

## SUPPLEMENTAL MATERIAL

**Supplementary Table I.** Spearman partial correlation coefficients among adipokines and baseline characteristics

	FABP4	RBP4	HMW adiponectin
Age at blood drawn	0.15***	0.09**	0.11**
BMI (baseline)	0.40***	0.01†	-0.19*
BMI at age 21	0.19***	-0.04†	-0.07*
TG	0.19***	0.27***	-0.32***
HDL	-0.23***	-0.07*	0.37***
LDL	-0.07*	-0.01†	0.11***
CRP	0.33***	-0.07*	-0.18***
HbA1C	0.05†	-0.13***	-0.13***
TNFR2	0.32***	0.14***	0.01†
eGFR	-0.25***	-0.31***	0.06*
RBP4	0.26***	1.00	0.02†
HMW adiponectin	-0.09**	0.02†	1.00

Spearman partial correlation coefficients were calculated after multivariate adjustment of age at blood draw (yr), date of blood draw (yr), body mass index at age 21 (kg/m<sup>2</sup>), physical activity, smoking status (never smoked, <10 pack-years, 10-24 pack-years, 25-44 pack-years, 45-64 pack-years, 65+ pack-years, missing), alcohol consumption (non-drinker, <5.0 g/day, 5.0-9.9 g/day, 10.0-14.9 g/day, 15.0-29.9 g/day, ≥30.0 g/day, missing), diabetes duration (yr), family history of myocardial infarction, aHEI score, use of aspirin or cholesterol-lowering medication (yes, no), baseline history of hypertension, high cholesterol, angina, CABG, myocardial infarction, and stroke (yes, no). \**P*<0.05; \*\**P*<0.01; \*\*\**P*<0.001.

† No significant association was observed.

**Supplementary Table II.** Hazard ratio (95% CI) of all-cause mortality associated with FABP4, RBP4, and HMW adiponectin levels

	Tertile level			<i>P</i> for trend
	1	2	3	
<b>FABP4</b>				
Case/person-years	160/4681	188/4451	232/3971	
Model 1*	1.0	1.19 (0.96, 1.47)	1.77 (1.45, 2.17)	<0.0001
Model 2†	1.0	1.17 (0.93, 1.46)	1.61 (1.30, 2.01)	<0.0001
Model 3‡	1.0	1.14 (0.91, 1.44)	1.59 (1.27, 2.00)	<0.0001
<b>RBP4</b>				
Case/person-years	188/4349	190/4441	202/4312	
Model 1*	1.0	0.98 (0.80, 1.20)	0.94 (0.77, 1.14)	0.52
Model 2†	1.0	1.05 (0.85, 1.29)	0.95 (0.77, 1.18)	0.61
Model 3‡	1.0	1.00 (0.81, 1.24)	0.87 (0.69, 1.10)	0.21
<b>HMW adiponectin</b>				
Case/person-years	165/4567	201/4456	214/4080	
Model 1*	1.0	1.16 (0.94, 1.42)	1.30 (1.06, 1.60)	0.01
Model 2†	1.0	1.19 (0.96, 1.49)	1.42 (1.14, 1.77)	0.002
Model 3‡	1.0	1.26 (1.01, 1.58)	1.57 (1.24, 2.00)	0.0003

\*Model 1 was adjusted for age at blood draw.

†Based on Model 1, Model 2 was further adjusted for date of blood draw (yr), body mass index at age 21 (kg/m<sup>2</sup>), physical activity, smoking status (never smoked, <10 pack-years, 10-24 pack-years, 25-44 pack-years, 45-64 pack-years, 65+ pack-years, missing), alcohol consumption (non-drinker, <5.0 g/day, 5.0-9.9 g/day, 10.0-14.9 g/day, 15.0-29.9 g/day, ≥30.0 g/day, missing),

diabetes duration (yr), family history of myocardial infarction, aHEI score, use of aspirin or cholesterol-lowering medication (yes, no), baseline history of hypertension, high cholesterol, angina, CABG, myocardial infarction, and stroke (yes, no).

‡Based on Model 2, Model 3 was further adjusted for triacylglycerol levels (mg/dL), high-density lipoprotein cholesterol (mg/dL), low-density lipoprotein cholesterol (mg/dL), eGFR, and CRP.

**Supplementary Table III.** Hazard ratio (95% CI) of cancer mortality associated with FABP4, RBP4, and HMW adiponectin levels

	Tertile level			<i>P</i> for trend
	1	2	3	
<b>FABP4</b>				
Case/person-years	27/4681	37/4451	49/3971	
Model 1*	1.0	1.36 (0.83, 2.24)	2.12 (1.32, 3.40)	0.001
Model 2†	1.0	1.27 (0.76, 2.14)	1.86 (1.12, 3.09)	0.01
Model 3‡	1.0	1.38 (0.81, 2.35)	2.10 (1.24, 3.58)	0.005
<b>RBP4</b>				
Case/person-years	32/4349	41/4441	40/4312	
Model 1*	1.0	1.21 (0.76, 1.93)	1.13 (0.71, 1.81)	0.65
Model 2†	1.0	1.25 (0.78, 2.01)	1.14 (0.70, 1.85)	0.65
Model 3‡	1.0	1.35 (0.83, 2.21)	1.32 (0.78, 2.24)	0.34
<b>HMW adiponectin</b>				
Case/person-years	40/4567	40/4456	33/4080	
Model 1*	1.0	0.93 (0.60, 1.44)	0.81 (0.51, 1.28)	0.36
Model 2†	1.0	0.86 (0.54, 1.37)	0.83 (0.51, 1.37)	0.52
Model 3‡	1.0	0.82 (0.51, 1.33)	0.75 (0.44, 1.30)	0.34

\*Model 1 was adjusted for age at blood draw.

†Based on Model 1, Model 2 was further adjusted for date of blood draw (yr), body mass index at age 21 (kg/m<sup>2</sup>), physical activity, smoking status (never smoked, <10 pack-years, 10-24 pack-years, 25-44 pack-years, 45-64 pack-years, 65+ pack-years, missing), alcohol consumption (non-drinker, <5.0 g/day, 5.0-9.9 g/day, 10.0-14.9 g/day, 15.0-29.9 g/day, ≥30.0 g/day, missing), diabetes duration (yr), family history of myocardial infarction, aHEI score, use of aspirin or

cholesterol-lowering medication (yes, no), baseline history of hypertension, high cholesterol, angina, CABG, myocardial infarction, and stroke (yes, no).

‡Based on Model 2, Model 3 was further adjusted for triacylglycerol levels (mg/dL), high-density lipoprotein cholesterol (mg/dL), low-density lipoprotein cholesterol (mg/dL), eGFR, and CRP.

**Supplementary Table IV.** Associations between SNPs, FABP4, and CVD mortality

SNPs	Biomarker (FABP4)		CVD mortality	
	Estimate	<i>P</i>	Estimate	<i>P</i>
<b>FABP4</b>				
LogFABP4 (Observational) *			1.8	<0.001
rs3824088_G	0.02	0.30		
LogFABP4 (Causal)			4.2	0.73
rs7835371_A	-0.002	0.89		
LogFABP4 (Causal)			57.3	0.54
rs1054135_T	0.007	0.65		
LogFABP4 (Causal)			-3.8	0.89
rs6992708_C	-0.008	0.41		
LogFABP4 (Causal)			-10.4	0.50
rs8192688_A	-0.02	0.07		
LogFABP4 (Causal)			-12.8	0.06
rs1843560_C	-0.007	0.51		
LogFABP4 (Causal)			-32.5	0.09
rs10808846_T	-0.01	0.21		
LogFABP4 (Causal)			-14.5	0.16
<b>FABP4_SNP_Score†</b>	-0.01	0.41		
LogFABP4 (Causal)			-18.8	0.23

\* Crude estimates without adjustment for any covariates.

† The unweighted score of each individual was calculated by summing the number of risk alleles.