

Supplementary Table 4a: Degrees of the network node (drug or gene) based on gene-drug associations of COVID-19 drugs

Name	Type	Degree
ABCB1	Gene	25
ABCC1	Gene	4
ABCC2	Gene	4
ABCC4	Gene	2
ABCG2	Gene	7
ACE2	Gene	2
AGTR1	Gene	2
ALB	Gene	18
ALDH2	Gene	2
ANXA1	Gene	2
Acalabrutinib	Drug	3
Acetylcysteine	Drug	3
Apremilast	Drug	4
Azithromycin	Drug	3
BCHE	Gene	2
Baricitinib	Drug	11
Bevacizumab	Drug	4
CHRNA2	Gene	2
CHRNA3	Gene	2
CHRNA7	Gene	2
CHRNA4	Gene	2
CYP17A1	Gene	3
CYP1A1	Gene	6
CYP1A2	Gene	14
CYP1B1	Gene	2
CYP2A6	Gene	6
CYP2B6	Gene	10
CYP2C19	Gene	12
CYP2C8	Gene	13
CYP2C9	Gene	14
CYP2D6	Gene	12
CYP2E1	Gene	7
CYP3A4	Gene	32
CYP3A5	Gene	10
CYP3A7	Gene	5
Chlorhexidine	Drug	1
Chloroquine	Drug	9
Colchicine	Drug	6
Dapagliflozin	Drug	10
Darunavir	Drug	6
Deferoxamine	Drug	1
Dexamethasone	Drug	19
Disulfiram	Drug	4

Elbasvir	Drug	4
Enoxaparin	Drug	2
F10	Gene	2
FCGR1A	Gene	2
FCGR2A	Gene	2
FCGR2B	Gene	2
FCGR3A	Gene	2
FGF2	Gene	2
Famotidine	Drug	5
Favipiravir	Drug	7
Fingolimod	Drug	3
Fluoxetine	Drug	15
Fluvoxamine	Drug	10
GRIN3A	Gene	2
Heparin	Drug	3
Human interferon beta	Drug	3
Hydroxychloroquine	Drug	8
IFNAR1	Gene	2
IL6R	Gene	2
Ibuprofen	Drug	19
Interferon alfa-2b, recombinant	Drug	2
Isotretinoin	Drug	2
JAK1	Gene	3
JAK2	Gene	3
JAK3	Gene	2
KCNH2	Gene	3
Ketamine	Drug	11
Leflunomide	Drug	4
Lopinavir	Drug	11
Losartan	Drug	11
Metenkefalin	Drug	2
Methylprednisolone	Drug	11
NR1I2	Gene	2
NR3C1	Gene	3
Naltrexone	Drug	4
Naproxen	Drug	13
Nicotine	Drug	17
Nitric Oxide	Drug	4
OPRD1	Gene	3
OPRK1	Gene	3
OPRM1	Gene	3
ORM1	Gene	6
PPARG	Gene	2
PTGS1	Gene	3
PTGS2	Gene	2

PTK2B	Gene	2
Prazosin	Drug	6
Progesterone	Drug	23
Ramipril	Drug	2
Remdesivir	Drug	8
Ritonavir	Drug	20
Ruxolitinib	Drug	3
SERPINC1	Gene	2
SLC10A1	Gene	2
SLC15A2	Gene	2
SLC22A1	Gene	3
SLC22A2	Gene	4
SLC22A3	Gene	3
SLC22A6	Gene	7
SLC22A8	Gene	6
SLC47A1	Gene	2
SLC6A4	Gene	2
SLCO1A2	Gene	5
SLCO1B1	Gene	7
SLCO1B3	Gene	5
SLCO2B1	Gene	2
Sarilumab	Drug	6
Siltuximab	Drug	1
Sirolimus	Drug	7
TLR9	Gene	2
Telmisartan	Drug	7
Tocilizumab	Drug	2
Tofacitinib	Drug	6
Tranexamic Acid	Drug	1
UGT1A1	Gene	2
UGT1A3	Gene	4
UGT1A9	Gene	4
UGT2B4	Gene	2
UGT2B7	Gene	5
Umifenovir	Drug	8
XDH	Gene	2