

**Supplementary Table 1.** Stratification by BMI and hyperlipidemia.

Variables	Hyperlipidemia											
	BMI<24 kg/m <sup>2</sup>			24 ≤ BMI ≤ 27 kg/m <sup>2</sup>			BMI>27 kg/m <sup>2</sup>			Overall		
	OR	95% CI	<i>P</i> value	OR	95% CI	<i>P</i> value	OR	95% CI	<i>P</i> value	OR	95% CI	<i>P</i> value <sup>a</sup>
Age, years												
Gender												
female	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
male	1.47	1.179- 1.823	0.0006	1.56	1.200- 2.036	0.0009	1.01	0.763- 1.334	0.9491	1.52	1.330- 1.745	<0.000 1
rs7738620												
84												
CC	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
CA / AA	0.546	0.343- 0.868	0.0106	0.93	0.539- 1.594	0.7826	0.71	0.431- 1.180	0.188	0.67	0.512- 0.888	0.0051
rs5675733												
86												
GG	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
GA / AA	0.412	0.119- 1.431	0.1629	0.51	0.098- 2.633	0.4201	0.26	0.029- 2.324	0.2274	0.40	0.165- 0.990	0.0476
rs1999106												
90												
CC	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
CT / TT	0.79	0.554- 1.134	0.204	0.88	0.585- 1.326	0.5425	0.69	0.464- 1.011	0.0569	0.86	0.693- 1.057	0.1485

<sup>a</sup> Comparisons of categorical variables were analyzed using logistic regression adjusted by age and gender.

Abbreviations: CI: confidence interval; OR: odds ratio; BMI: Body mass index; CKD: chronic kidney disease

**Supplementary Table 2.** Stratification by BMI and DM.

Variables	DM											
	BMI<24 kg/m <sup>2</sup>			24 ≤ BMI ≤ 27 kg/m <sup>2</sup>			BMI>27 kg/m <sup>2</sup>			Overall		
	OR	95% CI	<i>P</i> value	OR	95% CI	<i>P</i> value	OR	95% CI	<i>P</i> value	OR	95% CI	<i>P</i> value <sup>a</sup>
Age, years												
Gender												
female	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
male	2.03	1.603- 2.565	<0.000 1	1.43	1.092- 1.858	0.0091	0.98	0.743- 1.299	0.9016	1.79	1.555- 2.061	<0.000 1
rs7738620												
84												
CC	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
CA / AA	0.59	0.350- 0.987	0.0445	0.63	0.355- 1.120	0.1155	0.73	0.438- 1.205	0.2156	0.64	0.480- 0.862	0.0032
rs5675733												
86												
GG	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
GA / AA	0.63	0.182- 2.195	0.4702	0.23	0.028- 1.937	0.1774	0.28	0.031- 2.513	0.2554	0.41	0.155- 1.066	0.0674
rs1999106												
90												
CC	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
CT / TT	0.66	0.434- 1.002	0.0513	0.82	0.541- 1.241	0.346	0.57	0.381- 0.847	0.0056	0.72	0.576- 0.906	0.0048

<sup>a</sup> Comparisons of categorical variables were analyzed using logistic regression adjusted by age and gender.

Abbreviations: CI: confidence interval; OR: odds ratio; BMI: Body mass index; CKD: chronic kidney disease

**Supplementary Table 3.** Stratification by BMI and hypertension.

Variables	Hypertension											
	BMI<24 kg/m <sup>2</sup>			24 ≤ BMI ≤ 27 kg/m <sup>2</sup>			BMI>27 kg/m <sup>2</sup>			Overall		
	OR	95% CI	<i>P</i> value	OR	95% CI	<i>P</i> value	OR	95% CI	<i>P</i> value	OR	95% CI	<i>P</i> value <sup>a</sup>
Age, years												
Gender												
female	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
male	1.52	1.218- 1.905	0.0002	1.32	1.014- 1.724	0.0395	1.23	0.931- 1.634	0.1443	1.58	1.375- 1.812	<0.000 1
rs7738620												
84												
CC	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
CA / AA	0.36	0.206- 0.624	0.0003	0.83	0.477- 1.448	0.5138	0.64	0.382- 1.076	0.0922	0.59	0.440- 0.787	0.0004
rs5675733												
86												
GG	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
GA / AA	0.49	0.140- 1.690	0.257	0.24	0.028- 1.981	0.1841	-	-	-	0.28	0.098- 0.807	0.0183
rs1999106												
90												
CC	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
CT / TT	0.64	0.432- 0.944	0.0244	0.67	0.435- 1.022	0.0628	0.76	0.513- 1.123	0.1679	0.74	0.592- 0.919	0.0067

<sup>a</sup> Comparisons of categorical variables were analyzed using logistic regression adjusted by age and gender.

Abbreviations: CI: confidence interval; OR: odds ratio; BMI: Body mass index; CKD: chronic kidney disease

**Supplementary Table 4.** Stratification by BMI and hyperlipidemia in females.

Variables	Female											
	BMI<24 kg/m <sup>2</sup>			24 ≤ BMI ≤ 27 kg/m <sup>2</sup>			BMI>27 kg/m <sup>2</sup>			Overall		
	OR <sup>b</sup>	95% CI	P value	OR	95% CI	P value	OR	95% CI	P value	OR	95% CI	P value <sup>a</sup>
rs7738620												
84												
CC	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
CA / AA	0.55	0.264- 1.162	0.1181	1.54	0.610- 3.886	0.3604	0.34	0.113- 0.994	0.0487	0.63	0.387- 1.021	0.061
Age, years	1.04	1.032- 1.054	<0.000 1	1.02	0.999- 1.035	0.0689	1.02	1.004- 1.041	0.0154	1.03	1.025- 1.041	<0.000 1
DM												
No	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
Yes	4.13	2.889- 5.915	<0.000 1	4.44	2.727- 7.240	<0.000 1	6.04	3.616- 10.088	<0.000 1	5.08	3.991- 6.455	<0.000 1
CKD												
No	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
Yes	2.43	1.771- 3.343	<0.000 1	3.92	2.378- 6.472	<0.000 1	2.12	1.200- 3.736	0.0096	2.70	2.130- 3.419	<0.000 1
rs1999106												
90												
CC	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
CT / TT	1.22	0.746- 1.982	0.4338	0.88	0.408- 1.910	0.7514	0.78	0.392- 1.566	0.4908	1.06	0.755- 1.497	0.725
Age, years	1.04	1.031- 1.054	<0.000 1	1.02	0.999- 1.035	0.072	1.02	1.005- 1.042	0.0132	1.03	1.024- 1.041	<0.000 1

DM												
No	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
Yes	4.23	2.957- 6.054	<0.000 1	4.48	2.750- 7.295	<0.000 1	5.86	3.525- 9.744	<0.000 1	5.164	4.061- 6.566	<0.000 1
CKD												
No	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
Yes	2.51	1.826- 3.451	<0.000 1	3.86	2.326- 6.388	<0.000 1	2.29	1.302- 4.013	0.004	2.78	2.196- 3.529	<0.000 1

<sup>a</sup> Comparisons of categorical variables were analyzed using logistic regression.

<sup>b</sup> OR was adjusted for all variables in the table.

Abbreviations: CI: confidence interval; OR: odds ratio; BMI: Body mass index; CKD: chronic kidney disease; DM: diabetes mellitus.



**Supplementary Table 5.** Stratification by BMI and hyperlipidemia in males.

Variables	Male											
	BMI<24 kg/m <sup>2</sup>			24 ≤ BMI ≤ 27 kg/m <sup>2</sup>			BMI>27 kg/m <sup>2</sup>			Overall		
	OR <sup>b</sup>	95% CI	P value	OR	95% CI	P value	OR	95% CI	P value	OR	95% CI	P value <sup>a</sup>
rs7738620												
84												
CC	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
CA / AA	0.84	0.406- 1.724	0.6283	1.07	0.491- 2.346	0.8597	1.41	0.697- 2.844	0.3399	1.07	0.707- 1.612	0.7551
Age, years	1.02	1.004- 1.030	0.0123	1.01	0.998- 1.025	0.0821	1.01	0.999- 1.028	0.0633	1.01	1.007- 1.022	0.0002
DM												
No	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
Yes	4.00	2.652- 6.018	<0.000 1	3.34	2.296- 4.859	<0.000 1	4.71	3.170- 7.003	<0.000 1	4.34	3.479- 5.407	<0.000 1
CKD												
No	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
Yes	3.20	2.164- 4.743	<0.000 1	1.82	1.238- 2.663	0.0023	1.84	1.216- 2.778	0.0039	2.23	1.787- 2.787	<0.000 1
rs1999106												
90												
CC	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
CT / TT	0.79	0.381- 1.642	0.5293	1.29	0.730- 2.267	0.3838	0.97	0.542- 1.742	0.9225	1.13	0.807- 1.582	0.4767
Age, years	1.02	1.003- 1.030	0.0136	1.01	0.999- 1.026	0.0787	1.01	1.000- 1.029	0.0536	1.01	1.007- 1.022	0.0002

DM												
No	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
Yes	4.02	2.667- 6.067	<0.000 1	3.31	2.279- 4.819	<0.000 1	4.72	3.172- 7.027	<0.000 1	4.38	3.509- 5.457	<0.000 1
CKD												
No	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
Yes	3.16	2.133- 4.679	<0.000 1	1.83	1.247- 2.690	0.002	1.83	1.202- 2.780	0.0048	2.25	1.797- 2.813	<0.000 1

<sup>a</sup> Comparisons of categorical variables were analyzed using logistic regression.

<sup>b</sup> OR was adjusted for all variables in table.

Abbreviations: CI: confidence interval; OR: odds ratio; BMI: Body mass index; CKD: chronic kidney disease; DM: diabetes mellitus.

**Supplementary Table 6.** Stratification by BMI and DM in females.

Variables	Female											
	BMI<24 kg/m <sup>2</sup>			24 ≤ BMI ≤ 27 kg/m <sup>2</sup>			BMI>27 kg/m <sup>2</sup>			Overall		
	OR <sup>b</sup>	95% CI	P value	OR	95% CI	P value	OR	95% CI	P value	OR	95% CI	P value <sup>a</sup>
rs7738620												
84												
CC	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
CA / AA	0.54	0.216- 1.356	0.1903	0.50	0.181- 1.385	0.1829	1.40	0.528- 3.715	0.4986	0.69	0.409- 1.155	0.1569
Age, years	1.05	1.037- 1.064	<0.000 1	1.05	1.033- 1.072	<0.000 1	1.03	1.01- 1.046	0.0023	1.04	1.036- 1.053	<0.000 1
hyperlipidemia												
No	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
Yes	4.20	2.941- 5.984	<0.000 1	4.46	2.743- 7.261	<0.000 1	6.03	3.6.9- 10.065	<0.000 1	5.51	4.020- 6.484	<0.000 1
CKD												
No	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
Yes	1.24	0.864- 1.780	0.2438	1.09	0.648- 1.837	0.7433	1.15	0.656- 2.011	0.6276	1.16	0.898- 1.486	0.2619
rs1999106												
90												
CC	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
CT / TT	0.63	0.339- 1.169	0.1429	1.02	0.482- 2.155	0.9598 6	0.70	0.355- 1.380	0.3032	0.80	0.552- 1.156	0.2337

Age, years	1.05	1.037- 1.064	<0.000 1	1.05	1.033- 1.072	<0.000 1	1.03	1.011- 1.048	0.0017	1.05	1.036- 1.053	<0.000 1
hyperlipidemia												
No	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
Yes	4.31	3.023- 6.154	<0.000 1	4.50	2.766- 7.312	<0.000 1	5.86	3.527- 9.741	<0.000 1	5.20	4.094- 6.603	<0.000 1
CKD												
No	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
Yes	1.23	0.856- 1.767	0.2633	1.11	0.653- 1.876	0.7055	1.10	0.632- 1.919	0.7347	1.15	0.896- 1.485	0.2682

<sup>a</sup> Comparisons of categorical variables were analyzed using logistic regression.

<sup>b</sup> OR was adjusted for all variables in the table.

Abbreviations: CI: confidence interval; OR: odds ratio; BMI: Body mass index; CKD: chronic kidney disease; DM: diabetes mellitus.

**Supplementary Table 7.** Stratification by BMI and DM in males.

Variables	Male											
	BMI<24 kg/m <sup>2</sup>			24 ≤ BMI ≤ 27 kg/m <sup>2</sup>			BMI>27 kg/m <sup>2</sup>			Overall		
	OR <sup>b</sup>	95% CI	P value	OR	95% CI	P value	OR	95% CI	P value	OR	95% CI	P value <sup>a</sup>
rs7738620												
84												
CC	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
CA / AA	0.63	0.296- 1.343	0.2319	0.65	0.289- 1.478	0.3069	0.69	0.335- 1.419	0.3129	0.68	0.439- 1.039	0.0743
Age, years	1.03	1.017- 1.045	<0.000 1	1.03	1.018- 1.047	<0.000 1	1.02	1.005- 1.034	0.0095	1.03	1.018- 1.033	<0.000 1
hyperlipidemia												
No	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
Yes	4.01	2.666- 6.030	<0.000 1	3.36	2.310- 4.887	<0.000 1	4.71	3.170- 7.003	<0.000 1	4.35	3.492- 5.423	<0.000 1
CKD												
No	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
Yes	1.25	0.826- 1.879	0.2944	1.45	0.986- 2.136	0.0593	1.85	1.225- 2.795	0.0035	1.53	1.219- 1.913	0.0002
rs1999106												
90												
CC	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
CT / TT	0.72	0.338- 1.514	0.3815	0.81	0.452- 1.456	0.4831	0.56	0.305- 1.036	0.0649	0.68	0.478- 0.97	0.0333
Age, years	1.03	1.018- 1.046	<0.000 1	1.03	1.018- 1.047	<0.000 1	1.02	1.004- 1.034	0.0104	1.03	1.017- 1.033	<0.000 1

hyperlipidemia												
No	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
Yes	4.04	2.683- 6.075	<0.000 1	3.33	2.293- 4.845	<0.000 1	4.72	3.167- 7.015	<0.000 1	4.39	3.519- 5.469	<0.000 1
CKD												
No	1.00	—	—	1.00	—	—	1.00	—	—	1.00	—	—
Yes	1.27	0.840- 1.911	0.2591	1.47	0.994- 2.159	0.0538	1.73	1.137- 2.628	0.0105	1.51	1.202- 1.891	0.0004

<sup>a</sup> Comparisons of categorical variables were analyzed using logistic regression.

<sup>b</sup> OR was adjusted for all variables in the table.

Abbreviations: CI: confidence interval; OR: odds ratio; BMI: Body mass index; CKD: chronic kidney disease; DM: diabetes mellitus.