

High-Throughput Sequencing of Gastric Cancer Patients: Unravelling Genetic Predispositions Towards an Early-Onset Subtype

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Table S1. Clinical characteristics of the studied group.

Patient ID	Age of Onset	Age-Dependent Subtype	Histology	Family History	CDH1 Mutation Status (dbSNP)	Treatment Strategy
1	>45	CGC	Intestinal	Negative	rs1801552, rs9929218	Surgical resection
2	>45	CGC	Intestinal	Negative	rs1801552	Surgical resection
5	>45	CGC	Intestinal	Negative	rs1801552	Surgical resection
7	>45	CGC	Intestinal	Negative	rs1801552	Surgical resection
10	>45	CGC	Intestinal	Negative	rs1801552	Surgical resection
17	>45	CGC	Intestinal	Negative	rs33969373, rs1801552, rs2229044, rs9929218	Surgical resection
21	>45	CGC	Intestinal	Negative	rs1801552	Surgical resection
22	>45	CGC	Intestinal	Negative	rs1801552, rs33964119	Surgical resection
26	>45	CGC	Intestinal	Negative	rs1801552, rs9929218	Surgical resection
31	>45	CGC	Intestinal	Negative	rs1801552, rs9929218	Surgical resection
35	>45	CGC	Intestinal	Negative	rs1801552, rs9929218	Surgical resection
37	>45	CGC	Intestinal	Negative	rs35741240, rs1801552	Surgical resection
45	>45	CGC	Intestinal	Negative	rs1801552, rs9929218	Surgical resection
63N	>45	CGC	Intestinal	Negative	rs1801552, rs9929218	Surgical resection
72	>45	CGC	Intestinal	Negative	rs1801552	Surgical resection
82	>45	CGC	Intestinal	Negative	rs1801552	Surgical resection
84	>45	CGC	Intestinal	Negative	rs1801552	Surgical resection
91N	>45	CGC	Diffuse	Negative	rs1801552	Surgical resection
Y3	≤45	EOGC	Diffuse	Negative	rs1801552	Surgical resection
Y68	≤45	EOGC	Diffuse	Negative	rs9929218	Surgical resection
Y77	≤45	EOGC	Diffuse	Negative	rs1801552, rs9929218	Surgical resection
Y88	≤45	EOGC	Diffuse	Negative	rs761309816	Surgical resection
Y102	≤45	EOGC	Diffuse	Negative	rs1801552	Surgical resection
Y103	≤45	EOGC	Diffuse	Negative	rs1801552, rs9929218	Surgical resection

Y104	≤ 45	EOGC	Diffuse	Negative	rs761309816, rs1801552, rs61747636, rs9929218	Surgical resection
Y105	≤ 45	EOGC	Diffuse	Negative	Negative	Surgical resection
Y109B	≤ 45	EOGC	Diffuse	Negative	rs1801552	Surgical resection
Y110B	≤ 45	EOGC	Diffuse	Negative	rs1801552	Surgical resection
Y115B	≤ 45	EOGC	Diffuse	Negative	rs1801552	Surgical resection
Y123B	≤ 45	EOGC	Diffuse	Negative	rs1801552, rs9929218	Surgical resection
Y128B	≤ 45	EOGC	Diffuse	Negative	rs1801552	Surgical resection
Y132B	≤ 45	EOGC	Diffuse	Negative	rs1801023, rs9929218	Surgical resection
Y134B	≤ 45	EOGC	Diffuse	Negative	rs1801552, rs9929218	Surgical resection
Y135	≤ 45	EOGC	Diffuse	Negative	rs1801552	Surgical resection
Y137B	≤ 45	EOGC	Diffuse	Negative	Negative	Surgical resection
Y143C	≤ 45	EOGC	Diffuse	Negative	rs1801552, rs9929218	Surgical resection
Y144C	≤ 45	EOGC	Diffuse	Negative	rs1801552	Surgical resection
Y145B	≤ 45	EOGC	Diffuse	Negative	rs1801552, rs9929218	Surgical resection
Y146B	≤ 45	EOGC	Diffuse	Negative	rs1801025, rs1801552	Surgical resection
Y147C	≤ 45	EOGC	Diffuse	Negative	rs1801552	Surgical resection
Y148C	≤ 45	EOGC	Diffuse	Negative	Negative	Surgical resection
Y151B	≤ 45	EOGC	Diffuse	Negative	rs1801552, rs9929218	Surgical resection
Y159C	≤ 45	EOGC	Diffuse	Negative	rs1801552	Surgical resection
Y161C	≤ 45	EOGC	Diffuse	Negative	rs1801552, rs9929218	Surgical resection
Y162C	≤ 45	EOGC	Diffuse	Negative	rs1801552, rs9929218	Surgical resection
Y165B	≤ 45	EOGC	Diffuse	Negative	Negative	Surgical resection
Y167B	≤ 45	EOGC	Diffuse	Negative	rs1801552	Surgical resection
Y168C	≤ 45	EOGC	Diffuse	Negative	rs1801552	Surgical resection
Y169C	≤ 45	EOGC	Diffuse	Negative	rs1801552, rs9929218	Surgical resection
Y179F	≤ 45	EOGC	Diffuse	Negative	rs1801552, rs9929218	Surgical resection
Y183B	≤ 45	EOGC	Diffuse	Negative	rs1801552, rs9929218	Surgical resection
Y188B	≤ 45	EOGC	Diffuse	Negative	rs1801552, rs9929218	Surgical resection
Y199B	≤ 45	EOGC	Diffuse	Negative	rs35741240, rs1801552	Surgical resection

Table S2. *In silico* estimation of CDH1 mutations status among GC patients.

dbSNP	Variant Type	Chr	CADD Score (Scaled)	DANN Score	FATHMM-XF Prediction	SIFT Prediction	PROVEAN Prediction	gnomAD MAF (European)
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								Non-Finnish)
rs1801552	synonymous	16	5.661	0.4494	Benign (high conf.)	Tolerated	Neutral	0.6252
rs9929218	intron_variant	16	2.120	0.6168	Benign (high conf.)	NA	NA	0.2859
rs33969373	synonymous	16	0.549	0.8224	Benign (high conf.)	Tolerated	Neutral	0.007797
rs2229044	synonymous	16	7.155	0.7629	Benign (high conf.)	Tolerated	Neutral	0.007156
rs33964119	synonymous	16	1.320	0.8216	Benign (high conf.)	Tolerated	Neutral	0.02579
rs35741240	synonymous	16	0.029	0.6151	Benign (high conf.)	Tolerated	Neutral	0.004466
rs761309816	disruptive_infraframe_deletion	16	NA	NA	NA	NA	NA	NA
rs61747636	synonymous	16	8.601	0.785	Benign (high conf.)	Tolerated	Neutral	0.002268
rs1801023	synonymous	16	1.198	0.5807	Benign (high conf.)	Tolerated	Neutral	0.004145
rs1801025	synonymous	16	7.508	0.9873	Benign	Tolerated	Neutral	0.0007044

NA: not applicable.



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