

Supplemental table 1: baseline characteristics of patients stratified by TyG quartile of the total T2DM population

Characteristics	Q1(n=626)	Q2(n=581)	Q3(n=538)	Q4(n=583)	P-value
Demographics					
Age(years)	57.19(14.53)	57.58(13.52)	56.16(13.31)	54.92(13.30)	0.057
Age group,n(%)					0.082
<65 years	355(66.5)	350(64.8)	339(70.7)	414(74.4)	
>=65 years	271(33.5)	231(35.2)	199(29.3)	169(25.6)	
Gender,n(%)					0.198
Male	304(48.5)	319(53.4)	274(48.8)	321(56.0)	
Female	322(51.5)	262(46.6)	264(51.2)	262(44.0)	
Race,n(%)					<0.001
Mexican Amercian	76(6.2)	110(8.3)	127(11.2)	169(14.1)	
Non-Hispanic Black	255(26.6)	121(12.3)	96(10.1)	82(9.3)	
Non-Hispanic White	179(53.8)	212(62.3)	193(64.1)	211(61.6)	
Others	116(13.5)	138(17.2)	122(14.6)	121(15.1)	
Education,n(%)					0.442
Above high school	113(20.6)	114(25.5)	90(19.7)	75(19.5)	
High school or equivalent	322(57.7)	279(51.3)	261(58.0)	301(57.4)	
Under high school	191(21.8)	188(23.1)	187(22.2)	207(23.1)	
PIR(%)	2.73(1.63)	2.91(1.59)	2.71(1.59)	2.67(1.58)	0.372
Physical examination					
BMI(kg/m ²)	32.13(7.76)	33.03(8.01)	33.65(7.33)	34.05(7.60)	0.007
WC(cm)	107.46(17.13)	110.63(16.69)	113.08(16.49)	113.97(16.36)	<0.001
Health-related behaviors					
Smoking,n(%)					0.377
Current	101(16.2)	93(16.9)	112(20.8)	109(19.4)	
Former	185(30.4)	183(34.3)	186(35.2)	184(32.5)	
Never	340(53.4)	305(48.8)	240(44.0)	290(48.1)	
Heavy drinking,n(%)	108(17.9)	89(13.3)	85(15.8)	92(17.6)	0.361
Medical conditions					
Cardiovascular diseases,n(%)	144(19.3)	113(18.8)	108(19.1)	110(20.2)	0.967
Hypertension,n(%)	439(64.7)	397(68.3)	378(66.8)	400(66.4)	0.831
Medications					
Antidiabetic agents,n(%)	382(59.5)	349(59.8)	317(61.1)	372(66.6)	0.254
Insulin,n(%)	100(17.1)	85(14.4)	68(11.0)	99(14.9)	0.122
Other antidiabetic agents,n(%)	334(50.5)	310(54.1)	291(57.2)	342(63.2)	0.013
Antihyperlipidemic agents,n(%)	292(45.9)	277(48.9)	235(44.7)	245(46.7)	0.767

Antihypertensive agents,n(%)	372(55.6)	324(56.1)	308(55.7)	328(57.8)	0.929
Insulin resistance indices					
TyG index	8.30(0.34)	8.95(0.12)	9.32(0.12)	9.99(0.33)	<0.001
eGDR index	5.76(2.44)	5.23(2.40)	4.88(2.47)	4.05(2.46)	<0.001
Laboratory measurements					
HDL-C(mg/dL)	58.53(20.64)	49.62(11.66)	46.27(10.47)	42.51(11.31)	<0.001
TG(mg/dL)	72.98(23.47)	118.35(28.22)	161.14(37.71)	238.58(70.97)	<0.001
LDL(mg/dL)	99.07(32.51)	104.52(35.87)	112.75(36.33)	113.47(43.13)	<0.001
HbA1c(%)	6.39(1.01)	6.61(1.20)	6.94(1.37)	8.33(2.14)	<0.001
FBG(mg/dL)	119.41(28.91)	136.74(32.91)	147.16(38.25)	202.81(71.16)	<0.001
Serum creatinine(mg/dL)	0.88(0.23)	0.87(0.21)	0.84(0.22)	0.86(0.22)	0.086
ALT(U/L)	25.02(15.46)	27.35(15.55)	29.90(25.48)	31.59(20.85)	<0.001
eGFR(mL/1.73m ² *min)	89.38(22.28)	88.51(20.53)	90.83(21.32)	91.74(21.52)	0.143

Abbreviations: HDL-C: high-density lipoproteincholesterol; TG, triglyceride; LDL-C, low-density lipoprotein cholesterol; FBG, fasting blood glucose; ALT, glutamic-pyruvic transaminase; eGFR,estimated glomerular filtration rate; BMI, body mass index; WC, waist circumference.

Supplemental table 2: baseline characteristics of patients stratified by recommended critical value of eGDR in the total T2DM population.

Characteristics	eGDR<4(n=789)	4<eGDR<6(n=829)	6<eGDR<8(n=373)	eGDR>8(n=337)	P-value
Demographics					
Age(years)	55.92(12.64)	59.36(13.08)	54.86(15.43)	53.02(14.30)	<0.001
Age group,n(%)					<0.001
<65 years	527(73.6)	454(61.3)	235(68.0)	242(77.0)	
>=65 years	262(26.4)	375(38.7)	138(32.0)	95(23.0)	
Gender,n(%)					0.084
Male	415(53.9)	415(46.9)	195(53.4)	193(55.2)	
Female	374(46.1)	414(53.1)	178(46.6)	144(44.8)	
Race,n(%)					<0.001
Mexican Amercian	135(7.9)	188(10.5)	86(11.8)	73(11.4)	
Non-Hispanic Black	244(17.7)	203(15.8)	60(10.0)	47(9.3)	
Non-Hispanic White	293(64.1)	270(59.9)	122(57.6)	110(55.9)	
Others	117(10.3)	168(13.7)	105(20.6)	107(23.5)	
Education,n(%)					0.115
Above high school	133(20.9)	125(18.2)	62(21.6)	72(29.1)	
High school or equivalent	407(58.4)	405(57.3)	191(56.0)	160(48.2)	
Under high school	249(20.7)	299(24.5)	120(22.4)	105(22.8)	
PIR(%)	2.73(1.59)	2.75(1.57)	2.71(1.65)	2.89(1.63)	0.721
Physical examination					
BMI(kg/m ²)	38.98(7.53)	31.32(5.57)	30.05(6.10)	27.10(4.24)	<0.001
WC(cm)	125.25(13.83)	107.20(11.97)	103.38(14.53)	95.62(9.09)	<0.001
Health-related behaviors					
Smoking,n(%)					0.029
Current	129(16.0)	142(18.6)	66(16.1)	78(25.5)	
Former	278(37.8)	262(32.2)	107(29.8)	91(27.5)	
Never	382(46.2)	425(49.2)	200(54.1)	168(46.9)	
Heavy drinking,n(%)	141(19.2)	121(14.9)	60(13.6)	52(14.3)	0.178
Medical conditions					
Cardiovascular diseases,n(%)	206(25.2)	183(19.8)	54(13.7)	32(10.5)	<0.001
Hypertension,n(%)	767(96.2)	704(81.3)	140(31.8)	3(0.5)	<0.001
Medications					
Antidiabetic agents,n(%)	557(68.3)	496(61.7)	215(58.1)	152(50.2)	<0.001
Insulin,n(%)	184(20.3)	94(11.3)	51(12.8)	23(8.7)	<0.001
Other antidiabetic agents,n(%)	493(62.4)	455(57.5)	188(49.1)	141(46.5)	0.001
Antihyperlipidemic agents,n(%)	408(52.0)	383(48.5)	156(44.0)	102(31.7)	0.001
Antihypertensive agents,n(%)	653(84.8)	567(66.4)	109(24.4)	3(0.5)	<0.001

Insulin resistance indices					
TyG index	9.32(0.63)	9.12(0.63)	9.03(0.68)	8.87(0.67)	<0.001
eGDR index	2.40(1.26)	4.94(0.57)	6.96(0.59)	9.08(0.81)	<0.001
Laboratory measurements					
HDL-C(mg/dL)	45.39(11.70)	50.50(12.91)	52.59(23.48)	51.94(14.75)	<0.001
TG(mg/dL)	158.69(76.01)	148.42(74.48)	138.45(75.05)	130.42(71.64)	<0.001
LDL(mg/dL)	105.41(37.42)	108.21(40.08)	107.55(35.33)	110.56(34.59)	0.350
HbA1c(%)	7.64(1.88)	6.89(1.52)	6.91(1.61)	6.26(0.89)	<0.001
FBG(mg/dL)	166.87(63.37)	146.21(51.63)	147.87(52.64)	130.77(33.00)	<0.001
Serum creatinine(mg/dL)	0.88(0.22)	0.86(0.23)	0.85(0.22)	0.85(0.21)	0.253
ALT(U/L)	29.39(17.43)	28.04(21.95)	29.45(23.00)	26.11(16.70)	0.107
eGFR(mL/1.73m ² *min)	89.99(21.79)	87.93(21.76)	92.12(21.45)	93.11(19.33)	0.011

Abbreviations: HDL-C: high-density lipoprotein cholesterol; TG, triglyceride; LDL-C, low-density lipoprotein cholesterol; FBG, fasting blood glucose; ALT, glutamic-pyruvic transaminase; eGFR, estimated glomerular filtration rate; BMI, body mass index; WC, waist circumference.