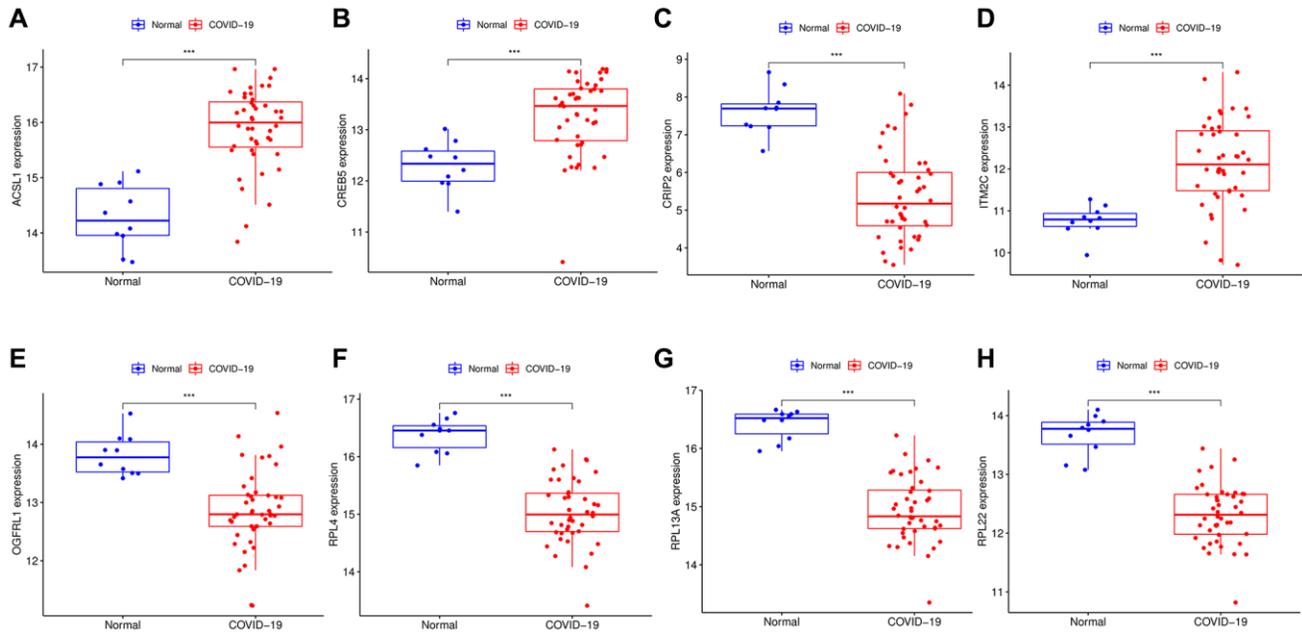
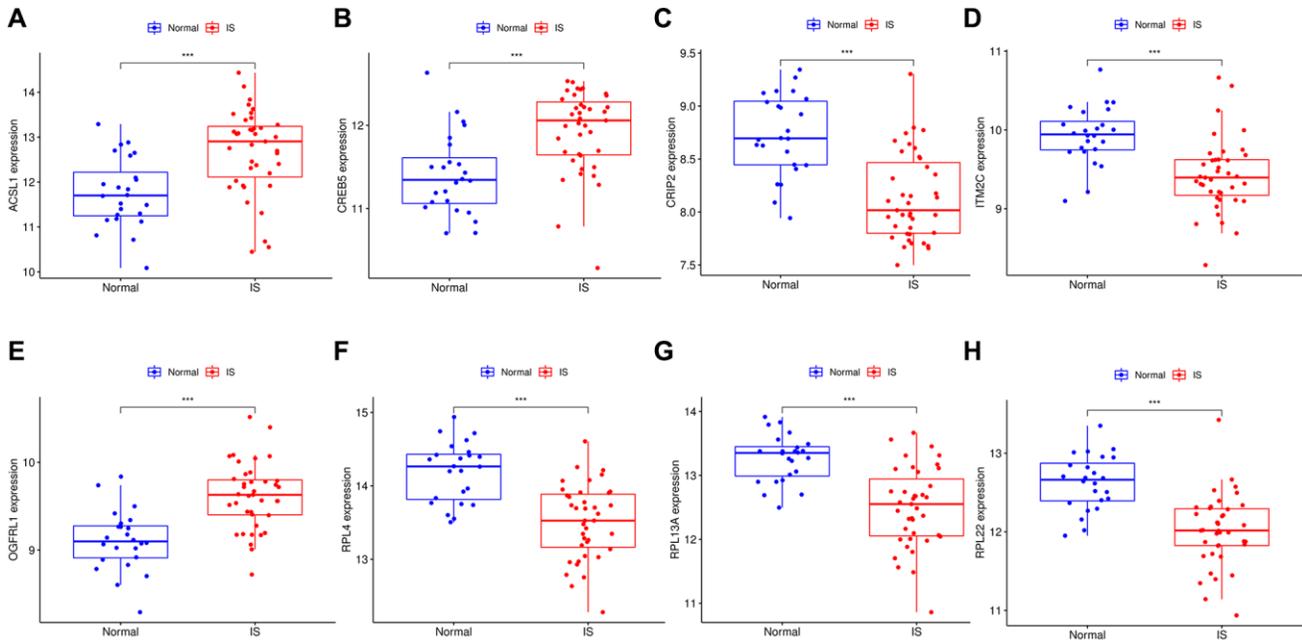


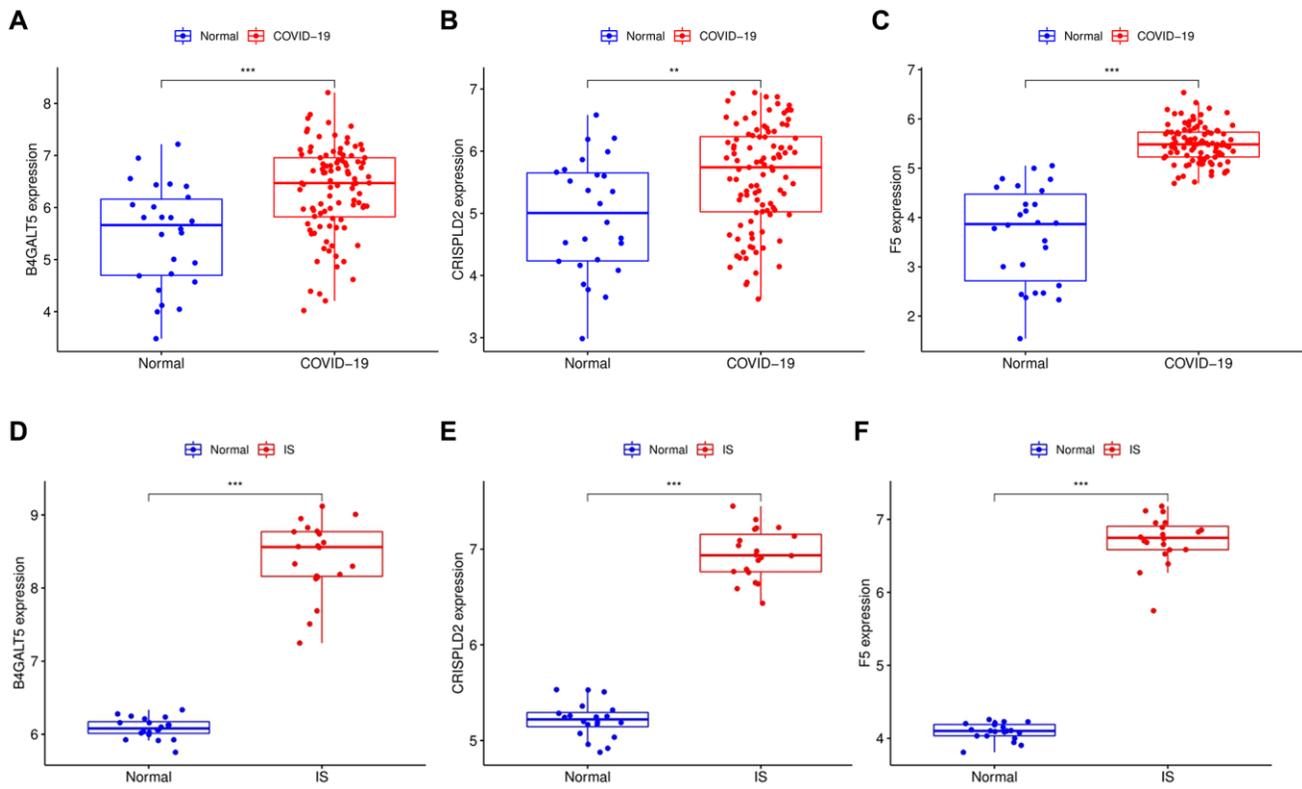
SUPPLEMENTARY FIGURES



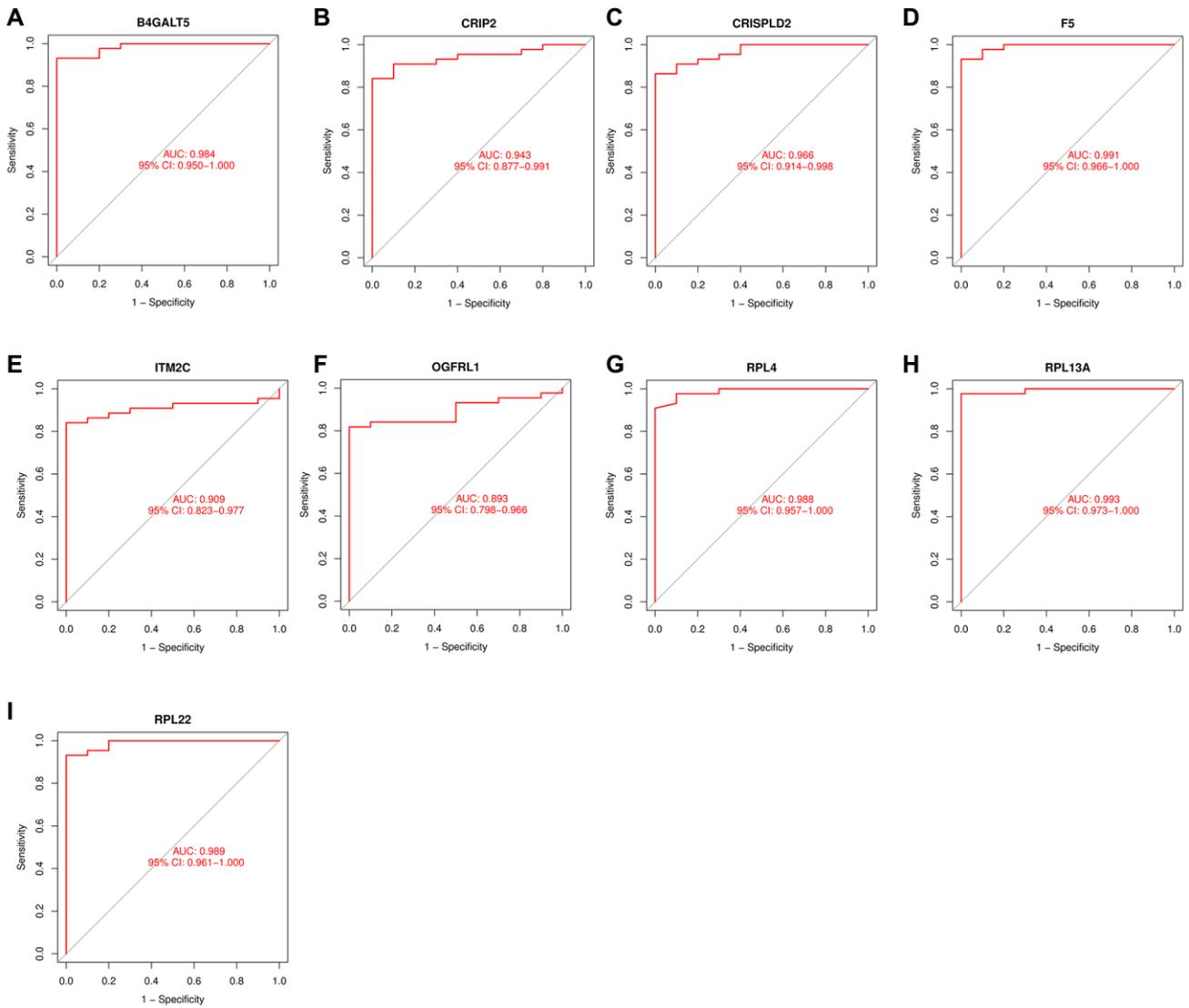
Supplementary Figure 1. Expression of hub genes in COVID-19 train cohort GSE171110. (A) The expression of ACSL1 in GSE171110. (B) The expression of CREB5 in GSE171110. (C) The expression of CRIP2 in GSE171110. (D) The expression of ITM2C in GSE171110. (E) The expression of OGFRL1 in GSE171110. (F) The expression of RPL4 in GSE171110. (G) The expression of RPL13A in GSE171110. (H) The expression of RPL22 in GSE171110.



Supplementary Figure 2. Expression of hub genes in IS train cohort GSE16561. (A) The expression of ACSL1 in GSE16561. (B) The expression of CREB5 in GSE16561. (C) The expression of CRIP2 in GSE16561. (D) The expression of ITM2C in GSE16561. (E) The expression of OGFRL1 in GSE16561. (F) The expression of RPL4 in GSE16561. (G) The expression of RPL13A in GSE16561. (H) The expression of RPL22 in GSE16561.



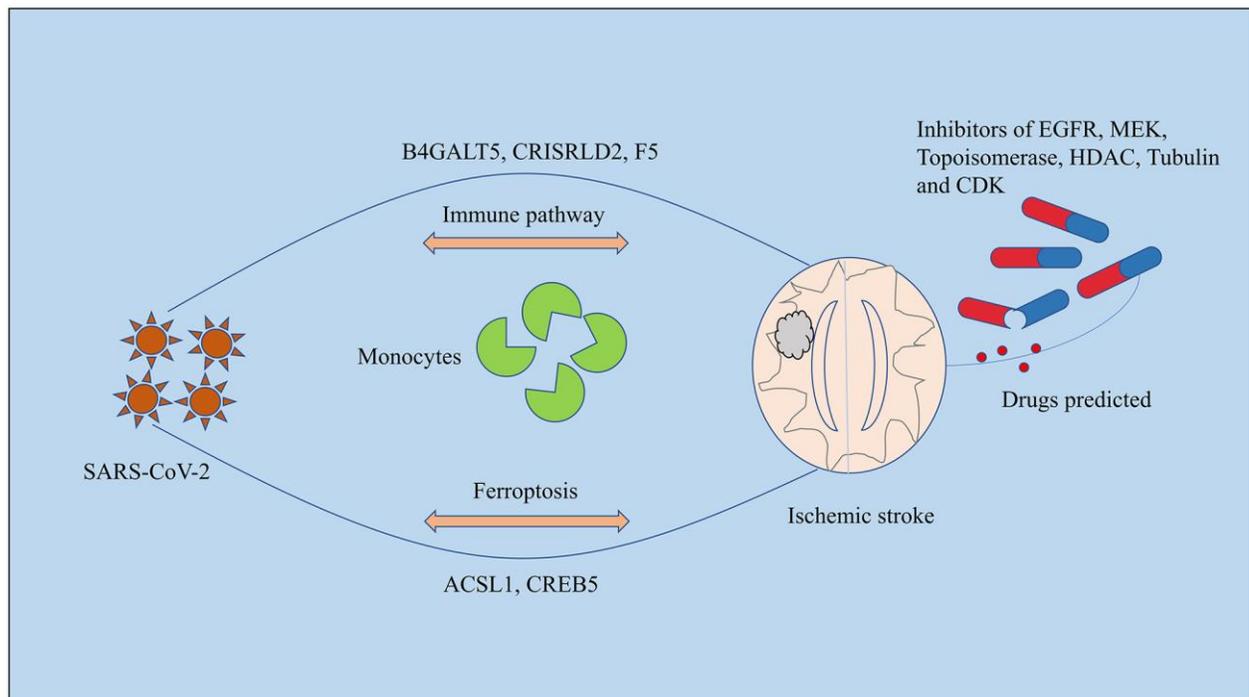
Supplementary Figure 3. Expression of hub genes in COVID-19 validation cohort GSE157103 and IS validation cohort GSE22255. (A) The expression of B4GALT5 in GSE157103. (B) The expression of CRISPLD2 in GSE157103. (C) The expression of F5 in GSE157103. (D) The expression of B4GALT5 in GSE22255. (E) The expression of CRISPLD2 in GSE22255. (F) The expression of F5 in GSE22255.



Supplementary Figure 4. ROC curves for hub genes in COVID-19 train cohort GSE171110. (A) The ROC curve of B4GALT5 in GSE171110. (B) The ROC curve of CRIP2 in GSE171110. (C) The ROC curve of CRISPLD2 in GSE171110. (D) The ROC curve of F5 in GSE171110. (E) The ROC curve of ITM2C in GSE171110. (F) The ROC curve of OGFRL1 in GSE171110. (G) The ROC curve of RPL4 in GSE171110. (H) The ROC curve of RPL13A in GSE171110. (I) The ROC curve of RPL22 in GSE171110.

Rank	Pert_iname	Moa	Target name	Fdr_q_nlog10	Norm_CS
1	ARRY-334543	EGFR inhibitor	ERBB2 EGFR ERBB4	15.6536	-1.9725
2	BIX-02189	MEK inhibitor	MAP2K5 MAPK7	15.6536	-1.9445
3	etoposide	Topoisomerase inhibitor	TOP2A TOP2B CYP2E1 CYP3A5	15.6536	-1.9418
4	SB-939	HDAC inhibitor	HDAC1 HDAC2 HDAC10 HDAC3 HDAC4 HDAC5 HDAC9	15.6536	-1.9247
5	cabazitaxel	Tubulin inhibitor	CYP2C8 CYP3A5 SLCO1B3 TUBA4A TUBB TUBB1	15.6536	-1.9246
6	amsacrine	Topoisomerase inhibitor	TOP2A KCNH2	15.6536	-1.906
7	amsacrine	Topoisomerase inhibitor	TOP2A KCNH2	15.6536	-1.9
8	docetaxel	Tubulin inhibitor	TUBB BCL2 MAP2 MAP4 MAPT NR1I2 TUBB1	15.6536	-1.8952
9	teniposide	Topoisomerase inhibitor	TOP2A CYP3A5 TOP2B	15.6536	-1.8803
10	palbociclib	CDK inhibitor	CDK4 CDK6 CCND3	15.6536	-1.8635

Supplementary Figure 5. Potential drugs for COVID-19 predicted by CMAP database.



Supplementary Figure 6. Schematic diagram of the research.