

# A pharmacoepidemiological study of maternal prescriptive drug use: the risks and benefits to mothers and neonates

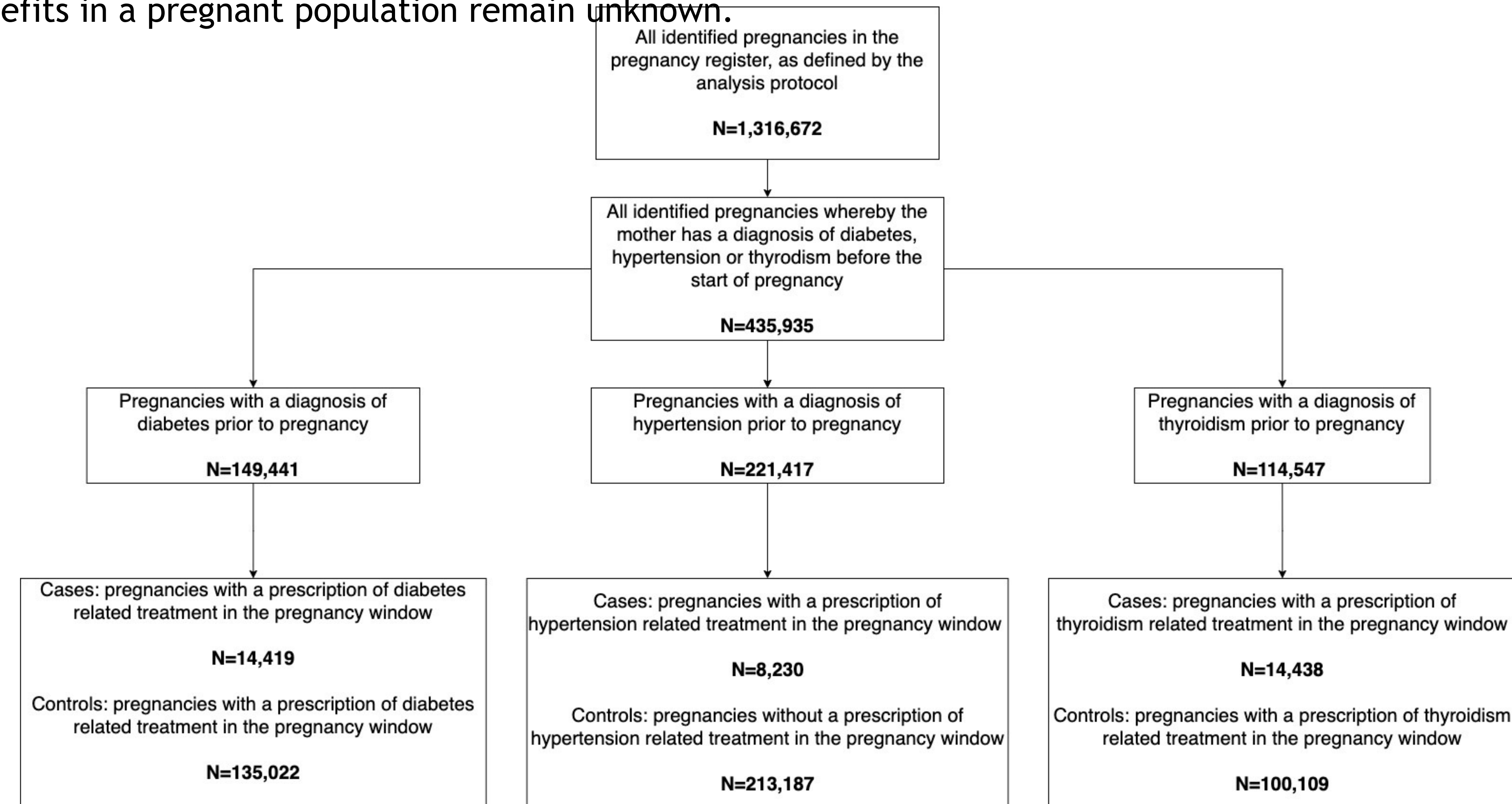
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Pregnant women are largely excluded from clinical trials due to concerns over foetal harm.

However, profound physiologic changes during pregnancy alter the pharmacokinetics of many drugs.

Therefore, effects determined in a non-pregnant clinical trial cannot be extrapolated with certainty and the risks and benefits in a pregnant population remain unknown.



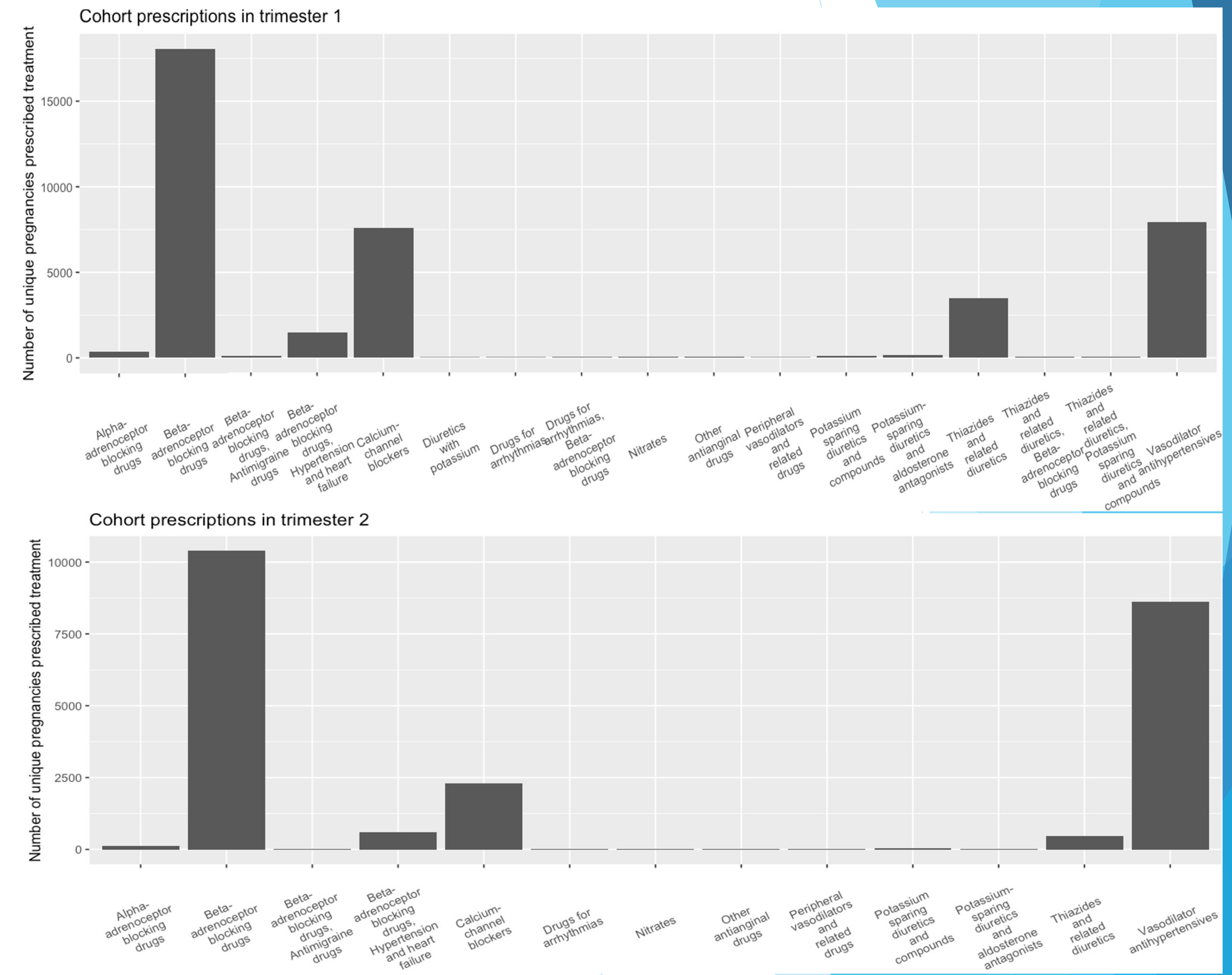
## Aims:

- 1) To assess current prescribing patterns and trends within pregnancy for the treatment of diabetes, hypertension and thyroid disorders.
- 2) To estimate the effect of continuing prescriptions for medication to treat these conditions on maternal health outcomes.
- 3) To determine whether there is an associated increased risk of adverse neonatal outcomes after continued prescription of treatment for the listed conditions throughout pregnancy.

## Methods:

Conduct an intergenerational hypothesis testing cohort study of maternal prescriptive drug use on maternal and neonatal outcomes, using data from the Clinical Practice Research Datalink (CPRD). Full protocol: <https://doi.org/10.12688/wellcomeopenres.17523.1>

## Results:



**Next steps:** Apply multiple statistical methods such as linear or logistic multivariable adjusted regression, propensity score regression, instrumental variables analysis and a negative control analysis to determine associative relationships and assess the extent of confounding,

