

Supplementary Materials

Table S1 The odds ratio (OR) of Body mass index (BMI), Waist to hip ratio (WHR), waist to height ratio (WHtR), and Body adiposity index (BAI) in the binary logistic regression model adjusted for age and sex. Footnotes: diabetic retinopathy (DR), diabetic macular edema (DME) and vision threatening diabetic retinopathy (VTDR) were set as outcomes of the regression model, respectively.

	DR		DME		VTDR	
	Odds ratio (95%CI)	P valve	Odds ratio (95%CI)	P valve	Odds ratio (95%CI)	P valve
BMI, kg/m2						
18.5-22.9 (normal weight)	Ref.		Ref.		Ref.	
23.0-25.0 (overweight)	1.22(0.90, 1.65)	0.200	1.09(0.64, 1.84)	0.758	1.12(0.67, 1.86)	0.660
≥25.0 (obese)	0.85(0.64, 1.14)	0.275	0.61(0.35, 1.04)	0.067	0.57(0.33, 0.96)	0.034
P for trend		0.204		0.056		0.028
WHR						
Quarter 1	Ref.		Ref.		Ref.	
Quarter 2	1.32(0.66, 2.67)	0.434	2.18(0.52, 9.10)	0.283	1.60(0.43, 5.93)	0.478
Quarter 3	0.77(0.35, 1.67)	0.503	0.68(0.11, 4.30)	0.682	0.76(0.16, 3.59)	0.725
Quarter 4	2.02(1.03, 3.98)	0.041	3.61(0.92, 14.16)	0.065	2.65(0.77, 9.12)	0.123
P for trend		0.089		0.101		0.169
WHtR						
Quarter 1	Ref.		Ref.		Ref.	
Quarter 2	1.00(0.68, 1.48)	0.991	1.21(0.64, 2.28)	0.558	1.20(0.64, 2.23)	0.567
Quarter 3	0.87(0.58, 1.30)	0.495	0.84(0.42, 1.68)	0.620	0.79(0.40, 1.58)	0.509
Quarter 4	0.95(0.63, 1.42)	0.785	0.42(0.17, 1.02)	0.055	0.40(0.16, 0.96)	0.039
P for trend		0.627		0.046		0.029
BAI						
Quarter 1	Ref.		Ref.		Ref.	
Quarter 2	0.64(0.34, 1.23)	0.182	0.57(0.18, 1.84)	0.344	0.51(0.16, 1.60)	0.247
Quarter 3	0.44(0.21, 0.93)	0.031	0.62(0.18, 2.18)	0.456	0.55(0.16, 1.90)	0.348
Quarter 4	0.52(0.24, 1.13)	0.098	0.27(0.05, 1.56)	0.144	0.37(0.08, 1.69)	0.199
P for trend		0.060		0.166		0.201

Table S2 The OR of BMI, WHR, WHtR, and BAI in the binary logistic regression model adjusted for age, sex, and lipid metabolism parameter (total cholesterol, triglycerides, low-density cholesterol, and high-density cholesterol). Footnotes: DR, DME and VTDR were set as outcomes of the regression model, respectively.

	DR	P value	DME	P value	VTDR	P value
	Odds ratio (95%CI)		Odds ratio (95%CI)		Odds ratio (95%CI)	
BMI, kg/m²						
18.5-22.9 (normal weight)	Ref.		Ref.		Ref.	
23.0-25.0 (overweight)	1.24(0.91, 1.68)	0.175	1.10(0.64, 1.88)	0.729	1.13(0.67, 1.89)	0.649
≥25.0 (obese)	0.87(0.64, 1.17)	0.343	0.61(0.35, 1.06)	0.079	0.56(0.33, 0.97)	0.039
P for trend		0.251		0.065		0.030
WHR						
Quarter 1	Ref.		Ref.		Ref.	
Quarter 2	1.37(0.67, 2.78)	0.387	2.38(0.56, 10.10)	0.241	1.68(0.45, 6.35)	0.441
Quarter 3	0.81(0.36, 1.80)	0.604	0.78(0.12, 5.15)	0.795	0.79(0.16, 3.95)	0.776
Quarter 4	2.22(1.08, 4.55)	0.030	4.37(1.02, 18.80)	0.048	2.85(0.76, 10.69)	0.121
P for trend		0.066		0.074		0.165
WHtR						
Quarter 1	Ref.		Ref.		Ref.	
Quarter 2	0.97(0.65, 1.45)	0.874	1.26(0.65, 2.43)	0.492	1.22(0.64, 2.32)	0.537
Quarter 3	0.84(0.55, 1.28)	0.413	0.88(0.42, 1.81)	0.720	0.81(0.39, 1.65)	0.559
Quarter 4	0.90(0.59, 1.38)	0.639	0.43(0.17, 1.08)	0.072	0.40(0.16, 0.98)	0.046
P for trend		0.511		0.060		0.033
BAI						
Quarter 1	Ref.	Ref.	Ref.		Ref.	
Quarter 2	0.64(0.33, 1.23)	0.177	0.60(0.18, 1.96)	0.396	0.53(0.17, 1.72)	0.293
Quarter 3	0.43(0.20, 0.92)	0.030	0.64(0.18, 2.27)	0.486	0.55(0.16, 1.91)	0.348
Quarter 4	0.51(0.23, 1.12)	0.095	0.28(0.05, 1.65)	0.161	0.37(0.08, 1.72)	0.202
P for trend		0.059		0.186		0.200

Table S3-1 The OR of BMI, WHR, WHtR, and BAI in the binary logistic regression model additionally adjusted for variables in female patients.

Footnotes: These variables included continuous variables (e.g., age, systolic blood pressure, HbA1c, c-reaction protein, total cholesterol, triglycerides, low-density cholesterol, high-density cholesterol, creatinine, microalbuminuria, uric acid, and axial length) and categorical variables (e.g., sex, smoking history, drinking history, education, duration of diabetes, and insulin use). DR, DME and VTDR were set as outcomes of the regression model, respectively. DR, DME and VTDR were set as outcomes of the regression model, respectively.

	DR Odds ratio (95%CI)	P value	DME Odds ratio (95%CI)	P value	VTDR Odds ratio (95%CI)	P value
BMI, kg/m²						
18.5-22.9 (normal weight)	Ref.		Ref.		Ref.	
23.0-25.0 (overweight)	0.89(0.49, 1.62)	0.708	0.68(0.17, 2.68)	0.582	0.57(0.15, 2.17)	0.412
≥25.0 (obese)	0.77(0.43, 1.39)	0.392	0.10(0.01, 0.77)	0.027	0.09(0.01, 0.76)	0.027
P for trend		0.392		0.021		0.015
WHR						
Quarter 1	Ref.		Ref.		Ref.	
Quarter 2	1.31(0.46, 3.75)	0.610	1.42(0.02, 81.66)	0.866	0.78(0.02, 29.41)	0.894
Quarter 3	0.25(0.04, 1.34)	0.106	*	*	*	*
Quarter 4	1.20(0.40, 3.55)	0.748	3.52(0.20, 61.43)	0.389	2.21(0.26, 18.92)	0.470
P for trend		0.617		0.459		0.786
WHtR						
Quarter 1	Ref.		Ref.		Ref.	
Quarter 2	1.36(0.60, 3.09)	0.466	6.79(1.19, 38.57)	0.031	7.38(1.48, 36.77)	0.015
Quarter 3	0.70(0.30, 1.67)	0.421	*	*	*	*
Quarter 4	1.10(0.47, 2.56)	0.828	0.41(0.06, 2.63)	0.347	0.40(0.06, 2.73)	0.351
P for trend		0.884		0.065		0.049
BAI						
Quarter 1	Ref.		Ref.		Ref.	
Quarter 2	1.11(0.26, 4.78)	0.889	0.31(0.01, 12.27)	0.534	0.30(0.01, 8.98)	0.487
Quarter 3	0.66(0.15, 2.93)	0.582	0.83(0.04, 15.46)	0.898	0.80(0.11, 5.86)	0.822
Quarter 4	0.73(0.17, 3.11)	0.673	0.26(0.01, 6.94)	0.425	0.76(0.14, 4.26)	0.758
P for trend		0.512		0.653		0.857

* No observation.

Table S3-2 The OR of BMI, WHR, WHtR, and BAI in the binary logistic regression model additionally adjusted for variables in male patients.

	DR		DME		VTDR	
	Odds ratio (95%CI)	P valve	Odds ratio (95%CI)	P valve	Odds ratio (95%CI)	P valve
BMI, kg/m²						
18.5-22.9 (normal weight)	Ref.		Ref.		Ref.	
23.0-25.0 (overweight)	0.61(0.29, 1.27)	0.182	1.63(0.46, 5.74)	0.448	1.84(0.54, 6.22)	0.328
≥25.0 (obese)	0.59(0.29, 1.19)	0.144	0.73(0.23, 2.38)	0.605	0.71(0.22, 2.27)	0.565
P for trend		0.183		0.411		0.326
WHR						
Quarter 1	Ref.		*	*	*	*
Quarter 2	0.64(0.12, 3.39)	0.602	Ref.		Ref.	
Quarter 3	0.61(0.14, 2.73)	0.514	0.40(0.06, 2.78)	0.354	0.53(0.09, 3.02)	0.472
Quarter 4	1.07(0.27, 4.29)	0.919	1.35(0.18, 9.92)	0.771	1.55(0.21, 11.45)	0.669
P for trend		0.777		0.190		0.136
WHtR						
Quarter 1	Ref.		Ref.		Ref.	
Quarter 2	0.75(0.33, 1.70)	0.494	1.85(0.53, 6.52)	0.337	1.43(0.44, 4.66)	0.557
Quarter 3	0.48(0.19, 1.18)	0.109	1.39(0.35, 5.56)	0.643	1.06(0.29, 3.88)	0.927
Quarter 4	0.56(0.21, 1.50)	0.248	0.68(0.09, 5.40)	0.718	0.57(0.07, 4.64)	0.601
P for trend		0.124		0.714		0.567
BAI						
Quarter 1	Ref.		Ref.		Ref.	
Quarter 2	0.57(0.19, 1.75)	0.327	1.61(0.36, 7.12)	0.530	1.55(0.38, 6.33)	0.544
Quarter 3	0.60(0.22, 1.67)	0.330	0.41(0.04, 3.90)	0.438	0.35(0.04, 3.04)	0.339
Quarter 4	0.46(0.08, 2.80)	0.403	*	*	*	*
P for trend		0.243		0.464		0.399

* No observation.