

**Table S2 The risk score of DDR genes signature in the TARGET group**

id	futime	fustat	NHEJ1	RMI2	SWI5	ERCC2	CLK2	POLG
TARGET-4C	74	1	11.7787	20.7548	40.0489	11.2931	47.7583	54.6541
TARGET-4C	180	1	10.3223	11.2786	34.8907	17.6108	12.859	47.675
TARGET-4C	271	1	9.85758	5.33142	34.65	21.0171	26.4744	41.3906
TARGET-4C	286	0	9.41836	5.74032	31.4205	12.7265	14.9205	15.5077
TARGET-4C	290	1	10.1374	7.99346	50.8698	14.9305	25.993	24.7499
TARGET-4C	295	1	13.5711	21.5957	47.0187	23.7519	60.1429	64.8911
TARGET-4C	347	1	11.2474	4.83486	12.8658	5.87781	22.3341	38.7442
TARGET-4C	361	1	10.3694	8.99282	19.9338	8.62842	19.3471	36.6787
TARGET-4C	369	0	2.9882	11.0794	15.1426	16.569	39.8784	19.4017
TARGET-4C	377	0	6.36989	10.5517	26.2502	9.47845	26.6298	34.0631
TARGET-4C	378	1	17.2879	4.69125	24.1876	13.5854	54.419	50.0967
TARGET-4C	386	1	19.8975	8.6507	13.8705	13.1945	47.067	69.4078
TARGET-4C	388	1	11.697	7.89873	20.117	9.13342	50.5554	22.5885
TARGET-4C	422	1	35.9905	20.3262	24.7469	8.26696	16.2562	14.317
TARGET-4C	476	0	4.15381	3.71129	23.6355	14.8915	24.4317	14.9184
TARGET-4C	503	1	3.62576	3.81372	26.7934	8.13775	21.8934	26.1287
TARGET-4C	510	1	12.0193	5.63555	37.3996	10.7908	50.8662	41.6502
TARGET-4C	511	0	5.50451	8.30885	47.5969	14.2045	33.1255	19.7727
TARGET-4C	519	1	16.3514	4.05529	34.2025	8.86032	33.3583	40.3057
TARGET-4C	537	1	10.0934	3.43483	24.609	10.4304	31.082	43.6338
TARGET-4C	542	0	2.32894	5.34149	14.4124	3.41931	17.1698	20.3002
TARGET-4C	551	0	7.74376	8.48607	34.7024	13.8251	37.1873	47.1509
TARGET-4C	579	0	4.78273	30.5838	6.45926	4.01446	18.2884	26.8893
TARGET-4C	606	1	4.25616	7.5185	32.2236	5.71468	17.8247	268.701
TARGET-4C	619	0	16.5284	11.2164	45.1624	10.7756	34.0324	63.799
TARGET-4C	619	1	11.8732	10.8633	18.0221	16.2331	33.7419	72.6272
TARGET-4C	627	1	9.69422	12.0689	90.8826	15.4385	40.4476	84.2034
TARGET-4C	653	1	23.2306	3.58031	21.7993	17.2741	9.85726	38.6095
TARGET-4C	672	0	9.06292	6.89838	56.098	16.6916	66.2215	93.0325
TARGET-4C	679	1	17.7184	8.99638	20.8189	16.2457	51.536	56.4454
TARGET-4C	683	0	2.11132	3.36981	14.4738	16.4131	23.4091	27.7266
TARGET-4C	687	0	7.07448	10.092	40.6959	15.3218	51.2717	46.7289
TARGET-4C	708	0	7.81596	7.51254	29.7799	13.9395	25.2471	33.3394
TARGET-4C	754	1	9.82805	7.17404	29.7194	12.8038	16.6418	26.4179
TARGET-4C	756	1	8.67824	22.2311	33.3726	33.7559	135.888	74.4481
TARGET-4C	758	1	11.4975	8.65116	61.0729	9.78802	37.4397	35.4569
TARGET-4C	776	1	5.01211	15.2922	39.1372	9.99879	27.7549	34.1399
TARGET-4C	788	1	7.81038	5.95796	28.3475	13.2478	45.2626	82.2501
TARGET-4C	857	1	11.5437	8.73363	42.6663	23.196	128.207	24.5051
TARGET-4C	909	1	5.11733	10.5043	33.884	14.0981	46.7816	57.2732
TARGET-4C	922	0	9.02508	8.04616	64.3335	8.59056	20.156	38.3445
TARGET-4C	922	1	13.0623	11.4934	46.0285	15.0073	23.7664	43.3908
TARGET-4C	983	0	5.96987	9.14087	26.1876	18.7387	35.4772	18.8084
TARGET-4C	1003	1	0.878194	2.52087	9.40825	2.92729	2.2181	6.38974
TARGET-4C	1023	1	9.23522	19.3068	25.5347	10.6051	37.1273	61.1257
TARGET-4C	1029	0	63.8961	11.0762	38.49	10.1392	24.4195	27.2402
TARGET-4C	1061	1	9.57423	3.39269	34.8247	15.627	19.396	46.3519
TARGET-4C	1217	0	4.90731	10.4062	27.1237	11.1684	30.3161	55.7527
TARGET-4C	1323	0	6.08661	12.1811	82.6426	39.2792	19.3704	26.0549

TARGET-4C	1451	0	9.99624	9.15711	29.9993	15.2815	50.7175	42.8443
TARGET-4C	1468	0	7.0326	12.4235	41.3052	20.0666	40.5548	43.6307
TARGET-4C	1515	1	7.58461	11.931	49.3429	13.0215	55.7065	31.1165
TARGET-4C	1538	0	4.84422	12.5285	34.0813	13.3977	17.3114	18.2181
TARGET-4C	1575	0	5.84238	36.1181	66.1055	25.6961	38.97	46.9535
TARGET-4C	1579	1	14.1431	8.10775	41.533	15.0757	49.4595	90.8055
TARGET-4C	1580	0	6.46079	9.88871	60.6657	11.8784	21.4985	25.5997
TARGET-4C	1583	0	6.23001	5.71246	24.7412	25.2649	46.0669	50.5358
TARGET-4C	1616	0	8.52518	13.1613	39.0537	31.8087	32.1139	65.7963
TARGET-4C	1625	0	6.33526	11.0828	54.8834	10.6217	26.592	49.377
TARGET-4C	1631	1	6.36353	9.93599	26.8165	9.91395	38.564	33.0035
TARGET-4C	1637	1	16.6296	10.6061	21.8353	19.9286	83.0076	56.1497
TARGET-4C	1702	0	4.94311	15.9413	39.2231	19.0718	26.8778	54.104
TARGET-4C	1707	0	5.99293	6.78208	33.5194	10.486	26.608	38.1349
TARGET-4C	1719	0	3.67356	6.21483	24.8345	7.90471	23.9188	69.4359
TARGET-4C	1747	0	8.23919	12.5428	43.1974	13.7778	40.3292	33.2361
TARGET-4C	1750	0	14.4921	27.1171	26.2292	47.8867	44.8231	49.4369
TARGET-4C	1844	0	9.76558	10.5675	44.7096	29.4606	37.4164	40.3242
TARGET-4C	1865	0	11.2895	14.7814	31.5024	19.2343	24.5646	36.6544
TARGET-4C	1870	0	5.91108	23.0068	21.909	12.2535	18.6723	26.8773
TARGET-4C	1906	1	5.17172	7.6298	36.554	6.68794	21.0103	24.3934
TARGET-4C	1913	0	11.709	31.2328	62.7162	9.73327	28.7429	49.6808
TARGET-4C	2049	0	6.11009	11.9404	18.7473	12.9427	11.8536	39.4136
TARGET-4C	2062	0	4.96236	6.46164	44.3312	11.227	21.788	18.0643
TARGET-4C	2112	0	12.3583	14.2544	24.647	14.2661	28.0565	43.1917
TARGET-4C	2122	0	6.11591	10.5441	36.1949	19.6883	30.6525	25.4217
TARGET-4C	2163	0	5.33838	9.68988	57.6543	22.614	41.0337	53.5069
TARGET-4C	2216	0	5.42534	1.80053	24.1218	12.6218	20.8736	24.0202
TARGET-4C	2256	0	5.27	5.48167	50.1722	27.2712	19.2645	41.6908
TARGET-4C	2257	0	10.4244	9.90498	28.4957	18.6022	18.6769	24.1944
TARGET-4C	2462	0	20.935	10.7988	50.1564	15.7183	24.7187	21.4309
TARGET-4C	2520	0	8.987	19.3309	63.8273	18.9072	19.9773	30.9678
TARGET-4C	2526	0	7.38661	4.56634	12.9067	23.407	14.4381	18.8499
TARGET-4C	2610	0	9.32073	11.4757	44.1849	12.2742	13.3943	27.3904
TARGET-4C	2882	1	11.2276	9.96505	44.3074	29.1752	42.3224	84.4264
TARGET-4C	2948	0	15.7209	18.4585	37.7914	11.5545	23.6843	37.7931
TARGET-4C	3002	0	17.2487	17.0566	98.0952	16.6635	15.782	39.5369
TARGET-4C	3095	0	5.84314	14.2117	65.698	23.9364	28.0989	48.0436
TARGET-4C	3282	0	9.01097	12.0676	50.2364	29.0899	36.6981	48.5977
TARGET-4C	3378	0	4.12999	17.37	37.8885	8.42924	14.9017	33.0487
TARGET-4C	3378	0	7.23678	19.5328	57.2111	17.5692	23.1222	37.7972
TARGET-4C	3862	1	6.25852	9.19884	70.117	17.2665	27.9889	49.2923
TARGET-4C	3900	0	4.73162	5.07748	57.0143	11.7533	8.99137	34.2159
TARGET-4C	3946	0	9.83998	12.9618	25.2952	29.8772	24.1956	27.7675
TARGET-4C	4374	0	4.23831	23.2809	100.235	5.52033	24.076	37.6015
TARGET-4C	5840	0	9.22632	21.7458	28.7044	23.9243	29.6905	20.8026

MLH1	riskScorer	risk
12.9576	1.911473	high
6.17662	1.042941	low
17.7761	0.652087	low
10.7506	1.444835	high
18.3465	0.597331	low
10.3745	0.977009	low
7.29188	9.303363	high
18.7629	1.801039	high
6.34737	2.050531	high
17.5791	1.360552	high
12.2674	9.821306	high
23.4005	4.963758	high
6.52796	10.68588	high
13.1552	4.789874	high
24.2288	0.572595	low
15.4409	1.84931	high
21.6248	2.857787	high
10.3496	1.069654	low
7.59264	8.541319	high
7.43224	6.215197	high
8.61176	4.3856	high
19.4199	1.19924	high
3.72873	1.959328	high
4.87479	18.18393	high
20.3302	1.788365	high
17.1468	1.959776	high
18.7201	0.406787	low
12.0362	2.841867	high
6.98993	5.319339	high
18.6282	3.976996	high
9.76108	1.626306	high
12.9778	1.89213	high
12.64	1.459145	high
12.4775	1.408537	high
24.108	1.329565	high
8.98389	2.402531	high
14.9271	0.843945	low
20.5073	2.559646	high
17.5122	7.132857	high
22.4348	1.030192	low
11.2642	1.168239	high
14.304	0.914739	low
15.8763	0.78002	low
4.02976	4.505626	high
17.461	1.459293	high
46.788	3.594552	high
11.6467	1.56738	high
11.0231	2.169435	high
19.7592	0.013047	low

14.1432 2.680549 high  
22.2722 0.37851 low  
6.3422 2.950338 high  
9.83888 0.751254 low  
27.5432 0.019402 low  
20.16 2.565996 high  
18.968 0.387901 low  
16.6031 0.869321 low  
19.428 0.151234 low  
11.1765 1.100859 low  
16.5429 2.025098 high  
13.4268 8.431396 high  
25.6542 0.176383 low  
19.9015 1.121216 low  
20.0531 1.782323 high  
19.409 0.803822 low  
12.2351 0.058125 low  
16.861 0.246589 low  
28.3146 0.222551 low  
17.0339 0.415842 low  
12.2574 1.813323 high  
18.8486 0.261019 low  
17.5156 0.706168 low  
21.329 0.53524 low  
32.5147 0.39536 low  
9.57655 0.755583 low  
19.186 0.296884 low  
13.6615 1.742993 high  
9.04017 0.287173 low  
12.5252 0.761181 low  
12.2785 1.340293 high  
24.9683 0.079395 low  
13.509 0.612013 low  
22.087 0.372735 low  
10.1799 0.737007 low  
7.66136 1.830841 high  
24.0124 0.088409 low  
14.5841 0.15779 low  
22.9432 0.13288 low  
15.7641 0.541747 low  
17.9839 0.175604 low  
12.9203 0.425186 low  
9.88101 0.718147 low  
12.4359 0.269895 low  
6.79015 0.327967 low  
13.3234 0.265626 low