

Supplementary Table 1 Characteristics of the population according to the status of glucose metabolism (N=8196)

Variables	Men			Women (D) n=5422	<i>P</i>			
	All	BMI<25kg/m ²	BMI≥25kg/m ²		B vs. C	B vs. D	C vs. D	A vs. D
	(A) n=2774	(B) n=1433	(C) n=1341					
Age (years)	59.82±10.69	60.53±10.75	59.04±10.58	58.25±10.25	<0.001	<0.001	0.013	<0.001
BMI (kg/m ²)	24.99±3.31	22.53±1.80	27.63±2.41	24.74±3.51	<0.001	<0.001	<0.001	0.001
WC (cm)	90.31±8.50	85.74±7.07	95.17±7.02	88.23±9.69	<0.001	<0.001	<0.001	<0.001
WHR	0.93±0.06	0.91±0.06	0.95±0.06	0.92±0.08	<0.001	<0.001	<0.001	<0.001
FPG (mmol/L)	5.91±1.64	5.85±1.66	5.98±1.60	5.74±1.47	0.028	0.017	<0.001	<0.001
2hPG (mmol/L)	8.33±3.68	8.26±3.81	8.40±3.53	8.11±3.45	0.270	0.164	0.006	0.010
HbA1c (%)	6.05±1.01	5.99±1.00	6.13±1.01	6.00±0.95	<0.001	0.468	<0.001	0.040
TG (mmol/L)	1.19(0.87-1.69)	1.05(0.81-1.51)	1.41(1.02-2.06)	1.22(0.88-1.81)	<0.001	<0.001	<0.001	0.011
TC (mmol/L)	4.61±0.96	4.58±0.96	4.62±0.97	4.81±1.01	0.332	<0.001	<0.001	<0.001
LDL-C (mmol/L)	2.66±0.76	2.61±0.75	2.70±0.77	2.74±0.78	0.003	<0.001	0.091	<0.001
HDL-C (mmol/L)	1.24±0.33	1.32±0.36	1.16±0.28	1.34±0.33	<0.001	0.038	<0.001	<0.001
FINS(μU/mL)	5.50(3.90-7.90)	4.50(3.30-6.20)	6.90(5.10-9.60)	6.20(4.50-8.60)	<0.001	<0.001	<0.001	<0.001
HOMA-IR	1.41(0.95-2.09)	1.11(0.78-1.62)	1.79(1.24-2.52)	1.52(1.06-2.21)	<0.001	<0.001	0.970	<0.001
HOMA-β SBP (mmHg) DBP	54.38(36.97-80.29)	46.41(31.54-66.15)	65.76(44.37-94.79)	64.20(45.40-89.95)	<0.001	<0.001	<0.001	<0.001
(mmHg)	131.60±21.35	129.19±21.40	134.17±21.03	128.87±21.55	<0.001	0.622	<0.001	<0.001
Smoking status	79.05±13.59	77.10±13.58	81.13±13.29	75.44±12.58	<0.001	<0.001	<0.001	<0.001
never-smoker (%)	1139(41.1%)	568(39.6%)	571(42.6%)	5323(98.2%)	-	-	-	
ex-smoker (%)	280(10.1%)	134(9.4%)	146(10.9%)	12(0.2%)	-	-		
current smoker (%)	1355(48.8%)	731(51.0%)	624(46.5%)	87(1.6%)	-	-		
T2DM(%)	741(26.7%)	388(27.1%)	353(26.3%)	1192(22.0%)	0.654	<0.001	0.001	<0.001
nonfatal stroke (%)	67(2.4%)	33(2.3%)	34(2.5%)	121(2.2%)	0.690	0.871	0.506	0.599

Supplementary Table 2 Association of smoking status with pre-diabetes(N=6263)

	Model 1		Model 2		Model 3	
	<i>OR</i>	<i>P</i>	<i>OR</i>	<i>P</i>	<i>OR</i>	<i>P</i>
Smoking status						
Never-smoker	1		1		1	
Ex-smoker	1.37(1.02-1.85)	0.034	0.90(0.64-1.24)	0.503	0.91(0.65-1.26)	0.553
Current smoker	0.82(0.71-0.95)	0.007	0.75(0.62-0.92)	0.005	0.77(0.63-0.93)	0.008
Daily consumption						
Never-smoker	1		1		1	
1-19 cigarettes/day	0.80(0.65-0.98)	0.034	0.69(0.54-0.88)	0.003	0.68(0.53-0.88)	0.003
≥20 cigarettes/day	0.83(0.69-1.00)	0.054	0.78(0.61-0.98)	0.038	0.78(0.61-0.99)	0.040
Smoking Duration						
Never-smoker	1		1		1	
<20 years	0.84(0.67-1.05)	0.122	0.73(0.57-0.95)	0.018	0.69(0.52-0.93)	0.016
≥20 years	0.91(0.78-1.07)	0.260	0.80(0.65-0.98)	0.034	0.75(0.60-0.93)	0.010
Pack-year						
Never-smoker	1		1		1	
1-19 pack-years	0.78(0.64-0.95)	0.013	0.71(0.56-0.90)	0.005	0.71(0.54-0.90)	0.005
≥20 pack-years	0.86(0.71-1.04)	0.119	0.76(0.60-0.97)	0.025	0.76(0.60-0.98)	0.029

Model 1: No adjusted variables

Model 2: Adjusted for age, BMI, gender, educational level, physical activity, alcohol consumption and family history of diabetes

Model 3: Adjusted for Model 2 plus SBP, DBP, TG, TC, HDL-C and LDL-C

The sample size was 6263 in the analysis of the subgroup of smoking status. * Ex-smokers were not included in the analysis of the subgroup of daily consumption, smoking duration and pack-year (n=6065).

Supplementary Table 3 Association between cigarette smoking and pre-diabetes in men stratified by obesity(N=1846)

Subgroup	Model 1		Model 2		Model 3	
	OR	P	OR	P	OR	P
BMI<25kg/m²						
Never-smoker	1		1		1	
1-19 pack-years	0.52(0.36-0.74)	<0.001	0.54(0.37-0.80)	0.002	0.52(0.35-0.77)	0.001
≥20 pack-years	0.63(0.45-0.88)	0.007	0.61(0.42-0.89)	0.009	0.60(0.42-0.87)	0.008
BMI≥25kg/m²						
Never-smoker	1		1		1	
1-19 pack-years	0.76(0.54-1.08)	0.124	0.94(0.65-1.36)	0.942	0.96(0.66-1.39)	0.824
≥20 pack-years	0.71(0.51-0.99)	0.044	0.88(0.60-1.29)	0.524	0.89(0.62-1.28)	0.525
WC<90cm						
Never-smoker	1		1		1	
1-19 pack-years	0.38(0.25-0.58)	<0.001	0.44(0.28-0.69)	<0.001	0.42(0.27-0.66)	<0.001
≥20 pack-years	0.70(0.49-1.01)	0.056	0.77(0.52-1.14)	0.196	0.73(0.49-1.08)	0.116
WC≥90cm						
Never-smoker	1		1		1	
1-19 pack-years	0.85(0.62-1.16)	0.310	0.97(0.69-1.36)	0.858	0.99(0.71-1.39)	0.958
≥20 pack-years	0.64(0.47-0.88)	0.006	0.74(0.53-1.03)	0.076	0.76(0.54-1.07)	0.112
WHR<1.0						
Never-smoker	1		1		1	
1-19 pack-years	0.54(0.41-0.72)	0.001	0.63(0.47-0.84)	0.002	0.62(0.46-0.83)	0.001
≥20 pack-years	0.66(0.51-0.85)	0.001	0.73(0.55-0.96)	0.024	0.72(0.55-0.95)	0.020
WHR≥1.0						
Never-smoker	1		1		1	
1-19 pack-years	1.15(0.63-2.10)	0.656	1.27(0.67-2.40)	0.452	1.30(0.65-2.61)	0.460
≥20 pack-years	0.72(0.39-1.35)	0.311	0.88(0.46-1.71)	0.709	0.84(0.42-1.69)	0.626

Model 1: No adjusted variables

Model 2: Adjusted for age, BMI, gender, educational level, physical activity, alcohol consumption and family history of diabetes

Model 3: Adjusted for Model 2 plus SBP, DBP, TG, TC, HDL-C and LDL-C