

Analyzing PKC Gamma (+19506 A/G) Polymorphism as a Promising Genetic Marker for HCV-induced Hepatocellular Carcinoma

Fizzah Abid¹, Talha Iqbal¹, Khushbukhat Khan¹, Yasmin Badshah¹, Janeen H, Trembley^{2,3,4}, Kanza Shahid¹, Sameen Zafar¹, Amna Hafeez¹, Naila Khan¹, Naeem Mahmood Ashraf⁵, Maria Shabbir^{1*}, Tayyaba Afsar⁶, Ali Almajwal⁶, Nawaf W. Alruwaili⁶, Suhail Razak^{6*}.

Table S2: Pathogenic nsSNPs based on six different tools

Variant	PredictSNP2	CADD	DANN	FATHMM	FunSeq2	GWAVA
19:53882640, G→C	Deleterious	Deleterious	Deleterious	Deleterious	Deleterious	Deleterious
19: 53882648, T→A	Neutral	Deleterious	Neutral	Neutral	Deleterious	Deleterious
19: 53889693, G→A	Deleterious	Deleterious	Deleterious	Neutral	Deleterious	Deleterious
19: 53889719, G→A	Deleterious	Deleterious	Deleterious	Deleterious	Deleterious	Deleterious
19: 53889734, G→C	Deleterious	Deleterious	Neutral	Deleterious	Deleterious	Nil
19: 53889743, T→A	Deleterious	Deleterious	Deleterious	Deleterious	Deleterious	Nil
19: 53889743, T→C	Deleterious	Deleterious	Deleterious	Deleterious	Deleterious	Nil
19: 53889901, T→A	Neutral	Deleterious	Neutral	Neutral	Deleterious	Deleterious
19: 53889936, T→C	Deleterious	Deleterious	Deleterious	Deleterious	Deleterious	Nil
19: 53889963, G→A	Deleterious	Deleterious	Deleterious	Neutral	Deleterious	Nil
19: 53889963, G→T	Deleterious	Deleterious	Deleterious	Deleterious	Deleterious	Nil
19: 53898095, A→G	Deleterious	Deleterious	Deleterious	Deleterious	Deleterious	Deleterious
19: 53898097, G→A	Deleterious	Deleterious	Deleterious	Deleterious	Deleterious	Deleterious
19: 53900612, G→T	Deleterious	Deleterious	Neutral	Deleterious	Deleterious	Deleterious
19: 53906342, G→A	Deleterious	Deleterious	Deleterious	Deleterious	Deleterious	Deleterious
19: 53906729, T→C	Neutral	Deleterious	Deleterious	Neutral	Deleterious	Nil

**Supplementary Table S1: Genotype data of all participants from both pat
HCC SAMPLES**

Age	Gender	viral load	ALT	AA	GG	AG
44	M	847539383	102	+	-	-
42	F	61700	92	+	-	-
38	M	39000	74	+	-	-
51	M	673000	85	+	-	-
27	M	847579493	117	+	-	-
52	F	8485748	94	+	-	-
24	F	8857749	169	-	-	+
43	M	948585730	66	+	-	-
32	M	39485580	91	+	-	-
55	F	9488843	75	+	-	-
43	M	394984478	95	+	-	-
46	F	8373723	61	+	-	-
58	M	921874654	125	-	-	+
35	F	83746339	66	+	-	-
32	F	8384743	67	-	-	+
35	F	938374	69	+	-	-
63	F	7293837	103	+	-	-
29	M	3943857403	193	-	-	+
32	M	847583930	183	+	-	-
38	M	74637839	75	+	-	-
50	M	836465493	78	+	-	-
50	M	93848745	81	+	-	-
40	F	9384750	81	+	-	-
29	F	3738493	84	+	-	-
25	F	8484883	84	+	-	-
35	F	9382746	88	-	-	+
27	M	833202938	172	-	-	+
52	F	347593	92	+	-	-
43	M	821939475	173	-	-	+
14	M	624403938	92	+	-	-
32	M	83747338	145	+	-	-
42	F	657448	210	+	-	-
42	M	475730200	153	-	-	+
43	M	938475653	104	-	-	+
29	F	364908323	129	+	-	-
72	M	7439298437	132	+	-	-
25	F	83949202	98	-	-	+
46	F	843292034	103	+	-	-
35	M	747362392	106	-	+	-
26	M	73298473	92	+	-	-
45	F	87000	94	+	-	-

55	M	39400	110	+	-	-
42	M	73700	72	-	-	+
36	F	3543110	14	+	-	-
32	F	74332282	57	+	-	-
32	M	736231	91	-	-	+
45	F	262000	87	-	+	-
55	M	246000	79	+	-	-
39	F	893700	62	+	-	-
30	M	1360000	97	+	-	-
55	M	72109832	153	-	-	+
31	F	63228289	94	+	-	-
26	F	7464939	73	+	-	-
30	F	79000	82	+	-	-
49	F	7438282922	110	-	-	+
38	F	873290109	96	+	-	-
33	M	978000	132	+	-	-
40	F	73218943	89	-	+	-
35	F	8587584	90	+	-	-
42	F	9484844	78	+	-	-
34	F	9484843	104	+	-	-
49	F	1179300	97	+	-	-
30	F	63922304	127	-	+	-
34	M	948757483	149	+	-	-
25	F	67333929	89	-	+	-
52	M	38380024	124	+	-	-
36	M	89000345	392	+	-	-
32	F	7439202	138	-	+	-
32	F	890073	97	+	-	-
39	M	7320922	64	+	-	-
47	M	119740	31	+	-	-
23	M	1167390	84	+	-	-
50	M	73020103	87	+	-	-
58	M	643000	56	+	-	-
48	M	493807	69	-	-	+
33	M	92721	45	+	-	-
59	F	1643000	98	-	-	+
37	F	84700	61	-	-	+
46	M	84878493	109	-	+	-
40	M	9488494	93	-	-	+
50	M	49000	220	+	-	-
40	M	63939434	126	-	+	-
45	F	283843186	210	+	-	-
52	M	48844833	82	+	-	-
49	M	94944432	98	+	-	-

23	F	21000	149	+	-	-
41	F	746363832	71	+	-	-
35	F	300000	48	-	+	-
40	M	189000	51	+	-	-
38	M	763500	179	-	-	+
34	F	73000	93	+	-	-
58	M	66337489	57	-	+	-
32	F	737338839	132	+	-	-
40	M	970000	95	+	-	-
45	F	78300	162	+	-	-
32	F	4646737	179	+	-	-
50	M	113276	291	+	-	-
45	F	647900	92	-	+	-
40	F	76300	115	+	-	-
36	F	5647747	61	+	-	-

oints and control group.

CONTROLS

<u>Age</u>	<u>Gender</u>	<u>ALT</u>	AA	GG	AG
51	M	35	-	+	-
27	M	41	-	+	-
52	F	27	+	-	-
24	F	29	-	+	-
43	M	36	-	+	-
32	M	45	-	+	-
55	F	23	+	-	-
43	M	37	-	-	+
46	F	57	-	+	-
43	M	28	-	+	-
35	F	49	-	+	-
32	F	38	-	+	-
35	F	34	-	+	-
63	F	39	-	+	-
29	M	35	-	+	-
32	M	35	-	-	+
38	M	30	+	-	-
50	M	41	-	-	+
40	F	35	-	-	+
42	F	41	-	+	-
25	F	25	-	+	-
35	F	37	-	+	-
27	M	29	-	+	-
25	F	41	+	-	-
43	M	44	-	+	-
14	M	38	-	-	+
32	M	51	-	-	+
42	F	45	+	-	-
43	M	37	-	-	+
29	F	43	-	-	+
53	M	47	-	+	-
25	F	57	-	+	-
46	F	39	-	+	-
35	M	16	-	+	-
26	M	32	-	+	-
45	F	49	-	+	-
42	M	51	-	+	-
36	F	45	+	-	-
32	F	91	+	-	-
55	M	29	-	-	+
39	F	38	-	-	+

65	M	29	+	-	-
55	M	40	+	-	-
42	F	29	+	-	-
26	F	36	-	-	+
49	F	45	-	-	+
38	F	23	-	+	-
33	M	37	+	-	-
40	F	57	-	+	-
35	F	28	-	-	+
86	F	49	-	-	+
34	F	38	-	-	+
49	F	34	-	+	-
30	F	39	-	-	+
34	M	35	-	-	+
73	F	35	-	-	+
52	M	30	-	-	+
36	M	41	-	-	+
32	F	35	-	-	+
62	F	41	-	-	+
39	M	29	+	-	-
47	F	36	-	-	+
23	M	45	-	-	+
50	M	23	+	-	-
74	F	37	-	-	+
64	M	57	-	-	+
33	M	28	+	-	-
59	F	49	+	-	-
46	M	38	+	-	-
40	M	34	-	-	+
50	M	39	+	-	-
40	M	35	-	-	+
45	F	35	+	-	-
52	M	30	-	-	+
49	M	41	-	-	+
23	F	18	+	-	-
41	F	28	-	-	+
35	F	32	+	-	-
40	M	31	-	-	+
38	M	33	-	+	-
34	F	29	-	-	+
58	M	31	-	+	-
32	F	31	-	-	+
32	F	32	-	-	+
50	M	33	-	-	+

45	F	32	+	-	-
40	F	30	+	-	-
36	F	29	+	-	-
44	M	30	+	-	-
42	F	33	+	-	-
38	M	26	-	-	+
50	F	26	-	+	-
42	M	31	-	-	+
55	F	57	-	+	-
32	M	37	+	-	-
45	F	53	+	-	-
30	F	41	+	-	-
37	F	39	+	-	-
40	M	27	+	-	-
45	F	40	+	-	-