Supplemental Table S1. Predict MKX-AS1 SNP rs11006706. [83-88]

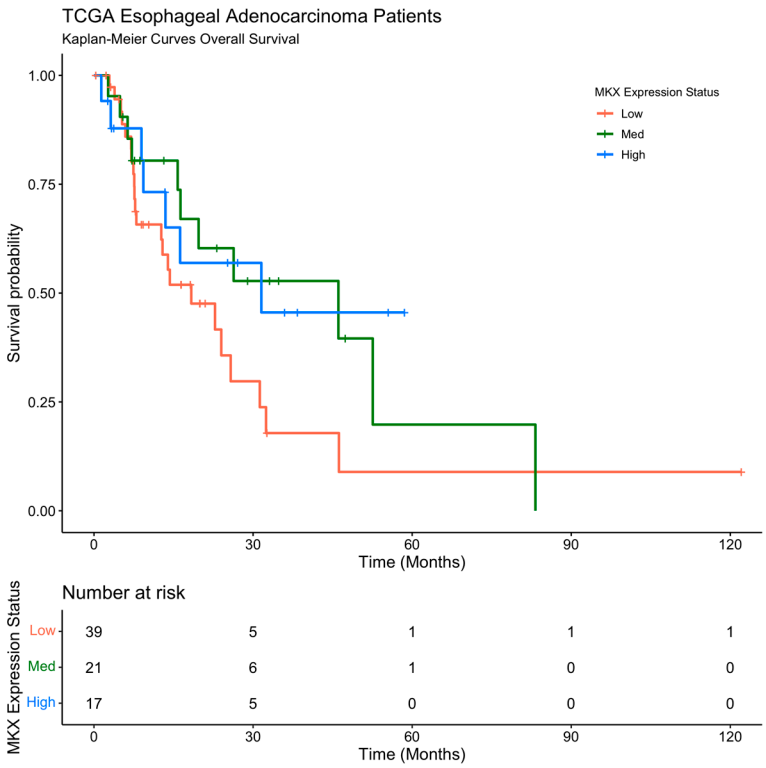
Genomic Position	rsID	REF	ALT	Genome Region	PredictSNP			CADD		
					Estimated effect	Score given by tool	Estimated expected accuracy	Estimated effect	Score given by tool	Estimated expected accuracy
chr10:28050840	rs11006706	G	A	ncRNA intronic	neutral	-1	0.88	neutral	4.663	0.8
chr10:27745700	rs11006701	G	C	ncRNA intronic	neutral	0.2806798	0.73	deleterious	11.62	0.69
chr10:27745700	.	G	A	ncRNA intronic	deleterious	0.42256593	0.91	deleterious	13.06	0.79
chr10:27745700	.	G	T	ncRNA intronic	deleterious	0.37735204	0.91	deleterious	11.89	0.69

DANN			FATHMM			FunSeq			GWAVA		
Estimated effect	Score given by tool	Estimated expected accuracy	Estimated effect	Score given by tool	Estimated expected accuracy	Estimated effect	Score given by tool	Estimated expected accuracy	Estimated effect	Score given by tool	Estimated expected accuracy
neutral	0.6220574	0.71	neutral	0.13318	0.89	neutral	1.65E-20	0.8	neutral	0.16	0.79
deleterious	0.8451956	0.62	neutral	0.18712	0.77	deleterious	1.79118225	0.64	neutral	0.29	0.7
deleterious	0.9631567	1	neutral	0.18737	0.77	deleterious	1.79117016	0.64	neutral	0.29	0.7
deleterious	0.9304451	0.96	neutral	0.20506	0.75	deleterious	1.79078091	0.64	neutral	0.29	0.7

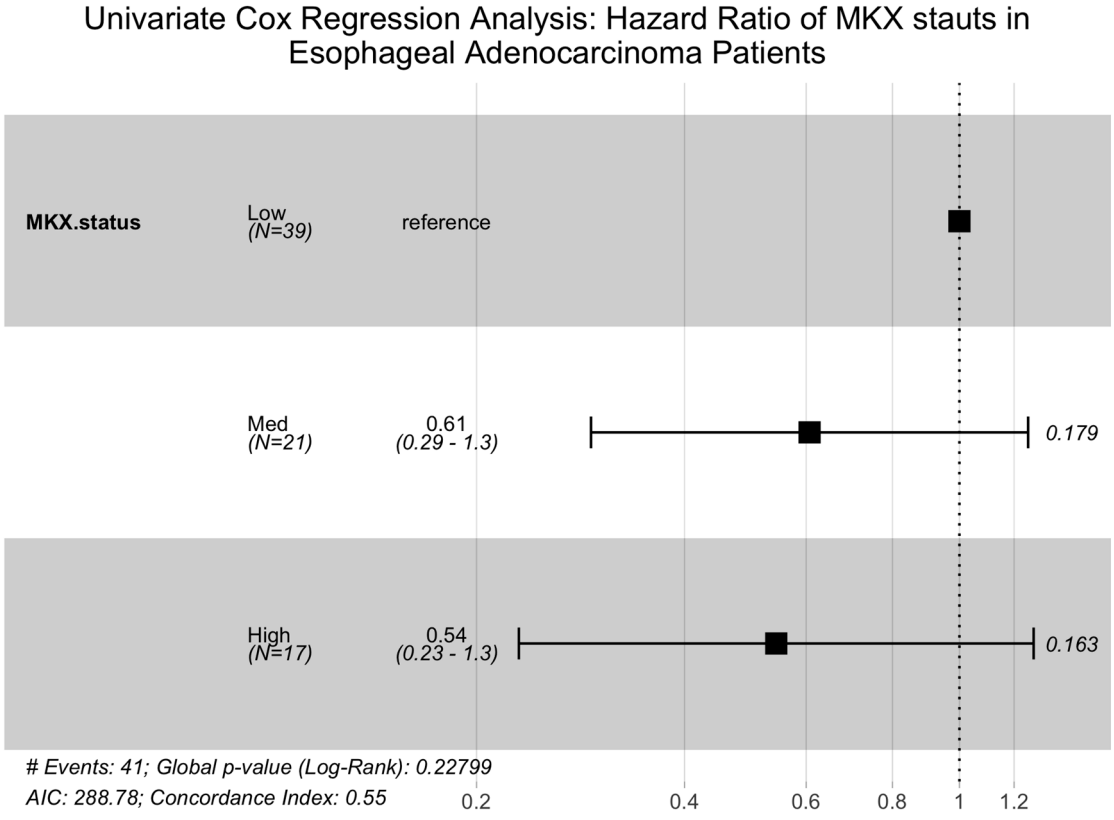
Supplemental Table S2. Minor Allele Frequency for SNP rs11006706.

Global	Study-wide	5008	G=0.8235	A=0.1765
African	Sub	1322	G=0.9486	A=0.0514
East Asian	Sub	1008	G=0.6290	A=0.3710
Europe	Sub	1006	G=0.8897	A=0.1103
South Asian	Sub	978	G=0.786	A=0.214
American	Sub	694	G=0.824	A=0.176

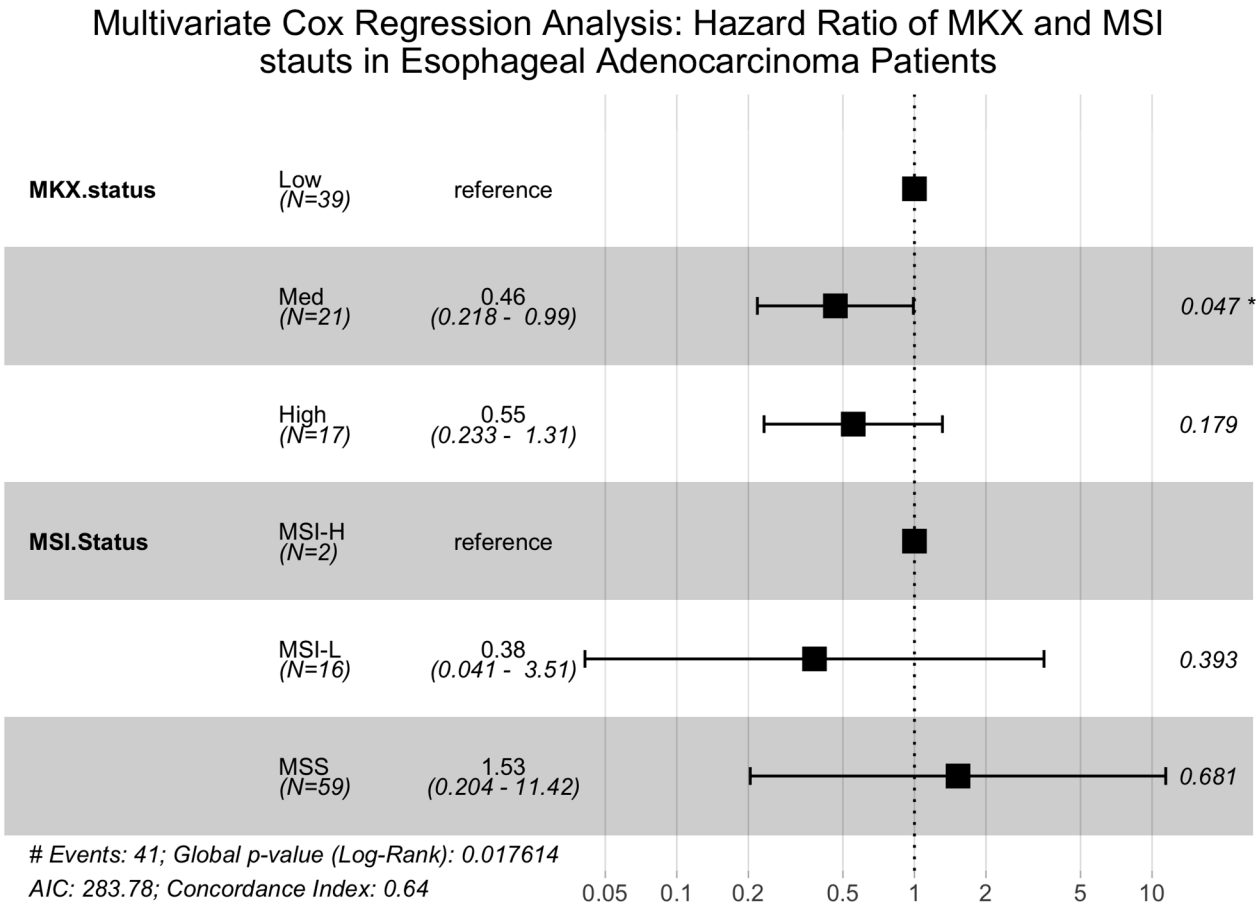
* 1000Genomes.BioProject ID: PRJEB6930


TCGA Esophageal Adenocarcinoma Patients
Kaplan-Meier Curves Overall Survival
MKX Expression Status
Low
Med
High
Survival probability
1.00
0.75
0.50
0.25
0.00
0
30
60
90
120
Time (Months)
Number at risk
MKX Expression Status
Low 39 5 1 1 1
Med 21 6 1 0 0
High 17 5 0 0 0
0
30
60
90
120
Time (Months)

(a)


Univariate Cox Regression Analysis: Hazard Ratio of MKX stauts in Esophageal Adenocarcinoma Patients
MKX.status
Low (N=39) reference
Med (N=21) 0.61 (0.29 - 1.3) 0.179
High (N=17) 0.54 (0.23 - 1.3) 0.163
Events: 41; Global p-value (Log-Rank): 0.22799
AIC: 288.78; Concordance Index: 0.55
0.2
0.4
0.6
0.8
1
1.2

(b)



(c)

Figure S1. (a) Kaplan–Meier curve of OS for the TCGA Esophageal Adenocarcinoma patient cohort based on the *MKX* gene expression status. Cox Proportional-Hazards Model Hazard Ratio with 95% Confidence Interval and p-value is shown. **(b)** Forest plot showing univariate Cox regression analysis: hazard ratio of MKX status in TCGA Esophageal Adenocarcinoma patient cohort. **(c)** Forest plot showing the multivariate Cox regression analysis: hazard ratio of MKX and MSI (Microsatellite Instability) status in TCGA Esophageal Adenocarcinoma patient cohort. MSS- Microsatellite stable; MSI-L, Low levels of MSI; MSI-H, High levels of MSI.

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