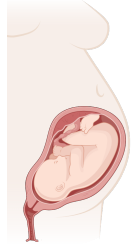


Study Cohort



Genotype

Genome sequencing from NIPT
N=121,579



Phenotypes

Blood lipid & Glycemic (N=8)
Blood routine (N=32)
Infection (N=14)
Liver, Kidney & Thyroid function (N=15)
Tang & NIPT screen (N=19)

Basic information (N=7)
Birth outcome (N=6)
Gestational disorders (N=21)

Genetic association

Baoan
(N=50,963)

meta

Longgang
(N=70,616)

5,027 independent
signals in 3,845 loci

Consistency
Baoan vs Longgang
(N=121,579)

External replication
NIPT PLUS (N=5,733)
Baoan 20K (N=20,891)

Genome-wide association study

24 gestational phenotypes with
multiple measurements in 5 periods

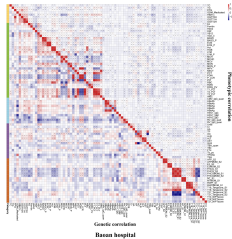
TrajGWAS

localized association

GWAS of longitudinal trajectories

Post-GWAS

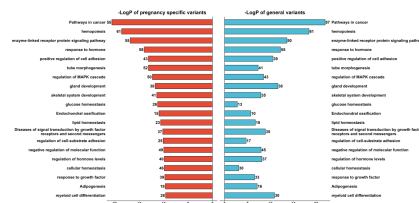
Heritability & Correlation



LDSC

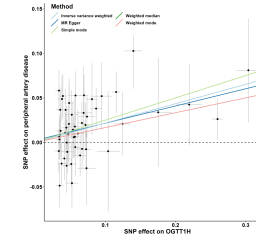
Up to 44% heritability

Different variant analysis



Genetic
difference

Mendelian randomization



TwoSample MR
&
Multivariable MR

Future health