**Supplementary data**

Supplementary figure 1. Unsupervised PCA analysis of overall metabolomic profiles by exposure (control, glyphosate or roundup) in rat female and male pups.



Supplementary table 1. Compare the levels of metabolites in different exposure groups in dams. The p-values were obtained from non-parametric Wilcoxon test. The VIP scores were obtained from PLS-DA analysis. P-value1 and VIP1 are for comparison between Glyphosate and control; P-value2 and VIP2 are for comparison between Roundup and control; P-value3 and VIP3 are for comparison between Glyphosate and Roundup.

Supplementary table 2. Compare the levels of metabolites in different exposure groups in female pups. The p-values were obtained from non-parametric Wilcoxon test. The VIP scores were obtained from PLS-DA analysis. P-value1 and VIP1 are for comparison between Glyphosate and control; P-value2 and VIP2 are for comparison between Roundup and control; P-value3 and VIP3 are for comparison between Glyphosate and Roundup.

Supplementary table 3. Compare the levels of metabolites in different exposure groups in male pups. The p-values were obtained from non-parametric Wilcoxon test. The VIP scores were obtained from PLS-DA analysis. P-value1 and VIP1 are for comparison between Glyphosate and control; P-value2 and VIP2 are for comparison between Roundup and control; P-value3 and VIP3 are for comparison between Glyphosate and Roundup.

Supplementary table 4. Feature selection using random forest Boruta method. The p-values were obtained from non-parametric Wilcoxon test. The VIP scores were obtained from PLS-DA analysis. P-value1 and VIP1 are for comparison between Glyphosate and control; P-value2 and VIP2 are for comparison between Roundup and control; P-value3 and VIP3 are for comparison between Glyphosate and Roundup.