

## **Supplementary materials**

### **Pivotal biomarker expression and drug screening in advanced ccRCC**

Wen Xiao, Ke Chen, Xiaoping Zhang\*

Department of Urology, Union Hospital, Tongji Medical College, Huazhong

University of Science and Technology, Wuhan 430022, China

### **Running head: Biomarker and drug screening in advanced ccRCC**

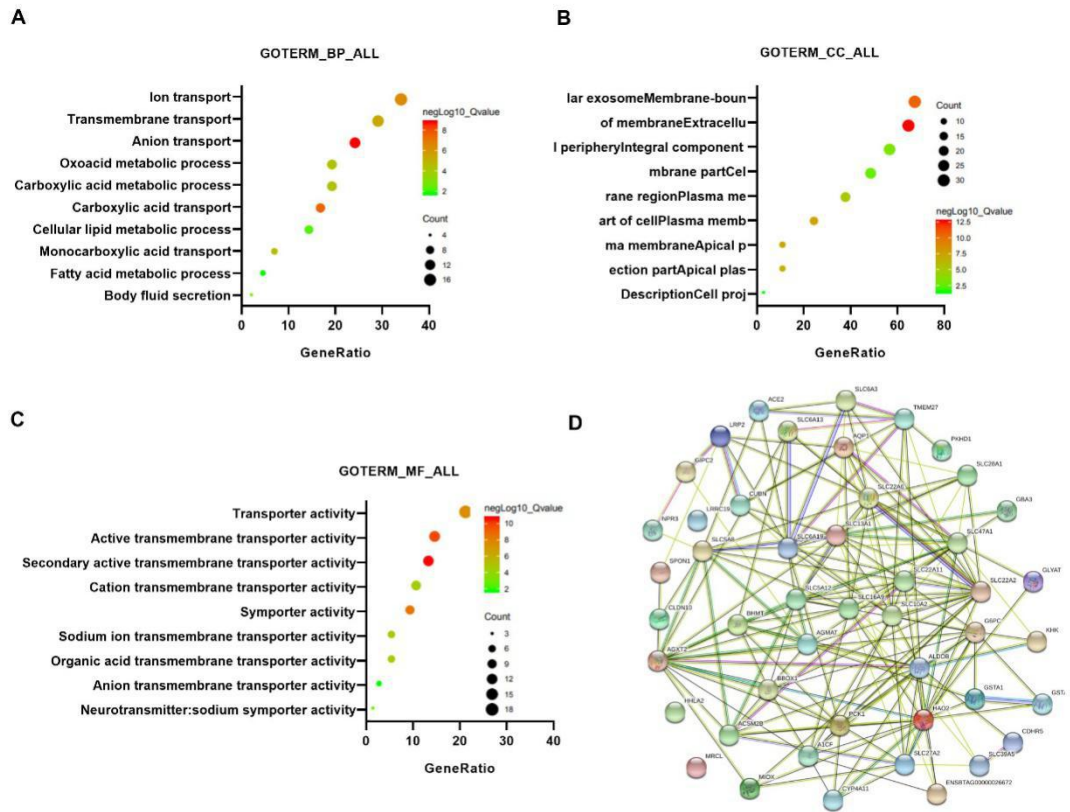
*Correspondence to:*

Xiaoping Zhang, Department of Urology, Union Hospital, Tongji Medical College, Huazhong

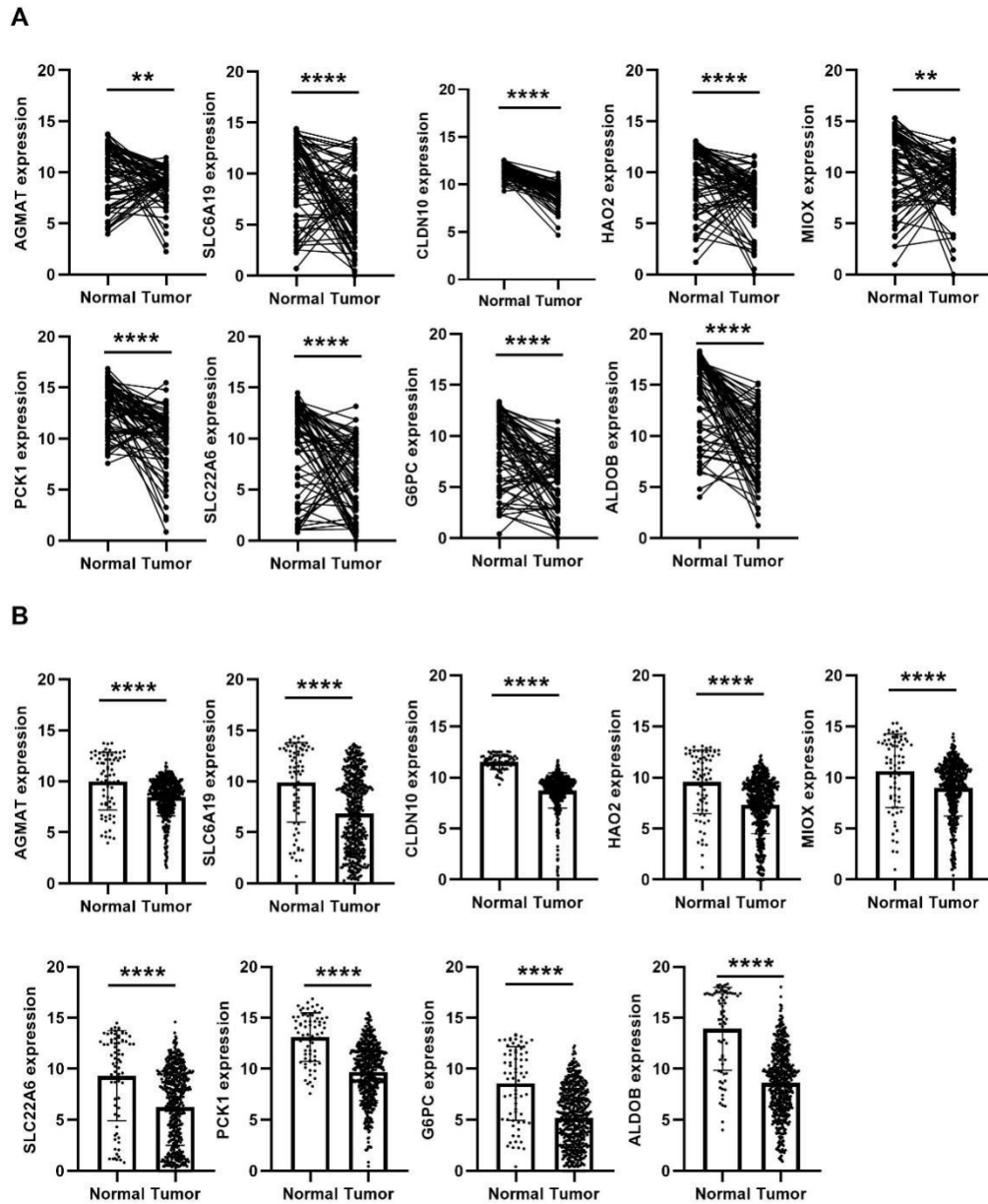
University of Science and Technology, 1277 Jiefang Avenue, Wuhan, Hubei Province,

430022(China). Phone: 86-18602752025; FAX number: 85776343; Email: [xzhang@hust.edu.cn](mailto:xzhang@hust.edu.cn).

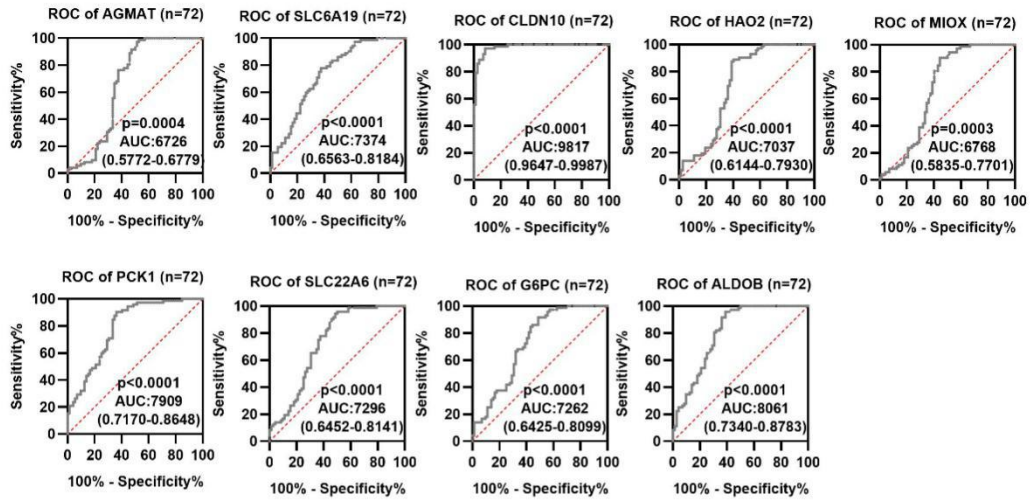
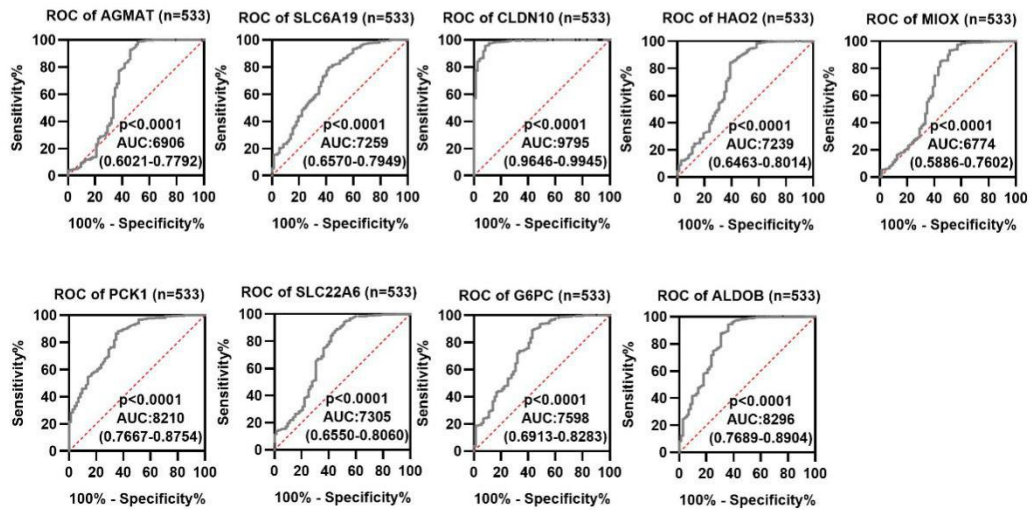
## Supplementary figure



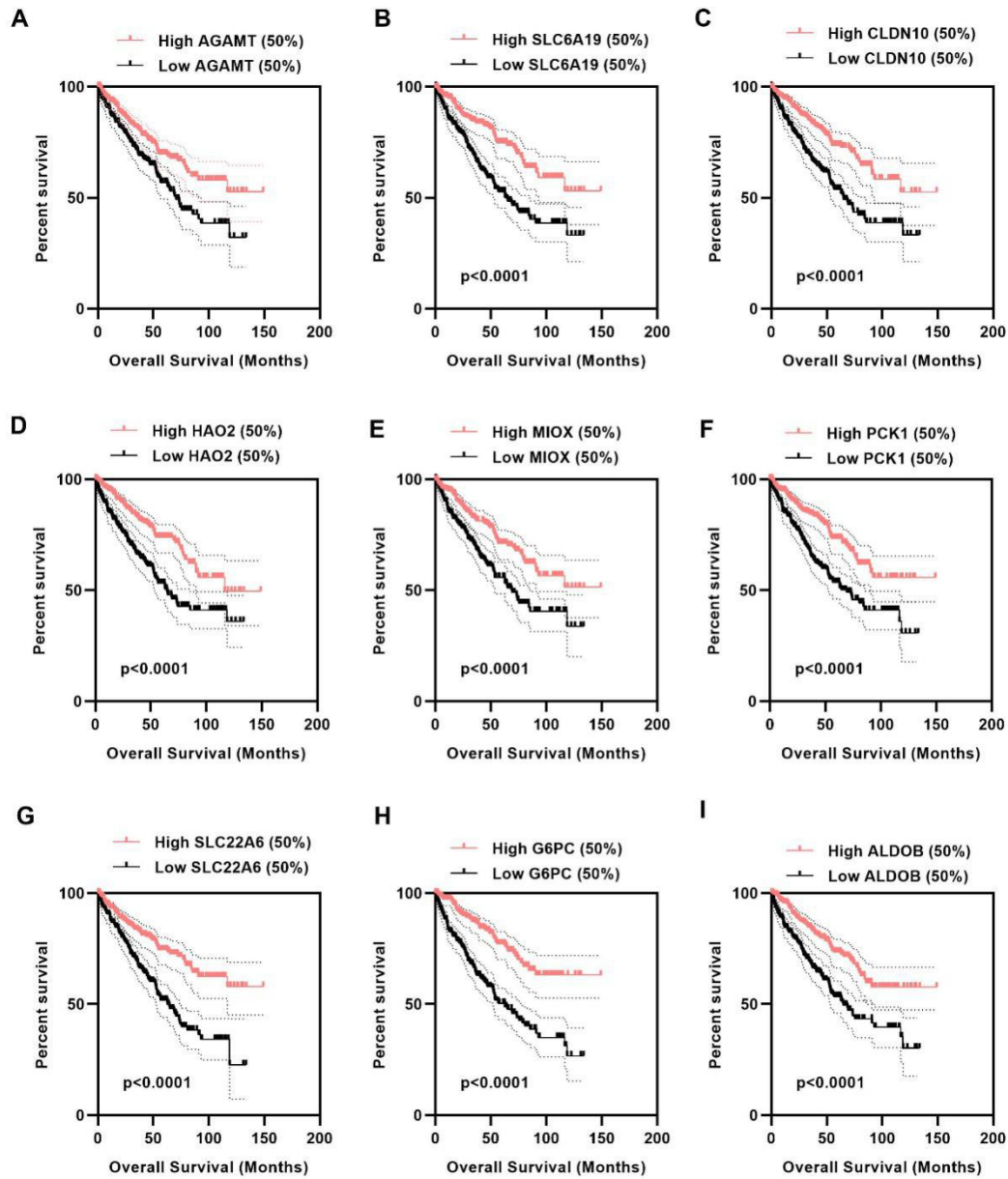
Supplementary Figure 1. Functional Enrichment and PPI Network Analysis. (A) –(C) The GO analysis of downregulated DEGs. (D) The PPI network of downregulated DEGs



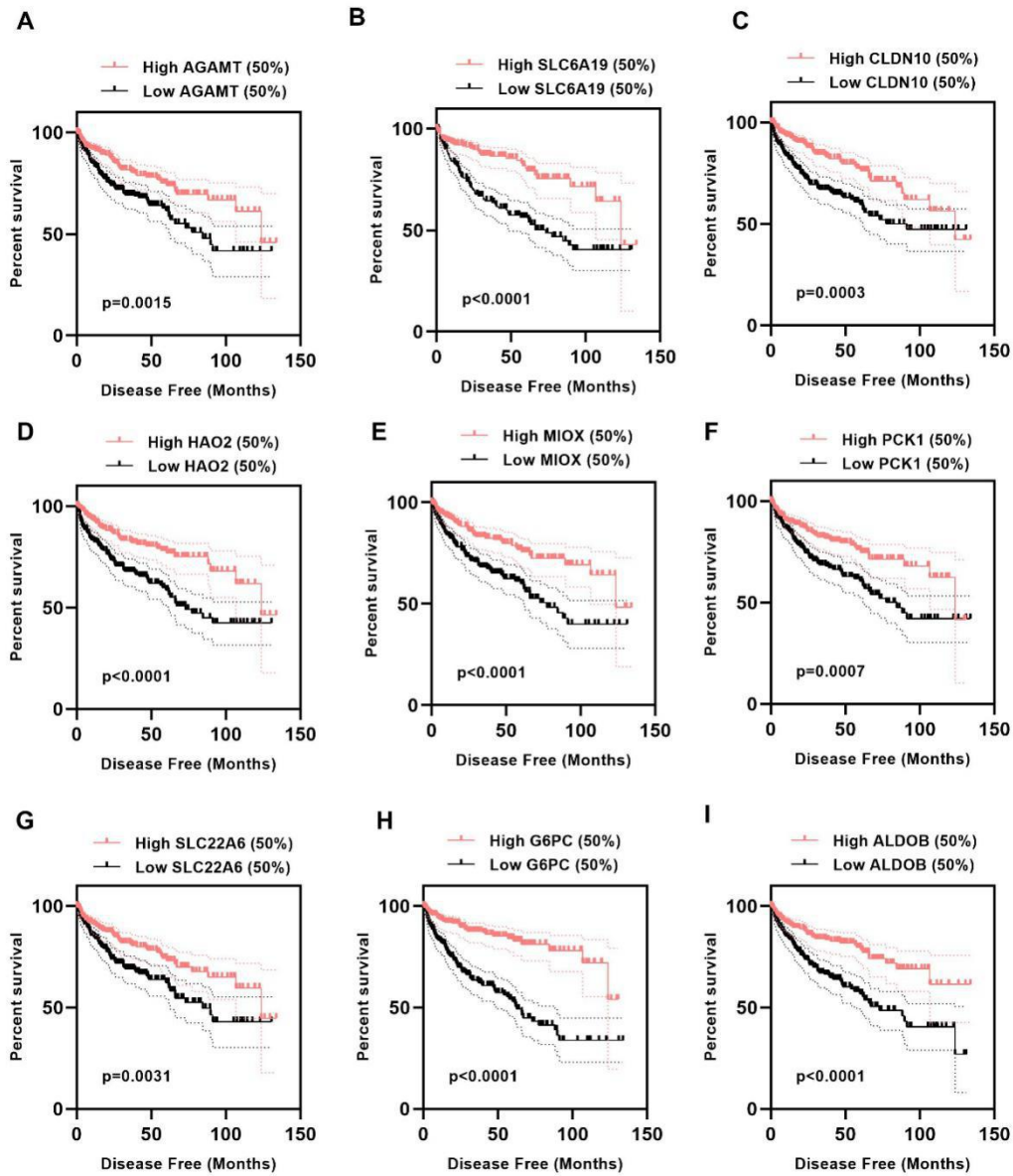
Supplementary Figure 2. Verification of 9 pivotal gene expression in total cases of ccRCC. (A) Expression of 9 pivotal genes in 72 matched normal and cancer tissues in TCGA-KIRC, (B) Expression of 9 pivotal genes in 72 normal and 533 cancer tissues in TCGA-KIRC. \*\* $P < 0.01$  and \*\*\*\* $P < 0.0001$ .

**A****B**

Supplementary Figure 3. Diagnostic efficiency of 9 pivotal genes in ccRCC. (A) ROC curve of AGMAT, SLC6A19, CLDN10, HAO2, MIOX, PCK1, SLC22A6, G6PC, ALDOB between 72 matched normal and cancer tissues in TCGA-KIRC. (B) ROC curve of AGMAT, SLC6A19, CLDN10, HAO2, MIOX, PCK1, SLC22A6, G6PC, ALDOB between 72 normal and 533 cancer tissues in TCGA-KIRC.



Supplementary Figure 4. The overall survival analysis of 9 pivotal genes in ccRCC. (A) AGMAT, (B) SLC6A19, (C) CLDN10, (D) HAO2, (E) MIOX, (F) PCK1, (G) SLC22A6, (H) G6PC, (I) ALDOB.



Supplementary Figure 5. The disease-free survival analysis of 9 pivotal genes in ccRCC. (A) AGMAT, (B) SLC6A19, (C) CLDN10, (D) HAO2, (E) MIOX, (F) PCK1, (G) SLC22A6, (H) G6PC, (I) ALDOB.