

Table SI. Ferroptosis-related genes.

Gene	Definition
ACSL4	Acyl-CoA synthetase long chain family member 4
AKR1C1	Aldo-keto reductase family 1 member C1
AKR1C2	Aldo-keto reductase family 1 member C2
AKR1C3	Aldo-keto reductase family 1 member C3
ALOX15	Arachidonate 15-lipoxygenase
ALOX5	Arachidonate 5-lipoxygenase
ALOX12	Arachidonate 12-lipoxygenase
ATP5MC3	ATP synthase membrane subunit C locus 3
CARS1	Cysteinyl-tRNA synthetase 1
CBS	Cystathionine beta-synthase
CD44	CD44 molecule (Indian blood group)
CHAC1	ChaC glutathione specific gamma-glutamylcyclotransferase 1
CISD1	CDGSH iron sulfur domain 1
CS	Citrate synthase
DPP4	Dipeptidyl-peptidase 4
FANCD2	FA complementation group D2
GCLC	Glutamate-cysteine ligase catalytic subunit
GCLM	Glutamate-cysteine ligase modifier subunit
GLS2	Glutaminase 2
GPX4	Glutathione peroxidase 4
GSS	Glutathione synthetase
HMGCR	3-hydroxy-3-methylglutaryl-CoA reductase
HSPB1	Heat shock protein family B (small) member 1
CRYAB	Crystallin alpha B
LPCAT3	Lysophosphatidylcholine acyltransferase 3
MT1G	Metallothionein 1G
NCOA4	Nuclear receptor coactivator 4

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PTGS2	Prostaglandin-endoperoxide synthase 2
RPL8	Ribosomal protein L8
SAT1	Spermidine/spermine N1-acetyltransferase 1
SLC7A11	Solute carrier family 7 member 11
FDFT1	Farnesyl-diphosphate farnesyltransferase 1
TFRC	Transferrin receptor
TP53	Tumor protein p53
EMC2	ER membrane protein complex subunit 2
AIFM2	Apoptosis inducing factor mitochondria associated 2
PHKG2	Phosphorylase kinase catalytic subunit gamma 2
HSBP1	Heat shock factor binding protein 1
ACO1	Aconitase 1
FTH1	Ferritin heavy chain 1
STEAP3	STEAP family member 3
NFS1	NFS1 cysteine desulfurase
ACSL3	Acyl-coa synthetase long chain family member 3
ACACA	Acetyl-coa carboxylase alpha
PEBP1	Phosphatidylethanolamine binding protein 1
ZEB1	Zinc finger E-box binding homeobox 1
SQLE	Squalene epoxidase
FADS2	Fatty acid desaturase 2
NFE2L2	NFE2 like bZIP transcription factor 2
KEAP1	Kelch like ECH associated protein 1
NQO1	NAD(P)H quinone dehydrogenase 1
NOX1	NADPH oxidase 1
ABCC1	ATP binding cassette subfamily C member 1
SLC1A5	Solute carrier family 1 member 5
GOT1	Glutamic-oxaloacetic transaminase 1
G6PD	Glucose-6-phosphate dehydrogenase

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PGD	Phosphogluconate dehydrogenase
IREB2	Iron responsive element binding protein 2
HMOX1	Heme oxygenase 1
ACSF2	Acyl-CoA synthetase family member 2

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Table SII. Results of univariate independent prognostic analysis of ferroptosis-related genes.

ID	HR	Lower 95% confidence limit	Higher 95% confidence limit	P-value
ACSL4	0.978835	0.955235	1.003017	0.085793
AKR1C1	1.002375	0.998935	1.005827	0.176151
AKR1C2	1.000439	0.998381	1.002501	0.675969
AKR1C3	1.000656	0.998799	1.002517	0.488843
ALOX15	0.97761	0.907662	1.052947	0.54994
ALOX5	0.988159	0.979712	0.996679	0.00654
ALOX12	0.990585	0.94743	1.035705	0.677227
ATP5MC3	1.004006	0.989494	1.018732	0.590409
CARS1	0.977721	0.917975	1.041356	0.483716
CBS	1.183744	0.787364	1.779675	0.417466
CD44	1.001903	0.999473	1.004339	0.124953
CHAC1	0.997721	0.958446	1.038605	0.911325
CISD1	1.033571	0.997947	1.070467	0.065019
CS	1.007401	0.990403	1.024691	0.395721
DPP4	1.003948	0.976525	1.032141	0.780351
FANCD2	0.937503	0.874372	1.005192	0.069622
GCLC	1.003841	0.994431	1.013339	0.425012
GCLM	1.00685	0.998918	1.014846	0.090725
GLS2	0.978977	0.427535	2.241679	0.959911
GPX4	0.998305	0.995483	1.001136	0.240327
GSS	0.99975	0.99388	1.005654	0.933617
HMGCR	1.03493	1.007808	1.062781	0.011278
HSPB1	1.000066	0.999833	1.0003	0.578128
CRYAB	1.005697	0.995916	1.015575	0.254603
LPCAT3	1.018375	0.975577	1.063049	0.405857

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MT1G	0.997908	0.991664	1.004191	0.513098
NCOA4	1.007676	0.997156	1.018307	0.15327
PTGS2	0.997135	0.989194	1.00514	0.481852
RPL8	0.999912	0.999553	1.000271	0.630711
SAT1	0.998974	0.997116	1.000835	0.279526
SLC7A11	1.007365	0.9977	1.017124	0.135725
FDFT1	0.997759	0.991504	1.004053	0.484314
TFRC	1.002183	0.998308	1.006074	0.269891
TP53	1.009296	0.996401	1.022358	0.158423
EMC2	1.032934	0.989083	1.078728	0.143194
AIFM2	0.960622	0.911908	1.011938	0.130275
PHKG2	0.971731	0.909147	1.038624	0.398531
HSBP1	0.998071	0.969373	1.027619	0.896798
ACO1	1.003493	0.968053	1.04023	0.849253
FTH1	1.000672	0.999749	1.001595	0.153429
STEAP3	0.993877	0.979022	1.008957	0.424067
NFS1	1.001825	0.924021	1.086179	0.964749
ACSL3	1.009322	0.986874	1.032281	0.418768
ACACA	1.037728	0.993948	1.083436	0.092194
PEBP1	0.999532	0.998557	1.000508	0.347123
ZEB1	1.034222	0.975036	1.097001	0.263081
SQLE	1.009502	1.001211	1.017861	0.0246
FADS2	1.007477	0.997148	1.017914	0.156549
NFE2L2	1.000044	0.988676	1.011542	0.994017
KEAP1	0.991494	0.974833	1.00844	0.323197
NQO1	1.001461	0.999597	1.003328	0.124544
NOX1	0.843032	0.722803	0.983258	0.029628
ABCC1	1.010577	1.000873	1.020376	0.032588
SLC1A5	1.002833	1.000807	1.004863	0.00611

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GOT1	1.000243	0.984731	1.015999	0.975725
G6PD	1.002658	1.000583	1.004737	0.012006
PGD	1.001017	0.99971	1.002325	0.127374
IREB2	1.024788	0.944628	1.111752	0.555716
HMOX1	1.000539	0.997613	1.003475	0.718329
ACSF2	0.99471	0.982709	1.006857	0.391753

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HR, hazard ratio.