

**Table S3:** ORs, 95% CIs, p-values and FDR corrections for the full stratified analyses of the Irish cohorts.

Gene	SNP	Allele	Ca/Co	Case	Control	Test	OR	95%CI	P	FDR
<b>GPX1</b>	rs1050450	C>T	209/359	Polyp/Adenoma/HGD	Control	Dominant	1.03	0.72, 1.45	0.875	0.99
			209/359	Polyp/Adenoma/HGD	Control	Recessive	0.95	0.54, 1.65	0.850	0.99
			209/359	Polyp/Adenoma/HGD	Control	Additive	1.00	0.77, 1.29	0.977	1.00
			230/359	Cancer	Control	Dominant	0.85	0.61, 1.18	0.342	0.89
			230/359	Cancer	Control	Recessive	1.11	0.60, 1.72	0.951	1.00
			230/359	Cancer	Control	Additive	0.92	0.72, 1.18	0.499	0.89
			230/468	Cancer	Control/Polyp	Dominant	0.87	0.63, 1.18	0.368	0.89
			230/468	Cancer	Control/Polyp	Recessive	1.00	0.62, 1.64	0.994	1.00
			230/468	Cancer	Control/Polyp	Additive	1.20	0.81, 1.78	0.503	0.89
			355/468	Adenoma/HGD/Cancer	Control/Polyp	Dominant	0.94	0.71, 1.25	0.689	0.94
			355/468	Adenoma/HGD/Cancer	Control/Polyp	Recessive	0.94	0.59, 1.47	0.772	0.95
			355/468	Adenoma/HGD/Cancer	Control/Polyp	Additive	0.95	0.77, 1.18	0.664	0.94
			355/359	Adenoma/HGD/Cancer	Control	Dominant	0.93	0.14, 0.70	0.615	0.92
			355/359	Adenoma/HGD/Cancer	Control	Recessive	0.98	0.63, 1.54	0.944	1.00
			355/359	Adenoma/HGD/Cancer	Control	Additive	0.96	0.77, 1.18	0.684	0.94
			99/359	Adenoma/HGD	Control	Dominant	1.14	0.73, 1.78	0.562	0.91
			99/359	Adenoma/HGD	Control	Recessive	0.81	0.38, 1.72	0.579	0.91
			99/359	Adenoma/HGD	Control	Additive	1.03	0.74, 1.44	0.860	0.99
			99/468	Adenoma/HGD	Control/Polyp	Dominant	1.16	0.75, 1.80	0.506	0.89
			99/468	Adenoma/HGD	Control/Polyp	Recessive	0.79	0.38, 1.66	0.538	0.89
			99/468	Adenoma/HGD	Control/Polyp	Additive	1.04	0.75, 1.43	0.835	0.99
<b>GPX3</b>	rs8177426	A>G	209/364	Polyp/Adenoma/HGD	Control	Dominant	0.93	0.64, 1.34	0.680	0.94
			209/364	Polyp/Adenoma/HGD	Control	Recessive	1.11	0.36, 3.43	0.860	0.99
			209/364	Polyp/Adenoma/HGD	Control	Additive	0.95	0.68, 1.32	0.749	0.94
			240/364	Cancer	Control	Dominant	1.18	0.84, 1.67	0.332	0.89
			240/364	Cancer	Control	Recessive	0.95	0.31, 2.93	0.924	0.99
			240/364	Cancer	Control	Additive	1.14	0.84, 1.56	0.394	0.89

			240/471	Cancer	Control/Polyp	Dominant	1.16	0.85, 1.59	0.379	0.89
			240/471	Cancer	Control/Polyp	Recessive	0.81	0.28, 2.34	0.702	0.94
			240/471	Cancer	Control/Polyp	Additive	1.11	0.83, 1.48	0.497	0.89
			358/471	Adenoma/HGD/Cancer	Control/Polyp	Dominant	1.02	0.76, 1.37	0.891	0.99
			358/471	Adenoma/HGD/Cancer	Control/Polyp	Recessive	0.69	0.26, 1.86	0.461	0.89
			358/471	Adenoma/HGD/Cancer	Control/Polyp	Additive	0.99	0.76, 1.29	0.932	0.99
			358/364	Adenoma/HGD/Cancer	Control	Dominant	1.06	0.79, 1.42	0.700	0.94
			358/364	Adenoma/HGD/Cancer	Control	Recessive	1.02	0.39, 2.61	0.966	1.00
			358/364	Adenoma/HGD/Cancer	Control	Additive	1.05	0.81, 1.37	0.719	0.94
			99/364	Adenoma/HGD	Control	Dominant	0.75	0.46, 1.23	0.260	0.85
			99/364	Adenoma/HGD	Control	Recessive	0.45	0.06, 3.67	0.459	0.89
			99/364	Adenoma/HGD	Control	Additive	0.75	0.47, 1.19	0.220	0.83
			99/471	Adenoma/HGD	Control/Polyp	Dominant	0.74	0.45, 1.19	0.212	0.83
			99/471	Adenoma/HGD	Control/Polyp	Recessive	0.39	0.05, 3.04	0.369	0.89
			99/471	Adenoma/HGD	Control/Polyp	Additive	0.73	0.47, 1.14	0.166	0.80
<b>GPX3</b>	rs8177447	T>C	206/363	Polyp/Adenoma/HGD	Control	Dominant	0.97	0.67, 1.39	0.862	0.99
			206/363	Polyp/Adenoma/HGD	Control	Recessive	1.09	0.36, 3.38	0.878	0.99
			206/363	Polyp/Adenoma/HGD	Control	Additive	0.98	0.71, 1.36	0.911	0.99
			238/363	Cancer	Control	Dominant	1.14	0.81, 1.61	0.457	0.89
			238/363	Cancer	Control	Recessive	0.95	0.31, 2.94	0.932	0.99
			238/363	Cancer	Control	Additive	1.11	0.81, 1.52	0.517	0.89
			238/472	Cancer	Control/Polyp	Dominant	1.10	0.79, 1.52	0.588	0.91
			238/472	Cancer	Control/Polyp	Recessive	0.82	0.29, 2.36	0.717	0.94
			238/472	Cancer	Control/Polyp	Additive	1.06	0.79, 1.42	0.704	0.94
			356/472	Adenoma/HGD/Cancer	Control/Polyp	Dominant	0.98	0.73, 1.32	0.882	0.99
			356/472	Adenoma/HGD/Cancer	Control/Polyp	Recessive	0.70	0.29, 1.87	0.471	0.89
			356/472	Adenoma/HGD/Cancer	Control/Polyp	Additive	0.96	0.73, 1.25	0.735	0.94
			356/363	Adenoma/HGD/Cancer	Control	Dominant	1.06	0.79, 1.42	0.711	0.94
			356/363	Adenoma/HGD/Cancer	Control	Recessive	1.02	0.39, 2.61	0.971	1.00
			356/363	Adenoma/HGD/Cancer	Control	Additive	1.05	0.80, 1.37	0.731	0.94

			98/363	Adenoma/HGD	Control	Dominant	0.76	0.46, 1.25	0.277	0.86
			98/363	Adenoma/HGD	Control	Recessive	0.45	0.06, 3.67	0.458	0.89
			98/363	Adenoma/HGD	Control	Additive	0.76	0.48, 1.19	0.234	0.83
			98/472	Adenoma/HGD	Control/Polyp	Dominant	0.73	0.45, 1.19	0.202	0.83
			98/472	Adenoma/HGD	Control/Polyp	Recessive	0.39	0.05, 3.04	0.370	0.89
			98/472	Adenoma/HGD	Control/Polyp	Additive	0.73	0.46, 1.14	0.159	0.80
<b>GPX4</b>	rs2074451	T>G	209/206	Polyp/Adenoma/HGD	Control	Dominant	1.00	0.69, 1.45	0.995	1.00
			209/206	Polyp/Adenoma/HGD	Control	Recessive	1.16	0.77, 1.75	0.477	0.89
			209/206	Polyp/Adenoma/HGD	Control	Additive	1.05	0.83, 1.33	0.688	0.94
			224/206	Cancer	Control	Dominant	1.08	0.75, 1.55	0.681	0.94
			224/206	Cancer	Control	Recessive	1.15	0.77, 1.72	0.493	0.89
			224/206	Cancer	Control	Additive	1.08	0.86, 1.36	0.512	0.89
			224/315	Cancer	Control/Polyp	Dominant	0.70	0.47, 1.03	0.073	0.72
			224/315	Cancer	Control/Polyp	Recessive	0.85	0.57, 1.26	0.408	0.89
			224/315	Cancer	Control/Polyp	Additive	0.82	0.65, 1.05	0.109	0.80
			355/315	Adenoma/HGD/Cancer	Control/Polyp	Dominant	0.70	0.49, 1.01	0.055	0.70
			355/315	Adenoma/HGD/Cancer	Control/Polyp	Recessive	0.91	0.64, 1.29	0.599	0.91
			355/315	Adenoma/HGD/Cancer	Control/Polyp	Additive	0.85	0.68, 1.05	0.130	0.80
			355/206	Adenoma/HGD/Cancer	Control	Dominant	1.04	0.77, 1.41	0.803	0.97
			355/206	Adenoma/HGD/Cancer	Control	Recessive	1.16	0.82, 1.62	0.405	0.89
			355/206	Adenoma/HGD/Cancer	Control	Additive	1.07	0.88, 1.29	0.525	0.89
			98/206	Adenoma/HGD	Control	Dominant	0.92	0.57, 1.48	0.735	0.94
			98/206	Adenoma/HGD	Control	Recessive	1.32	0.78, 2.21	0.299	0.88
			98/206	Adenoma/HGD	Control	Additive	1.06	0.78, 1.44	0.706	0.94
			98/315	Adenoma/HGD	Control/Polyp	Dominant	0.94	0.56, 1.56	0.814	0.97
			98/315	Adenoma/HGD	Control/Polyp	Recessive	1.40	0.84, 2.34	0.198	0.83
			98/315	Adenoma/HGD	Control/Polyp	Additive	0.16	0.80, 1.53	0.530	0.89
<b>GPX4</b>	rs713041	T>C	209/284	Polyp/Adenoma/HGD	Control	Dominant	0.68	0.45, 1.01	0.059	0.71
			209/284	Polyp/Adenoma/HGD	Control	Recessive	1.13	0.65, 1.94	0.674	0.94
			209/284	Polyp/Adenoma/HGD	Control	Additive	0.85	0.64, 1.13	0.261	0.85

			225/284	Cancer	Control	Dominant	0.76	0.52, 1.13	0.177	0.80
			225/284	Cancer	Control	Recessive	0.95	0.55, 1.64	0.864	0.99
			225/284	Cancer	Control	Additive	0.86	0.65, 1.14	0.288	0.87
			225/448	Cancer	Control/Polyp	Dominant	1.06	0.75, 1.50	0.741	0.94
			225/448	Cancer	Control/Polyp	Recessive	1.14	0.78, 1.67	0.491	0.89
			225/448	Cancer	Control/Polyp	Additive	1.07	0.86, 1.34	0.544	0.89
			355/448	Adenoma/HGD/Cancer	Control/Polyp	Dominant	1.01	0.74, 1.37	0.952	1.00
			355/448	Adenoma/HGD/Cancer	Control/Polyp	Recessive	1.19	0.85, 1.67	0.310	0.89
			355/448	Adenoma/HGD/Cancer	Control/Polyp	Additive	1.06	0.87, 1.29	0.530	0.89
			355/284	Adenoma/HGD/Cancer	Control	Dominant	0.72	0.51, 1.02	0.066	0.72
			355/284	Adenoma/HGD/Cancer	Control	Recessive	1.03	0.64, 1.66	0.896	0.99
			355/284	Adenoma/HGD/Cancer	Control	Additive	0.86	0.67, 1.09	0.213	0.83
			98/284	Adenoma/HGD	Control	Dominant	0.71	0.48, 1.17	0.181	0.80
			98/284	Adenoma/HGD	Control	Recessive	0.81	0.39, 1.70	0.582	0.91
			98/284	Adenoma/HGD	Control	Additive	0.79	0.54, 1.14	0.210	0.83
			98/448	Adenoma/HGD	Control/Polyp	Dominant	0.91	0.57, 1.44	0.672	0.94
			98/448	Adenoma/HGD	Control/Polyp	Recessive	1.31	0.79, 2.16	0.296	0.88
			98/448	Adenoma/HGD	Control/Polyp	Additive	1.05	0.78, 1.41	0.740	0.94
<b>GPX5</b>	rs445870	A>G	209/215	Polyp/Adenoma/HGD	Control	Dominant	0.92	0.61, 1.37	0.668	0.94
			209/215	Polyp/Adenoma/HGD	Control	Recessive	2.12	0.63, 7.16	0.225	0.83
			209/215	Polyp/Adenoma/HGD	Control	Additive	1.00	0.70, 1.43	0.997	1.00
			236/215	Cancer	Control	Dominant	0.87	0.59, 1.29	0.489	0.89
			236/215	Cancer	Control	Recessive	2.25	0.69, 7.29	0.176	0.80
			236/215	Cancer	Control	Additive	0.97	0.69, 1.36	0.870	0.99
			236/324	Cancer	Control/Polyp	Dominant	1.19	0.85, 1.66	0.317	0.89
			236/324	Cancer	Control/Polyp	Recessive	0.66	0.37, 1.18	0.158	0.80
			236/324	Cancer	Control/Polyp	Additive	1.01	0.79, 1.30	0.916	0.99
			355/324	Adenoma/HGD/Cancer	Control/Polyp	Dominant	1.12	0.83, 1.53	0.456	0.89
			355/324	Adenoma/HGD/Cancer	Control/Polyp	Recessive	0.69	0.41, 1.16	0.159	0.80
			355/324	Adenoma/HGD/Cancer	Control/Polyp	Additive	0.99	0.79, 1.25	0.937	1.00

			355/215	Adenoma/HGD/Cancer	Control	Dominant	0.89	0.63, 1.26	0.512	0.89
			355/215	Adenoma/HGD/Cancer	Control	Recessive	2.19	0.73, 6.56	0.160	0.80
			355/215	Adenoma/HGD/Cancer	Control	Additive	0.99	0.73, 1.33	0.923	0.99
			98/215	Adenoma/HGD	Control	Dominant	1.11	0.68, 1.82	0.687	0.94
			98/215	Adenoma/HGD	Control	Recessive	2.27	0.56, 9.28	0.253	0.85
			98/215	Adenoma/HGD	Control	Additive	1.17	0.76, 1.82	0.481	0.89
			98/324	Adenoma/HGD	Control/Polyp	Dominant	0.98	0.62, 1.55	0.943	1.00
			98/324	Adenoma/HGD	Control/Polyp	Recessive	0.77	0.36, 1.65	0.503	0.89
			98/324	Adenoma/HGD	Control/Polyp	Additive	0.94	0.67, 1.31	0.716	0.94
<i>SELENOF</i>	rs5859	C>T	209/368	Polyp/Adenoma/HGD	Control	Dominant	1.29	0.91, 1.83	0.153	0.80
			209/368	Polyp/Adenoma/HGD	Control	Recessive	0.82	0.78, 4.28	0.169	0.80
			209/368	Polyp/Adenoma/HGD	Control	Additive	1.29	0.96, 1.74	0.090	0.75
			236/368	Cancer	Control	Dominant	1.54	1.10, 2.15	<b>0.012</b>	0.50
			236/368	Cancer	Control	Recessive	2.05	0.91, 4.59	0.082	0.75
			236/368	Cancer	Control	Additive	1.49	1.12, 1.98	<b>0.006</b>	0.50
			236/477	Cancer	Control/Polyp	Dominant	1.47	1.07, 2.02	<b>0.017</b>	0.50
			236/477	Cancer	Control/Polyp	Recessive	1.82	0.87, 3.80	0.111	0.80
			236/477	Cancer	Control/Polyp	Additive	1.42	1.09, 1.86	<b>0.010</b>	0.50
			334/477	Adenoma/HGD/Cancer	Control/Polyp	Dominant	1.43	1.07, 1.90	<b>0.014</b>	0.50
			334/477	Adenoma/HGD/Cancer	Control/Polyp	Recessive	1.84	0.94, 3.59	<b>0.008</b>	0.50
			334/477	Adenoma/HGD/Cancer	Control/Polyp	Additive	1.39	1.10, 1.77	<b>0.007</b>	0.50
			334/368	Adenoma/HGD/Cancer	Control	Dominant	1.42	1.07, 1.88	<b>0.016</b>	0.50
			334/368	Adenoma/HGD/Cancer	Control	Recessive	1.94	0.37, 0.95	0.072	0.72
			334/368	Adenoma/HGD/Cancer	Control	Additive	1.39	1.09, 1.78	<b>0.008</b>	0.50
			99/368	Adenoma/HGD	Control	Dominant	1.39	0.88, 2.19	0.155	0.80
			99/368	Adenoma/HGD	Control	Recessive	2.12	0.76, 5.87	0.150	0.80
			99/368	Adenoma/HGD	Control	Additive	1.40	0.95, 2.04	0.087	0.75
			99/477	Adenoma/HGD	Control/Polyp	Dominant	1.33	0.86, 2.06	0.206	0.83
			99/477	Adenoma/HGD	Control/Polyp	Recessive	1.88	0.72, 4.93	0.200	0.83
			99/477	Adenoma/HGD	Control/Polyp	Additive	1.33	0.92, 1.93	0.127	0.80

<b>SELENOM</b>	rs11705137	T>C	209/209	Polyp/Adenoma/HGD	Control	Dominant	1.31	0.93, 1.85	0.127	0.80
			209/209	Polyp/Adenoma/HGD	Control	Recessive	1.25	0.64, 2.42	0.510	0.89
			209/209	Polyp/Adenoma/HGD	Control	Additive	1.23	0.94, 1.61	0.140	0.80
			225/209	Cancer	Control	Dominant	1.30	0.93, 1.81	0.123	0.80
			225/209	Cancer	Control	Recessive	1.10	0.57, 2.12	0.789	0.95
			225/209	Cancer	Control	Additive	1.20	0.92, 1.56	0.179	0.80
			225/316	Cancer	Control/Polyp	Dominant	1.33	0.88, 1.99	0.174	0.80
			225/316	Cancer	Control/Polyp	Recessive	0.99	0.66, 1.48	0.962	1.00
			225/316	Cancer	Control/Polyp	Additive	1.11	0.87, 1.42	0.417	0.89
			352/316	Adenoma/HGD/Cancer	Control/Polyp	Dominant	1.13	0.79, 1.62	0.507	0.89
			352/316	Adenoma/HGD/Cancer	Control/Polyp	Recessive	1.10	0.77, 1.58	0.596	0.91
			352/316	Adenoma/HGD/Cancer	Control/Polyp	Additive	1.09	0.87, 1.36	0.460	0.89
			352/209	Adenoma/HGD/Cancer	Control	Dominant	1.30	0.98, 1.73	0.065	0.72
			352/209	Adenoma/HGD/Cancer	Control	Recessive	1.17	0.67, 2.03	0.586	0.91
			352/209	Adenoma/HGD/Cancer	Control	Additive	1.21	0.97, 1.52	0.091	0.75
			99/209	Adenoma/HGD	Control	Dominant	0.99	0.63, 1.57	0.976	1.00
			99/209	Adenoma/HGD	Control	Recessive	1.16	0.48, 2.79	0.740	0.94
			99/209	Adenoma/HGD	Control	Additive	1.02	0.71, 1.47	0.913	0.99
			99/316	Adenoma/HGD	Control/Polyp	Dominant	0.81	0.49, 1.34	0.411	0.89
			99/316	Adenoma/HGD	Control/Polyp	Recessive	1.39	0.84, 2.31	0.202	0.83
			99/316	Adenoma/HGD	Control/Polyp	Additive	1.04	0.76, 1.43	0.790	0.95
<b>SELENON</b>	rs11247710	G>C	209/219	Polyp/Adenoma/HGD	Control	Dominant	1.07	0.71, 1.61	0.753	0.94
			209/219	Polyp/Adenoma/HGD	Control	Recessive	1.09	0.68, 1.74	0.727	0.94
			209/219	Polyp/Adenoma/HGD	Control	Additive	1.06	0.81, 1.37	0.690	0.94
			215/219	Cancer	Control	Dominant	1.16	0.77, 1.74	0.476	0.89
			215/219	Cancer	Control	Recessive	1.08	0.68, 1.71	0.749	0.94
			215/219	Cancer	Control	Additive	1.09	0.84, 1.41	0.521	0.89
			215/320	Cancer	Control/Polyp	Dominant	1.19	0.82, 1.72	0.359	0.89
			215/320	Cancer	Control/Polyp	Recessive	1.12	0.74, 1.71	0.590	0.91
			215/320	Cancer	Control/Polyp	Additive	0.92	0.73, 1.17	0.369	0.89

			356/320	Adenoma/HGD/Cancer	Control/Polyp	Dominant	1.22	0.87, 1.73	0.245	0.84
			356/320	Adenoma/HGD/Cancer	Control/Polyp	Recessive	1.20	0.82, 1.76	0.342	0.89
			356/320	Adenoma/HGD/Cancer	Control/Polyp	Additive	1.15	0.93, 1.43	0.190	0.82
			356/219	Adenoma/HGD/Cancer	Control	Dominant	1.11	0.78, 1.58	0.548	0.90
			356/219	Adenoma/HGD/Cancer	Control	Recessive	1.08	0.72, 1.62	0.701	0.94
			356/219	Adenoma/HGD/Cancer	Control	Additive	1.07	0.86, 1.35	0.545	0.89
			99/219	Adenoma/HGD	Control	Dominant	1.26	0.75, 2.12	0.389	0.89
			99/219	Adenoma/HGD	Control	Recessive	1.33	0.76, 2.34	0.316	0.89
			99/219	Adenoma/HGD	Control	Additive	1.21	0.87, 1.68	0.263	0.85
			99/320	Adenoma/HGD	Control/Polyp	Dominant	1.29	0.79, 2.12	0.313	0.89
			99/320	Adenoma/HGD	Control/Polyp	Additive	1.24	0.91, 1.65	0.182	0.80
<b>SELENON</b>	rs4659382	C>G	206/214	Polyp/Adenoma/HGD	Control	Dominant	1.43	0.97, 2.11	0.070	0.72
			206/214	Polyp/Adenoma/HGD	Control	Recessive	3.52	1.27, 9.79	<b>0.016</b>	0.50
			206/214	Polyp/Adenoma/HGD	Control	Additive	1.51	1.08, 2.07	<b>0.015</b>	0.50
			236/214	Cancer	Control	Dominant	1.17	0.79, 1.70	0.427	0.89
			236/214	Cancer	Control	Recessive	2.64	0.93, 7.45	0.067	0.72
			236/214	Cancer	Control	Additive	1.25	0.90, 1.73	0.181	0.80
			236/323	Cancer	Control/Polyp	Dominant	1.07	0.76, 1.50	0.706	0.94
			236/323	Cancer	Control/Polyp	Recessive	1.39	0.65, 2.98	0.394	0.89
			236/323	Cancer	Control/Polyp	Additive	1.10	0.83, 1.45	0.529	0.89
			333/323	Adenoma/HGD/Cancer	Control/Polyp	Dominant	1.17	0.86, 1.60	0.311	0.89
			333/323	Adenoma/HGD/Cancer	Control/Polyp	Recessive	1.49	0.74, 2.98	0.264	0.85
			333/323	Adenoma/HGD/Cancer	Control/Polyp	Additive	1.18	0.91, 1.53	0.207	0.83
			333/214	Adenoma/HGD/Cancer	Control	Dominant	1.28	0.92, 1.79	0.142	0.80
			333/214	Adenoma/HGD/Cancer	Control	Recessive	3.04	1.16, 7.96	<b>0.023</b>	0.57
			333/214	Adenoma/HGD/Cancer	Control	Additive	1.36	1.02, 1.80	<b>0.035</b>	0.68
			97/214	Adenoma/HGD	Control	Dominant	1.61	0.99, 2.61	0.055	0.70
			97/214	Adenoma/HGD	Control	Recessive	3.25	1.01, 10.52	<b>0.049</b>	0.69
			97/214	Adenoma/HGD	Control	Additive	1.64	1.09, 2.48	<b>0.019</b>	0.50
			97/323	Adenoma/HGD	Control/Polyp	Dominant	1.47	0.94, 2.32	0.096	0.75

			97/323	Adenoma/HGD	Control/Polyp	Recessive	1.72	0.48, 0.67	0.258	0.85
			97/323	Adenoma/HGD	Control/Polyp	Additive	1.41	0.97, 2.04	0.071	0.72
<b>SELENOP</b>	rs2972994	G>A	208/363	Polyp/Adenoma/HGD	Control	Dominant	1.10	0.75, 1.59	0.630	0.92
			208/363	Polyp/Adenoma/HGD	Control	Recessive	1.08	0.72, 1.62	0.710	0.94
			208/363	Polyp/Adenoma/HGD	Control	Additive	1.06	0.84, 1.35	0.603	0.91
			240/363	Cancer	Control	Dominant	1.44	0.99, 2.08	0.055	0.70
			240/363	Cancer	Control	Recessive	0.14	0.77, 1.67	0.518	0.89
			240/363	Cancer	Control	Additive	1.20	0.96, 1.51	0.112	0.80
			240/471	Cancer	Control/Polyp	Dominant	1.44	1.01, 2.05	<b>0.044</b>	0.69
			240/471	Cancer	Control/Polyp	Recessive	1.18	0.82, 1.70	0.378	0.89
			240/471	Cancer	Control/Polyp	Additive	1.22	0.98, 1.52	0.073	0.72
			308/471	Adenoma/HGD/Cancer	Control/Polyp	Dominant	1.37	1.00, 1.87	<b>0.049</b>	0.69
			308/471	Adenoma/HGD/Cancer	Control/Polyp	Recessive	1.25	0.89, 1.73	0.184	0.80
			308/471	Adenoma/HGD/Cancer	Control/Polyp	Additive	1.22	1.01, 1.49	<b>0.044</b>	0.69
			308/363	Adenoma/HGD/Cancer	Control	Dominant	1.26	0.93, 1.71	0.135	0.80
			308/363	Adenoma/HGD/Cancer	Control	Recessive	1.11	0.79, 1.54	0.537	0.89
			308/363	Adenoma/HGD/Cancer	Control	Additive	0.14	0.93, 1.38	0.193	0.82
			98/363	Adenoma/HGD	Control	Dominant	1.22	0.74, 2.00	0.429	0.89
			98/363	Adenoma/HGD	Control	Recessive	1.37	0.83, 2.27	0.216	0.83
			98/363	Adenoma/HGD	Control	Additive	1.21	0.89, 1.64	0.225	0.83
			98/471	Adenoma/HGD	Control/Polyp	Dominant	1.22	0.76, 1.98	0.416	0.89
			98/471	Adenoma/HGD	Control/Polyp	Recessive	1.43	0.88, 2.33	0.155	0.80
			98/471	Adenoma/HGD	Control/Polyp	Additive	1.23	0.59, 1.21	0.180	0.80
<b>SELENOP</b>	rs7579	T>C	209/364	Polyp/Adenoma/HGD	Control	Dominant	1.18	0.83, 1.66	0.355	0.89
			209/364	Polyp/Adenoma/HGD	Control	Recessive	1.74	0.90, 3.34	0.097	0.75
			209/364	Polyp/Adenoma/HGD	Control	Additive	1.22	0.93, 1.59	0.156	0.80
			233/364	Cancer	Control	Dominant	1.19	0.86, 1.66	0.297	0.88
			233/364	Cancer	Control	Recessive	1.35	0.69, 2.64	0.375	0.89
			233/364	Cancer	Control	Additive	1.18	0.90, 1.54	0.231	0.83
			233/473	Cancer	Control/Polyp	Dominant	1.08	0.79, 1.48	0.622	0.92



			233/473	Cancer	Control/Polyp	Recessive	1.05	0.57, 1.93	0.876	0.99
			233/473	Cancer	Control/Polyp	Additive	1.06	0.83, 1.36	0.648	0.94
			356/473	Adenoma/HGD/Cancer	Control/Polyp	Dominant	0.99	0.75, 1.31	0.949	1.00
			356/473	Adenoma/HGD/Cancer	Control/Polyp	Recessive	1.00	0.57, 1.73	0.988	1.00
			356/473	Adenoma/HGD/Cancer	Control/Polyp	Additive	0.99	0.79, 1.24	0.954	1.00
			356/364	Adenoma/HGD/Cancer	Control	Dominant	1.19	0.89, 1.57	0.235	0.83
			356/364	Adenoma/HGD/Cancer	Control	Recessive	1.53	0.87, 2.69	0.139	0.80
			356/364	Adenoma/HGD/Cancer	Control	Additive	1.20	0.96, 1.49	0.120	0.80
			99/364	Adenoma/HGD	Control	Dominant	0.88	0.56, 1.39	0.586	0.91
			99/364	Adenoma/HGD	Control	Recessive	1.12	0.44, 2.87	0.811	0.97
			99/364	Adenoma/HGD	Control	Additive	0.93	0.64, 1.34	0.722	0.94
			99/473	Adenoma/HGD	Control/Polyp	Dominant	0.80	0.51, 1.25	0.324	0.89
			99/473	Adenoma/HGD	Control/Polyp	Recessive	0.87	0.35, 2.14	0.760	0.94
			99/473	Adenoma/HGD	Control/Polyp	Additive	0.85	0.59, 1.21	0.361	0.89
<b>SELENOS</b>	rs34713741	C>T	209/362	Polyp/Adenoma/HGD	Control	Dominant	0.85	0.60, 1.19	0.350	0.89
			209/362	Polyp/Adenoma/HGD	Control	Recessive	1.25	0.62, 2.54	0.530	0.89
			209/362	Polyp/Adenoma/HGD	Control	Additive	0.93	0.69, 1.23	0.601	0.91
			235/362	Cancer	Control	Dominant	0.74	0.53, 1.04	0.080	0.75
			235/362	Cancer	Control	Recessive	1.77	0.94, 3.31	0.076	0.73
			235/362	Cancer	Control	Additive	0.91	0.70, 1.19	0.505	0.89
			235/472	Cancer	Control/Polyp	Dominant	0.73	0.53, 0.99	<b>0.049</b>	0.69
			235/472	Cancer	Control/Polyp	Recessive	1.58	0.88, 2.81	0.122	0.80
			235/472	Cancer	Control/Polyp	Additive	0.89	0.69, 1.14	0.352	0.89
			365/472	Adenoma/HGD/Cancer	Control/Polyp	Dominant	0.69	0.52, 0.92	<b>0.011</b>	0.50
			365/472	Adenoma/HGD/Cancer	Control/Polyp	Recessive	1.36	0.79, 2.35	0.267	0.85
			365/472	Adenoma/HGD/Cancer	Control/Polyp	Additive	0.83	0.66, 1.05	0.110	0.80
			365/362	Adenoma/HGD/Cancer	Control	Dominant	0.79	0.59, 1.05	0.101	0.77
			365/362	Adenoma/HGD/Cancer	Control	Recessive	1.52	0.87, 2.68	0.144	0.80
			365/362	Adenoma/HGD/Cancer	Control	Additive	0.92	0.74, 1.15	0.476	0.89
			95/362	Adenoma/HGD	Control	Dominant	0.62	0.39, 0.99	<b>0.046</b>	0.69

			95/362	Adenoma/HGD	Control	Recessive	0.95	0.35, 2.60	0.921	0.99
			95/362	Adenoma/HGD	Control	Additive	0.71	0.48, 1.05	0.088	0.75
			95/472	Adenoma/HGD	Control/Polyp	Dominant	0.61	0.39, 0.94	<b>0.032</b>	0.68
			95/472	Adenoma/HGD	Control/Polyp	Recessive	0.85	0.32, 2.25	0.742	0.94
			95/472	Adenoma/HGD	Control/Polyp	Additive	0.69	0.47, 1.01	0.058	0.71
<i>SEPSH1</i>	rs2275129	C>G	201/216	Polyp/Adenoma/HGD	Control	Dominant	1.03	0.66, 1.59	0.897	0.99
			201/216	Polyp/Adenoma/HGD	Control	Recessive	1.62	1.03, 2.55	<b>0.034</b>	0.68
			201/216	Polyp/Adenoma/HGD	Control	Additive	1.21	0.92, 1.59	0.171	0.80
			207/216	Cancer	Control	Dominant	0.90	0.58, 1.38	0.628	0.92
			207/216	Cancer	Control	Recessive	1.41	0.89, 2.22	0.133	0.80
			207/216	Cancer	Control	Additive	1.09	0.82, 1.42	0.552	0.90
			207/323	Cancer	Control/Polyp	Dominant	0.95	0.64, 1.39	0.785	0.95
			207/323	Cancer	Control/Polyp	Recessive	1.28	0.86, 1.93	0.227	0.83
			207/323	Cancer	Control/Polyp	Additive	1.07	0.84, 1.37	0.582	0.91
			301/323	Adenoma/HGD/Cancer	Control/Polyp	Dominant	1.05	0.74, 1.51	0.773	0.95
			301/323	Adenoma/HGD/Cancer	Control/Polyp	Recessive	1.44	1.01, 2.07	<b>0.047</b>	0.69
			301/323	Adenoma/HGD/Cancer	Control/Polyp	Additive	1.17	0.94, 1.45	0.160	0.80
			301/216	Adenoma/HGD/Cancer	Control	Dominant	0.96	0.66, 1.39	0.832	0.99
			301/216	Adenoma/HGD/Cancer	Control	Recessive	1.52	1.02, 2.25	<b>0.039</b>	0.69
			301/216	Adenoma/HGD/Cancer	Control	Additive	1.14	0.91, 1.44	0.263	0.85
			94/216	Adenoma/HGD	Control	Dominant	1.30	0.73, 2.31	0.383	0.89
			94/216	Adenoma/HGD	Control	Recessive	2.02	1.18, 3.46	<b>0.011</b>	0.50
			94/216	Adenoma/HGD	Control	Additive	1.46	1.03, 2.08	<b>0.035</b>	0.68
			94/323	Adenoma/HGD	Control/Polyp	Dominant	1.36	0.79, 2.37	0.270	0.85
			94/323	Adenoma/HGD	Control/Polyp	Recessive	1.83	1.11, 3.02	<b>0.018</b>	0.50
			94/323	Adenoma/HGD	Control/Polyp	Additive	1.43	1.03, 1.98	<b>0.034</b>	0.68
<i>SOD2</i>	rs4880	T>C	209/366	Polyp/Adenoma/HGD	Control	Dominant	1.06	0.72, 1.57	0.752	0.94
			209/366	Polyp/Adenoma/HGD	Control	Recessive	0.90	0.60, 1.34	0.599	0.91
			209/366	Polyp/Adenoma/HGD	Control	Additive	0.99	0.78, 1.25	0.904	0.99
			236/366	Cancer	Control	Dominant	1.22	0.84, 1.78	0.304	0.89

			236/366	Cancer	Control	Recessive	0.98	0.67, 1.43	0.910	0.99
			236/366	Cancer	Control	Additive	1.07	0.85, 1.34	0.575	0.91
			236/476	Cancer	Control/Polyp	Recessive	0.99	0.69, 1.42	0.952	1.00
			236/476	Cancer	Control/Polyp	Additive	1.06	0.85, 1.32	0.602	0.91
			355/476	Adenoma/HGD/Cancer	Control/Polyp	Dominant	1.11	0.80, 1.53	0.522	0.89
			355/476	Adenoma/HGD/Cancer	Control/Polyp	Recessive	0.95	0.68, 1.31	0.738	0.94
			355/476	Adenoma/HGD/Cancer	Control/Polyp	Additive	1.02	0.84, 1.24	0.849	0.99
			355/366	Adenoma/HGD/Cancer	Control	Dominant	1.14	0.83, 1.57	0.407	0.89
			355/366	Adenoma/HGD/Cancer	Control	Recessive	0.94	0.68, 1.29	0.708	0.94
			355/366	Adenoma/HGD/Cancer	Control	Additive	1.03	0.85, 1.25	0.778	0.95
			99/366	Adenoma/HGD	Control	Dominant	0.99	0.60, 1.63	0.965	1.00
			99/366	Adenoma/HGD	Control	Recessive	0.84	0.49, 1.42	0.515	0.89
			99/366	Adenoma/HGD	Control	Additive	0.94	0.69, 1.28	0.676	0.94
			99/476	Adenoma/HGD	Control/Polyp	Dominant	0.96	0.58, 1.56	0.870	0.99
			99/476	Adenoma/HGD	Control/Polyp	Recessive	0.85	0.51, 1.42	0.531	0.89
			99/476	Adenoma/HGD	Control/Polyp	Additive	0.93	0.69, 1.26	0.631	0.92
TXNRD1	rs11111979	C>G	209/214	Polyp/Adenoma/HGD	Control	Dominant	1.13	0.74, 1.71	0.573	0.91
			209/214	Polyp/Adenoma/HGD	Control	Recessive	0.98	0.63, 1.53	0.924	0.99
			209/214	Polyp/Adenoma/HGD	Control	Additive	1.04	0.80, 1.35	0.766	0.95
			240/214	Cancer	Control	Dominant	1.15	0.77, 1.73	0.489	0.89
			240/214	Cancer	Control	Recessive	1.16	0.76, 1.77	0.499	0.89
			240/214	Cancer	Control	Additive	1.11	0.87, 1.42	0.411	0.89
			240/323	Cancer	Control/Polyp	Dominant	1.05	0.73, 1.52	0.780	0.95
			240/323	Cancer	Control/Polyp	Recessive	1.19	0.81, 1.74	0.381	0.89
			240/323	Cancer	Control/Polyp	Additive	1.08	0.86, 1.36	0.490	0.89
			355/323	Adenoma/HGD/Cancer	Control/Polyp	Dominant	1.00	0.71, 1.39	0.988	1.00
			355/323	Adenoma/HGD/Cancer	Control/Polyp	Recessive	1.15	0.81, 1.64	0.434	0.89
			355/323	Adenoma/HGD/Cancer	Control/Polyp	Additive	1.05	0.86, 1.29	0.650	0.94
			355/214	Adenoma/HGD/Cancer	Control	Dominant	1.14	0.80, 1.63	0.465	0.89
			355/214	Adenoma/HGD/Cancer	Control	Recessive	1.07	0.73, 1.57	0.715	0.94

			355/214	Adenoma/HGD/Cancer	Control	Additive	1.08	0.86, 1.35	0.506	0.89
			96/214	Adenoma/HGD	Control	Dominant	0.96	0.57, 1.60	0.863	0.99
			96/214	Adenoma/HGD	Control	Recessive	1.04	0.59, 1.81	0.895	0.99
			96/214	Adenoma/HGD	Control	Additive	1.00	0.72, 1.37	0.975	1.00
			96/323	Adenoma/HGD	Control/Polyp	Dominant	0.87	0.54, 1.43	0.589	0.91
			96/323	Adenoma/HGD	Control/Polyp	Recessive	1.07	0.63, 1.81	0.815	0.97
			96/323	Adenoma/HGD	Control/Polyp	Additive	0.97	0.71, 1.32	0.840	0.99
TXNRD2	rs9605031	C>T	208/266	Polyp/Adenoma/HGD	Control	Dominant	0.81	0.52, 1.25	0.339	0.89
			208/266	Polyp/Adenoma/HGD	Control	Recessive	1.42	0.91, 2.22	0.126	0.80
			208/266	Polyp/Adenoma/HGD	Control	Additive	1.05	0.80, 1.37	0.738	0.94
			234/266	Cancer	Control	Dominant	1.25	0.81, 1.97	0.323	0.89
			234/266	Cancer	Control	Recessive	1.09	0.69, 1.71	0.701	0.94
			234/266	Cancer	Control	Additive	1.13	0.85, 1.49	0.394	0.89
			256/476	Cancer	Control/Polyp	Dominant	1.15	0.84, 1.58	0.377	0.89
			256/476	Cancer	Control/Polyp	Recessive	1.08	0.55, 1.89	0.954	1.00
			256/476	Cancer	Control/Polyp	Additive	1.10	0.85, 1.41	0.466	0.89
			355/476	Adenoma/HGD/Cancer	Control/Polyp	Dominant	1.07	0.80, 1.42	0.656	0.94
			355/476	Adenoma/HGD/Cancer	Control/Polyp	Recessive	1.04	0.59, 1.81	0.900	0.99
			355/476	Adenoma/HGD/Cancer	Control/Polyp	Additive	1.05	0.84, 1.31	0.680	0.94
			355/266	Adenoma/HGD/Cancer	Control	Dominant	1.01	0.69, 1.48	0.975	1.00
			355/266	Adenoma/HGD/Cancer	Control	Recessive	1.24	0.84, 1.84	0.281	0.86
			355/266	Adenoma/HGD/Cancer	Control	Additive	1.09	0.86, 1.37	0.496	0.89
			97/266	Adenoma/HGD	Control	Dominant	0.77	0.45, 1.31	0.329	0.89
			97/266	Adenoma/HGD	Control	Recessive	1.53	0.89, 2.65	0.124	0.80
			97/266	Adenoma/HGD	Control	Additive	1.06	0.75, 1.48	0.745	0.94
			97/476	Adenoma/HGD	Control/Polyp	Dominant	0.88	0.56, 1.38	0.579	0.91
			97/476	Adenoma/HGD	Control/Polyp	Recessive	1.08	0.43, 0.47	0.860	0.99
			97/476	Adenoma/HGD	Control/Polyp	Additive	0.94	0.67, 1.34	0.710	0.94
BAX	rs4645887	T>A	209/211	Polyp/Adenoma/HGD	Control	Dominant	1.17	1.81, 0.69	0.486	0.89
			209/211	Polyp/Adenoma/HGD	Control	Recessive	1.17	0.74, 1.84	0.505	0.89

			209/211	Polyp/Adenoma/HGD	Control	Additive	1.12	0.86, 1.48	0.404	0.89
			235/211	Cancer	Control	Dominant	0.70	0.45, 1.09	0.441	0.89
			235/211	Cancer	Control	Recessive	0.77	0.49, 1.19	0.241	0.83
			235/211	Cancer	Control	Additive	0.80	0.61, 1.04	0.094	0.75
			235/319	Cancer	Control/Polyp	Dominant	0.89	0.63, 1.26	0.504	0.89
			235/319	Cancer	Control/Polyp	Recessive	0.84	0.52, 1.36	0.473	0.89
			235/319	Cancer	Control/Polyp	Additive	0.90	0.69, 1.15	0.398	0.89
			355/319	Adenoma/HGD/Cancer	Control/Polyp	Dominant	0.87	0.64, 1.19	0.389	0.89
			355/319	Adenoma/HGD/Cancer	Control/Polyp	Recessive	0.80	0.51, 1.25	0.927	0.99
			355/319	Adenoma/HGD/Cancer	Control/Polyp	Additive	0.88	0.69, 1.10	0.260	0.85
			355/211	Adenoma/HGD/Cancer	Control	Dominant	0.77	0.52, 1.14	0.193	0.82
			355/211	Adenoma/HGD/Cancer	Control	Recessive	0.81	0.55, 1.18	0.276	0.86
			355/211	Adenoma/HGD/Cancer	Control	Additive	0.12	0.67, 1.06	0.144	0.80
			98/211	Adenoma/HGD	Control	Dominant	1.03	0.60, 1.76	0.913	0.99
			98/211	Adenoma/HGD	Control	Recessive	1.39	0.81, 2.41	0.237	0.83
			98/211	Adenoma/HGD	Control	Additive	1.14	0.82, 1.59	0.440	0.89
			98/319	Adenoma/HGD	Control/Polyp	Dominant	0.83	0.52, 1.32	0.424	0.89
			98/319	Adenoma/HGD	Control/Polyp	Recessive	0.71	0.35, 1.43	0.342	0.89
			98/319	Adenoma/HGD	Control/Polyp	Additive	0.83	0.59, 1.17	0.280	0.86
FOXO3	rs3813498	C>T	209/213	Polyp/Adenoma/HGD	Control	Dominant	0.85	0.58, 1.24	0.396	0.89
			209/213	Polyp/Adenoma/HGD	Control	Recessive	0.68	0.36, 1.25	0.218	0.83
			209/213	Polyp/Adenoma/HGD	Control	Additive	0.84	0.64, 1.12	0.233	0.83
			242/213	Cancer	Control	Dominant	1.10	0.76, 1.59	0.618	0.92
			242/213	Cancer	Control	Recessive	0.59	0.32, 1.08	0.087	0.75
			242/213	Cancer	Control	Additive	0.94	0.72, 1.24	0.677	0.94
			256/322	Cancer	Control/Polyp	Dominant	0.95	0.67, 1.36	0.784	0.95
			256/322	Cancer	Control/Polyp	Recessive	1.69	1.14, 3.01	0.276	0.86
			256/322	Cancer	Control/Polyp	Additive	1.02	0.75, 1.38	0.907	0.99
			338/322	Adenoma/HGD/Cancer	Control/Polyp	Dominant	0.69	0.52, 0.92	<b>0.011</b>	0.5
			338/322	Adenoma/HGD/Cancer	Control/Polyp	Recessive	1.70	0.70, 4.09	0.241	0.83

			338/322	Adenoma/HGD/Cancer	Control/Polyp	Additive	1.07	0.81, 1.42	0.621	0.92
			338/213	Adenoma/HGD/Cancer	Control	Dominant	0.97	0.70, 1.35	0.872	0.99
			338/213	Adenoma/HGD/Cancer	Control	Recessive	0.63	0.37, 1.05	0.080	0.50
			338/213	Adenoma/HGD/Cancer	Control	Additive	0.89	0.69, 1.14	0.357	0.89
			96/213	Adenoma/HGD	Control	Dominant	0.91	0.56, 1.47	0.701	0.94
			96/213	Adenoma/HGD	Control	Recessive	0.68	0.31, 1.51	0.346	0.89
			96/213	Adenoma/HGD	Control	Additive	0.88	0.61, 1.25	0.471	0.89
			96/322	Adenoma/HGD	Control/Polyp	Dominant	1.21	0.24, 0.75	0.431	0.89
			96/322	Adenoma/HGD	Control/Polyp	Recessive	1.71	0.50, 5.79	0.315	0.89
			96/322	Adenoma/HGD	Control/Polyp	Additive	1.22	0.81, 1.84	0.336	0.89
FRZB	rs17265803	T>C	209/215	Polyp/Adenoma/HGD	Control	Dominant	0.81	0.49, 1.33	0.401	0.89
			209/215	Polyp/Adenoma/HGD	Control	Recessive	0.00	0	0.999	1.00
			209/215	Polyp/Adenoma/HGD	Control	Additive	0.79	0.48, 1.24	0.346	0.89
			248/215	Cancer	Control	Dominant	1.13	0.72, 1.77	0.581	0.91
			248/215	Cancer	Control	Recessive	0.87	0.05, 13.94	0.919	0.99
			248/215	Cancer	Control	Additive	1.12	0.73, 1.73	0.604	0.91
			248/323	Cancer	Control/Polyp	Dominant	1.20	0.80, 1.81	0.370	0.89
			248/323	Cancer	Control/Polyp	Recessive	1.30	0.08, 20.95	0.852	0.99
			248/323	Cancer	Control/Polyp	Additive	1.20	0.81, 1.78	0.369	0.89
			355/323	Adenoma/HGD/Cancer	Control/Polyp	Dominant	1.10	0.75, 1.60	0.634	0.92
			355/323	Adenoma/HGD/Cancer	Control/Polyp	Recessive	0.94	0.06, 15.12	0.966	1.00
			355/323	Adenoma/HGD/Cancer	Control/Polyp	Additive	1.09	0.75, 1.58	0.645	0.94
			355/215	Adenoma/HGD/Cancer	Control	Dominant	0.98	0.65, 1.47	0.931	0.99
			355/215	Adenoma/HGD/Cancer	Control	Recessive	0.48	0.03, 7.64	0.600	0.91
			355/215	Adenoma/HGD/Cancer	Control	Additive	0.97	0.65, 1.42	0.876	0.99
			99/215	Adenoma/HGD	Control	Dominant	0.79	0.42, 1.48	0.457	0.89
			99/215	Adenoma/HGD	Control	Recessive	0.00	0	0.999	1.00
			99/215	Adenoma/HGD	Control	Additive	0.77	0.42, 1.43	0.414	0.89
			99/323	Adenoma/HGD	Control/Polyp	Dominant	0.84	0.46, 1.53	0.561	0.91
			99/323	Adenoma/HGD	Control/Polyp	Recessive	0.00	0	0.999	1.00

99/323	Adenoma/HGD	Control/Polyp	Additive	0.82	0.45, 1.49	0.524	0.89
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Polyps were generally hyperplastic and less than 2mm, or 1 or 2 tubular adenomas <10mm.

Adenomas (advanced adenomas) were all >10mm, or at least 3 adenomas <10mm, and/or with villous or tubulovillous components.

Adenomas with high grade dysplasia (HGD) were advanced adenomas with at least 5% HGD.

SNP, Single Nucleotide Polymorphism; OR, Odd Ratio; CI, Confidence Interval; Ca/Co, Case/Control; HGD, High Grade Dysplasia.

\**p-value* obtained from logistic regression model (Additive, Dominant, Recessive) adjusted for age and sex; *p-value considered significant at < 0.05 and noted in bold.*

FDR- False Discovery Rate obtained by the Benjamini–Hochberg procedure.