Supplementary Material to: Wang D, Xu Z, Zhao X, et al. Selection of pyroptosis-related genes and potential pharmacological targets in sepsis-induced myopathy. Ann Acad Med Singap 2024;55:86-95. DOI: https://doi.org/10.47102/annals-acadmedsg.2025326

Table 1. 39 PRDEGs.

Gene symbol	Log FC	*P* value	Adjusted *P* value	Description
ANXA2	1.4327437	6.67E-06	5.30E-04	Annexin A2
BRD4	1.0811675	8.73E-06	6.17E-04	Bromodomain containing 4
CASP3	1.0640348	7.19E-04	1.04E-02	Caspase 3
CHI3L1	5.5991818	1.58E-10	5.61E-0	Chitinase 3 like 1
CNR1	1.306223	4.22E-03	3.40E-02	Cannabinoid receptor 1
CSNK1A1	1.0120444	2.19E-05	1.10E-0	Casein kinase 1 alpha 1
DLEU2	1.1141013	6.22E-03	4.38E-02	Deleted in lymphocytic leukemia 2
DPP9	1.0152351	5.73E-03	4.14E-0	Dipeptidyl peptidase 9
ERP44	1.0077916	2.08E-0	1.07E-03	Endoplasmic reticulum protein 44
GABPB1-AS1	2.195625	1.51E-03	1.70E-02	GABPB1 antisense RNA 1
HDAC2	1.3828759	3.07E-03	2.75E-02	Histone deacetylase 2
LINC01554	2.6235681	2.36E-06	2.76E-04	Long intergenic non-protein coding RNA 1554
LINC-PINT	1.5093167	1.05E-06	1.70E-04	Long intergenic non-protein coding RNA, p53 induced transcript
MALAT1	1.1312434	1.77E-04	4.14E-03	Metastasis associated lung adenocarcinoma transcript 1
MDM2	2.3431006	1.69E-04	4.02E-03	MDM2 proto-oncogene
NBR2	1.0730003	1.57E-03	1.75E-02	Neighbor of BRCA1 gene 2
NOP2	1.214973	7.40E-06	5.65E-04	NOP2 nucleolar protein
PANX1	1.3266896	1.48E-03	1.68E-02	Pannexin 1
PDCD6IP	1.0481048	2.10E-05	1.07E-03	Programmed cell death 6 interacting protein
POP1	1.4814929	6.48E-04	9.70E-03	POP1 homolog, ribonuclease P/MRP subunit

PRMT5	1.3374791	2.72E-04	5.46E-03	Protein arginine methyltransferase 5
PTEN	1.1789928	1.61E-05	9.14E-04	Phosphatase and tensin homolog
RIPK1	1.0570921	4.27E-03	3.41E-02	Receptor interacting serine/threonine kinase 1
RSL1D	1.0013095	6.12E-05	2.04E-03	Ribosomal L1 domain containing
RUNX1-IT1	3.2562173	2.38E-06	2.77E-04	RUNX1 intronic transcript 1
SERPINB1	1.1660179	5.20E-03	3.90E-02	Serpin family B member 1
SQSTM1	1.4905747	3.37E-05	1.41E-03	Sequestosome 1
SRPK	1.4258482	1.61E-06	2.16E-04	SRSF protein kinase 1
TP63	1.1178972	5.33E-05	1.86E-03	Tumor protein p63
TP53	1.1104206	4.47E-04	7.58E-0	Tumor protein p53
VDR	1.8741741	4.51E-04	7.62E-03	Vitamin D receptor
XPNPEP1	1.1512837	7.99E-04	1.12E-02	X-prolyl aminopeptidase 1
BCL2	-2.512411	2.05E-04	4.55E-03	BCL2, apoptosis regulator
BHLHE41	-2.675863	3.99E-04	7.02E-0	Basic helix-loop-helix family member e41
CD274	-1.378021	7.25E-06	5.60E-04	CD274 molecule
FNDC5	-1.485953	4.23E-04	7.31E-0	Fibronectin type III domain containing 5
MIR100HG	-1.227858	5.11E-06	4.53E-04	Mir-100-let-7a-2 cluster host gene
NOS1	-1.680495	2.82E-03	2.59E-02	Nitric oxide synthase 1
TPM3	-1.189869	1.16E-03	1.43E-02	Tropomyosin 3

Table 2. Top 10 hub genes identified by CytoHubba.

Gene symbol	Description	Score	LogFC
TP53	Tumour protein p53	1586	1.11
PTEN	Phosphatase and tension homolog	1548	1.79
BCL2	BCL2, apoptosis regulator	1520	-2.51
CASP3	Caspase-3	1519	1.06
MDM2	MDM2 proto-oncogene	1492	1.50
BRD4	Bromodomain containing 4	1473	1.08
HDAC2	Histone deacetylase 2	750	1.38
CD274	CD274 molecule	720	-1.38
SQSTM1	Sequestosome 1	63	1.49
CSNK1A1	Casein kinase 1 alpha 1	36	1.01

Table 3. Top 10 small molecular compounds provided by CMap to PRDEGs.

CMap name	ID	Score	Description
Quinpirole	BRD-K26548821	-99.93	Dopamine receptor agonist
Zolpidem	BRD-K44876623	-99.79	Benzodiazepine receptor agonist
PTB1	BRD-K1655495	-99.79	AMPK activator
CG-930	BRD-K84085265	-99.7	JNK inhibitor
9-methyl-5H-6-thia-4,5-diaza-chrysene-6,6-dioxide	BRD-K14696368	-99.65	NF-kB pathway inhibitor
VER-155008	BRD-K32330832	-99.58	HSP inhibitor
Chromanol	BRD-A8369576	-99.58	Potassium channel blocker
Anagrelide	BRD-K62200014	-99.58	Phosphodiesterase inhibitor
Tipifarnib-P2	BRD-K62965247	-99.51	Farnesyltransferase inhibitor
Benproperine	BRD-A42423104	-99.44	Antitussive

AMPK: adenosine monophosphate-activated protein kinase; CMap: Connectivity Map; HSP: heat shock protein; JNK: c-Jun N-terminal kinase; NF-kB: nuclear factor kappa-light-chain-enhancer of activated B cells; PRDEGs: pyroptosis-related differentially expressed genes