



Supplementary figure 1. The Results for supremum test to explore functional forms of the continuous variables

Supplementary table 1. Lists of principal component codes for oral antidiabetic medication and insulin used in our study

Item	Principal component codes
Oral antidiabetic medication	191501ATB 191502AGR 191502ATB 191502ATR
	191503ATB 191504ATB 191504ATR 191505ATR
	165401ATB 165402ATB 165501ATB 132001ATB
	417401ATB 417402ATB 417401ATB 417402ATB
	165801ATB A0096901 165901ATB 165601ACS
	165602ACS 165602ATB 165603ATR 165604ATR
	165701ATB 165702ATB 165703ATB 165704ATB
	348001ATB 348002ATB 348003ATB 431901ATB
	431902ATB 501101ATB 501102ATB 501103ATB
	417403ATB 613301ATB 613302ATB 624202ATB
	624203ATB 624201ATB 616401ATB 619101ATB
	523800ATR 421100ATB 443400ATB 443500ATB
	471900ATB 497200ATB 474200ATB 474300ATB
	474300ATR 498600ATB 452700ATB 452900ATB
	461200ATB 469100ATB 471800ATB 488800ATB
	488900ATB 489000ATB 498100ATB 524700ATR
	502300ATB 502300ATR 502900ATB 513700ATB
	513700ATR 507000ATB 507100ATB 519600ATB
	518600ATR 518500ATR 520500ATB 520700ATB
	520600ATB 100601ATB 100602ATB 406201ATB
	406202ATB 417404ATB 417405ATB 379501ATB
	379502ATB 379503ATB 430201ATB 430202ATB
	430203ATB 486101ATB
	Insulin
170402BIJ 170502BIJ 175301BIJ 175302BIJ	
175304BIJ 441301BIJ 441302BIJ 441303BIJ	
441304BIJ 441305BIJ 461801BIJ 461802BIJ	
484901BIJ 484902BIJ 488701BIJ 507401BIJ	

Supplementary table 2. Risk of overall and cause-specific mortality according to change of smoking status

Category	Variables	No of study subjects	Person-years	Death event	Age-standardized mortality rates	HR ^a	95% CI		p-value
All-cause mortality	Current smokers	4,609	33,175	369	9.2	1.00			
	Short-term quitters	2,199	15,842	172	7.2	0.78	0.64	0.95	0.015
	Long-term quitters	1,896	13,748	125	6.3	0.68	0.54	0.85	0.001
	Never smokers	4,673	33,523	348	6.4	0.66	0.56	0.78	<.001
Death from cancer	Current smokers	4,609	33,175	166	4.1	1.00			
	Short-term quitters	2,199	15,842	63	2.6	0.60	0.44	0.83	0.002
	Long-term quitters	1,896	13,748	54	2.6	0.65	0.46	0.90	0.010
	Never smokers	4,673	33,523	123	2.1	0.50	0.39	0.65	<.001
Death from CVD	Current smokers	4,609	33,175	61	1.5	1.00			
	Short-term quitters	2,199	15,842	30	1.3	0.74	0.46	1.18	0.210
	Long-term quitters	1,896	13,748	24	1.3	0.64	0.39	1.07	0.087
	Never smokers	4,673	33,523	69	1.3	0.72	0.49	1.06	0.092

Note. CVD, cardiovascular disease; HR, hazard ratio; CI, confident interval

^aHRs were estimated after adjusting for age, BMI, BP, fasting glucose, total cholesterol, family history of diabetes, heavy drinking, exercise, household income, residential area, and comorbidities

Supplementary table 3. Change of smoking status and risk of mortality according to BMI and exercise

Category	Variables	Current smokers	HR (95% CI)			p for trend
			Short-term quitters	Long-term quitters	Never smokers	
BMI ^a	BMI<25	1.00	0.73 (0.58-0.92)**	0.67 (0.52-0.87)**	0.64 (0.53-0.78)***	<.001
	BMI≥25	1.00	0.74 (0.51-1.07)	0.61 (0.40-0.93)*	0.61 (0.44-0.84)**	0.001
Exercise ^b	Exercise	1.00	0.54 (0.38-0.76)***	0.58 (0.42-0.80)***	0.58 (0.45-0.75)***	<.001
	Non-exercise	1.00	0.96 (0.74-1.23)	0.76 (0.56-1.02)	0.72 (0.58-0.90)**	0.003

Note. BMI, body mass index; HR, hazard ratio; CI, confident interval

^aHRs were estimated after adjusting for age, BP, fasting glucose, total cholesterol, family history of diabetes, heavy drinking, exercise, household income, residential area, and comorbidities

^bHRs were estimated after adjusting for age, BMI, BP, fasting glucose, total cholesterol, family history of diabetes, heavy drinking, household income, residential area, and comorbidities

* p-value<0.05, ** p-value<0.01, ***p-value<0.001