**SUPPLEMENTARY FIGURES**



**Supplementary figure 1**

Hierarchical clustering analysis of all samples. Pre-CIRT is green (n=15) and post-CIRT is red (n=15)



**Supplementary figure 2**

Identified compound within the pathway of biotin metabolism, D-Glutamine and D-glutamate metabolism, pantothenate and CoA biosynthesis, alanine, aspartate and glutamate metabolism. Light blue means those metabolites are not in our data and are used as background for enrichment analysis; other colors (varying from yellow to red) means the metabolites are in the data with different levels of significance.



**Supplementary figure 3**

Identified compound within the pathway of glutathione metabolism, cysteine and methionine metabolism. Light blue means those metabolites are not in our data and are used as background for enrichment analysis; other colors (varying from yellow to red) means the metabolites are in the data with different levels of significance.