

Supplemental Table 5. The negative results of MR study between intake of artificial sweetener added to coffee and cancers.

	Type of cancer	GWAS ID	Inverse variance weighted						Heterogeneity		Pleio	
			Odds ratio	CI lower	CI upper	p-value	β	SE	Q-value	p-value	MR Egger-intercep	p-value
Lung cancer	Squamous cell lung cancer	finn-b-C3_NSCLC_SQUAM_EXALLC	1.244	0.132	11.742	0.849	0.218	1.145	6.126	0.805	-0.106	0.141
	Squamous cell lung cancer	finn-b-C3_NSCLC_SQUAM	1.340	0.142	12.617	0.798	0.293	1.144	6.000	0.815	-0.105	0.146
	Squamous cell lung cancer	ieu-a-967	1.374	0.333	5.679	0.660	0.318	0.724	17.008	0.017	0.015	0.751
	Small cell lung cancer	finn-b-C3_SCLC_EXALLC	0.605	0.025	14.797	0.758	-0.502	1.631	6.543	0.768	0.008	0.934
	Small cell lung cancer	finn-b-C3_SCLC	0.641	0.026	15.661	0.785	-0.445	1.631	6.622	0.761	0.007	0.942
	Non-small cell lung cancer	finn-b-C3_LUNG_NONSMALL	0.935	0.319	2.745	0.903	-0.067	0.549	4.022	0.946	-0.020	0.546
	Non-small cell lung cancer	finn-b-C3_LUNG_NONSMALL_EXALLC	0.913	0.309	2.696	0.870	-0.091	0.552	3.374	0.971	-0.020	0.543
	Lung cancer and mesothelioma	ukb-d-LUNG_CANCER_MESOT	0.997	0.991	1.004	0.418	-0.003	0.003	14.295	0.160	0.000	0.461

Lung cancer	Lung cancer	ieu-b-4954	0.999	0.992	1.006	0.738	-0.001	0.003	2.230	0.973	0.000	0.511
	Lung cancer	ieu-a-966	0.768	0.404	1.459	0.421	-0.264	0.327	7.142	0.414	0.009	0.653
	Lung cancer	ieu-b-4955	0.999	0.992	1.006	0.754	-0.001	0.003	2.359	0.968	0.000	0.528
	lung adenocarcinoma	finn-b-C3_NSCLC_ADENO_EXALLC	2.351	0.385	14.341	0.354	0.855	0.923	12.753	0.238	-0.064	0.262
	Lung adenocarcinoma	ieu-a-965	0.598	0.223	1.604	0.307	-0.514	0.503	2.574	0.921	-0.016	0.630
	lung adenocarcinoma	finn-b-C3_NSCLC_ADENO	2.455	0.402	14.979	0.330	0.898	0.923	6.481	0.773	-0.063	0.266
	Malignant neoplasm of bronchus and lung	ukb-d-C3_BRONCHUS_LUNG	0.996	0.990	1.002	0.150	-0.004	0.003	9.460	0.305	0.000	0.567
	Lung cancer	ieu-a-987	0.830	0.618	1.115	0.215	-0.187	0.151	7.472	0.991	0.018	0.076
	Lung adenocarcinoma	ieu-a-984	0.768	0.496	1.191	0.238	-0.264	0.223	19.498	0.301	-0.002	0.905

Lung cancer	Squamous cell lung cancer	ieu-a-989	1.358	0.822	2.243	0.232	0.306	0.256	19.407	0.306	0.001	0.959
Colorectal cancer	Colorectal cancer	ieu-b-4965	1.009	0.999	1.019	0.077	0.009	0.005	3.393	0.907	0.000	0.968
	Colon adenocarcinoma	finn-b-C3_COLON_ADENO_EXALLC	1.252	0.312	5.027	0.751	0.225	0.709	12.753	0.238	-0.059	0.164
	Malignant neoplasm of colon	finn-b-C3_COLON_EXALLC	0.829	0.296	2.318	0.721	-0.187	0.525	7.686	0.659	-0.042	0.199
Malignant neoplasm of stomach (all cancers excluded)	Malignant neoplasm of stomach (all cancers excluded)	finn-b-C3_STOMACH_EXALLC	0.916	0.165	5.085	0.920	-0.087	0.874	2.221	0.994	-0.018	0.730
Breast cancer	Breast cancer	ieu-b-4810	1.001	0.983	1.020	0.906	0.001	0.009	15.923	0.598	0.000	0.480
	Breast cancer	ebi-a-GCST004988	0.956	0.771	1.185	0.681	-0.045	0.110	8.447	0.585	0.004	0.610
	Breast cancer	ebi-a-GCST007236	0.068	0.000	29372	0.684	-2.694	6.623	14589	0.000	-0.223	0.632
	Breast cancer	ieu-a-1126	0.864	0.665	1.124	0.276	-0.146	0.134	6.802	0.558	0.001	0.903

Breast cancer	Breast cancer	ieu-a-1131	0.478	0.202	1.133	0.094	-0.738	0.440	7.070	0.529	0.007	0.778
	Breast cancer	ieu-a-1168	0.979	0.679	1.411	0.908	-0.022	0.187	7.892	0.639	-0.024	0.074
	Breast cancer	ieu-a-1130	0.912	0.588	1.413	0.679	-0.093	0.224	8.792	0.360	-0.001	0.950
	Breast cancer	ieu-a-1129	0.922	0.647	1.315	0.654	-0.081	0.181	7.321	0.502	0.003	0.769
	Breast cancer	ieu-a-1165	1.630	0.535	4.965	0.390	0.488	0.568	12.689	0.177	-0.024	0.544
	Breast cancer	ukb-a-55	0.992	0.979	1.004	0.177	-0.008	0.006	12.693	0.241	0.000	0.960
	ER- Breast cancer	ieu-a-1128	1.144	0.709	1.845	0.583	0.134	0.244	3.187	0.922	-0.009	0.523
	ER- Breast cancer	ieu-a-1137	0.337	0.078	1.466	0.147	-1.086	0.749	8.962	0.346	0.033	0.450
	ER- Breast cancer	ieu-a-1166	0.944	0.456	1.955	0.876	-0.058	0.372	9.144	0.518	-0.042	0.100

Breast cancer	ER- Breast cancer	ieu-a-1136	1.199	0.514	2.797	0.675	0.181	0.432	4.956	0.762	-0.018	0.473
	ER- Breast cancer	ieu-a-1135	1.421	0.753	2.681	0.278	0.351	0.324	5.139	0.743	-0.007	0.718
	ER- Breast cancer	ieu-a-1163	0.436	0.052	3.680	0.445	-0.831	1.089	12.443	0.132	0.019	0.810
	ER+ Breast cancer	ieu-a-1127	0.859	0.630	1.172	0.339	-0.151	0.158	6.155	0.630	0.005	0.575
	ER+ Breast cancer	ieu-a-1134	0.584	0.115	2.959	0.516	-0.537	0.828	1.009	0.995	-0.055	0.251
	ER+ Breast cancer	ieu-a-1167	1.122	0.738	1.706	0.590	0.115	0.214	4.244	0.936	-0.013	0.380
	ER+ Breast cancer	ieu-a-1133	0.992	0.566	1.739	0.978	-0.008	0.286	10.056	0.261	0.011	0.527
	ER+ Breast cancer	ieu-a-1132	0.808	0.541	1.205	0.295	-0.214	0.204	5.952	0.653	0.006	0.584
	ER+ Breast cancer	ieu-a-1164	2.356	0.374	14.854	0.362	0.857	0.939	13.323	0.101	-0.052	0.413

Liver cancer	Malignant neoplasm of liver and intrahepatic bile ducts	finn-b-C3_LIVER_INTRAHEPATIC_BILE_DUCTS	2.041	0.175	23.830	0.569	0.713	1.254	5.739	0.837	0.049	0.515
	Malignant neoplasm of liver and intrahepatic bile ducts (all cancers excluded)	finn-b-C3_LIVER_INTRAHEPATIC_BILE_DUCTS_EXALLC	1.842	0.158	21.417	0.626	0.611	1.252	5.872	0.826	0.050	0.506
Ovarian cancer	Serous ovarian cancer: low malignant potential	ieu-a-1230	1.202	0.302	4.786	0.794	0.184	0.705	2.036	0.980	-0.023	0.570
	Serous ovarian cancer: low grade and low malignant potential	ieu-a-1229	0.475	0.148	1.528	0.212	-0.743	0.595	2.579	0.958	0.008	0.822
	Ovarian cancer	ieu-a-1120	1.857	1.089	3.164	0.023	0.619	0.272	3.845	0.871	0.030	0.079
	Mucinous ovarian cancer: invasive and low malignant potential	ieu-a-1231	1.538	0.452	5.236	0.491	0.430	0.625	1.634	0.990	0.061	0.109
	Low malignant potential ovarian cancer	ieu-a-1233	1.261	0.404	3.937	0.690	0.232	0.581	3.445	0.903	0.026	0.440
	Low malignant potential mucinous ovarian cancer	ieu-a-1232	1.551	0.191	12.610	0.681	0.439	1.069	7.420	0.492	0.107	0.070
	Low grade serous ovarian cancer	ieu-a-1122	0.121	0.009	1.584	0.108	-2.110	1.311	12.009	0.151	0.082	0.272

Ovarian cancer	Invasive mucinous ovarian cancer	ieu-a-1123	1.707	0.345	8.448	0.512	0.535	0.816	4.728	0.786	0.020	0.660
	Endometrioid ovarian cancer	ieu-a-1125	1.396	0.435	4.480	0.575	0.334	0.595	4.420	0.817	0.051	0.160
	Clear cell ovarian cancer	ieu-a-1124	1.746	0.239	12.784	0.583	0.558	1.016	12.565	0.128	-0.054	0.367
Kidney cancer	"Malignant neoplasm of kidney, except renal pelvis" (all cancers excluded)	finn-b-C3_KIDNEY_NOTREN ALPELVIS_EXALLC	0.178	0.044	0.722	0.016	-1.727	0.715	4.916	0.897	0.054	0.223
	Malignant neoplasm of kidney, except renal pelvis	finn-b-C3_KIDNEY_NOTREN ALPELVIS	0.186	0.046	0.749	0.018	-1.681	0.710	5.395	0.863	0.057	0.195
	Benign neoplasm: Kidney	finn-b-CD2_BENIGN_KIDNEY	0.604	0.063	5.744	0.660	-0.505	1.150	11.373	0.329	0.027	0.710
	Benign neoplasm: Kidney (all cancers excluded)	finn-b-CD2_BENIGN_KIDNEY_EXALLC	0.592	0.061	5.707	0.650	-0.524	1.156	11.506	0.319	0.026	0.714
Prostate cancer	Prostate cancer	ieu-b-4809	1.005	0.980	1.030	0.724	0.004	0.013	7.403	0.494	0.001	0.560
	Prostate cancer	ieu-b-85	0.851	0.592	1.222	0.382	-0.161	0.185	14.117	0.079	-0.005	0.738

Prostate cancer	Prostate cancer	ukb-d-C3_PROSTATE	1.003	0.988	1.019	0.664	0.003	0.008	24.356	0.007	0.001	0.223
	Prostate cancer	finn-b-C3_PROSTATE_EXAL LC	0.871	0.461	1.647	0.671	-0.138	0.325	8.071	0.622	-0.012	0.530
Endometrial cancer	Endometrial cancer	ebi-a-GCST006464	1.278	0.742	2.204	0.377	0.246	0.278	6.637	0.576	0.005	0.791
	Endometrial cancer (endometrioid histology)	ebi-a-GCST006465	1.436	0.750	2.748	0.275	0.362	0.331	4.586	0.801	0.031	0.180
	Endometrial cancer (Non- endometrioid histology)	ebi-a-GCST006466	1.307	0.154	11.102	0.806	0.268	1.092	8.787	0.186	-0.086	0.261