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Supplemental information

Intergenerational association of gut microbiota and metabolism with perinatal folate metabolism and neural tube defects

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Supplemental Figures

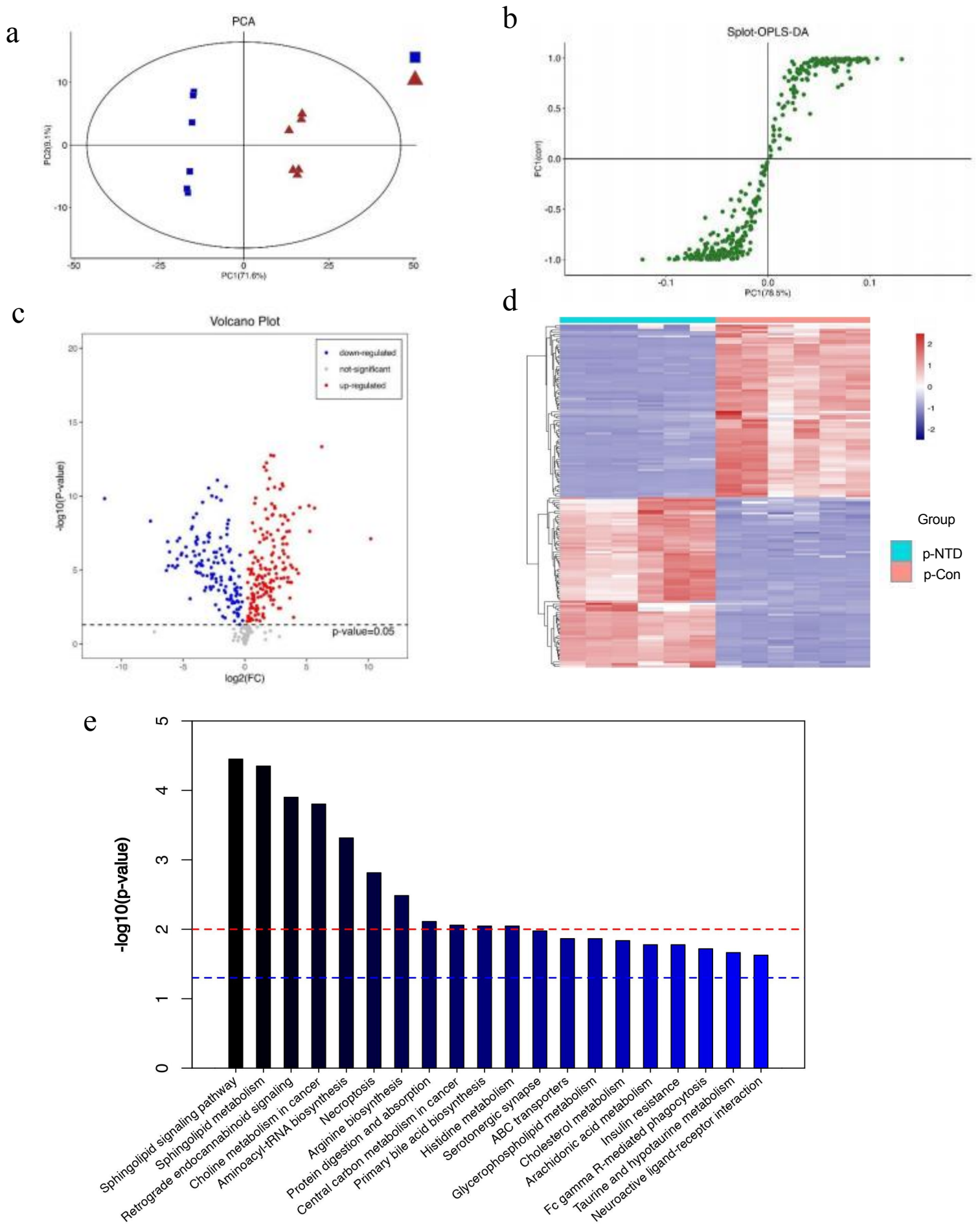


Fig S1. Fecal metabolic profile of pregnant mice (GC-MS), Related to Figure 4.

(a-b) PCA and OPLS-DA analysis to the overall distribution and stability of each sample. (c) Volcano plots of all differential metabolites between two groups. (d) Heat map of differential metabolites. (e) Functional clustering of differential metabolites.

a

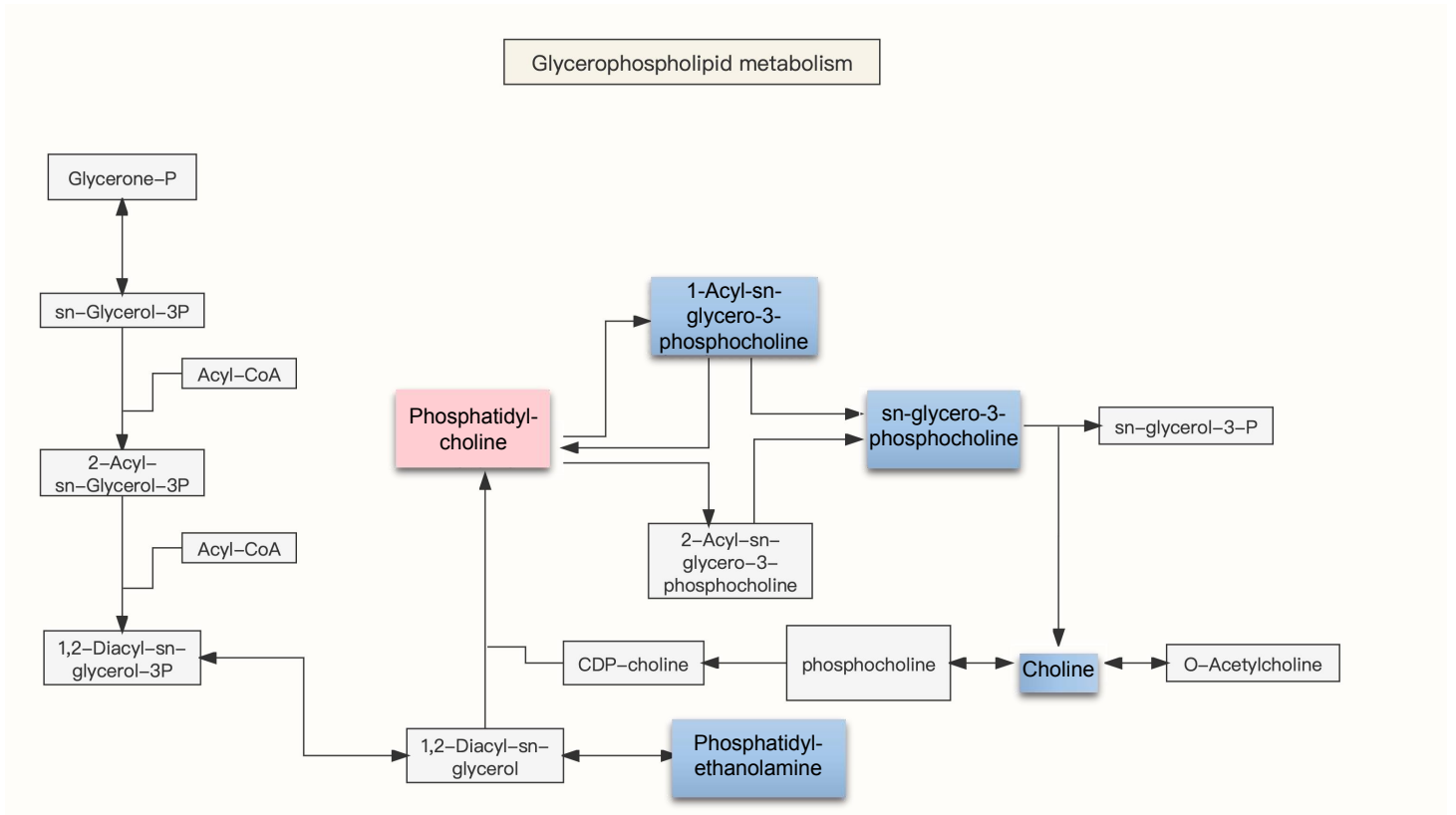


Fig S2. Glycerophospholipid metabolism pathway, Related to Figure 4.

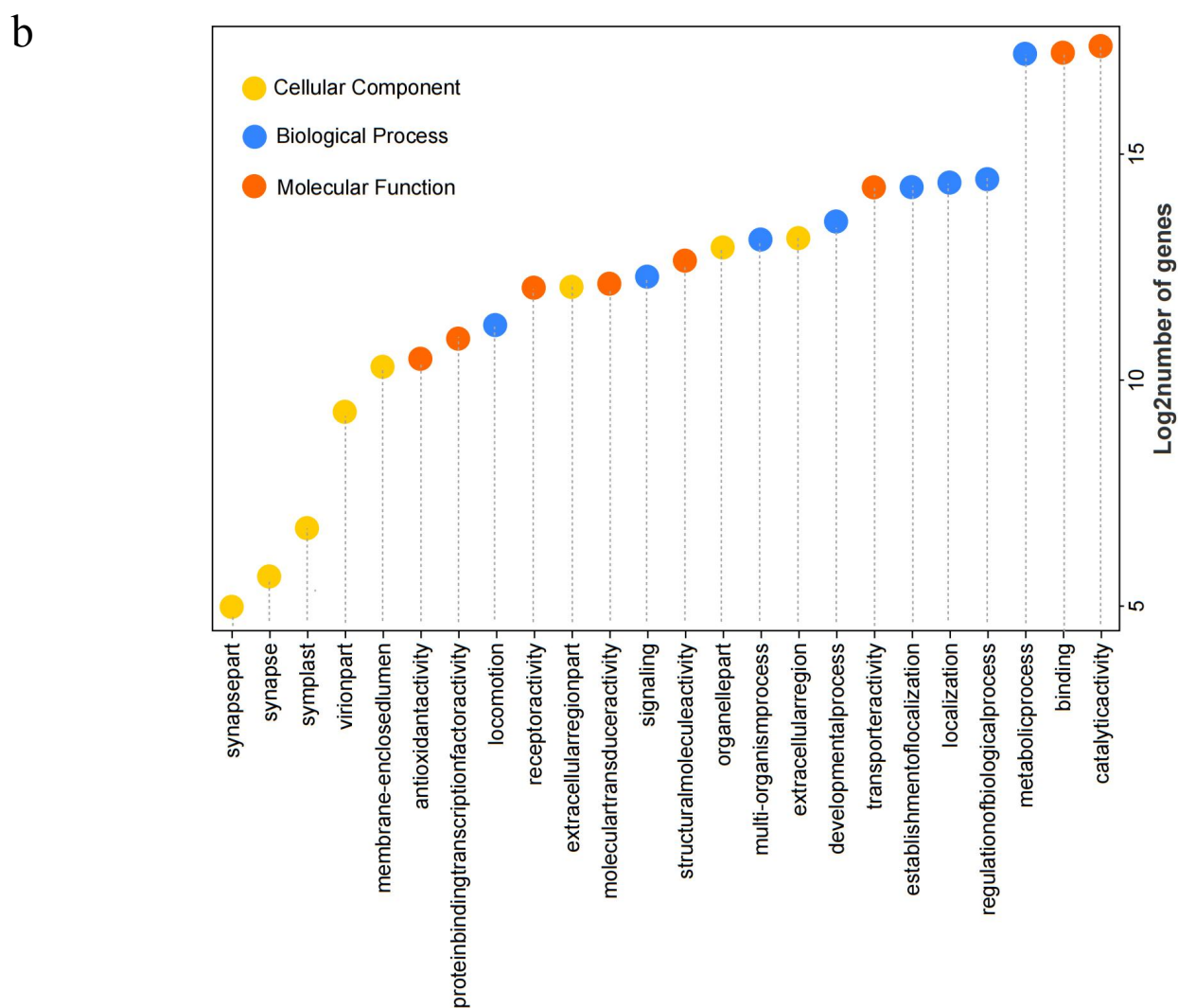
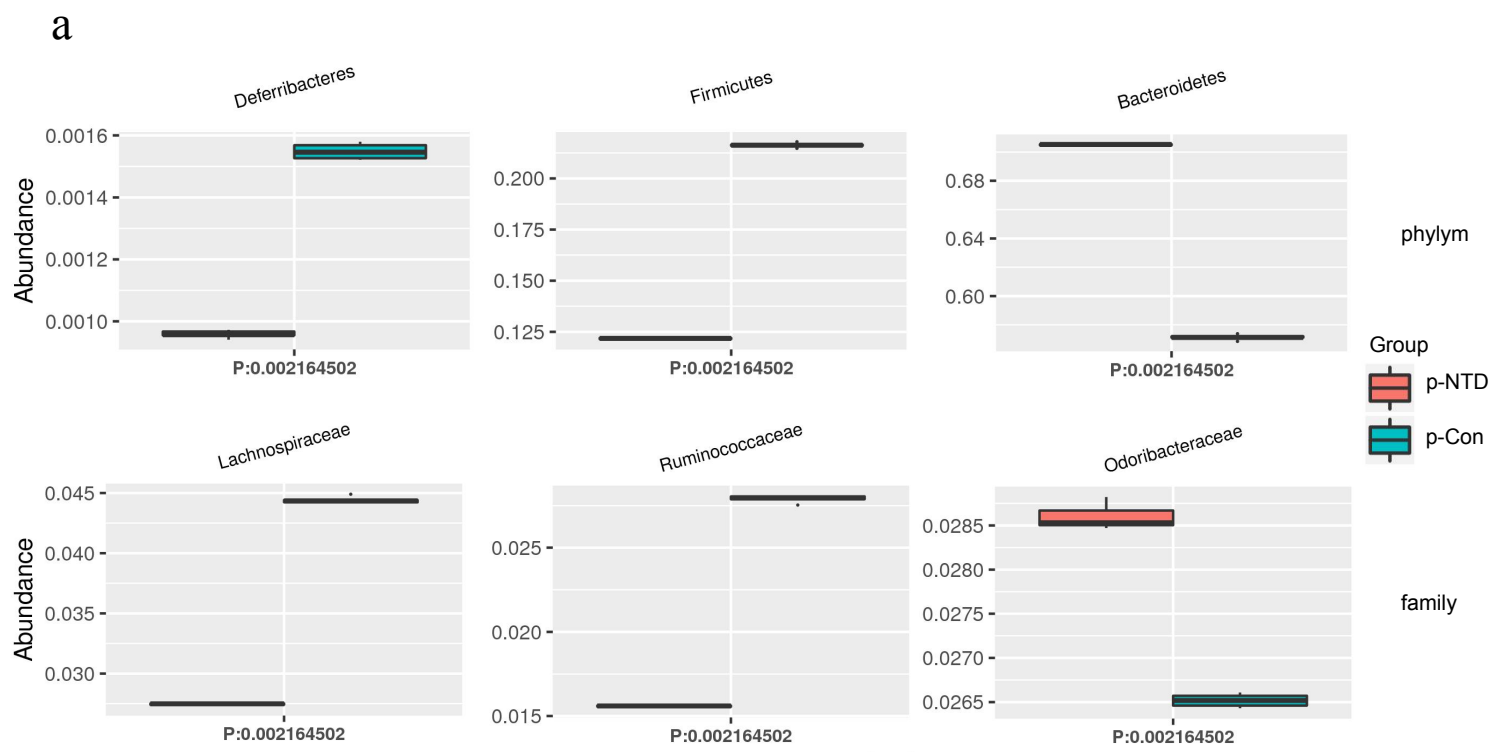
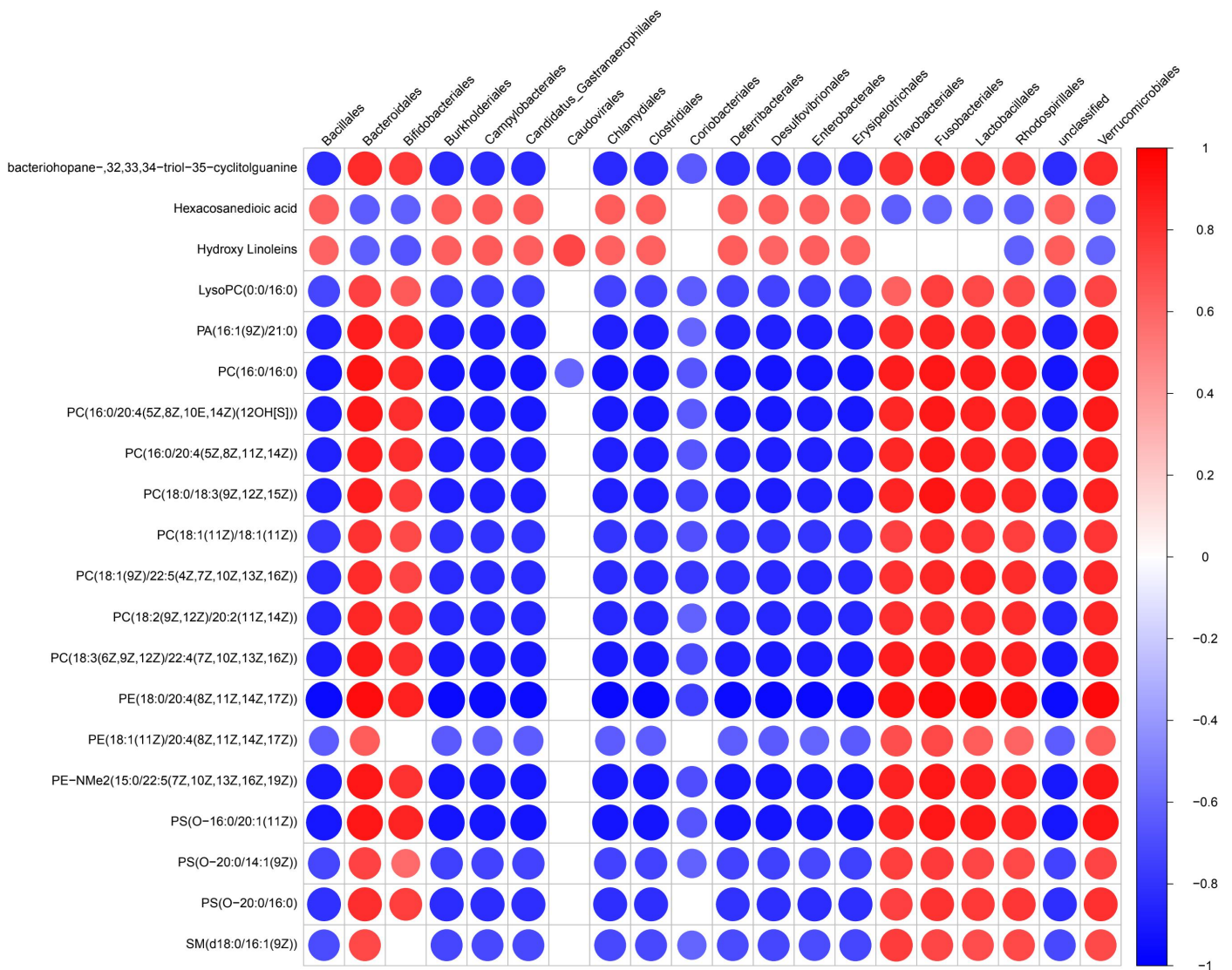


Fig S3. Differential microbial community analysis of pregnant mice feces , Related to Figure5

(a) The differential microbial community at the phylum and family level. (b) The different functional terms of Cellular Component, Molecular Function, and Biological Process in gene ontologies (GO) between p-Con and p-NTD groups.

a



b

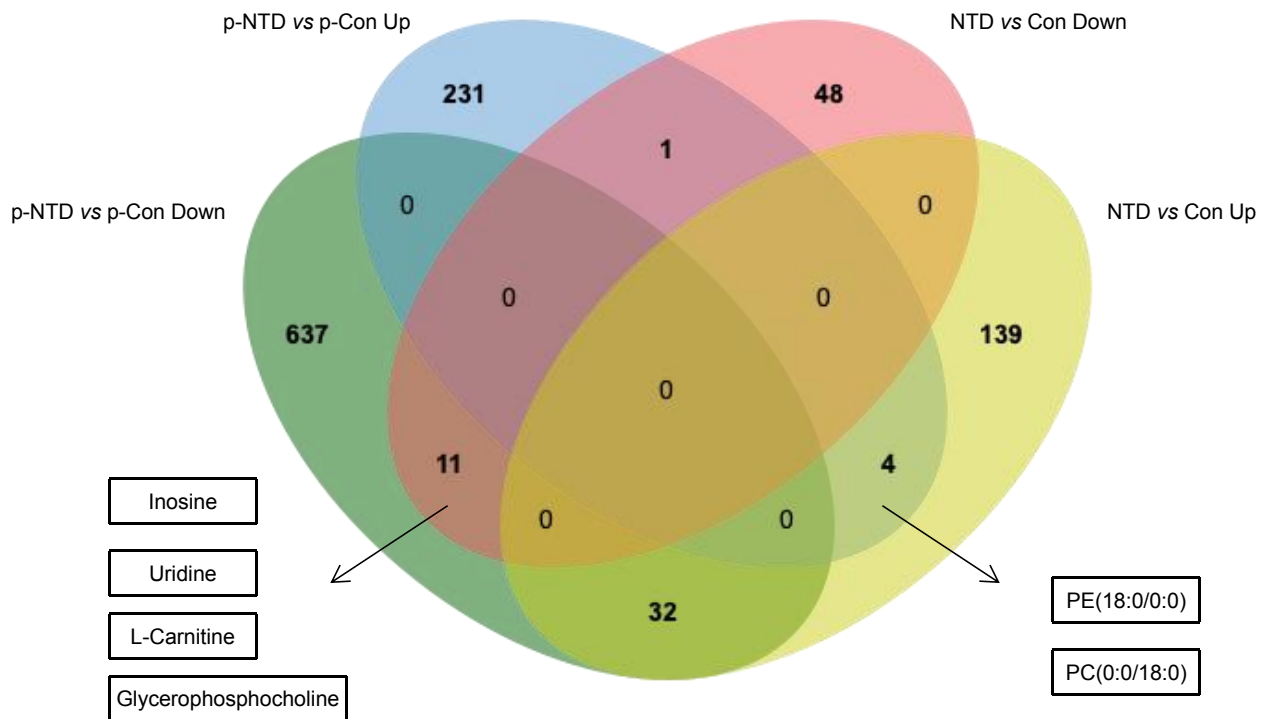


Fig S4. Correlation between mouse brain metabolites and maternal microbiota, Related to Figure 6. (a) Association heatmap of metabolism and gut microbiota in pregnant mice (order level). (b) A metabolomic Venn diagram of maternal and fetal mice.