

## SUPPLEMENTARY TABLES

**Supplementary Table 1. TCGA samples used in the study.**

Sample ID (normal)	Sample ID (GBM)	Sample ID (GBM)	Sample ID (GBM)	Sample ID (GBM)	Sample ID (GBM)
TCGA-06-0675-11	TCGA-02-0047-01	TCGA-06-0646-01	TCGA-06-5856-01	TCGA-19-1389-02	TCGA-28-2513-01
TCGA-06-0678-11	TCGA-02-0055-01	TCGA-06-0649-01	TCGA-06-5858-01	TCGA-19-1390-01	TCGA-28-2514-01
TCGA-06-0680-11	TCGA-02-2483-01	TCGA-06-0686-01	TCGA-06-5859-01	TCGA-19-1787-01	TCGA-28-5204-01
TCGA-06-0681-11	TCGA-02-2485-01	TCGA-06-0743-01	TCGA-08-0386-01	TCGA-19-2619-01	TCGA-28-5207-01
TCGA-06-AABW-11	TCGA-02-2486-01	TCGA-06-0744-01	TCGA-12-0616-01	TCGA-19-2620-01	TCGA-28-5208-01
	TCGA-06-0125-01	TCGA-06-0745-01	TCGA-12-0618-01	TCGA-19-2624-01	TCGA-28-5209-01
	TCGA-06-0125-02	TCGA-06-0747-01	TCGA-12-0619-01	TCGA-19-2625-01	TCGA-28-5213-01
	TCGA-06-0129-01	TCGA-06-0749-01	TCGA-12-0821-01	TCGA-19-2629-01	TCGA-28-5215-01
	TCGA-06-0130-01	TCGA-06-0750-01	TCGA-12-1597-01	TCGA-19-4065-01	TCGA-28-5216-01
	TCGA-06-0132-01	TCGA-06-0878-01	TCGA-12-3650-01	TCGA-19-4065-02	TCGA-28-5218-01
	TCGA-06-0138-01	TCGA-06-0882-01	TCGA-12-3652-01	TCGA-19-5960-01	TCGA-28-5220-01
	TCGA-06-0141-01	TCGA-06-1804-01	TCGA-12-3653-01	TCGA-26-1442-01	TCGA-32-1970-01
	TCGA-06-0152-02	TCGA-06-2557-01	TCGA-12-5295-01	TCGA-26-5132-01	TCGA-32-1980-01
	TCGA-06-0156-01	TCGA-06-2558-01	TCGA-12-5299-01	TCGA-26-5133-01	TCGA-32-1982-01
	TCGA-06-0157-01	TCGA-06-2559-01	TCGA-14-0736-02	TCGA-26-5134-01	TCGA-32-2615-01
	TCGA-06-0158-01	TCGA-06-2561-01	TCGA-14-0781-01	TCGA-26-5135-01	TCGA-32-2616-01
	TCGA-06-0168-01	TCGA-06-2562-01	TCGA-14-0787-01	TCGA-26-5136-01	TCGA-32-2632-01
	TCGA-06-0171-02	TCGA-06-2563-01	TCGA-14-0789-01	TCGA-26-5139-01	TCGA-32-2634-01
	TCGA-06-0174-01	TCGA-06-2564-01	TCGA-14-0790-01	TCGA-27-1830-01	TCGA-32-2638-01
	TCGA-06-0178-01	TCGA-06-2565-01	TCGA-14-0817-01	TCGA-27-1831-01	TCGA-32-4213-01
	TCGA-06-0184-01	TCGA-06-2567-01	TCGA-14-0871-01	TCGA-27-1832-01	TCGA-32-5222-01
	TCGA-06-0187-01	TCGA-06-2569-01	TCGA-14-1034-01	TCGA-27-1834-01	TCGA-41-2571-01
	TCGA-06-0190-01	TCGA-06-2570-01	TCGA-14-1034-02	TCGA-27-1835-01	TCGA-41-2572-01
	TCGA-06-0190-02	TCGA-06-5408-01	TCGA-14-1402-02	TCGA-27-1837-01	TCGA-41-3915-01
	TCGA-06-0210-01	TCGA-06-5410-01	TCGA-14-1823-01	TCGA-27-2519-01	TCGA-41-4097-01
	TCGA-06-0210-02	TCGA-06-5411-01	TCGA-14-1825-01	TCGA-27-2521-01	TCGA-41-5651-01
	TCGA-06-0211-01	TCGA-06-5412-01	TCGA-14-1829-01	TCGA-27-2523-01	TCGA-76-4925-01
	TCGA-06-0211-02	TCGA-06-5413-01	TCGA-14-2554-01	TCGA-27-2524-01	TCGA-76-4926-01
	TCGA-06-0219-01	TCGA-06-5414-01	TCGA-15-0742-01	TCGA-27-2526-01	TCGA-76-4927-01
	TCGA-06-0221-02	TCGA-06-5415-01	TCGA-15-1444-01	TCGA-27-2528-01	TCGA-76-4928-01
	TCGA-06-0238-01	TCGA-06-5416-01	TCGA-16-0846-01	TCGA-28-1747-01	TCGA-76-4929-01

**Supplementary Table 2. 60 Ferroptosis-related genes.**

Ferroptosis-related genes
ACSL4, AKR1C1, AKR1C2, AKR1C3, ALOX15 ALOX5, ALOX12, ATP5MC3, CARS1, CBS CD44, CHAC1, CISD1, CS, DPP4, FANCD2 GCLC, GCLM, GLS2, GPX4, GSS, HMGCR HSPB1, CRYAB, LPCAT3, MT1G, NCOA4 PTGS2, RPL8, SAT1, SLC7A11, FDFT1, TFRC TP53, EMC2, AIFM2, PHKG2, HSBP1, ACO1 FTH1, STEAP3, NFS1, ACSL3, ACACA, PEBP1 ZEB1, SQLE, FADS2, NFE2L2, KEAP1, NQO1 NOX1, ABCC1, SLC1A5, GOT1, G6PD, PGD IREB2, HMOX1, ACSF2

**Supplementary Table 3. Characteristics of patients in low and high-risk scores in TCGA cohort.**

<b>ID</b>	<b>futime</b>	<b>fustat</b>	<b>Age</b>	<b>Gender</b>	<b>Grade</b>	<b>Stage</b>	<b>T</b>	<b>M</b>	<b>N</b>	<b>Risk-group</b>
TCGA-14-1829	218	0	57	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-19-5960	455	1	56	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-12-1597	675	1	62	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-32-4213	604	0	47	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-14-0871	880	1	74	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-14-0790	419	1	64	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-02-2483	466	0	43	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-2565	506	1	59	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-0221	603	1	31	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-28-5208	544	1	52	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-19-1787	385	1	48	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-26-5134	167	0	74	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-0174	98	1	54	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-32-5222	585	1	66	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-41-5651	460	1	59	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-0158	329	1	73	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-19-1390	772	1	63	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-12-0618	395	1	49	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-28-5209	442	0	66	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-32-1970	468	1	59	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-02-2485	470	0	53	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-5413	268	0	67	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-0744	1426	1	66	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-5411	254	1	51	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-0686	432	1	53	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-0129	1024	1	30	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-27-1837	427	1	36	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-32-2638	766	1	67	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-27-1834	1233	1	56	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-0219	22	1	67	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-28-5216	415	0	52	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-0130	394	1	54	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-27-2523	489	1	63	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-32-2634	693	0	82	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-26-5133	452	0	59	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-0743	803	1	69	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-0745	239	1	59	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-19-2629	737	1	60	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-27-1835	648	1	53	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-16-0846	119	1	85	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-2557	33	1	76	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-5417	155	0	45	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-5416	204	0	23	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-14-1825	232	1	70	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-28-1753	37	0	53	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-27-2526	87	1	79	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk

TCGA-06-0178	2681	1	38	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-2569	13	0	24	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-14-1402	975	1	58	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-0132	771	1	49	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-0157	97	1	63	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-2559	150	1	83	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-12-3652	1062	1	60	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-12-3650	333	1	46	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-28-5218	157	1	63	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-28-5215	335	1	62	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-28-1747	77	1	44	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-12-0616	448	1	36	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-0238	405	1	46	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-2564	181	0	50	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-19-2619	294	0	55	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-32-1982	142	1	76	FEMALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-26-1442	953	0	43	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-26-5132	286	0	74	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-41-2572	406	1	67	MALE	unknow	unknow	unknow	unknow	unknow	Low risk
TCGA-06-5418	83	1	75	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-32-2616	224	1	48	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-28-2509	145	0	77	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-2558	380	1	75	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-27-1831	505	1	66	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-19-4065	214	0	36	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-76-4928	94	1	85	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-08-0386	548	1	74	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-19-2620	148	1	70	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-5412	138	1	78	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-19-1389	141	1	51	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-2561	537	1	53	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-27-2524	231	1	56	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-0138	737	1	43	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-14-2554	532	1	52	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-28-5204	454	1	72	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-0646	175	1	60	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-26-5136	577	1	78	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-12-5295	454	1	60	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-0139	362	1	40	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-2567	133	1	65	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-5408	357	1	54	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-76-4927	535	1	58	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-0878	218	0	74	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-0644	384	1	71	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-14-0789	342	1	54	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-12-5299	98	1	56	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-76-4929	111	1	76	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-0210	225	1	72	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk

TCGA-76-4931	279	1	70	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-15-0742	419	1	65	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-0211	360	1	47	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-16-1045	883	1	49	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-27-2519	550	1	48	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-0750	28	1	43	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-28-2513	222	0	69	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-02-2486	618	1	64	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-28-5207	343	1	71	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-26-5139	48	0	65	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-41-3915	360	1	48	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-14-1034	485	1	60	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-32-1980	36	1	72	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-12-0821	323	1	62	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-26-5135	270	1	72	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-0649	64	1	73	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-19-2625	124	1	76	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-14-1823	543	1	58	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-14-0817	164	1	69	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-0125	1448	1	63	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-12-3653	442	1	34	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-5859	139	0	63	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-41-2571	26	1	89	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-5414	273	0	61	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-12-0619	1062	1	60	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-14-0736	460	1	49	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-28-5220	388	1	67	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-5858	187	0	45	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-14-0787	68	1	69	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-0152	375	1	68	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-0184	2126	1	63	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-0882	632	1	30	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-0171	399	1	65	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-41-4097	6	1	63	FEMALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-06-0187	828	1	69	MALE	unknow	unknow	unknow	unknow	unknow	High risk
TCGA-27-1830	154	1	57	MALE	unknow	unknow	unknow	unknow	unknow	High risk