

SUPPLEMENTAL MATERIAL

Supplemental material for:

Modifiable Risk Factors for Intracranial Aneurysm and Aneurysmal Subarachnoid Hemorrhage: A Mendelian Randomization Study

Table S1

Table S2

Figure S1

Table S1. Minimum detectable odds ratios*

Exposure	Intracranial aneurysm	Subarachnoid hemorrhage
Alcohol consumption	> 1.98, < 0.50	> 2.44, < 0.41
Body mass index	> 1.14, < 0.88	> 1.18, < 0.85
Blood urea nitrogen	> 1.30, < 0.77	> 1.39, < 0.72
Caffeine consumption	> 1.99, < 0.50	> 2.29, < 0.44
Chronic kidney disease	NA	NA
Coffee consumption	> 1.86, < 0.54	> 2.15, < 0.47
Diastolic blood pressure	> 1.16, < 0.86	> 1.21, < 0.83
eGFR	> 1.25, < 0.80	> 1.32, < 0.76
Fasting glucose	> 1.25, < 0.80	> 1.31, < 0.76
Fasting insulin	> 2.05, < 0.49	> 2.45, < 0.41
HbA1c	> 1.31, < 0.77	> 1.39, < 0.72
High-density lipoprotein cholesterol	> 1.14, < 0.88	> 1.18, < 0.85
Interleukin-6 receptor	> 1.73, < 0.58	> 1.93, < 0.52
Insomnia	NA	NA
Low-density lipoprotein cholesterol	> 1.13, < 0.88	> 1.14, < 0.87
Physical activity	> 3.75, < 0.27	> 5.55, < 0.18
Systolic blood pressure	> 1.22, < 0.82	> 1.30, < 0.77
Sleep duration	> 1.70, < 0.59	> 1.97, < 0.51
Long sleep duration	NA	NA
Short sleep duration	NA	NA
Smoking index	> 1.48, < 0.68	> 1.69, < 0.59
Smoking initiation	NA	NA
Type 2 diabetes mellitus	NA	NA
Triglycerides	> 1.17, < 0.85	> 1.21, < 0.82

*Minimum detectable odds ratio for the continuous exposures with 80% power ($\alpha = 0.05$) and based on the exposure genome-wide association study sample size and the sum of the variance explained by the individual genetic instruments.

Table S2. Associations of genetically predicted exposures and intracranial aneurysm and aneurysmal subarachnoid hemorrhage in main and sensitivity analyses

Group	Exposure	Outcome	Method	SNPs	OR	95%_CI_low	95%_CI_high	p-value	p-value pleiotropy
Lifestyle	Smoking index	IA	IVW-RE	85	3,1985	1,9347	5,2878	5,82E-06	
Lifestyle	Smoking index	IA	MR-Egger	85	8,0469	0,9194	70,4329	0,0596	0,3915
Lifestyle	Smoking index	IA	Weighted Median	85	3,3335	1,7879	6,2155	0,0002	
Lifestyle	Smoking index	IA	Weighted Mode	85	2,0699	0,3743	11,4477	0,4045	
Lifestyle	Smoking initiation	IA	IVW-RE	235	1,8484	1,4952	2,2850	0,0000	
Lifestyle	Smoking initiation	IA	MR-Egger	235	2,7557	1,1367	6,6805	0,0249	0,3626
Lifestyle	Smoking initiation	IA	Weighted Median	235	2,0337	1,5197	2,7216	1,37E-08	
Lifestyle	Smoking initiation	IA	Weighted Mode	235	1,6888	0,7564	3,7705	0,2010	
Lifestyle	Insomnia	IA	IVW-RE	143	1,2382	1,0978	1,3965	0,0005	
Lifestyle	Insomnia	IA	MR-Egger	143	1,1186	0,6081	2,0574	0,7186	0,7389
Lifestyle	Insomnia	IA	Weighted Median	143	1,2743	1,0767	1,5081	0,0048	
Lifestyle	Insomnia	IA	Weighted Mode	143	1,2266	0,7388	2,0366	0,4298	
Lifestyle	Caffeine consumption	IA	IVW-RE	2	1,2257	0,9297	1,6160	0,1490	
Lifestyle	Short sleep duration	IA	IVW-RE	19	1,1220	0,7032	1,7903	0,6292	
Lifestyle	Short sleep duration	IA	MR-Egger	19	1,0288	0,1147	9,2258	0,9798	0,9367
Lifestyle	Short sleep duration	IA	Weighted Median	19	1,0992	0,6332	1,9083	0,7367	
Lifestyle	Short sleep duration	IA	Weighted Mode	19	1,1241	0,4724	2,6748	0,7915	
Lifestyle	Alcohol consumption	IA	IVW-RE	56	0,8622	0,3885	1,9137	0,7155	
Lifestyle	Alcohol consumption	IA	MR-Egger	56	0,5845	0,0700	4,8821	0,6200	0,6982
Lifestyle	Alcohol consumption	IA	Weighted Median	56	0,7160	0,2599	1,9731	0,5184	
Lifestyle	Alcohol consumption	IA	Weighted Mode	56	0,4892	0,1184	2,0214	0,3233	
Lifestyle	Coffee consumption	IA	IVW-RE	10	0,8269	0,4875	1,4028	0,4810	
Lifestyle	Coffee consumption	IA	MR-Egger	10	1,1072	0,3563	3,4409	0,8602	0,5641
Lifestyle	Coffee consumption	IA	Weighted Median	10	1,0034	0,5472	1,8398	0,9913	
Lifestyle	Coffee consumption	IA	Weighted Mode	10	1,1311	0,6027	2,1228	0,7013	
Lifestyle	Long sleep duration	IA	IVW-RE	4	0,7968	0,4875	1,3023	0,3648	

Lifestyle	Long sleep duration	IA	MR-Egger	4	1,1545	0,1654	8,0601	0,8848	0,6991
Lifestyle	Long sleep duration	IA	Weighted Median	4	0,7161	0,3968	1,2924	0,2677	
Lifestyle	Long sleep duration	IA	Weighted Mode	4	0,6545	0,3130	1,3687	0,2601	
Lifestyle	Sleep duration	IA	IVW-RE	54	0,7134	0,4228	1,2040	0,2060	
Lifestyle	Sleep duration	IA	MR-Egger	54	1,0103	0,1473	6,9304	0,9917	0,7127
Lifestyle	Sleep duration	IA	Weighted Median	54	0,6403	0,3084	1,3291	0,2315	
Lifestyle	Sleep duration	IA	Weighted Mode	54	0,5593	0,1722	1,8167	0,3337	
Lifestyle	Physical activity	IA	IVW-RE	6	0,2196	0,0322	1,4982	0,1218	
Lifestyle	Physical activity	IA	MR-Egger	6	0,0011	0,0000	78,5456	0,2314	0,3442
Lifestyle	Physical activity	IA	Weighted Median	6	0,0999	0,0130	0,7686	0,0269	
Lifestyle	Physical activity	IA	Weighted Mode	6	0,0553	0,0031	0,9971	0,0498	
Cardiometabolic	Diastolic blood pressure	IA	IVW-RE	721	2,9227	2,4925	3,4271	8,38E-40	
Cardiometabolic	Diastolic blood pressure	IA	MR-Egger	721	5,4346	3,5999	8,2041	8,88E-16	0,0014
Cardiometabolic	Diastolic blood pressure	IA	Weighted Median	721	2,8770	2,2997	3,5993	2,29E-20	
Cardiometabolic	Diastolic blood pressure	IA	Weighted Mode	721	2,6370	1,1465	6,0651	0,0225	
Cardiometabolic	Blood urea nitrogen	IA	IVW-RE	67	1,9416	0,7231	5,2134	0,1880	
Cardiometabolic	Blood urea nitrogen	IA	MR-Egger	67	2,7888	0,1878	41,4029	0,4562	0,7772
Cardiometabolic	Blood urea nitrogen	IA	Weighted Median	67	1,1348	0,2854	4,5131	0,8575	
Cardiometabolic	Blood urea nitrogen	IA	Weighted Mode	67	0,4220	0,0613	2,9073	0,3809	
Cardiometabolic	Systolic blood pressure	IA	IVW-RE	214	1,8696	1,6117	2,1687	1,42E-16	
Cardiometabolic	Systolic blood pressure	IA	MR-Egger	214	3,6572	2,2723	5,8861	9,29E-08	0,0037
Cardiometabolic	Systolic blood pressure	IA	Weighted Median	214	1,7832	1,4970	2,1242	9,18E-11	
Cardiometabolic	Systolic blood pressure	IA	Weighted Mode	214	1,4929	0,9253	2,4089	0,1007	
Cardiometabolic	eGFR	IA	IVW-RE	235	1,6261	0,4839	5,4645	0,4317	
Cardiometabolic	eGFR	IA	MR-Egger	235	0,0588	0,0030	1,1632	0,0628	0,0173
Cardiometabolic	eGFR	IA	Weighted Median	235	1,5335	0,2371	9,9198	0,6536	
Cardiometabolic	eGFR	IA	Weighted Mode	235	3,2552	0,0544	194,9203	0,5719	
Cardiometabolic	Triglycerides	IA	IVW-RE	60	1,1870	1,0196	1,3819	0,0271	
Cardiometabolic	Triglycerides	IA	MR-Egger	60	1,0621	0,8386	1,3452	0,6170	0,2295
Cardiometabolic	Triglycerides	IA	Weighted Median	60	1,1392	0,9120	1,4231	0,2508	

Cardiometabolic	Triglycerides	IA	Weighted Mode	60	1,1751	0,9535	1,4482	0,1302	
Cardiometabolic	Body mass index	IA	IVW-RE	967	1,1537	1,0095	1,3186	0,0359	
Cardiometabolic	Body mass index	IA	MR-Egger	967	0,9867	0,6767	1,4386	0,9445	0,3848
Cardiometabolic	Body mass index	IA	Weighted Median	967	1,1991	0,9742	1,4760	0,0866	
Cardiometabolic	Body mass index	IA	Weighted Mode	967	1,4877	0,9178	2,4114	0,1070	
Cardiometabolic	Chronic kidney disease	IA	IVW-RE	21	1,1440	0,9001	1,4539	0,2714	
Cardiometabolic	Chronic kidney disease	IA	MR-Egger	21	1,9347	1,0206	3,6677	0,0431	0,0847
Cardiometabolic	Chronic kidney disease	IA	Weighted Median	21	1,3581	1,0875	1,6959	0,0069	
Cardiometabolic	Chronic kidney disease	IA	Weighted Mode	21	1,3350	1,0083	1,7675	0,0436	
Cardiometabolic	Type 2 diabetes mellitus	IA	IVW-RE	422	1,0136	0,9458	1,0863	0,7024	
Cardiometabolic	Type 2 diabetes mellitus	IA	MR-Egger	422	0,8829	0,7568	1,0300	0,1132	0,0496
Cardiometabolic	Type 2 diabetes mellitus	IA	Weighted Median	422	0,9718	0,8753	1,0790	0,5925	
Cardiometabolic	Type 2 diabetes mellitus	IA	Weighted Mode	422	0,8695	0,7288	1,0373	0,1204	
Cardiometabolic	HbA1c	IA	IVW-RE	34	0,9683	0,5378	1,7434	0,9144	
Cardiometabolic	HbA1c	IA	MR-Egger	34	0,9770	0,1810	5,2742	0,9784	0,9911
Cardiometabolic	HbA1c	IA	Weighted Median	34	0,9230	0,3941	2,1614	0,8535	
Cardiometabolic	HbA1c	IA	Weighted Mode	34	0,9447	0,2964	3,0109	0,9234	
Cardiometabolic	Fasting insulin	IA	IVW-RE	9	0,9585	0,1691	5,4332	0,9618	
Cardiometabolic	Fasting insulin	IA	MR-Egger	9	0,2732	0,0000	4248511	0,8779	0,8812
Cardiometabolic	Fasting insulin	IA	Weighted Median	9	0,4446	0,0762	2,5954	0,3679	
Cardiometabolic	Fasting insulin	IA	Weighted Mode	9	0,1236	0,0026	5,9757	0,2907	
Cardiometabolic	HDL cholesterol	IA	IVW-RE	113	0,9317	0,8244	1,0531	0,2576	
Cardiometabolic	HDL cholesterol	IA	MR-Egger	113	1,0550	0,8452	1,3168	0,6359	0,1882
Cardiometabolic	HDL cholesterol	IA	Weighted Median	113	0,9145	0,7597	1,1010	0,3453	
Cardiometabolic	HDL cholesterol	IA	Weighted Mode	113	0,9361	0,7769	1,1279	0,4874	
Cardiometabolic	LDL cholesterol	IA	IVW-RE	88	0,8959	0,7842	1,0234	0,1054	
Cardiometabolic	LDL cholesterol	IA	MR-Egger	88	0,9669	0,7810	1,1970	0,7570	0,3705
Cardiometabolic	LDL cholesterol	IA	Weighted Median	88	0,9705	0,8179	1,1515	0,7314	
Cardiometabolic	LDL cholesterol	IA	Weighted Mode	88	0,9845	0,8373	1,1576	0,8504	
Cardiometabolic	Interleukin-6 receptor	IA	IVW-RE	2	0,8049	0,4865	1,3318	0,3983	

Cardiometabolic	Fasting glucose	IA	IVW-RE	32	0,6391	0,4278	0,9548	0,0288	
Cardiometabolic	Fasting glucose	IA	MR-Egger	32	1,0586	0,5040	2,2238	0,8804	0,1165
Cardiometabolic	Fasting glucose	IA	Weighted Median	32	0,8572	0,5222	1,4072	0,5424	
Cardiometabolic	Fasting glucose	IA	Weighted Mode	32	0,8269	0,5193	1,3167	0,4233	
Lifestyle	Smoking index	aSAH	IVW-RE	66	2,9861	1,5538	5,7388	0,0010	
Lifestyle	Smoking index	aSAH	MR-Egger	66	25,6901	1,6637	396,6874	0,0201	0,1128
Lifestyle	Smoking index	aSAH	Weighted Median	66	2,0573	0,9239	4,5814	0,0774	
Lifestyle	Smoking index	aSAH	Weighted Mode	66	1,6760	0,2102	13,3657	0,6259	
Lifestyle	Smoking initiation	aSAH	IVW-RE	190	1,6217	1,2372	2,1257	0,0005	
Lifestyle	Smoking initiation	aSAH	MR-Egger	190	5,1285	1,7086	15,3938	0,0036	0,0343
Lifestyle	Smoking initiation	aSAH	Weighted Median	190	2,1689	1,5006	3,1348	3,79E-05	
Lifestyle	Smoking initiation	aSAH	Weighted Mode	190	3,0090	1,2050	7,5142	0,0183	
Lifestyle	Insomnia	aSAH	IVW-RE	109	1,1986	1,0252	1,4014	0,0231	
Lifestyle	Insomnia	aSAH	MR-Egger	109	1,1289	0,5396	2,3618	0,7475	0,8706
Lifestyle	Insomnia	aSAH	Weighted Median	109	1,1832	0,9527	1,4694	0,1280	
Lifestyle	Insomnia	aSAH	Weighted Mode	109	1,1230	0,6164	2,0460	0,7047	
Lifestyle	Caffeine consumption	aSAH	IVW-RE	2	1,2035	0,8719	1,6611	0,2601	
Lifestyle	Short sleep duration	aSAH	IVW-RE	14	1,4819	0,8809	2,4929	0,1383	
Lifestyle	Short sleep duration	aSAH	MR-Egger	14	2,9471	0,1939	44,7913	0,4363	0,6139
Lifestyle	Short sleep duration	aSAH	Weighted Median	14	1,4557	0,7107	2,9815	0,3047	
Lifestyle	Short sleep duration	aSAH	Weighted Mode	14	1,3632	0,4629	4,0150	0,5740	
Lifestyle	Alcohol consumption	aSAH	IVW-RE	46	0,7232	0,3164	1,6530	0,4423	
Lifestyle	Alcohol consumption	aSAH	MR-Egger	46	0,9197	0,1040	8,1298	0,9400	0,8150
Lifestyle	Alcohol consumption	aSAH	Weighted Median	46	0,5593	0,1594	1,9622	0,3642	
Lifestyle	Alcohol consumption	aSAH	Weighted Mode	46	0,5455	0,0941	3,1627	0,4991	
Lifestyle	Coffee consumption	aSAH	IVW-RE	9	1,0027	0,5251	1,9147	0,9935	
Lifestyle	Coffee consumption	aSAH	MR-Egger	9	0,9359	0,2310	3,7912	0,9260	0,9115
Lifestyle	Coffee consumption	aSAH	Weighted Median	9	1,1272	0,5448	2,3320	0,7469	
Lifestyle	Coffee consumption	aSAH	Weighted Mode	9	1,1713	0,5101	2,6893	0,7093	
Lifestyle	Long sleep duration	aSAH	IVW-RE	4	0,7291	0,4032	1,3186	0,2960	

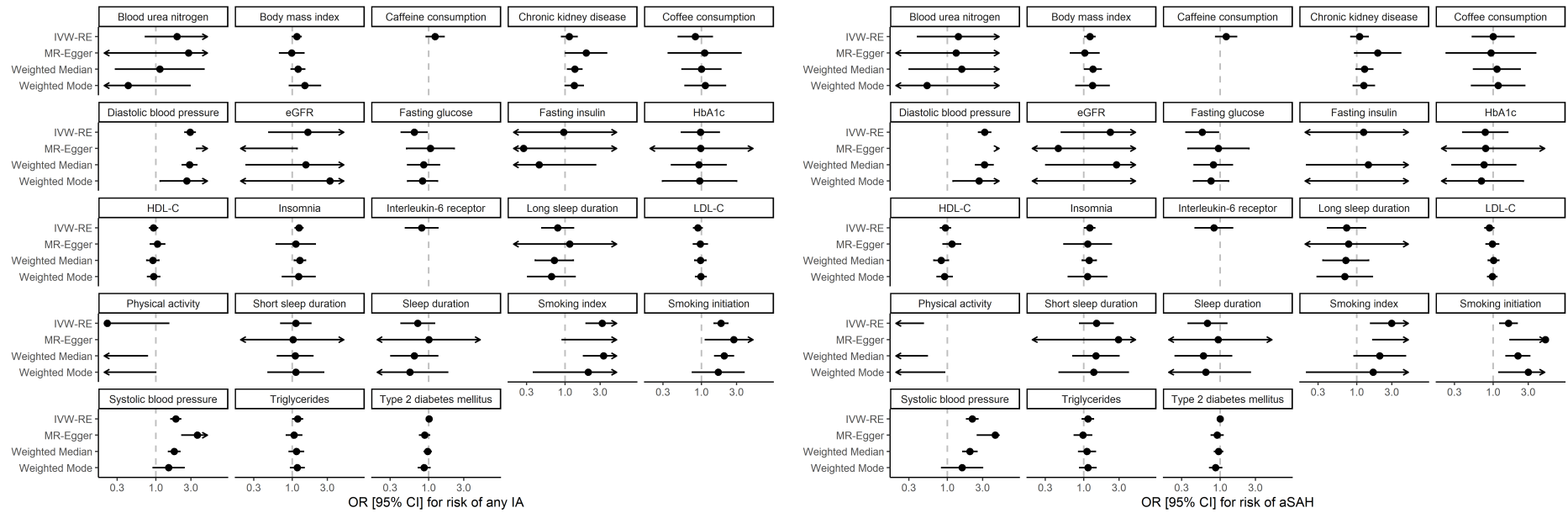
Lifestyle	Long sleep duration	aSAH	MR-Egger	4	0,7792	0,0761	7,9758	0,8335	0,9538
Lifestyle	Long sleep duration	aSAH	Weighted Median	4	0,7131	0,3504	1,4515	0,3511	
Lifestyle	Long sleep duration	aSAH	Weighted Mode	4	0,6907	0,2918	1,6347	0,3998	
Lifestyle	Sleep duration	aSAH	IVW-RE	47	0,6708	0,3669	1,2266	0,1947	
Lifestyle	Sleep duration	aSAH	MR-Egger	47	0,9375	0,1059	8,2972	0,9538	0,7540
Lifestyle	Sleep duration	aSAH	Weighted Median	47	0,5888	0,2445	1,4181	0,2376	
Lifestyle	Sleep duration	aSAH	Weighted Mode	47	0,6383	0,1593	2,5576	0,5261	
Lifestyle	Physical activity	aSAH	IVW-RE	5	0,0543	0,0063	0,4678	0,0080	
Lifestyle	Physical activity	aSAH	MR-Egger	5	0,0003	0,0000	133,9815	0,2250	0,4345
Lifestyle	Physical activity	aSAH	Weighted Median	5	0,0425	0,0034	0,5328	0,0144	
Lifestyle	Physical activity	aSAH	Weighted Mode	5	0,0181	0,0004	0,9122	0,0449	
Cardiometabolic	Diastolic blood pressure	aSAH	IVW-RE	651	3,2096	2,6627	3,8690	2,05E-34	
Cardiometabolic	Diastolic blood pressure	aSAH	MR-Egger	651	7,6051	4,6743	12,3735	2,22E-16	0,0002
Cardiometabolic	Diastolic blood pressure	aSAH	Weighted Median	651	3,1726	2,4245	4,1515	3,93E-17	
Cardiometabolic	Diastolic blood pressure	aSAH	Weighted Mode	651	2,6823	1,1950	6,0204	0,0168	
Cardiometabolic	Blood urea nitrogen	aSAH	IVW-RE	64	1,4062	0,3942	5,0162	0,5993	
Cardiometabolic	Blood urea nitrogen	aSAH	MR-Egger	64	1,3093	0,0387	44,2434	0,8807	0,9660
Cardiometabolic	Blood urea nitrogen	aSAH	Weighted Median	64	1,5625	0,3023	8,0763	0,5943	
Cardiometabolic	Blood urea nitrogen	aSAH	Weighted Mode	64	0,5288	0,0409	6,8434	0,6258	
Cardiometabolic	Systolic blood pressure	aSAH	IVW-RE	188	2,1696	1,8236	2,5814	2,40E-18	
Cardiometabolic	Systolic blood pressure	aSAH	MR-Egger	188	4,4641	2,5548	7,8001	1,49E-07	0,0078
Cardiometabolic	Systolic blood pressure	aSAH	Weighted Median	188	2,0175	1,6240	2,5063	2,30E-10	
Cardiometabolic	Systolic blood pressure	aSAH	Weighted Mode	188	1,5856	0,8395	2,9948	0,1554	
Cardiometabolic	eGFR	aSAH	IVW-RE	216	2,2873	0,4951	10,5671	0,2893	
Cardiometabolic	eGFR	aSAH	MR-Egger	216	0,4500	0,0095	21,2913	0,6849	0,3680
Cardiometabolic	eGFR	aSAH	Weighted Median	216	2,7807	0,3043	25,4133	0,3650	
Cardiometabolic	eGFR	aSAH	Weighted Mode	216	7,5182	0,0283	1999,2246	0,4788	
Cardiometabolic	Triglycerides	aSAH	IVW-RE	54	1,1356	0,9571	1,3474	0,1450	
Cardiometabolic	Triglycerides	aSAH	MR-Egger	54	0,9701	0,7424	1,2678	0,8242	0,1352
Cardiometabolic	Triglycerides	aSAH	Weighted Median	54	1,1027	0,8510	1,4290	0,4595	

Cardiometabolic	Triglycerides	aSAH	Weighted Mode	54	1,1340	0,8821	1,4577	0,3266	
Cardiometabolic	Body mass index	aSAH	IVW-RE	911	1,2077	1,0324	1,4129	0,0184	
Cardiometabolic	Body mass index	aSAH	MR-Egger	911	1,0281	0,6605	1,6002	0,9024	0,4455
Cardiometabolic	Body mass index	aSAH	Weighted Median	911	1,3317	1,0308	1,7204	0,0284	
Cardiometabolic	Body mass index	aSAH	Weighted Mode	911	1,3125	0,7831	2,1999	0,3021	
Cardiometabolic	Chronic kidney disease	aSAH	IVW-RE	21	1,0935	0,8356	1,4309	0,5149	
Cardiometabolic	Chronic kidney disease	aSAH	MR-Egger	21	1,9333	0,9454	3,9536	0,0709	0,0942
Cardiometabolic	Chronic kidney disease	aSAH	Weighted Median	21	1,2754	0,9836	1,6539	0,0664	
Cardiometabolic	Chronic kidney disease	aSAH	Weighted Mode	21	1,2497	0,8998	1,7355	0,1835	
Cardiometabolic	Type 2 diabetes mellitus	aSAH	IVW-RE	383	0,9985	0,9208	1,0827	0,9708	
Cardiometabolic	Type 2 diabetes mellitus	aSAH	MR-Egger	383	0,9080	0,7568	1,0894	0,2990	0,2538
Cardiometabolic	Type 2 diabetes mellitus	aSAH	Weighted Median	383	0,9493	0,8387	1,0745	0,4102	
Cardiometabolic	Type 2 diabetes mellitus	aSAH	Weighted Mode	383	0,8650	0,7194	1,0401	0,1232	
Cardiometabolic	HbA1c	aSAH	IVW-RE	31	0,7825	0,3876	1,5797	0,4939	
Cardiometabolic	HbA1c	aSAH	MR-Egger	31	0,7914	0,1049	5,9727	0,8205	0,9907
Cardiometabolic	HbA1c	aSAH	Weighted Median	31	0,7521	0,2782	2,0337	0,5746	
Cardiometabolic	HbA1c	aSAH	Weighted Mode	31	0,6961	0,1882	2,5754	0,5874	
Cardiometabolic	Fasting insulin	aSAH	IVW-RE	8	1,2434	0,1952	7,9211	0,8176	
Cardiometabolic	Fasting insulin	aSAH	MR-Egger	8	0,0561	0,0000	6533732	0,7612	0,7423
Cardiometabolic	Fasting insulin	aSAH	Weighted Median	8	1,4436	0,2098	9,9319	0,7091	
Cardiometabolic	Fasting insulin	aSAH	Weighted Mode	8	6,4921	0,1167	361,0099	0,3616	
Cardiometabolic	HDL cholesterol	aSAH	IVW-RE	102	0,9378	0,8047	1,0930	0,4112	
Cardiometabolic	HDL cholesterol	aSAH	MR-Egger	102	1,1488	0,8753	1,5078	0,3174	0,0782
Cardiometabolic	HDL cholesterol	aSAH	Weighted Median	102	0,8227	0,6587	1,0274	0,0852	
Cardiometabolic	HDL cholesterol	aSAH	Weighted Mode	102	0,9166	0,7257	1,1577	0,4648	
Cardiometabolic	LDL cholesterol	aSAH	IVW-RE	84	0,8890	0,7744	1,0205	0,0946	
Cardiometabolic	LDL cholesterol	aSAH	MR-Egger	84	0,9771	0,8064	1,1838	0,8126	0,1677
Cardiometabolic	LDL cholesterol	aSAH	Weighted Median	84	1,0165	0,8650	1,1946	0,8421	
Cardiometabolic	LDL cholesterol	aSAH	Weighted Mode	84	0,9756	0,8481	1,1223	0,7294	
Cardiometabolic	Interleukin-6 receptor	aSAH	IVW-RE	2	0,8197	0,4573	1,4695	0,5045	

Cardiometabolic	Fasting glucose	aSAH	IVW-RE	27	0,5694	0,3435	0,9439	0,0290	
Cardiometabolic	Fasting glucose	aSAH	MR-Egger	27	0,9449	0,3643	2,4506	0,9072	0,2208
Cardiometabolic	Fasting glucose	aSAH	Weighted Median	27	0,8041	0,4430	1,4598	0,4737	
Cardiometabolic	Fasting glucose	aSAH	Weighted Mode	27	0,7492	0,4346	1,2916	0,2987	

Abbreviations: aSAH, aneurysmal subarachnoid hemorrhage; CI, confidence interval; eGFR, estimated glomerular filtration rate; HDL, high-density lipoprotein cholesterol; IA, intracranial aneurysm; IVW-RE, inverse-variance weighted random effects; LDL, low-density lipoprotein; MR, Mendelian randomization; OR, odds ratio; SE, standard error; SNPs, single-nucleotide polymorphisms.

Figure S1. Associations of genetically predicted exposures and intracranial aneurysm and aneurysmal subarachnoid hemorrhage in main and sensitivity analyses



Abbreviations: aSAH, aneurysmal subarachnoid hemorrhage; CI, confidence interval; eGFR, estimated glomerular filtration rate; HDL, high-density lipoprotein cholesterol; IA, intracranial aneurysm; IVW-RE, inverse-variance weighted random effects; LDL, low-density lipoprotein; MR, Mendelian randomization; OR, odds ratio.