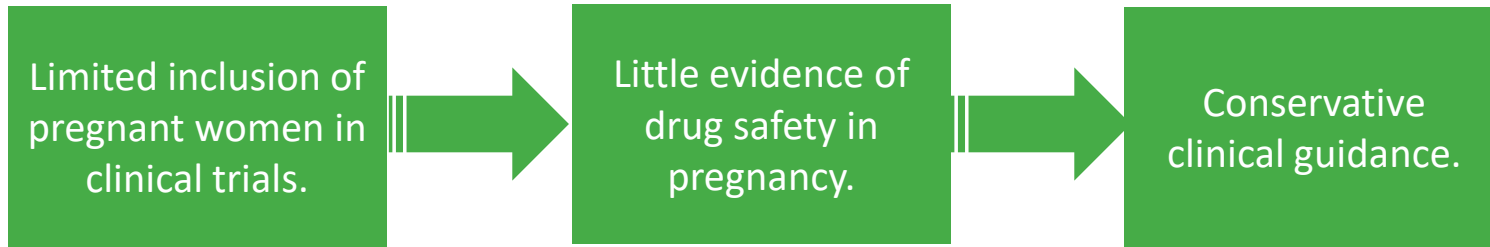
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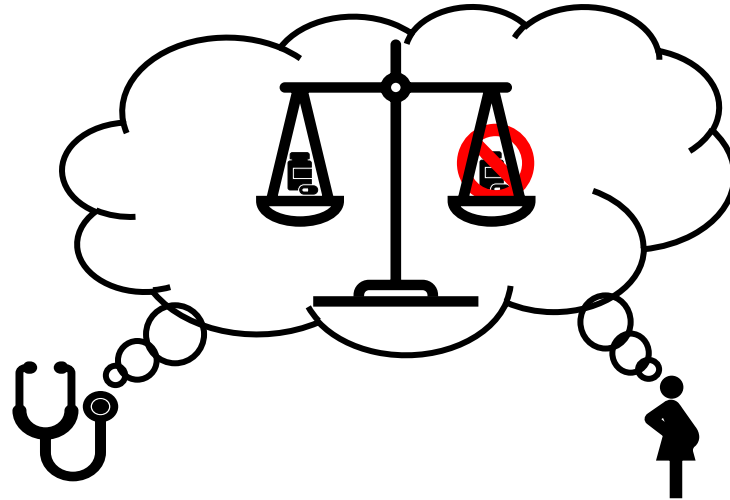


# Background

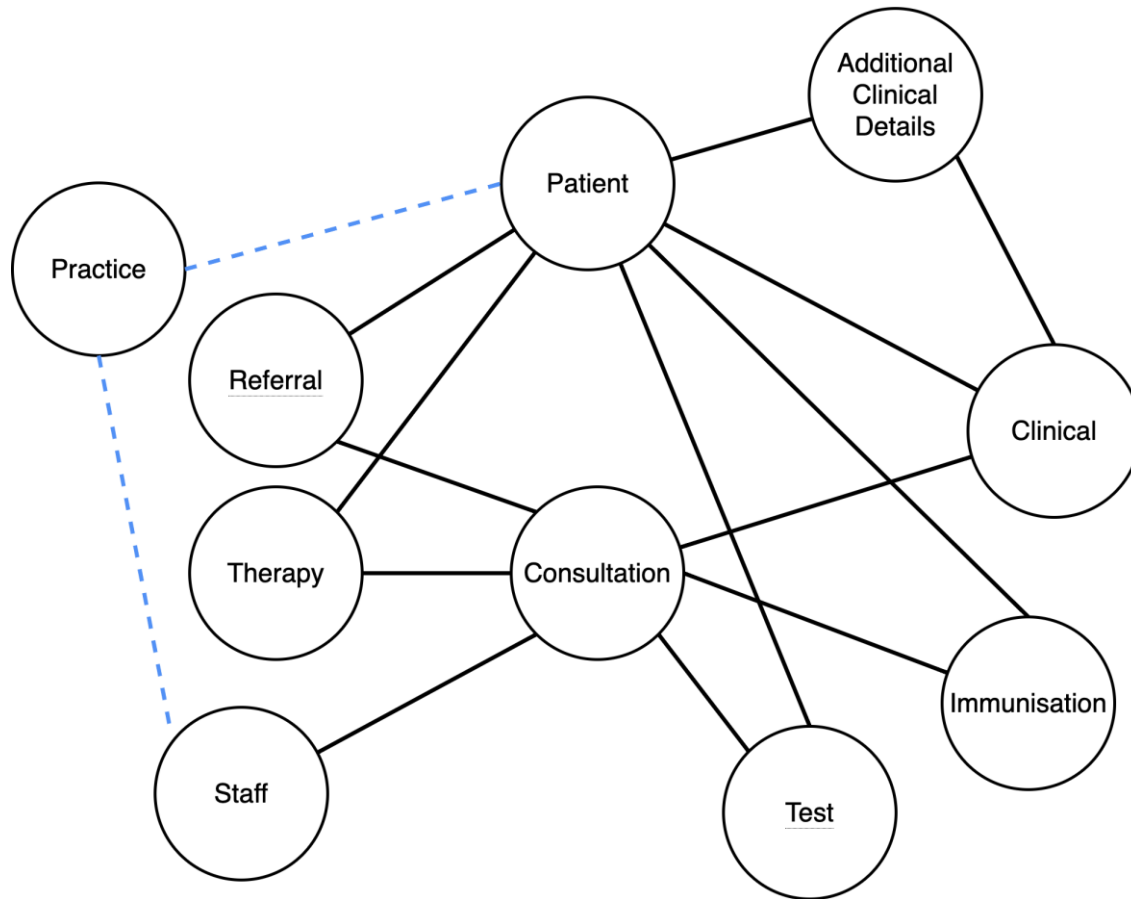


# Aim

Assess the risks and benefits to mothers and neonates associated with the discontinuation of maternal drug prescriptions for the treatment of chronic hypertension and hypothyroidism.



# Methods: UK Clinical Practice Research Datalink GOLD



— Direct dataset relation through patient or staff identifiers

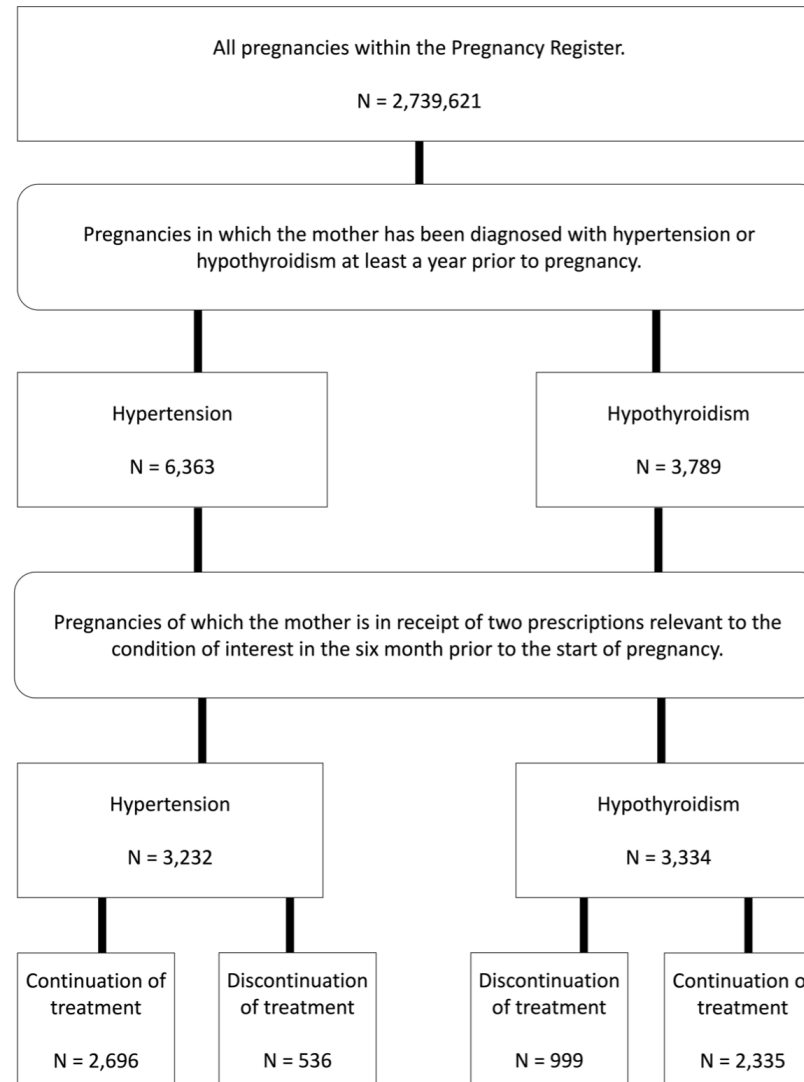
- - - Dataset relation possible through derived IDs e.g. practice identifier

# Methods: Analysis plan

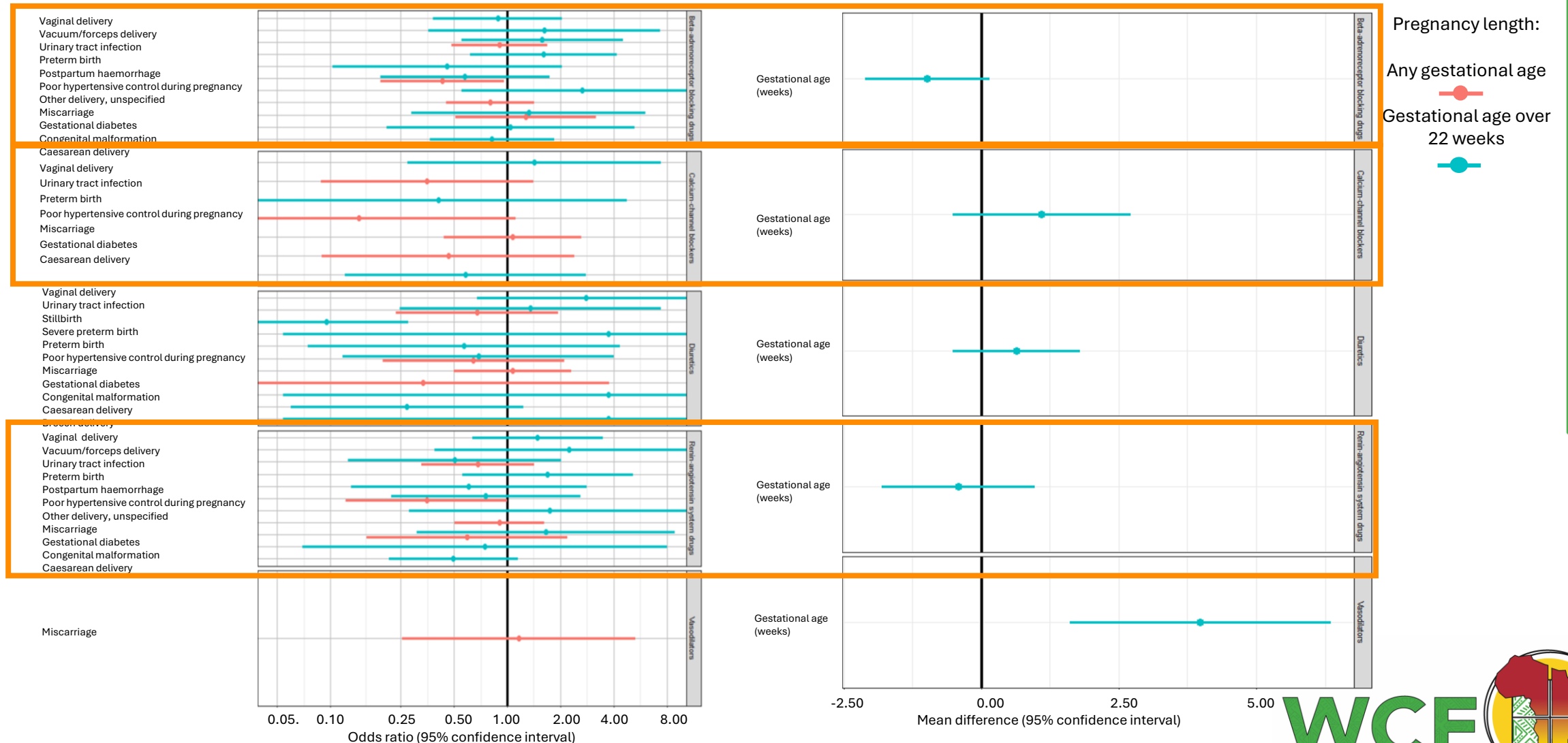
- ❖ **Study population:** UK Clinical Practice Research Datalink GOLD.
- ❖ **Cohorts:** pregnant mothers with chronic hypertension, pregnant mothers with chronic hypothyroidism, linked offspring of mothers.
- ❖ **Exposures:** Maternal treatment discontinuation.
- ❖ **Outcomes:** method of delivery, the incidence of urinary tract infection (UTI), postpartum haemorrhage, poor hypertensive control during pregnancy, miscarriage, poor thyroid control during pregnancy and gestational diabetes mellitus, stillbirth (neonatal death after week 24 of gestation), severe preterm birth (birth between 22 and 37 weeks of gestation), preterm birth (a birth between weeks 37-40 of gestation), gestational age and congenital malformation.
- ❖ **Statistical analysis methods:** multivariable regression models adjusted for covariates.
- ❖ **Sensitivity analysis:** propensity score regression, trimmed propensity score regression.
- ❖ **Protocol paper:** available on Wellcome Open



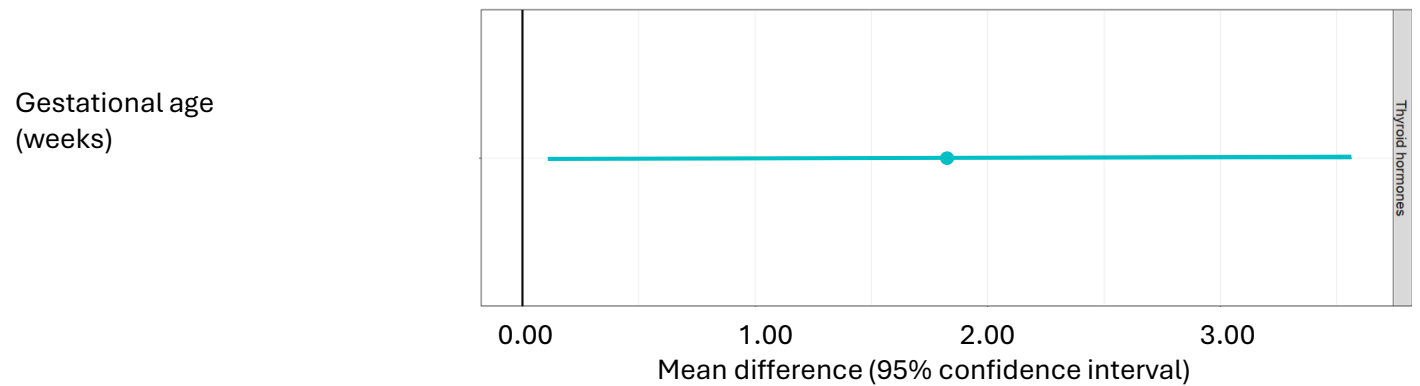
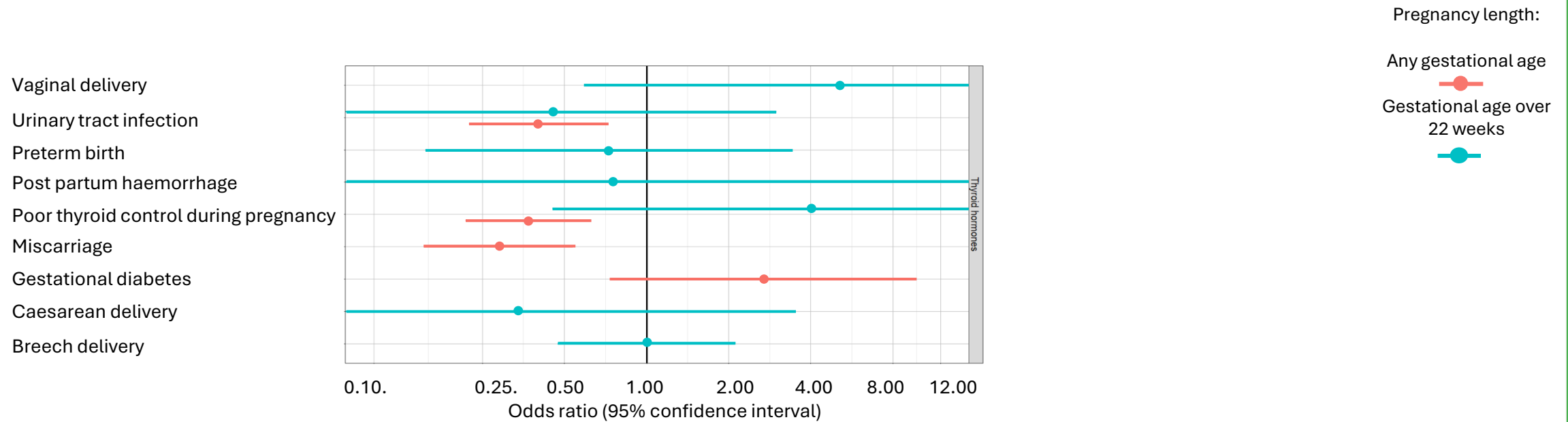
# Results: cohort derivation



# Results: main analysis, hypertensive medication



# Results: main analysis, hypothyroid medication





# Discussion

- This study reports a reassuring lack of association between the discontinuation of many drug subclasses and maternal and neonatal outcomes.
- Study estimates were imprecise
- Dataset
- Confounding by indication
- Unable to assess all outcomes outlined in the protocol
- Preprint available on medRxiv

