**Supplementary Figure S1**: Flow chart summarising exclusions from analysis

585,291

Births recorded

472,771

Births meeting labour/birth criteria

428,742

Births eligible for analysis

302,137

Births eligible for analysis with non-missing data

112,520 Exclusions not meeting criteria for labour/ birth:

67,910 No gestational age recorded (early miscarriage/ moved away)

1,489 Gestational age <24w (late miscarriage)

43,121 Births without labour (CS prior to labour onset)

44,029 Exclusions due to high-risk with different clinical management\*:

29,022 Gestational age <37w (pre-term)

671 Gestational age >42w (post-term)

9,658 Multiple pregnancies

13,494 Breech/non-vertex presentation

95,847 Exclusions from complete-case analysis\*:

1,744 Missing outcome (Apgar/ resus/ death\*\*)

81,130 Missing BMI

13,505 Missing other risk factor

22,507 Emergency CS with no missing data

8,251 Emergency CS with missing data

397,984

Non-emergency CS births eligible for analysis

\* breakdown exceeds total exclusions due to some labours having combinations of these

\*\* missing at least one outcome component; BMI: Body mass index, CS: Caesarean section