## **Supplementary Information**

# Role of multi-omics to understand host-pathogen interaction in COVID-19 pathogenesis

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## **Supplementary Tables**

Table S1: List of altered proteins in COVID-19 positive patients from published research articles and information for metadata analysis

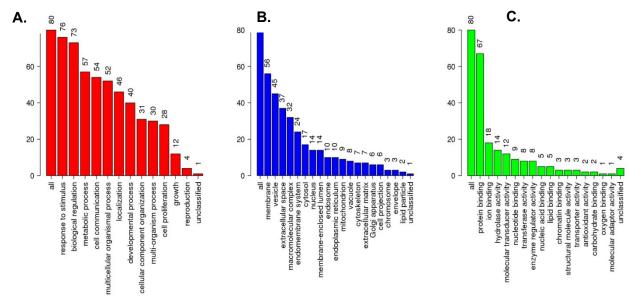
Table S2: List of altered metabolites in COVID-19 positive patients from published research articles and information for metadata analysis

# **Supplementary Figures**

Figure S1: Gene ontology analysis of the altered proteins in COVID-19 positive patients

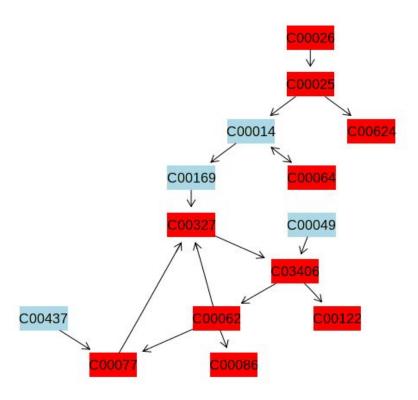
Figure S2: Altered metabolites mapped on altered pathways in SARS-CoV2 host

Figure S3: Inter-mapped significant metabolites and proteins pathways

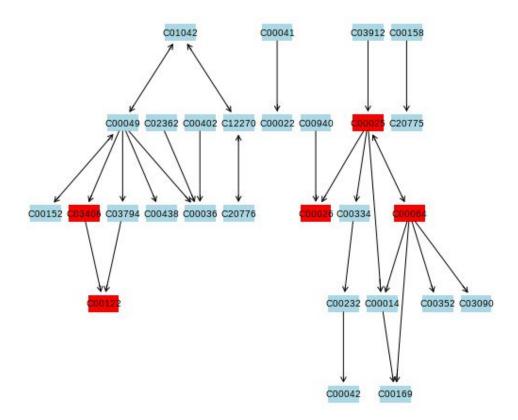


**Figure S1:** Gene ontology analysis of the altered proteins in COVID-19 positive patients, A. represents the bar chart of biological process categories, B. represents the bar chart of Cellular Component categories and C. represents the bar chart of Function categories

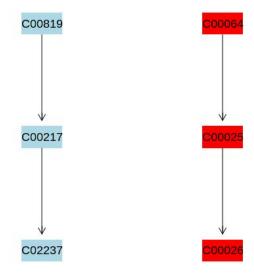
#### A. Arginine biosynthesis



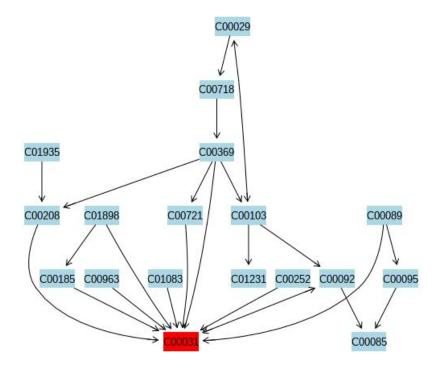
# B. Alanine, aspartate and glutamate metabolism



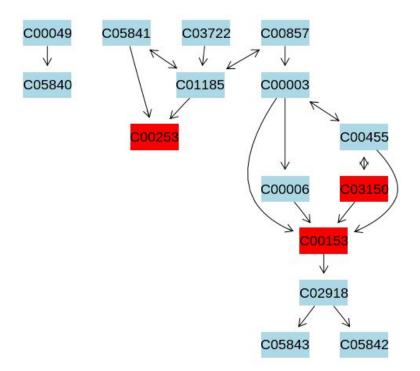
# C. D-Glutamine and D-glutamate metabolism

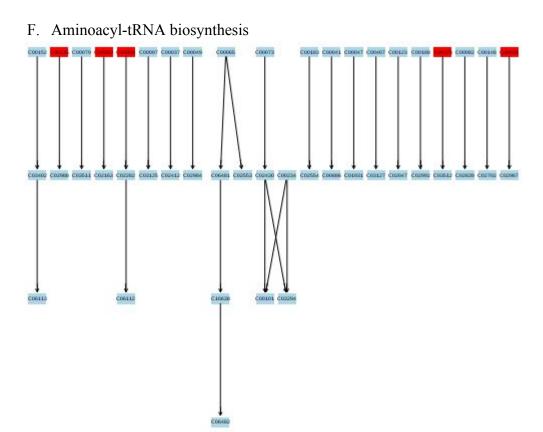


#### D. Starch and sucrose metabolism

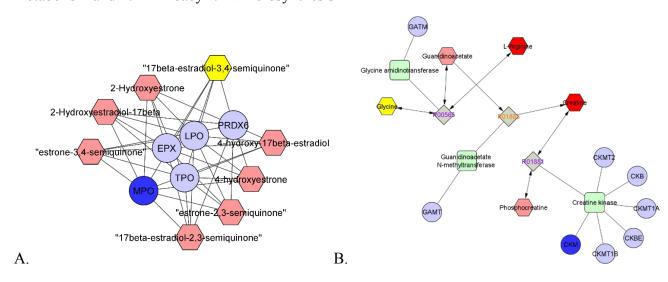


## E. Nicotinate and nicotinamide metabolism

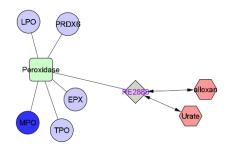


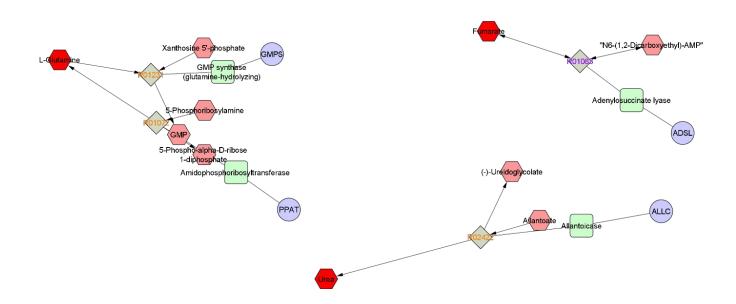


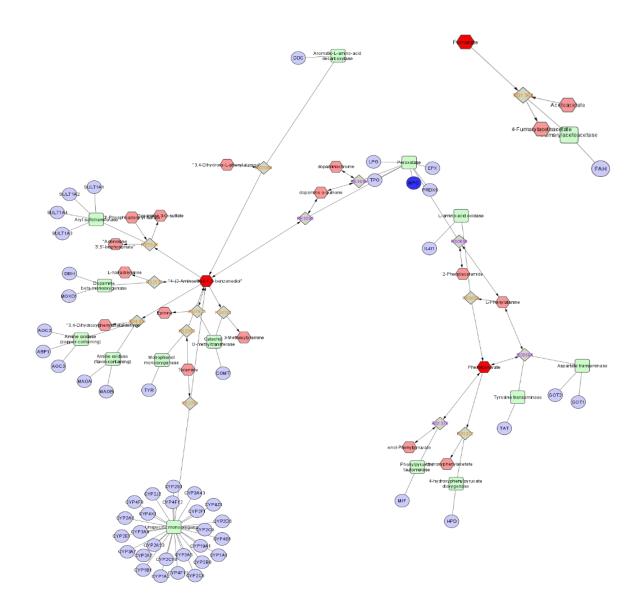
**Figure S2:** Altered metabolites mapped on altered pathways in SARS-CoV2 host, A. Arginine biosynthesis, B. Alanine, aspartate and glutamate metabolism, C. D-Glutamine and D-glutamate metabolism, D. Starch and sucrose metabolism, E. Nicotinate and nicotinamide metabolism and F. Aminoacyl-tRNA biosynthesis











D. Figure S3: Inter-mapped significant metabolites and proteins pathways. A. Androgen and estrogen biosynthesis and metabolism pathway; B. Glycine, serine, alanine and threonine metabolism pathway; C. purine metabolism pathway; D. tyrosine metabolism pathway based - interacting proteins and metabolites